

**FACTORS RELATED TO ADAPTATION TO CLINICAL
PRACTICE OF NURSING STUDENTS AT
SRIMAHASARAKHAM NURSING COLLEGE**

NOUVARAT SUKNALUM

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF NURSING SCIENCE
(PSYCHIATRIC AND MENTAL HEALTH NURSING)
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2005**

**ISBN 974-04-6083-6
COPYRIGHT OF MAHIDOL UNIVERSITY**

Thesis
Entitled

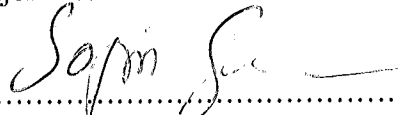
**FACTORS RELATED TO ADAPTATION TO CLINICAL
PRACTICE OF NURSING STUDENTS AT
SRIMAHASARAKHAM NURSING COLLEGE**



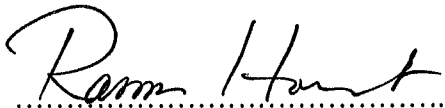
.....
Mrs. Nouvarat Suknalum
Candidate



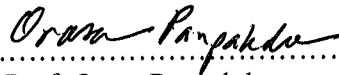
.....
Asst. Prof. Khannika Suwonnakote,
Ph.D.
Major-Advisor



.....
Lect. Sopin Sangon,
Ph.D.
Co-Advisor



.....
Assoc. Prof. Rassmidara Hoonsawat,
Ph.D.
Dean
Faculty of Graduate Studies



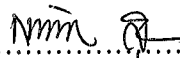
.....
Assoc. Prof. Orasa Panpakdee,
D.N.S.
Chair
Master of Nursing Science
Faculty of Medicine
Ramathibodi Hospital

**Thesis
Entitled**

**FACTORS RELATED TO ADAPTATION TO CLINICAL
PRACTICE OF NURSING STUDENTS AT
SRIMAHASARAKHAM NURSING COLLEGE**

was submitted to the Faculty of Graduate Studies, Mahidol University
For the degree of Master of Nursing Science
(Psychiatric and Mental Health Nursing)

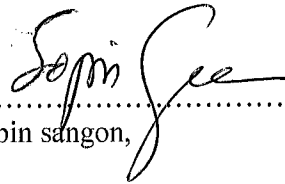
on
18 May, 2005



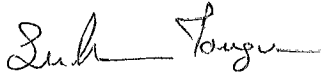
.....
Mrs. Nouvarat Suknalum
Candidate



.....
Asst. Prof. Khannika Suwonnakote,
Ph.D.
Chair



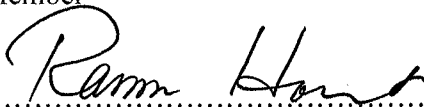
.....
Lect. Sopin sangon,
Ph.D.
Member



.....
Asst. Prof. Sulee Tongvichean,
Dr.P.H.
Member



.....
Assoc. Prof. Darunee Junhavat,
M.Ed.
Member



.....
Assoc. Prof. Rassmidara Hoonsawat,
Ph.D.
Dean
Faculty of Graduate Studies
Mahidol University



.....
Prof. Rajata Rajatanavin,
M.D.,F.A.C.E.
Dean
Faculty of Medicine, Ramathibodi Hospital
Mahidol University

ACKNOWLEDGEMENT

This thesis in which I put all my strength and effort could not have been succeeded without the contribution from many individuals. Firstly, I would like to thank my major advisor Asst. Prof. Khannika Suwonnakote and my co-advisor Lect. Sopin Sangon who encouraged and guided me through this study.

I would like to thank my thesis committee, Assoc. Prof. Darunee Junhavat and Asst. Prof. Sulee Tongvichean, for their suggestions and corrections that led to the completion of this thesis.

I am grateful to the professors at Srimahasarakham Nursing College for their assistance in data collection and to the nursing students for their cooperation and willingness to fill in the questionnaires.

I appreciate the help and support from my class of '44, especially to Miss. Nilshorn Yenyasun.

I would like to thank my dear mother Mrs. Wanna Singhsanan who gives me life and love.

Finally, I would like to thank my husband Mr. Ouaychai Suknalum who always loves and supports me and my beloved children who always be there for me.

Nouvarat Suknalum

FACTORS RELATED TO ADAPTATION TO CLINICAL PRACTICE OF NURSING STUDENTS AT SRIMAHASARAKHAM NURSING COLLEGE

NOUVARAT SUKNALUM 4436599 RAPM/M

M.N.S. (PSYCHIATRIC AND MENTAL HEALTH NURSING)

THESIS ADVISORS: KHANNIKA SUWONNAKOTE, Ph.D., SOPIN SANGON, Ph.D. (Nursing)

ABSTRACT

The purposes of this descriptive research were to describe the level of adaptation to clinical practice and the helping-trust relationship, to compare the difference in adaptation to clinical practice among nursing students by educational level group and to predict adaptation to clinical practice of nursing students at Srimahasarakham Nursing College by helping-trust relationship and nursing students' income. The samples of 174 baccalaureate nursing students at Srimahasarakham Nursing College were selected by purposive sampling method, composed of sophomores, juniors, and seniors in the academic year 2003. Data were collected by the researcher using two questionnaires during May, 2004. The questionnaires were the helping-trust relationship and the adaptation to clinical practice questionnaire. The reliability of both questionnaires, using Cronbach's alpha coefficients, was 0.94 and 0.84, respectively

The results:

1. The level of adaptation to clinical practice of nursing students was found at the low level. However, for each mode of adaptation, physiologic and self-concept mode was found at moderate level and the role function and interdependence mode was found at the low level.

2. The level of helping-trust relationship was found at the rather poor level for total and three sub-scales score.

3. The nursing students at different educational levels (sophomore, junior, and senior groups) showed no significant difference in adaptation to clinical practice in mode and total.

4. The result of the stepwise multiple regressions analysis showed that only the helping-trust relationship can predict adaptation to clinical practice of nursing students and can explain 6.7 % of the variance of the adaptation to clinical practice of nursing students. Nursing students' income did not emerge as a significant predictor of adaptation to clinical practice of nursing students. Its relation was expressed by the following equation;

$$\text{Adaptation to clinical practice} = 76.299 + .511 (\text{Helping-trust relationship})$$

KEY WORDS: ADAPTATION TO CLINICAL PRACTICE /
HELPING-TRUST RELATIONSHIP/ NURSING STUDENT

66 P. ISBN 974-04-6083-6

ปัจจัยที่มีความสัมพันธ์กับการปรับตัวในการฝึกภาคปฏิบัติของนักศึกษาพยาบาลวิทยาลัยพยาบาล
ศรีมหาสารคาม (FACTORS RELATED TO ADAPTATION TO CLINICAL
PRACTICE OF NURSING STUDENTS AT SRIMAHASARAKHAM NURSING
COLLEGE)

เนาวรัตน์ สุขณะลำ 4436599 RAPM/M

พย.ม. (การพยาบาลจิตเวชและสุขภาพจิต)

คณะกรรมการควบคุมวิทยานิพนธ์: กรณีการ์ สุวรรณ โคต, ก.ค., โสภิน แสงอ่อน, Ph.D.

บทคัดย่อ

การวิจัยครั้งนี้มีจุดมุ่งหมายเพื่ออธิบายระดับการปรับตัวในการฝึกภาคปฏิบัติและสัมพันธ์ภาพเชิงช่วยเหลือและไว้วางใจ เปรียบเทียบความแตกต่างของการปรับตัวในการฝึกภาคปฏิบัติของนักศึกษาพยาบาลที่อยู่ในชั้นปีที่แตกต่างกัน และความสามารถในการพยากรณ์การปรับตัวในการฝึกภาคปฏิบัติของนักศึกษาพยาบาลจากตัวพยากรณ์คือสัมพันธ์ภาพเชิงช่วยเหลือและไว้วางใจและรายได้ของนักศึกษาพยาบาล โดยกลุ่มตัวอย่างคือ นักศึกษาพยาบาล ชั้นปีที่ 2, 3, 4 วิทยาลัยพยาบาลศรีมหาสารคาม จำนวน 174 คน ซึ่งเลือกแบบเฉพาะเจาะจงเครื่องมือวิจัยประกอบด้วย แบบสอบถามข้อมูลทั่วไป แบบสอบถาม การปรับตัวในการฝึกภาคปฏิบัติ และ แบบสอบถามสัมพันธ์ภาพเชิงช่วยเหลือและไว้วางใจของพยาบาลประจำการและนักศึกษาพยาบาล การวิเคราะห์ข้อมูลใช้การวิเคราะห์ความแปรปรวนทางเดียว (ANOVA) และการถดถอยพหุแบบขั้นบันได (Stepwise Multiple Regression Analysis) ผลการวิจัยพบว่า การปรับตัวในการฝึกภาคปฏิบัติโดยรวมของนักศึกษาพยาบาล อยู่ในระดับต่ำ การปรับตัวรายด้านพบว่าปรับตัวด้านร่างกายและด้านอัตมโนทัศน์อยู่ในระดับปานกลาง ส่วนการปรับตัวด้านบทบาทหน้าที่และการพึ่งพาหะหว่างกันอยู่ในระดับต่ำ สัมพันธ์ภาพเชิงช่วยเหลือและไว้วางใจโดยรวมและรายด้านของพยาบาลประจำการและนักศึกษาพยาบาล อยู่ในระดับค่อนข้างไม่ดี นักศึกษาพยาบาล ในชั้นปีที่ 2, 3 และ 4 มีการปรับตัวในการฝึกภาคปฏิบัติไม่แตกต่างกัน ($F=7.200$ $p \leq .05$) ตัวแปรที่สามารถพยากรณ์การปรับตัวในการฝึกภาคปฏิบัติของนักศึกษาพยาบาลได้ คือ สัมพันธ์ภาพเชิงช่วยเหลือและไว้วางใจของพยาบาลประจำการและนักศึกษาพยาบาล โดยอธิบายความแปรปรวนของการปรับตัวในการฝึกภาคปฏิบัติของนักศึกษาพยาบาล ได้ ร้อยละ 6.7 และเขียนความสัมพันธ์ในรูปสมการได้ดังนี้

การปรับตัวในการฝึกภาคปฏิบัติ = $76.299 + .511$ (สัมพันธ์ภาพเชิงช่วยเหลือและไว้วางใจ)

CONTENTS

	Page
ACKNOWLEDGEMENT	iii
ABSTRACT (ENGLISH)	iv
ABSTRACT (THAI)	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER	
I INTRODUCTION	
Background and rationale	1
Research conceptual model derived from The Roy Adaptation Model	5
Research questions	5
Research objectives	6
Research hypotheses	6
Scope of the study	7
Definition of variables	7
Benefits of the study	7
II LITERATURE REVIEW	
The Roy Adaptation Model	9
Adaptation to clinical practice of nursing students	14
Factors related to adaptation to clinical practice of nursing students	18
Conceptual model of the research	28
III METHODOLOGY	
Population and sample	29
Research instruments	30
Protection of Human Subjects	33
Data collection	33
Data analysis	34

CONTENTS (Cont.)

	Page
IV RESULTS	35
V DISCUSSION	42
VI CONCLUSION AND RECOMMENDATIONS	47
BIBLIOGRAPHY	49
APPENDIX	56
BIOGRAPHY	66

LIST OF TABLES

	Page
Table	
1 Range, Mean and Standard Deviation (SD) of Nursing Students' Income in Baht (n=174)	36
2 Mean , Standard Deviation (SD), and Level of Adaptation to Clinical Practice of Nursing Students Classified by Mode and in Total (n =174)	37
3 Mean, Standard Deviation (SD), and Level of Helping-Trust Relationship Classified by Subscale and by Total (n =174)	38
4 Mean and Standard Deviation (SD) of Adaptation to Clinical Practice of Nursing Students, in Mode and in Total Characterized by Educational Level (n=174)	39
5 The Comparison of the Differences of Adaptation to Clinical Practice among Nursing Students at Different educational levels analyzed by One-way Analyses of Variance (n = 174)	39
6 Correlation Matrix of all Studies Variables	41
7 Stepwise Multiple Regression Analysis for Variables Predicting Adaptation to Clinical Practice in Nursing Students	41
8 Percentage (%) of Nursing Students' Answers in each Sub-scale of the Helping-Trust Relationship (n=174)	64

LIST OF FIGURES

	Page
Figures	
1 Research Conceptual Model derived from The Roy Adaptation Model	5
2 Human adaptive systems	10
3 Conceptual Model of the research	28

CHAPTER 1

INTRODUCTION

Background and Rationale

Clinical education is a vital component in the curricula of nursing programs because it provides student nurses with opportunities to develop competencies in nursing practice. Clinical practice is a period of transition, which allows students to consolidate knowledge and practice skills acquired during fieldwork practice in a working situation. During clinical field placement, students are expected to develop competencies in the application of knowledge, skills, attitudes, and values inherent in the nursing profession (Chan, 2002: 69). In addition, the clinical placement provides students with optimal opportunities to observe role models, practice by oneself, and reflect on what is seen, heard, sensed, and done (Thorell – Ekstrand & Bjorrell, 1995 cited by Chan, 2002: 70).

Clinical practice is a stressful situation for nursing students. The stress in nursing students is caused by the facts that they interact with dying patients, witness some of them die, and experience guilt concerning their deaths. They are also insecure about their competence and find it difficult to interact with more experienced nurses and other health professionals (Parkes, 1985, cited by Bigger, T., Zimmerman, R.S., & Alpert, G., 1988:412). Pagana's study revealed six major threats including personal inadequacy (77.1%), fear of making errors (34.0%), uncertainty (28.6%), the clinical instructor (26.0%), being scared or frightened (19.5%), and fear of failure (14.1%) (Pagana, 1988: 419). In addition, Beck and Srivastava (1991: 127) investigated the sources of stress in nursing students. The result showed that there were 12 sources of stress in nursing students, involving long hours of study, exams/grades, lack of free time, financial responsibilities, administration's response to students, university educational system for nurses, too much responsibility, atmosphere created by clinical faculty, negative personal habits, not enough time for feedback, patient care responsibility, and doubts about nursing as a career (Beck and Srivastava, 1991: 127-133). Moreover, the stress situations can be categorized into

three groups: situations that nursing students had no experience before, situations that had an impact on students' self-esteem, and situations that create conflict and provide insufficient material resources (Sujitra Paesuputt, B.E., 2542: 53).

Several studies have been conducted to explore the levels of stress in nursing students during clinical practice. Most of these studies revealed that the stress level of nursing students in clinical practice was at moderate level (Vallaphar Tantisoonthorn, B.E., 2532: 125, Nipa Rujanuntakul, B.E., 2541: 51, Varunee Ketin, B.E., 2542: 58, Sujitra Paesuputt, B.E., 2542: 53). However, in Beck and Srivastava's investigation, the result showed that the students experienced high stress levels, and they were at risk of having a physical or psychiatric illness.

When nursing students encounter stressful situations, they tend to have a high level of anxiety and stress, making them unlikely to succeed in their studies. Somsorn Chauhirun, Vidhaya Nakavachare, and Wasana Chalamket (B.E., 2523: 42) reported that 49.90 % of nursing students might have mental health problems. Some nursing students had mental problems so severe that they had to temporarily take leave or permanently drop out of their study programs, which could be considered a great loss of human resources of the country (Pongsri Srimorakot, Vanida Senasoottipun, and Chomchaen Somprasert, B.E.2532: 1). From personal experience as an instructor supervising nursing students in clinical practice courses at Srimahasarakham Nursing College and from nursing students' attitude report on the clinical practice, it was found that most of the nursing students had stress during the clinical practice. There were many sources of stressor, including tiresome, fear of patients' condition, interaction with professional nurses, and working with nursing students from other institutes. The stress and anxiety that occurred affected the adaptation to clinical practice of the nursing students. Besides, the study of Soottirat Pimpong (B.E., 2518: 50) found that nursing student's adaptation affected the achievement in clinical practice. Moreover, Somsorn Chauhirun, Vidhaya Nakavachara, and Wasana Chalamket (B.E., 2523: 42) found that the root of mental health problems of nursing students was adaptation. And the more they involved in clinical practice, the more problems occurred, especially in the third year nursing students compared with students in other major areas of study. Therefore, nursing students' adaptation is needed to be highly and clearly understood in order to assist nursing students to gain the effectiveness in clinical practice.

According to Roy, she “describes humans in terms of holistic adaptive system. The term holistic stems from the philosophic assumptions underlying the model and pertains to the idea that human systems function as wholes in one unified expression of meaningful human behavior. They are, then, more than the sum of their parts. Persons represent unity in diversity. Similarly, there is diversity among persons and their earth, yet all are united in a common destiny. The term adaptive is an integral concept in the scientific assumptions underlying the model. Human systems have thinking and feeling capacities, rooted in consciousness and meaning, by which they adjust effectively to changes in the environment and, in turn, affect the environment. Persons and the earth have common patterns and mutuality of relations and meaning” (Roy & Andrew, 1999: 35-36).

Generally, individuals’ adaptation can only take place when individuals are exposed to stimuli. Each person has one’s own adaptation level, and the adaptation or coping process will occur as a result of this, making individuals show different behaviors accordingly.

There are three types of stimuli—focal stimuli, contextual stimuli, and residual stimuli, all of which stimulate individuals to adapt themselves. Focal stimuli are defined as the internal or external stimuli most immediately confronting the human adaptive system. Contextual stimuli are defined as all other stimuli present in the situations that contribute to the effect of the focal stimulus. Residual stimuli are defined as an environmental factor within or without the human system, which effects in the current situation that are unclear (Roy & Andrew, 1999: 31-32).

While confronting with stimuli, human being adapts to them through internal control process. The major processes for coping processes are called regulator and cognator subsystem. However, these internal processes cannot be observed directly, only the responses: adaptive or maladaptive behaviors can be observed. The behaviors resulting from internal control process can be observed in four adaptive modes: physiologic mode, self-concept mode, role function mode, and interdependence mode. (Roy & Andrew, 1999: 55-56) “Behavior as the output of human systems takes the form of adaptive responses and ineffective responses. These responses act as feedback or further input to the system, allowing people to decide whether to increase or decrease efforts to cope with the stimuli.” (Roy & Andrew, 1999: 37)

Using Roy's Adaptation Model, the adaptation of nursing students to clinical practice can be explained. Clinical practice is a focal stimulus confronting nursing students who have to adapt in order to maintain physical and psychological well being.

Three selected factors as other focal stimuli, including educational level, nursing students' income, and helping-trust relationship, were chosen into the conceptual model to test their effects on the adaptation to clinical practice. Educational level was one of the factors that involved in the ability of students to adapt in clinical practice. Educational level represented the accumulative knowledge and experience in each academic year of nursing student. Few studies reported that educational level was positively and significantly related to adaptation of nursing students ($r = .26, p \leq 0.05$) (Suviriya Suvannakote, B.E., 2538: abstract). In addition, Saowaluck Janeviriyakul (B.E., 2536: abstract) revealed that the adaptation abilities of nursing students in each educational level differed with statistical significance at the .01 level ($f = 6.53$). Nursing students' income is another factor related to nursing students' adaptation. One study reported that nursing students' income was significantly and positively related to adjustment of nursing students ($r = .12, p \leq 0.05$) (Chaleekorn Boonprasert, B.E., 2543: abstract). Economic and social status of the family was found to have both direct and indirect effects on children's adaptation (Nipa Nithyayon, B.E., 2520: 195). According to the study of Suviriya Suvannakote (B.E., 2538: 81), family income was positively and significantly related to adaptation of nursing students ($r = .10, p \leq 0.05$). Helping-trust relationship was viewed as a part of intervention in human care process, which became actualized in the moment-to-moment human care process in which the nurse was being with the other person. This process entailed a commitment to caring as a moral ideal directed toward the preservation of humanity. The process affirmed the subjectivity of persons and led to a positive change for the welfare of others (Watson, 1988:74-75). During clinical practice, the interaction between nursing students and nursing staffs enabled nursing students to expose to professional nursing culture and environment, including social behavior, verbal communication, gestures, activities, and outcomes (Sathirakoset, cited by Nipa Nithyayon, B.E., 2520:165).

The conceptual model in this study is based on Roy's Adaptation Model. Educational level, nursing students' income, and helping-trust relationship are the three factors that are considered as focal stimuli, which most immediately confront the

nursing students during clinical practice. The adaptation to clinical practice comprises of four modes: the physiologic mode, the self-concept mode, the role function mode, and interdependence mode.

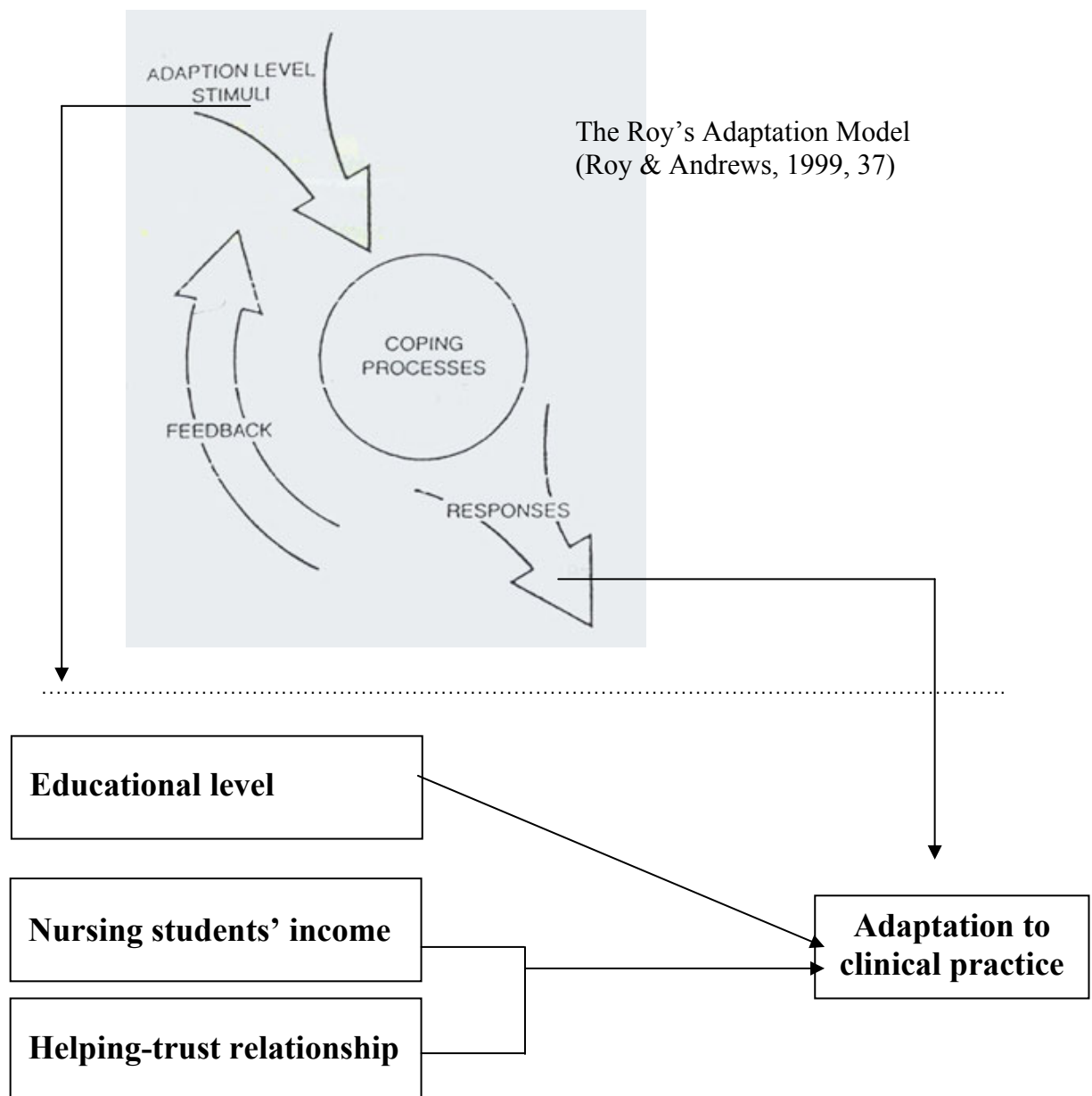


Figure 1: Research Conceptual Model derived from The Roy Adaptation Model.

Research Questions

1. What is the level of adaptation to clinical practice of nursing students at Srimahasarakham Nursing College?

2. What is the level of helping-trust relationship between nursing staffs and nursing students at Srimahasarakham Nursing College?
3. Are there differences in adaptation to clinical practice among nursing students who are different in educational level at Srimahasarakham Nursing College?
4. Can helping-trust relationship and nursing students' income predict the adaptation to clinical practice of nursing students at Srimahasarakham Nursing College?

Research Objectives

1. To describe the level of adaptation to clinical practice of the nursing students at Srimahasarakham Nursing College.
2. To describe the level of helping-trust relationship between nursing staffs and nursing students at Srimahasarakham Nursing College.
3. To compare the difference in adaptation to clinical practice among the nursing students who are different in educational levels at Srimahasarakham Nursing College
4. To predict the adaptation to clinical practice of the nursing students at Srimahasarakham Nursing College by the predictors: helping-trust relationship and nursing students' income.

Research Hypotheses

1. The level of adaptation to clinical practice of the nursing students at Srimahasarakham Nursing College is at high level.
2. The level of helping-trust relationship between nursing staffs and nursing students at Srimahasarakham Nursing College is at high level.
3. There are differences in adaptation to clinical practice among nursing students who are different in educational levels at Srimahasarakham Nursing College.
4. Helping-trust relationship and nursing students' income can predict the adaptation to clinical practice of the nursing students at Srimahasarakham Nursing College.

Scope of the Study

This study was aimed at describing the level of adaptation to clinical practice of nursing students and helping-trust relationship between nursing staffs and nursing students, at comparing the differences in adaptation to clinical practice among nursing students who were different in educational levels, and at exploring the prediction of helping-trust relationship and nursing students' income on adaptation to clinical practice of nursing students who had attended the clinical practice courses at Srimahasarakham Nursing College in the academic year of 2003. The research instruments comprised of the helping-trust relationship questionnaire based on the Caring Concept of Watson and the adaptation to clinical practice questionnaire based on The Roy Adaptation Model that comprised of the physiologic mode, the self-concept mode, the role function mode, and the interdependence mode.

Definition of Variables

Adaptation to clinical practice is defined as the scores of nursing students' behavioral adaptive response during the clinical practice in four adaptive modes, including physiologic, self-concept, role function, and interdependence modes, measured by the adaptation to clinical practice questionnaire.

Helping-trust relationship is defined as the scores of the perception to the relationship between nursing staffs and nursing students during clinical practice in three subscales: empathy, non-possessive warmth, and congruence or genuineness measured by the helping-trust relationship questionnaire.

Educational level refers to the years of study in nursing college which are sophomore, junior, and senior years.

Nursing students' income refers to the average revenue per month in baht of nursing students.

Benefits of the study

1. The findings of this study can be used as a guideline to promote nursing students' adaptation to clinical practice in Srimahasarakham Nursing College.
2. The findings can also yield a valuable information necessary to enhance

the relationship between nursing staff and nursing students in a clinical setting

3. The research findings can provide a basis for future research regarding the adaptation of nursing students during clinical practice.

CHAPTER II

LITERATURE REVIEW

This study was aimed at describing the level of adaptation to clinical practice of nursing students and the helping-trust relationship between nursing staffs and nursing students, at comparing the differences in adaptation to clinical practice among nursing students who were different in educational levels, and at exploring whether the adaptation to clinical practice of nursing students could be predicted by the helping-trust relationship and nursing students' income. The review of the literature consists of the following topics:

1. The Roy's Adaptation Model
2. Adaptation to clinical practice of nursing students
3. Factors related to adaptation to clinical practice of nursing students

1. The Roy Adaptation Model

“The Roy Adaptation Model is currently one of the most highly developed and widely used conceptual descriptions of nursing. Formal development of the model began in the late 1960s,...The major concepts associated with nursing models-recipient of care, the environment, health, the goal of nursing, and nursing activities” (Roy and Andrews, 1999: 1).

Human as adaptive system *The Roy Adaptation Model defines humans,*

“ as adaptive systems, with coping processes acting to maintain adaptation with respect to four adaptive modes. Stimuli from the internal and external environment activate the coping processes --the regulator and cognator subsystem which in turn, produce behavioral responses relative to the physiologic, self-concept, role function, and interdependence modes. These responses can be either adaptive, and thus promote the integrity or wholeness of the human, or ineffective, and not contributing to the goals of the human system. Although, for descriptive purposes, it has been necessary to present each aspect of the human adaptive system as a separate entity, the mode is based on the belief that human systems function in a holistic manner with each aspect related to and affected by the others(Roy and Andrews, 1999: 55-56).

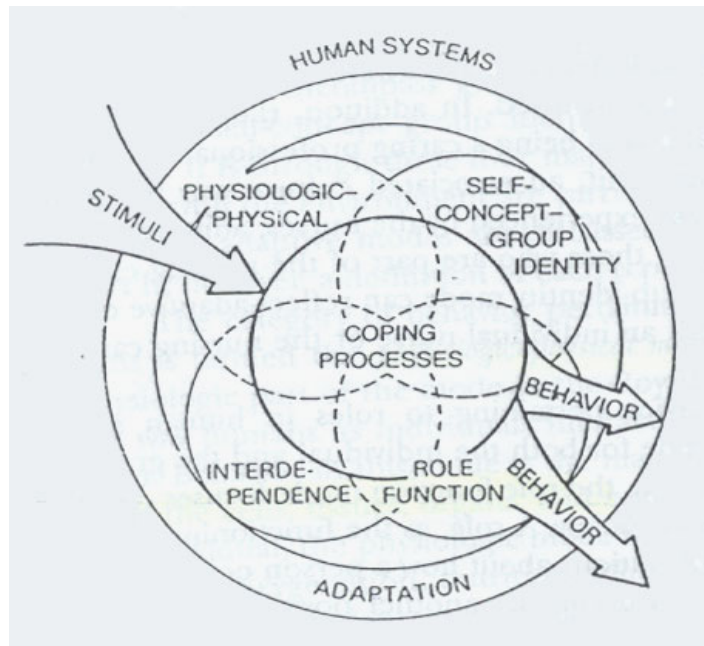


Figure 2. Human adaptive systems (Roy & Andrews, 1999: 50)

According to the Roy Adaptation Model, an individual's adaptation involves three important concepts: stimuli, coping process, and behavior. They are explained in detail as follows:

1.1 Stimuli "A stimulus has been defined as that which provokes a response. It is the point of interaction of the human system and environment. Stimuli can come externally from the environment (external stimuli) or may originate in the internal environment (internal stimuli)" (Roy & Andrews, 1999: 36). Describing three classes of stimuli as focal, contextual, and residual, Roy stated that

"Focal stimulus is the internal or external stimulus most immediately in the awareness of the human system; the object or event most present in consciousness...Contextual stimuli are all other stimuli present in the situation that contribute to the effect of the focal stimulus. That is, contextual stimuli are all the environmental factors that present to the human system from within or without but which are not the center of attention or energy. These factors will influence how the human system can deal with the focal stimulus....Residual stimuli are environmental factors within or without human systems, the effects of which are unclear in the current situation. There may not be an awareness of the influence of these factors, or it may not be clear to the observer that they are having an effect" (Roy & Andrew, 1999: 38-39). The skills used in assessing stimuli are astute and sensitive observation, measurement, and interview. Behavior manifesting a threat to integrity is the initial concern. To

assist in setting priorities relative to the behavior of concern, the nurse, in collaboration with the recipient(s) of care and others relevant in the situation, identifies the focal, contextual, and residual stimuli influencing these responses. In addition, the nurse identifies the special stimulus of the adaptation level, and in particular, any compensatory or compromised life processes, as these contribute to adaptive or ineffective behavior....Additional specific stimuli have been suggested by Roy and colleagues as having an effect on behavior in each adaptive mode. These common stimuli can be focal, contextual, or residual, depending on the situation (Roy and Andrews, 1999: 72).

They are identified as followed;

Culture: *Sato (1984, cited by Roy and Andrews, 1999: 75) discussed culture, family and developmental stage as primary considerations for stimuli affecting human adaptation. Culture is described as involving socioeconomic status, ethnicity, and belief systems. Socioeconomic status provides an indication of the style of living and the material resources upon which the human adaptive system has to draw. Different stimuli are evident in situations of different socioeconomic status. For example, an impoverished community with many inhabitants suffering from malnutrition is affected by entirely different stimuli than those affecting a situation involving a malnourished teenager from an upper-middle-class family.*

Ethnicity is viewed as including language, practices, philosophies, and associated values. Belief systems, as a component of culture, involve spiritual beliefs, practice, and philosophies and may influence all aspects of life for human adaptive systems. As well as being a major support system, belief system can have a specific influence on health practices and adaptation (Roy and Andrews, 1999: 75).

Family/aggregate participants: *Another common influencing stimulus pertains to the family or aggregate and its associated structure and tasks. The different stimuli are associated with a single-parent family as opposed to a nuclear or extended family. A family in the beginning stages of child-rearing has different duties and responsibilities from a family whose children is grown and have left home (Roy and Andrews, 1999: 75).*

Integrity of adaptive mode: *It is important to recognize that a stimulus being assessed may be a behavior in another adaptive mode or system, just as a laser light image may be viewed as a light seen by the person or as a light generated by a computer program operator. Thus, lack of integrity in any area of functioning will, in turn, act as a stimulus for another area. Since the nurse often encounters individuals during treatment for illness, an important consideration relative to adaptation in the physiologic mode is the presence of disease pathology. This lack of integrity in the physiologic mode will act as a stimulus for behavior in each of the other modes (Roy and Andrews, 1999: 76).*

Adaptation level: *Adaptation level is a significant internal stimulus. Adaptation levels in individuals and in groups can be described as integrated life processes, or compensatory or compromised life processes. The Roy Adaptation Model has always identified adaptation level as a stimulus. Another stimulus demonstrating the interrelated aspects of human adaptive systems relates directly to acquire coping processes, the cognator of the*

individual and innovator of the group. Coping processes involve the effectiveness with which the particular subsystem is functioning. Inherent in the stimulus of coping processes are the knowledge, perception, and skill to assist in coping with environmental stimuli (Roy and Andrews, 1999: 76).

Environmental considerations: *The last stimulus to be mentioned relates to the environment. Changes in environment can have a profound effect on the system's state of adaptation. These changes tend to affect the human system's senses and include such stimuli as temperature changes, different noise levels, or unusual diet. The presence of unfamiliar people or absence of familiar ones may be part of an environmental change. Also related to the environment are drugs, alcohol, and tobacco, the use of which has a distinct effect on the person's internal environment (Roy and Andrews, 1999: 76).*

1.2 Coping Process *The Roy Adaptation Model conceptualizes the complex dynamics within the person as the coping processes. Broadly categorized, these processes are the regulator and the cognator subsystems. The cognator and regulator act to maintain integrated life processes for the person. The life processes-- integrated, compensated, or compromised -- are manifested in behavior. Over time, the behavior of the basic life processes can reoccur in patterns that can be recognized as indicative of a given individual " (Roy & Andrews, 1999: 37). The life processes was called adaptation level which is the name given to three possible conditions of the life processes of the human adaptive system: The first adaptation level is termed integrated. The term integrated describes the structure and function of the life process working as a whole to meet human needs. For example, intact skin acts as a nonspecific defense to protect against infection. Integrated adaptation level thus constitutes a stimulus for a person. The second adaptation level is the compensatory level at which the cognator and regulator have been activated by a challenge to the integrated processes. An example of a compensatory adaptation level is fever, which inhibits the multiplication of bacteria and increases metabolic rate to enhance repair. The third adaptation level is the compromised level. When both integrated and compensatory processes are inadequate, an adaptation problem can result. Such problems become parts of the nurse's consideration of the person as having a compromised adaptation level (Roy & Andrews, 1999: 40-41).*

1.3 Behavior *is defined in the broadest sense as internal or external actions and reactions under specified circumstances. "Behavior as the output of human systems takes the form of adaptive responses and ineffective responses. These responses act as feedback or further input to the system, allowing people to decide whether to increase or decrease efforts to cope with the stimuli. As will be evident, when humans as adaptive systems are explored further, all of the various aspects of human systems are interrelated and anything happening in one aspect will have an effect on the others" (Roy and Andrews, 1999: 37). The behaviors that result from the control processes can be observed in four categories or adaptive modes." (Roy & Andrews, 1999: 48) The adaptive modes are four subscales described as follows:*

The physiologic mode *"The physiologic is associated with the physical and chemical processes involved in the function and activities of*

living organisms. Behavior in this mode is the manifestation of physiologic activities of all the cells, tissues, organs, and systems comprising the human body. As with each of the adaptive modes, stimuli activate the coping processes, creating adaptive and ineffective behavior. In this case, the coping processes are those associated with physiologic functioning and the resulting responses are physiologic behavior. It is the person's physiologic behavior that indicates whether the coping processes are able to adapt to the stimuli affecting them. In the individual, the physiologic mode has nine components. There are five basic needs: oxygenation, nutrition, elimination, activity and rest, and protection. In addition, four complex processes are involved in physiologic adaptation. These are the senses; fluid, electrolyte, and acid-base balance; neurologic function; and endocrine function" (Roy & Andrews, 1999: 101-102).

The self-concept mode *Self-concept is defined as the composite of beliefs and feelings that a person holds about him or herself at a given time and is formed from internal perceptions and perceptions of others' reactions. The composite sense of self is used to direct one's behavior. Components of the self-concept mode are the physical self, including body sensation and body image; and the personal self, comprised of self-consistency, self-ideal, and moral-ethical-spiritual self. (Roy & Andrews, 1999: 107) In the self-concept mode, the personal perspective focuses specifically on the psychological and spiritual aspects of the human system. The basic need underlying the individual self-concept mode has been identified as psychic and spiritual integrity, or the need to know who one is so that one can be or exist with a sense of unity, meaning, and purposefulness in the universe. This integrity is basic to health. Adaptation problems in integrity can interfere with the person's ability to heal or to do what is necessary to maintain other aspects of health.*

The role function mode *"From the perspective of the individual, the role function mode focuses on the roles that the individual occupies in society. As the functioning unit of society, it is defined as a set of expectations about how a person occupying one position behaves toward a person occupying another position. The basic need underlying the role function mode has been identified as social integrity, the need to know who one is in relation to others so that one can act. The role set is the complex of positions that an individual holds. A classification of role sets as involving primary, secondary, and tertiary roles has been adopted for use in the Roy Adaptation Model. Associated with each role are instrumental behaviors and expressive behaviors, assessment of which provides an indication of social adaptation relative to role function. The manner in which the person fulfills these role expectations is an indication of adequacy of role mastery." (Roy & Andrews, 1999: 109-110).*

The interdependence mode *Interdependent relationships involve the willingness and ability to give to others and accept from them aspects of all that one has to offer such as love, respect, value, nurturing, knowledge, skills, commitments, material possessions, time, and talents. People who have a comfortable balance in interdependent relationships feel valued and supported by others, and can express the same for others. These people have learned to live successfully in a world of others including people, animals, objects, and*

the environment. The basic need of this mode is termed relational integrity or the feeling of security in relationships. This basic need consists of three components: affectional adequacy, developmental adequacy, and resource adequacy. Specific to these relationships, two major areas of interdependence behavior have been identified: receptive behavior and contributive behavior. These behaviors apply respectively to the receiving and giving of love, respect, and value in interdependent relationships. The assessment of receptive and contributive behavior provides an indication of social adaptation relative to the interdependence mode”.... The interdependence mode focuses on the close relationships of people (individually and collectively) and their purpose, structure, and development. Each interdependent relationship exists for some purpose, and it is through such relationships that people continue to grow as individuals and as contributing members of society (Roy & Andrews, 1999: 111-112).

2. Adaptation to clinical practice of nursing students

When nursing students interact with stressful situation, they have internal processes that act to maintain the integrity of themselves, and the adaptive modes are the way in which nursing students, as adaptive systems, respond to stimuli from the environment during clinical practice. “Clinical experiences require difficult adjustments for students as they move from an environment that encourages thinking to an environment that encourages doing ... Nursing students frequently feel vulnerable in the clinical environment ... This may be because they are learning to provide care, but they also may concern with the reaction of nursing staffs to their efforts ... Student nurses have difficulty differentiating their roles of learner and worker. Inevitably, student nurses are thrust into the clinical area as short-term members of the patient care team ... Therefore, their position is anomalous, and their motive for involvement in patient care usually is different from those permanent employees” (Chan, 2002: 69-75).

Chaleekorn Boonprasert (B.E., 2543: 90-100) conducted a study with 903 first-, second-, third-, and fourth-year nursing students at a nursing college under the supervision of the Ministry of Defense and the National Police Bureau using a questionnaire based on Roy’s Adaptation Model. The findings revealed that in general, the nursing students had the adaptation at moderate level. When we considered each subscale, the findings revealed that the physiologic mode, self-concept mode and role function mode had the adaptation scores more than mean of

overall (74.70%, 74.89%, and 80.14%, respectively). In the interdependence mode, the nursing students had the adaptation scores less than mean of overall (76.55%). This is consistent with the findings in the study of Kankanit Kasampongthongdee(B.E., 2546: 64) that described the adjustment of 374 first- to fourth-year nursing students of Boromarajonani College of Nursing in Nonthaburi Province. In this study, a questionnaire was modified from Mooney Problem Check List, a personal development assessment tool. It was found that nursing students' self – adjustment were at moderate level. Moreover, Suwiriya Suwankote (B.E., 2538: 88) explored the adaptation of 1185 first- to fourth-year nursing students studying at a nursing college under the supervision of the Ministry of Public Health in a province in Northeastern region. In this study, a questionnaire constructed based on Roy's Adaptation Model was employed as the research instrument. The result was the same; the overall adaptation of nursing students was at moderate level.

Warunee Jamgrajai (B.E., 2540: 115) conducted a study on 248 first- to fourth-year nursing students at Kuakarun College of Nursing, Department of Medical Service, Bangkok Metropolis Administration, using a Mooney Problem Check List modified questionnaire, which was the same questionnaire in the study of Kankanit Kasampongthongdee(B.E., 2546: 64). However, the finding revealed that the nursing students' self – adjustment were just satisfied. In addition, the study of Riyaphun S. (2003:75-77) revealed a high level of adaptation to the clinical practice of 215 second-, third-, and fourth-year nursing students at Kuakarun College of Nursing. The instrument in this study was the adaptation to clinical practice questionnaire.

2.1 Assessment tools for measure adaptation to clinical practice of nursing students

There were total of five questionnaires developed to assess the adjustment and adaptation of nursing students. Three of them were based on the Roy Adaptation Model. One of them, with 2 versions, was modified from Mooney Problem Check List. And the last one was modified from Personal Adjustment Inventory of Heston.

The adjustment of nursing students questionnaire: The questionnaire was developed by Chaleekorn Boonprasert (B.E., 2543) based on the Roy Adaptation Model. The questionnaire consisted of 69 items and was divided into four subscales as

physiologic mode, self-concept mode, role function mode, and interdependence mode. There were concerns on both positive and negative attitudes towards the adjustment of nursing students in nursing colleges. The content validity of the instrument was determined by 10 experts: The agreement of the experts was 80 to 100 %. The items that expert showed less agreement than 80% were improved, including 9 items on physiologic mode, 7 items on self concept mode, 4 items on function mode, and 6 items on interdependence mode. To determine reliability, the instrument was used on 40 nursing students. The reliability was shown by the alpha coefficient of 0.90. Re-calculated in this study, the reliability was shown by the alpha coefficient of 0.92.

The adjustment of student nurses questionnaire: The questionnaire was developed by Suviriya Suwannakoat (B.E., 2538) based on the Roy Adaptation Model. The questionnaire consisted of 113 items and was divided into four subscales as physiologic mode, self-concept mode, role function mode, and interdependence mode. There were concerns on both positive and negative attitudes towards adjustment of nursing students in five aspects as theoretical study, accommodation, physical environment of patient's units, atmosphere, and relationship with clinical nurses, instructor, and team work. The content validity of the instrument was determined by 10 experts: The agreement of the experts was 80 to 100 %. The items that expert showed less agreement than 80% were improved. To determine reliability, the instrument was used on 39 nursing students. The reliability was shown by the alpha coefficient of 0.97.

The adaptation to clinical practice questionnaire: This questionnaire was developed by Riyapun S. (2003) based on the Roy Adaptation Model and related literature. The questionnaire consisted of 45 items and was divided into four subscales as physiologic mode, self-concept mode, role function mode, and interdependence mode. There were concerns on both positive and negative attitudes towards the adaptation to clinical practice of nursing students. The content validity of the instrument was determined by 5 experts: The agreement of the experts was 60 to 100 %. The items that expert showed less agreement than 60% were improved, including the item on activity and rest, perception, neurologic function, effective pattern of dependency and independency, and inadequate resources. To determine reliability, the

instrument was used on 60 samples of nursing students. The reliability was shown by the alpha coefficient of 0.86, and the reliability of the subscales ranged from .73 - .88.

The questionnaire modified from Mooney Problem Check List: The questionnaire was first modified by Warunee Jamgrajai (B.E., 2540) based on Mooney Problem Check List. The questionnaire consisted of 135 items in 11 subscales. Later, Kankanit Kasampongthongdee (B.E., 2546) modified Warunee Jamgrajai's questionnaire into a new questionnaire that consisted of 35 items in 3 subscales. There were concerns on both positive and negative attitudes towards the adjustment of nursing students. The content validity of the instrument was determined by 3 experts in Kankanit Kasampongthongdee's questionnaire and by 5 experts in Warunee Jamgrajai's questionnaire. There was no report on the content validity. To determine reliability, the instrument was used on 120 nursing students in Kankanit Kasampongthongdee's questionnaire and 80 nursing students in Warunee Jamgrajai's questionnaire. The reliabilities were shown by the alpha coefficient of 0.97 and 0.95, respectively.

The questionnaire modified from Personal Adjustment Inventory of Heston: The questionnaire was modified by Sumalee Suwunpugdi (B.E., 2541) based on Personal Adjustment Inventory of Heston. The questionnaire consisted of 36 items. There were concerns on both positive and negative attitudes towards the adjustment of nursing students. The content validity of the instrument was determined by 5 experts but there was no report on the content validity. To determine reliability, the instrument was used on 40 nursing students. The reliability was shown by the alpha coefficient of 0.89.

Among five questionnaires, three were based on Roy Adaptation Model. The first two questionnaires were used to measure the adaptation to being nursing students in the universities. On the other hand, the fourth and fifth instrument was used to measure the adaptation of nursing students in the universities based on Mooney Problem Check List and Personal Adjustment Inventory of Heston, respectively. Those were different from the conceptual model in this research. The third instrument was the most suitable for this research because it was the most relevant to the study's target population, which were nursing students having clinical practice experiences

and having been adapted to clinical practice based on the same conceptual model, The Roy Adaptation Model.

3. Factors related to adaptation to clinical practice of nursing students.

In searching for the related literature on the factors related to adaptation to clinical practice of nursing students using keyword: adaptation of nursing students to clinical practice from the databases of CINAHL, ERIC, and MEDLINE during the years of 1994 to 2003, there was no study report found.

In Thailand, only one study was aimed at describing the factors related to the adaptation of nursing students to clinical practice while five other studies were aimed at describing the factors related to the adaptation of nursing students in general. From the literature review, one factor related to adaptation of nursing students to clinical practice was revealed. It was the academic achievement. Meanwhile, nine other factors were found that they were related to the adaptation of nursing students only in general. They were learning behavior, student activity, sense of coherent, self-concept, attitude toward nursing career, college environment, educational level, nursing students' income / family's income, and interpersonal relationship between teacher-student nursing / interpersonal relationship between nursing student and friends. These factors were explored as follows:

3.1 Academic achievement: This factor was related to the general adaptation of nursing students at Nursing Colleges in Northeastern Region under the Jurisdiction of the Ministry of Public Health. ($r=.40$, $p\leq .05$, Suviriya Suvannakote, B.E., 2538: abstract) This is consistent with the study of Kankanit Kasampongthongdee (B.E., 2546: abstract), which revealed that the academic achievement was a factor related to the general adaptation of nursing students. ($r = .14$, $p\leq .01$) In contrast, one study revealed that this factor was not related to general adaptation of nursing students (Chaleekorn Boonprasert, B.E., 2543: 95,101).

3.2 Learning behavior: This factor was related to the general adaptation of 273 first- to fourth-year nursing students at five colleges of nursing under the administration of the Ministry of Public Health in the Southern Region ($r = .45$, $p\leq .01$), This was found in the study by Sumalee Suwunpugdi (B.E., 2541: 82). In

addition, Kankanit Kasampongthongdee (B.E., 2546: abstract) found that this factor was also related to the general adaptation of nursing students of Boromarajonani College of Nursing in Nonthaburi Province ($r = .32, p \leq .01$).

3.3 Student activity: This factor was related to the general adaptation of 273 first- to fourth-year nursing students at five colleges of nursing under the administration of the Ministry of Public Health in the Southern Region ($r = .31, p \leq .01$) This was found in the study by Sumalee Suwunpugdi (B.E., 2541: 82). In addition, Kankanit Kasampongthongdee (B.E., 2546: abstract) revealed that this factor was related to the general adaptation of nursing students of Boromarajonani College of Nursing in Nonthaburi Province ($r = .30, p \leq .01$).

3.4 Sense of coherent: One study revealed that this factor was related to the general adaptation of 290 first- to fourth-year nursing students at colleges of nursing under the administration of the Ministry of Defense and Royal Thai Police ($r = .72, p \leq .01$) (Chaleekorn Boonprasert (B.E., 2543: 92)

3.5 Self-concept: This factor was related to the general adaptation of nursing students at colleges of nursing under the administration of the Ministry of Public Health in the Northeastern Region. ($r = .23, p \leq .05$) (Suviriya Suvannakote, B.E., 2538: 81) In addition, the study by Warunee Jamgrajai (B.E., 2540: 112) revealed that self-concept was a factor related to the adjustment problems of nursing students at Kuakarun College of Nursing, Department of Medical Service, Bangkok Metropolis Administration. ($r = .14, p \leq .01$)

3.6 Attitude towards nursing career: This factor was explored that it was related to the general adaptation of 273 first- to fourth-year nursing students at five colleges of nursing in the Southern Region under the administration of Ministry of Public Health ($r = .30, p \leq .01$), by Sumalee Suwunpugdi (B.E., 2541: 82). This was consistent with the study by Kankanit Kasampongthongdee (B.E., 2546: abstract). It was found that this factor was related to the general adaptation of nursing students of Boromarajonani College of Nursing in Nonthaburi Province ($r = .28, p \leq .01$). In addition, Chaleekorn Boonprasert (B.E., 2543:) revealed that this factor was related to the general adaptation of 290 first- to fourth-year nursing students at nursing colleges under the administration of the Ministry of Defense and Royal Thai Police ($r = .63, p \leq .01$)

3.7 College environment: This factor was explored that it was related to the general adaptation of 273 first- to fourth- year nursing students at five colleges of nursing under the administration of the Ministry of Public Health in Southern Region ($r = .27, p \leq .01$) by Sumalee Suwunpugdi (B.E., 2541: 82). This was consistent with the study by Kankanit Kasampongthongdee (B.E., 2546: abstract). It revealed that this factor was also related to the general adaptation of nursing students of Boromarajonani College of Nursing in Nonthaburi Province ($r = .16, p \leq .01$). In addition, Chaleekorn Boonprasert (B.E., 2543:) revealed that this factor was related to the general adaptation of 290 first- to fourth-year nursing students at Nursing Colleges under the administration of the Ministry of Defense and Royal Thai Police ($r = .72, p \leq .01$).

3.8 Interpersonal relationship between teacher-student nursing / interpersonal relationship between nursing student and friends: One study revealed that these factors were related to the general adaptation of 347 first- to fourth-year nursing students of Boromarajonani College of Nursing in Nonthaburi Province ($r = .23, p \leq .01, r = .22, p \leq .01$, respectively). (Kankanit Kasampongthongdee, B.E., 2546: abstract)

3.9 Educational level: Roy & Andrews wrote, “Inherent in the stimulus of coping processes are the knowledge, perception, and skill to assist in coping with environmental stimuli” (Roy and Andrews, 1999: 76). Therefore, educational level is considered as important factor impacting on the adaptation level of nursing students. Besides, students studying in different levels tend to have different clinical experiences. According to Nipa Nithyayon (B.E., 2520: 111), past experiences partially affect individuals’ ability to adapt themselves.

One study revealed that the educational level was positively and significantly related to the adaptation of nursing students (Suviriya Suvannakote, B.E., 2538: 81). When considering the adaptation in each of the educational levels, Saowaluck Janeviriyakul (B.E., 2536: abstract) studied the adaptation ability of 509 nursing students of Khonkaen University during clinical practice. The subjects were selected by means of stratified random sampling. The findings of the study showed that the adaptation abilities of nursing students in each year of college differed with statistical significance at .01 ($t = 6.53, p \leq .01$). Comparing different means by Scheffe test, it was

found that the fourth-year nursing students had statistically higher adaptation to clinical practice than the first- ($p \leq .01$), the second- ($p \leq .05$), and the third-year students ($p \leq .01$). In contrast, Chaleekorn Boonprasert (B.E., 2543: 90-100) conducted a study with 903 first-, second-, third-, and fourth-year nursing students at the Nursing College under the supervision of the Ministry of Defense and the National Police Bureau using a questionnaire based on Roy's Adaptation Model. The findings revealed that the educational level was not related to the adaptation of nursing students. She explained that the educational level did not indicate the adaptation ability but it rather depended on the personality of each person. Also, the study by Kankanit Kasampongthongdee (B.E., 2546:74) revealed that the educational level was not related to the adaptation of nursing students at all. She explained the reason that all nursing students from all educational levels had to live together in the dormitory, and they had sister-like relationship; older sisters took care of younger sisters. As a result, they had continued the adaptation process for sometime; thus, the educational level did not affect the adaptation. Besides, there was a study (Prapawadee Laopoolsuk, B.E., 2539: 2), which compared the adaptation problems of first-year nursing students with first-year students in other major areas of study. The finding revealed that their adaptation did not differ. The researcher explained that all of the first-year students were required to take only general courses offered by the university; as a result, they had similar adaptation. However, during later years of studies, they had to take more specialized courses according to their majors, some of which required practice in addition to class lectures, so the students suffered from more mental health problems. The above results were in contrast with the relation between the educational level and the adaptation of nursing students from the review of literature about the educational level. Some of them were not clear.

3.10 Nursing students' income: Nursing students' income is another factor found to associate with the adaptation. Nipa Nithyayon (B.E., 2520: 195) pointed out that the family's social and economic status affects students' adaptation both directly and indirectly.

Sato (1984, cited by Roy and Andrews, 1999: 75) discussed socioeconomic status as the primary considerations for stimuli affecting human adaptation. Socioeconomic status provides an indication of the style of living and the material

resources upon which the human adaptive system has to draw (Roy and Andrews, 1999: 75). From the study of Suviriya Suvannakote (B.E., 2538:81), it could be seen that family income was positively and significantly related to the adaptation of nursing students ($r = .10$, $p \leq .05$). In addition, Chaleekorn Boonprasert (B.E., 2543: 92) revealed that nursing students' income was positively and statistically correlated with the adaptation of nursing students ($r = .116$ $p \leq .05$).

In contrast, the study of Kankanit Kasampongthongdee (B.E., 2546:abstract), the study revealed that neither family income nor nursing students' income was related to the adaptation of nursing students. This finding yielded support to that of the study by Sumalee Suwunpugdi (B.E., 2541:abstract), which was conducted in a different setting, in colleges of nursing in Southern Region under the administration of the Ministry of Public Health. It revealed that nursing students' income was not related to adaptation of nursing students. Thus, the literature review showed the opposite result of studying on income and adaptation of nursing students.

3.11 Helping-trust relationship: It is a part of intervention in human care process, which becomes actualized in the moment-to-moment human care process in which the nurse is being with the other person. This process entails a commitment to caring as a moral ideal directed toward the preservation of humanity. The process affirms the subjectivity of persons and leads to positive change for the welfare of others (Watson, 1985: 74-75). Based on Caring Concept of Watson (1985: 26), attitudinal processes of the development of helping-trust relationship are as follows:

Congruence: Congruence is a basic and necessary attitudinal process. Congruence is later researched as a critical variable in helping-trust relationships, and it is validated empirically. Congruence involves openness with the feelings and attitudes that are within at a given moment. Congruence can be equated with genuineness, which refers to being, real, honest, and authentic (Watson, 1985: 26).

Empathy: Empathy is another essential condition for the development of a helping-trust relationship. Empathy refers to the nurse's ability to experience the other person's private world and feelings to communicate to the other person some significant degree of that understanding. Often, the first step in communicating helpfully with another person is perceiving what the person is feeling. Every one has experienced "not helpful" communication or communication that ignores or denies

feeling. The nurse who is empathic recognizes and accepts the other person's feelings without discomfort, fear, anger, or conflict. That kind of understanding and acceptance, which is rare in day-to-day living, makes a difference in helping other (Watson, 1985: 28-30).

Nonpossessive Warmth: Nonpossessive Warmth is an interpersonal condition in a helping relationship that, along with congruence and empathy, promotes growth in another person. An effective nurse is able to “provide a non-threatening, safe, trusting, or secure atmosphere through acceptance, positive regard, love valuing, or nonpossessive warmth” (Watson, 1985: 30-32). Although warmth alone is inadequate for an effective helping relationship, it seems to encourage the development of the other condition of empathy and genuineness. Warmth is communicated through a wide variety of behaviors (e.g., gestures, posture, tone of voice, touch, and facial expressions). Warmth is an important nonverbal message and attitude that has a positive impact. Warmth can also be expressed verbally; for example, “I can see this is important to you, so it's also important to me” (Watson, 1985: 32).

Within the context of a helping-trust relationship, general principles of communication need to be considered. As previously mentioned, communication consists of all the cognitive, affective, and behavioral responses used to convey a message to another person. Within such a context there is no such thing as “no communication” or no behavior. All behaviors have meaning for the person, and all behavior has a message value. The nurse who wishes to communicate effectively within a helping relationship must be truly responsive to all the modes of behavior that one person uses to affect another. The following are the three basic types of communication that provide a context in which to understand people:

1. The somatic level includes the breathing and heart rates, the general physical state, and the related bio-physiological states.
2. The action level includes all nonverbal behavior, such as body movement, posture, gait, and position.
3. The language level refers to words and their meaning. There are two kinds of language communication:

3.1 denotative communication refers to the explicit meaning of

words and the overt, manifest context of words.

3.2 connotative communication refers to the implicit meaning, associated ideas, feelings, symbolic responses, and latent content of words.

(Watson, 1985: 33)

Generally, the cognitive domain is the intellectual focus of learning, and the affective domain reflects the heart and soul of learning. According to Pugh, “The central focus of the teacher’s effort should be to develop a relationship and to create an atmosphere conducive to self-motivated, personally maturing and significant learning. In a comparative study, Pugh found that the ideal teacher-student relationship “involves good or excellent communication, in a peer relationship.” This relationship is formed primarily for the purpose of teaching and learning; learning occurs within both the student and the teacher. With this focus, the teacher’s role is that of facilitator, counselor, and colleague in order to assist students to seek answers to various questions in their quest for knowledge. Carl Roger, whose view is similar to Pugh’s, visualizes the helping relationship between students and teacher as “one in which at least one of the parties has the intent of promoting the growth, development, maturity, improved functioning, and improved coping with life of the other. During each nursing instructor’s professional life, endless unique student-instructor relationships are formed. Each relationship offers both the student and the instructor an opportunity for growth in interpersonal skills, self-awareness, and cognitive areas. By applying the basic principles of helping relationship, nursing instructors may strengthen student interpersonal skills, which are necessary for effective therapeutic relationships with clients in the healthcare system”. (Griffith and Bakanauskas, 1983: 104) Moreover, the nursing students are unfamiliar with nursing staffs. Therefore the interaction between nursing students and nursing staffs in a clinical practice situation is the changing of the environment that affects adaptation to clinical practice of nursing students. Changes in environment can have a profound effect on the system’s state of adaptation (Roy and Andrews, 1999:76). And “the presence of unfamiliar people may be part of an environment change” (Roy and Andrews, 1999: 76).

From the review above, helping-trust relationship between nursing staffs and nursing students influences growth in interpersonal skills, self-awareness, and

cognitive areas that yield adaptation in clinical practice. The interaction between nursing students and nursing staffs in a clinical practice situation is a factor which enables nursing students to expose to professional nursing culture and environment, including social behavior, verbal communication, gestures, and activities and their outcomes (Sathirakoset, cited in Nipa Nithyayon, B.E., 2520: 165). At the same time, it is considered as a social environment. Both cultural and social environments are components in individuals' adaptation.

3.11.2 Assessment tools for measure of helping-trust relationship

There are three questionnaire developed to assess helping –trust relationship. Two questionnaires were developed to assess helping–trust relationship between faculty and nursing students, and one questionnaire was modified to assess helping – trust relationship between nurses and nursing students in Thailand.

The helping–trust relationship questionnaire. The questionnaire was developed by Sornsawart Chidaroon (B.E., 2537) based on Interpersonal Theory, Helping Relationship of Brammer, and Caring Concept of Watson, to assess the helping–trust relationship between faculty and nursing students. The questionnaire consisted of 40 items and was divided into six aspects as empathy, respect, warmth and caring, honest, modeling, and learning facilitating activities. There were concerns on both positive and negative items. The content validity of the instrument was determined by 10 experts but there was no report on the content validity. To determine reliability, the instrument was used on 30 nursing student. The reliability was shown by the alpha coefficient of 0.94, and the reliability of each aspect ranged from .72 - .89.

The helping–trust relationship questionnaire and the helping–trust relationship checklists of observation. These instruments were modified by Nuchamart Cheangmoenwai (B.E., 2539) from helping–trust relationship questionnaire by Sornsawart Chidaroon (B.E., 2537) based on Interpersonal Theory, Helping Relationship of Brammer, and Caring Concept of Watson to assess helping–trust relationship between faculty and nursing students. The questionnaire consisted of 40 items, and the checklists of observation consisted of 45 items. They were divided into six aspects as empathy, respect, warmth and caring, honest, modeling, and learning facilitating activities. There were concerns on both positive and negative

items. The content validity of the instrument was determined by 10 experts. The results led to the improvement of definition and content, changing rating scale from 4 to 5 and revising phrases used in the instrument. To determine reliability, the instrument was used on 30 nursing student. The questionnaire reliability was shown by the alpha coefficient of 0.94, the reliability of each aspect ranged from .72 to .89, and the checklist of observation reliability was shown by the alpha coefficient of 0.90.

The helping–trust relationship questionnaire. The questionnaire was modified from the helping-trust relationship of Sornsawat Chidaroon (B.E., 2537) by Varunee Ketin (B.E., 2542) based on Caring Concept of Watson to assess helping – trust relationship between nurses and nursing students. The questionnaire consisted of 17 items and was divided into three aspects as empathy, non-possessive warmth and congruence or genuineness. There were concerns on both positive and negative items. The content validity of the instrument was determined by 5 experts but there was no report on the content validity. To determine reliability, the instrument was used on 60 nursing student. The reliability was shown by the alpha coefficient of 0.91, and the reliability of each aspect ranged from .79 - .86.

Previous studies on helping-trust relationship of nursing students were as follows: according to Nuchamart Cheangmoenwai (B.E., 2539: 100-103) and Sornsawat Chaidarun (B.E., 2537: 62-95), the helping-trust relationship between nursing instructors and nursing students during clinical practice at a nursing college under the Ministry of Public Health located in the northeast region of Thailand and in a private nursing institute were analyzed. The findings from the two sites were similar. The helping-trust relationship between nursing instructors and nursing students in the dimensions of empathy, warmth and caring, openness, respect, honest, and learning facilitating activities were at moderate level. Nonetheless, in the dimension of role model, helping-trust relationship of the subjects sited in the nursing college under the Ministry of Public Health was at low level while that in the private one was at moderate level. As a whole, the helping-trust relationship between nursing instructors and nursing students was at moderate level.

Nuchamas Changmeunwai (B.E., 2539: 100-103) also found that the helping-trust relationship between nursing instructors and nursing students classified by age, educational level, and working experience were not statistically significantly different.

But the one classified by department of nursing and supervisory training were statistically significantly different, at the value of .05. Meanwhile, Sornsawat Chaidarun (B.E., 2537: 62-95) found that the dimension of role model, learning, facilitating activities, and warmth and caring aspects of the helping-trust relationship between nursing instructors and nursing students were the factors that significantly predicted clinical nursing experience of student nurses, at the value of .01.

Varunee Ketin (B.E., 2542) investigated the helping-trust relationship between nursing staffs and nursing students and stress in clinical practice among nursing students in College of Nursing, Ministry of Public Health. The sample consisted of 717 nursing students who had been trained in clinical practice. Using the helping-trust relationship questionnaire to assess the helping-trust relationship and the Pagana Clinical Stress questionnaire to assess the stress in clinical practice, the result indicated that the helping-trust relationship between nursing staffs and nursing students was at moderate level. The helping-trust relationship was statistically correlated to the stress in clinical practice in each dimension. The dimension of threat was negatively related at low level. ($r = -.20$, $p \leq .01$). While the dimensions of harm, challenge, and benefit were negatively related at moderate level ($r = -.33$, $r = .50$, $r = .48$, respectively, $p \leq .01$).

In the literature review about helping-trust relationship, it was found that no study had established the relationship between the adaptation to clinical practice and helping-trust relationship while from the aspects of theory, there was certainly involvement. The objective of this study is to prove that this is true.

The conceptual model of this research was derived from all of the literature review as follows:

Independent variable

Dependent variable

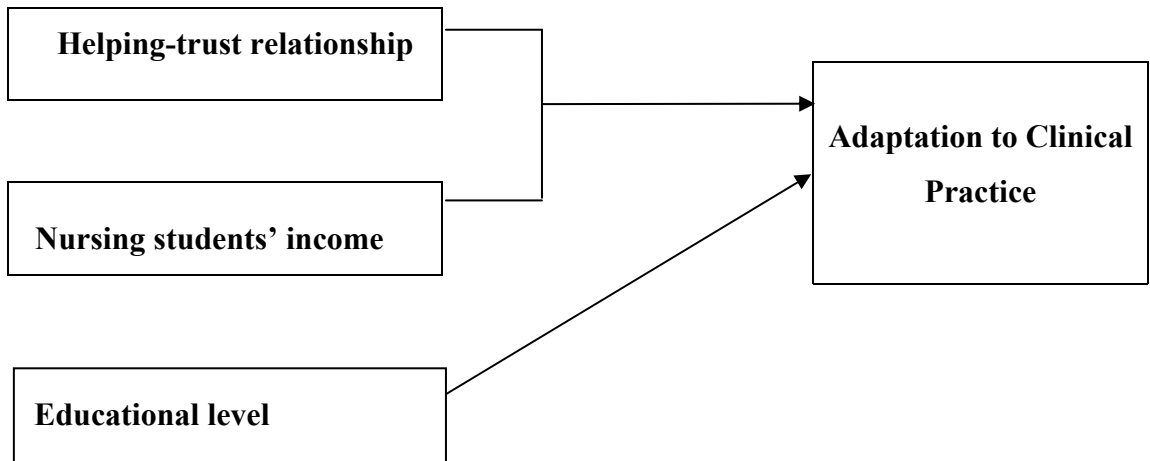


Figure 3 Conceptual Model of the research

CHAPTER III

METHODOLOGY

Research design

This study was a Correlational Research Design. The objectives were to describe the level of adaptation to clinical practice of nursing students and helping-trust relationship between nursing staffs and nursing students, to compare the differences in adaptation to clinical practice among nursing students who were different in educational level, and to predict the adaptation to clinical practice of the nursing students at Srimahasarakham Nursing College by the predictors: helping-trust relationship and nursing students' income.

Population and Sampling

Population

The population was 284 nursing students in a four-year nursing science program, seeking a bachelor's degree at Srimahasarakham Nursing College.

Sample

The sample composed of the 174 nursing students who were selected by purposive sampling method according to the following criteria: They had at least one course of clinical practice experience.

Setting

The setting of this study is Srimahasarakham Nursing College, a nursing college in the Northeastern part of Thailand. It is a governmental nursing college run by the Ministry of Public Health. Srimahasarakham Nursing College has 53 teachers and 501 nursing students in total. Its curricula has followed Praboromrajchanok Institute with some adjustments to suit the teaching loads and the number of student groups. The colleges offer a Bachelor's degree in Nursing Science and a Certificate of Nursing in Nursing Science for technical nurses. The courses towards the Bachelor's degree in Nursing Science are arranged into sequences that can fit into three semesters

per year, and the clinical practice courses will start in sophomore year. The degree requires the total of 144 credits: 29 credits for clinical practice, 12 credits for laboratory, and 103 credits for the theory.

In the academic year 2004, second semester, the sophomore was taking the clinical practice courses in Gerontology Nursing and Adult Nursing for 3 credits in total. The junior was taking the clinical practice courses, Obstetric Nursing V, Psychiatric and Mental Health Nursing Care III and Adult Nursing II for 8 credits in total. And the senior was taking the clinical practice courses, Community Health Nursing, Critical Care Nursing and Medical Practice Nursing for 5 credits in total.

The instructors from Srimahasarakham nursing college mainly took responsibility in clinical teaching for their students. During night shift experience, the nursing staffs of clinical area in hospital, who was training in clinical teaching, were asked to supervise the students.

Research Instruments

The research instruments comprised of three parts:

Part 1: The Demographic Data. There were two variables: educational level and nursing students' income. The former was collected from the students' records, and the latter was collected from the students.

Part 2: The Adaptation to Clinical Practice Questionnaire. This questionnaire was used to measure the adaptation to clinical practice of nursing students. This questionnaire was developed by Riyapun S. based on the Roy's adaptation model and related literatures (Riyaphun, S., 2003). There were 45 statements including both positive and negative statements. The questionnaires were divided into 4 subscales as follows.

The physiologic mode	19 items: Item number 1-19
The self-concept mode	9 items: Item number 20-28
The role function mode	9 items: Item number 29-37
The interdependence mode	8 items: Item number 38-45

The positive statements were the items number 8, 10, 16, 20-21, 23, 26-29, 32-34, 36, 39-41, and 44-45.

The negative statements were the items number 1-7, 9, 11-15, 17-19, 22, 24-25, 30-31, 35, 37-38, and 42-43.

The Scoring System: Each statement has 5 – point scale as follows:

Always occur	means	the situation always occurs to you
Frequently occur	means	the situation frequently occurs to you
Sometimes occur	means	the situation sometimes occurs to you
Rarely occur	means	the situation rarely occurs to you
Never occur	means	the situation never occurs to you
	For positive items	for negative items
Always occur	5 points	1 point
Frequently occur	4 points	2 points
Sometimes occur	3 points	3 points
Rarely occur	2 points	4 points
Never occur	1 point	5 points

According to Riyaphun S. (2003), the content of the instrument was validated by five experts: one from the education field, one from the model of Roy, and three from the clinical practice area. The agreement of the experts ranged from 60 to 100 %. The items that contained less than 60% of agreement by the experts were modified, including the items on activities and rest, perception, neurologic function, effective pattern of dependency and independency, and inadequate resources. To determine for the reliability, the instrument was tested on 60 nursing students. The total reliability was shown by the alpha coefficient of 0.86. For physiologic mode, self-concept mode, role-function mode, and interdependence mode, the reliabilities were .85, .78, .73, and .88 respectively.

Interpretations of the mean score

Mean scores of 3.67 - 5.00	= high level of adaptation
Mean scores of 2.34 - 3.66	= medium level of adaptation
Mean scores of 1.00 - 2.33	= low level of adaptation

In this study, the instrument was tested for the reliability on 53 nursing students at Khonkhaen Nursing College. The reliability was shown by the alpha coefficient of 0.84. For physiologic mode, self-concept mode, role-function mode, and interdependence mode, the reliabilities were .76, .73, .91, and .90 respectively.

Part 3: The Helping-trust Relationship Questionnaire. The questionnaire was used to measure the helping-trust relationship between nursing staffs and nursing

students. The questionnaire was modified from the helping-trust relationship questionnaire of Sornsavart Chaidaroon (B.E., 2537) by Varunee Ketin (B.E., 2542) based on the Caring Concept of Watson. The questionnaire consisted of 17 statements and was divided into three sub-scales as follows:

- | | | |
|---|---------------------------|----------------------------|
| 1 | Empathy | 5 items: item number 1-5 |
| 2 | Non-possessive warmth | 6 items: item number 6-11 |
| 3 | Congruence or Genuineness | 6 items: item number 12-17 |

Scoring system

The scoring of 5 -rating scale was as follows:

Scale	Score
Never occur	1
Rarely occur	2
Sometimes occur	3
Frequently occur	4
Very frequent occur	5

According to Varunee Ketin (B.E., 2542), the content validity was determined by five experts but there was no report on the content validity. To determine for reliability, the instrument was tested on 60 nursing students. The reliability was shown by the alpha coefficient of 0.91. The reliabilities of the subscales: empathy, non-possessive warmth, and congruence or genuineness were .80, .86, and .79 respectively.

Interpretation of the mean score

Mean score	Interpretation
4.50-5.00	Good helping-trust relationship
3.50-4.49	Rather good helping-trust relationship
2.50-3.49	Rather poor helping-trust relationship
1.00-2.49	Poor helping-trust relationship

In this study, the questionnaire was tested for the reliability in 53 nursing students in Khonkhaen Nursing College. The reliability was shown by the alpha coefficient of 0.94. The reliabilities of the subscales: empathy, non-possessive warmth, and congruence or genuineness were .73, .74, and .69 respectively.

Protection of Human Subjects

The study was conducted after receiving the permission from the faculty of Graduate Studies, Mahidol University. Regarding the protection of human subjects, the participants were informed in detail about the objectives of the study before they were asked to participate in this study. All subjects were informed about the study again by reading the consent form (Appendix A). The subjects could decide whether or not they wanted to participate in the study. If the subjects agreed to participate in the study, they would be asked to sign on the consent form. The data taken from the subjects was kept confidential.

Data collection

The researcher conducted the data collection. The introduction letter from the faculty of Graduate Studies, Mahidol University was sent to the director of Srimahasarakham Nursing College to ask for the permission. Data collection was conducted in the following sequences:

1. The researcher met with the Director of Srimahasarakham Nursing College in order to explain the objectives of the study and to ask for the permission for data collection.
2. The researcher selected the sample by purposive sampling technique according to the criteria.
3. After the subjects were selected, the researcher met with them at the end of the homeroom time on the first Monday of May 2004. The researcher explained to the subjects the purpose of the study, the procedure to answer the questionnaires, and the protection of human rights as stated in the consent form. After the subjects agreed to participate in the study, they were asked to sign on the consent form.
4. The researcher distributed the Adaptation to Clinical Practice Questionnaire to the subjects individually and allowed them to complete it. After it was done, the researcher distributed the Helping-trust Relationship Questionnaire to the subjects and allowed them to complete it. The total time they spent to complete the two questionnaires was approximately 60 minutes.

5. After the students filled in the questionnaires, the researcher edited the completeness of the questionnaires and asked them to answer the skipped questions if it was not complete.

Data Analysis

The analysis of the data was conducted by using the computer software program.

1. Frequency and percentage calculations were performed to describe educational level.

2. Range, Mean, and standard deviation were used to describe nursing students' income, the level of adaptation to clinical practice and the level of helping-trust relationship.

3. For assumption testing for One- way Analysis of Variance (ANOVA), One-Sample Kolmogorov-Smirnov, was applied to test the Normality. Levene Statistic was applied to test the Homogeneity of Variance. One-way Analysis of Variance (ANOVA) was used to compare the differences in adaptation to clinical practice of nursing students who were different in educational level at Srimahasarakham Nursing College.

4. For assumption testing for regression, One-Sample Kolmogorov-Smirnov, was applied to test the normal distribution. In case of normal distribution, Pearson's product-moment correlation was applied to find the intercorrelation of adaptation to clinical practice of nursing students. If not, Spearman's rank correlation was applied. Then the variables selection was gained to choose variables into the next step of applying the multiple regressions.

5. Stepwise multiple regressions were used to analyze the prediction of the influence of nursing students' income and helping-trust relationship on adaptation to clinical practice of nursing students.

6. The statistical significant level is .05.

CHAPTER IV

RESULTS

In this chapter, the research results were presented in the following sequence:

1. The Demographic data
2. The level of adaptation to clinical practice of nursing students at Srimahasarakham Nursing College
3. The level of helping-trust relationship between nursing staffs and nursing students at Srimahasarakham Nursing College
4. The comparison of the differences of the adaptation to clinical practice among nursing students who were different in educational levels at Srimahasarakham Nursing College
5. The prediction of the adaptation to clinical practice of nursing students at Srimahasarakham Nursing College by helping-trust relationship and nursing students' income

1. The demographic data.

A sample of 174 nursing students at Srimahasarakham Nursing College was chosen. In the sample, the numbers of the nursing students in the sophomore, junior and senior group were 55, 50 and 69, respectively.

The average income of the nursing students sample at Srimahasarakham Nursing College was 2,528.28 baht per month. The senior nursing students has the highest average income, which was 3,035.07 bath per month and the junior nursing students has the lowest average income, which was 2,104 bath per month. (Table 1)

Table1 Range, Mean and Standard Deviation (SD) of Nursing Students' Income in Baht (n=174)

Nursing Students' Income	Min	Max	Range	Mean	SD
Sophomore	1000	5000	4000	2278.18	1003.46
Junior	1000	5000	4000	2104.00	1012.97
Senior	1300	8000	6700	3035.07	1543.12
Total	1000	8000	7000	2528.28	1309.68

2. The level of adaptation to clinical practice of nursing students at Srimahasarakham Nursing College

The adaptation to clinical practice of nursing students was at the low level. The adaptation to clinical practice of nursing students in physiologic mode and in self-concept mode were at medium level. But in the role function mode and interdependence mode, the adaptation to clinical practice of nursing students were at low level. (Table 2)

Table 2 Mean, Standard Deviation (SD), and Level of Adaptation to Clinical Practice of Nursing Students Classified by Mode and by Total (n =174)

Adaptation to Clinical Practice Modes / Total	Mean	SD	Level of Adaptation
1. physiologic mode	2.34	.47	medium
2. self-concept mode	2.36	.44	medium
3. role function mode	2.06	.62	low
4. interdependence mode	2.15	.60	low
Total	2.28	.41	low

3. The level of helping-trust relationship of nursing students at Srimahasarakham Nursing College

The helping-trust relationship between nursing staffs and nursing students was found at rather poor level for total scores and for each subscales (Mean= 2.74, 2.85, 2.65, 2.74, respectively) (Table 3)

Table 3 Mean, Standard Deviation (SD), and Level of Helping-Trust Relationship Classified by Subscale and by Total (n =174)

Helping-Trust Relationship Subscale / Total	Mean	SD	Level of Helping-Trust Relationship
Subscale 1:Empathy	2.85	.57	Rather poor
Subscale 2:Non-possessive Warmth	2.65	.62	Rather poor
Subscale 3:Congruence or Genuineness	2.74	.67	Rather poor
Total	2.74	.67	Rather poor

4. The comparison of the difference of adaptation to clinical practice among nursing students, who were different in educational level at Srimahasarakham Nursing College

Assumption testing of Normality and Homogeneity of Variances

The results showed that all the assumptions were met. The distributions of adaptation to clinical practice scores of the three groups of nursing students were normal. The groups had equal variances. The groups were mutually exclusive.

The mean of total scores of Adaptation to clinical practice of nursing students at Srimahasarakham Nursing College was 2.28. The mean of total scores of Adaptation to clinical practice of sophomore was 2.31. The mean of total scores of Adaptation to clinical practice of junior was 2.28. And The mean of total scores of Adaptation to clinical practice of senior was 2.25 (Table 4).

Table 4 Mean and Standard Deviation (SD) of Adaptation to Clinical Practice of Nursing Students, in Mode and in Total Characterized by Educational Level (n=174)

Educational Level	n	Adaptation to Clinical Practice									
		Mode								Total	
		Physiologic		Self-concept		Role function		Inter dependence			
		mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
Sophomore	55	2.47	.47	2.33	.47	2.14	.55	2.11	.57	2.31	.40
Junior	50	2.39	.42	2.40	.39	2.04	.61	2.14	.60	2.28	.37
Senior	69	2.35	.47	2.36	.46	2.01	.69	2.18	.62	2.25	.44
Total	174	2.40	.46	2.36	.44	2.06	.62	2.15	.60	2.28	.41

The nursing students at different educational levels: sophomore, junior, and senior groups, showed non-significantly difference in the adaptation to clinical practice in all modes and total. (Table 5)

Table 5. The Comparison of the Differences of Adaptation to Clinical Practice among Nursing Students at Different Educational Levels analyzed by One-way Analyses of Variance (n = 174)

Adaptation to clinical practice	df	SS	MS	F
Total score				
Between Groups	2	220.00	110.00	.327 ^{ns}
Within groups	171	57531.35	336.44	
Total	173	57751.356		
Physiologic mode				
Between Groups	2	167.18	83.59	1.11 ^{ns}
Within groups	171	12842.85	75.10	
Total	173	13010.03		

Table 5 The Comparison of the Differences of Adaptation to Clinical Practice among Nursing Students at Different Educational Levels analyzed by One-way Analyses of Variance (n = 174) (Cont.)

Adaptation to clinical practice	df	SS	MS	F
Self concept mode				
Between Groups	2	13.36	6.68	.41 ^{ns}
Within groups	171	2759.52	16.14	
Total	173	2772.87		
Role function mode				
Between Groups	2	46.02	23.01	.73 ^{ns}
Within groups	171	5421.42	31.70	
Total	173	5467.45		
Interdependence mode				
Between Groups	2	9.31	4.66	.20 ^{ns}
Within groups	171	3916.85	22.91	
Total	173	3926.167		

ns =not significant

5. The prediction of adaptation to clinical practice of nursing students at Srimahasarakham Nursing College by helping-trust relationship, and nursing students' income.

According to the results of the correlation among studied variables, only one helping-trust relationship was significantly correlated to the adaptation to clinical practice ($r = .263$, $p \leq .05$). The nursing students' income was not significantly related to the adaptation to clinical practice. Among independent variables, helping-trust relationship was not significantly correlated to nursing students' income. (Table 6)

Table 6 Correlation Matrix of all Studies Variables

Variable	1	2	3
1. Adaptation to Clinical Practice	1		
2. Nursing Students' income	.110	1	
3. Helping-Trust Relationship	.263*	.063	1

* = $p \leq .05$,

According to the result of the stepwise multiple regressions analysis, it was found that only helping-trust relationship could predict the adaptation to clinical practice of nursing students. The relation between the adaptation to clinical practice and helping-trust relationship was illustrated in the following equation:

$$\text{Adaptation to clinical practice} = 76.299 + .511 (\text{Helping-trust relationship})$$

The helping-trust relationship could explain only 6.7% of the variance of the adaptation to clinical practice. (Table 7)

Table 7 Stepwise Multiple Regression Analysis for Variables Predicting Adaptation to Clinical Practice in Nursing Students (n= 174)

Variables	B	SEB	Beta	t	p
Constant	76.299	7.098	-	10.749	.05
Helping- Trust Relationship	.511	.147	.257	3.487	.05

$$R^2 = .067, F=7.200, p \leq .05$$

CHAPTER V

DISCUSSION

In this chapter, the interpretation and discussion of the data were presented in sequence of the study hypotheses as follows:

1. The level of the adaptation to clinical practice of the nursing students at Srimahasarakham Nursing College is at high level.
2. The level of helping-trust relationship between nursing staffs and nursing students at Srimahasarakham Nursing College is at the high level.
3. There are differences in the adaptation to clinical practice among nursing students, who were different in educational levels at Srimahasarakham Nursing College.
4. Helping-trust relationship and nursing students' income can predict the adaptation to clinical practice of the nursing students at Srimahasarakham Nursing College.

Hypothesis I

The level of the adaptation to clinical practice of the nursing students at Srimahasarakham Nursing College is at high level.

The research results do not support the hypothesis because of the fact that in overall, the level of adaptation to clinical practice of the nursing students at Srimahasarakham Nursing College is at low level. When considering each mode, it is found that in the physiologic mode and self-concept mode, the level of adaptation is at moderate level while in the role function mode and the interdependence mode, the level of the adaptation is at low level. This can be explained that the low level of the adaptation of the nursing students might be caused by the lack of the supportive systems during the clinical practice. Most of the nursing students of Srimahasarakham Nursing College have to take the clinical practice in other provinces because Mahasarakham Hospital, which is the provincial general hospital, does not have

enough capacity for all nursing students to practice. As a result, in the previous semester, the sophomore nursing students had to have the clinical practice in other provinces; e.g. Kalasin Hospital and Roi-ed Hospital. The junior nursing students had to take the clinical practice in Kalasin Hospital, Roi-ed Hospital, Konkaen Rajanakarin Mental Hospital, and Yasothon Hospital. And the senior nursing students had to take the clinical practice in Roi-ed Hospital, Konkaen Central Hospital, Mahasarakham Community Hospital, and Roi-ed Community Hospital. When nursing students had any problems, they had only few chances to consult with their advisors. When problems had not been solved, the adaptation was not improved. This is absolutely consistent with the research of Payaow Puljareon (B.E., 2524: 2), who studied the difference between the psychological group discussion and individual consultation of nursing students. It was found that students who attended either group discussion or individual consultation had better adaptation than before. Thus, when nursing students at Srimahasarakham Nursing College take the clinical practice in other provinces, the supervisors should realize the importance of their problems to assist them in the improvement of the adaptation.

Hypothesis II

The level of helping-trust relationship between nursing staffs and nursing students at Srimahasarakham Nursing College is at the high level.

The results showed that the level of helping-trust relationship between nursing staffs and nursing students at Srimahasarakham Nursing College in overall and subscales of empathy, non-possessive warmth, congruence or genuineness were at rather poor level. When considering in detail, all the helping-trust relationship between nursing staffs and nursing students behaviors have the answers of Never Occurred 1.1-10.3% and Frequently Occurred 0-4.6%. Behaviors with no answer of Frequently Occurred were item number 1 which is “Nursing staffs gave you chances to ask questions and make comments”, item number 6 “Nursing staffs welcomed you with warmth and friendliness when you started your clinical practice” and item number 11 “Nursing staffs showed willingness to teach and train you in nursing care”. It was clear

that the helping-trust relationship between nursing staffs and nursing students rarely happened. Especially, in item number 6 Nursing staffs welcomed you with warmth and friendliness when you started your clinical practice, 43.7% of the nursing students answered Rarely Occurred, and 10.3% of the nursing students answered Never Occurred.

It could be explained that in the clinical practice, the clinical teaching was mainly under the responsibility of the instructors from nursing college. There was less chance for nursing staffs to build up the helping-trust relationship.

Hypothesis III

There are differences in adaptation to clinical practice among nursing students who are different in educational levels at Srimahasarakham Nursing College.

There was no difference in adaptation to clinical practice among nursing students who were different in educational levels. This supported that increasing knowledge and experience according to educational level in nursing students did not associated with adaptation to clinical practice. This result did not support Roy's Adaptation Model, but it was congruence to Saowaluck Jenviyakul(B.E., 2536) who compared the different abilities in adaptation to clinical practice of the sophomore, junior, and senior nursing students. It was found that the adaptation to clinical practice between the sophomore and the junior students was not different.

According to Chaleekorn Boonprasert (B.E.,2543) who conducted a study on 903 first- to fourth- year nursing students at the Nursing College under the supervision of the Ministry of Defense and the National Police Bureau, these nursing students lived in the dormitory of their college as well. And the findings also revealed that educational level was not related to the adaptation of nursing students. She explained that the nursing students, who study at the Nursing College and live in the dormitory in their college. The living style in the dormitory of nursing was like being with family. The atmosphere of the dormitory is very warm. The experience in clinical practice is transferred to everybody in every educational level. As a result, they can

learn by the experience of the others and contribute to their own adaptation to clinical practice in the same level.

Hypothesis IV:

Helping-trust relationship and nursing students' income can predict the adaptation to clinical practice of nursing students at Srimahasarakham Nursing College.

The research result partially supported the hypothesis by the fact that the helping-trust relationship between nursing staffs and nursing students could be the predictor of the adaptation to clinical practice of nursing students. It could explain 6.7% of the total variance of the adaptation to clinical practice. But the nursing students' income could not predict the adaptation to clinical practice of nursing students.

Helping- trust relationship

The relationship between helping- trust relationship and adaptation to clinical practice of nursing students was clearly explained by Watson's that helping relationship was one of the curative factors that encouraged caring and encourage person to establish identity of mental, physical, and spiritual. It can also create positive thinking to them and other people strengthen the spiritual feelings, and form ability of self-regulation. It affects self-care, self-learning, and life-goals. All of these qualities lead to transcendence and self-actualization which affect the adaptation of persons.

It is indicated that the helping-trust relationship between nursing staffs and nursing students influences the improvement in the interpersonal skills, self-awareness, and cognitive areas that yield adaptation in clinical practice.

Nursing Students' income

Nursing students' income could not predict the adaptation to clinical practice of nursing students at Srimahasarakham Nursing College. This was similar to the study result of Kanganit Kasampongthongdee (B.E.,2546) and Sumaree Suwannapakdi (2541: 100), they discussed that nursing students had a low level of stress about income because they received support from the government.

The nursing students' income had no relation to the adaptation to clinical practice because it was not the source of stressor. The expense during nursing study

was not so high and most of student got support from the government or through governmental loan. Nursing students in junior and senior years of the Bachelor curriculum of Srimahasarakham Nursing College received the support from the government in the terms of food, dormitory fee, and stationary. Only sophomore nursing students, 31.6 percent of nursing students all educational levels, received the support as government loan.

CHAPTER VI

CONCLUSION AND RECOMMENDATION

Conclusion of the study

This presenting research was a descriptive research. The objectives of this research were:

1. To describe the level of adaptation to clinical practice among nursing students at Srimahasarakham Nursing College.
2. To describe the level of helping-trust relationship between nursing staffs and nursing students at Srimahasarakham Nursing College
3. To compare the difference in adaptation to clinical practice among the nursing students who are different in educational levels at Srimahasarakham Nursing College
4. To predict the adaptation to clinical practice of nursing students at Srimahasarakham Nursing College by the predictors: helping-trust relationship, and nursing students' income

The sample of 174 nursing students at Srimahasarakham Nursing College was selected by purposive sample method. The selected sample consisted of sophomore, junior, and senior nursing students in the academic year of 2003. The data was collected by the researcher using questionnaires during May 2004. The research tool were 5- rating scales separated into two parts:

- Part 1 The helping-trust relationship questionnaire
- Part 2 The adaptation to clinical practice questionnaire

The reliability of both questionnaires, using Cronbach's alpha coefficients, was as following:

1. 0.94 for the helping-trust relationship questionnaire.
2. 0.84 for the adaptation to clinical practice questionnaire.

The results of this study were as follows:

1. The adaptation to clinical practice of nursing students was at low level (Mean=2.28), and the adaptation to clinical practice of nursing students in two out of

four mode: physiologic mode and self-concept mode were at medium level. But the role function mode and interdependence mode were at low level.

2. The helping-trust relationship between nursing staffs and nursing students was found to be at poor level in total as well as in three sub-scales: Empathy, Non-possessive warmth, and Congruence or Genuineness.

3. There was no significant difference in the adaptation to clinical practice among nursing students who were different in educational levels: sophomore, junior, and senior, in mode and in total.

4. The helping-trust relationship could predict the adaptation to clinical practice of nursing students while nursing students' income could not. The relationship can be expressed with the following equation:

$$\text{Adaptation to clinical practice} = 76.299 + .511 (\text{Helping-trust relationship})$$

The helping-trust relationship could explain 6.7% of variance of adaptation to clinical practice.

Recommendations

1. Implication for nursing education

The result of this research indicated that helping-trust relationship between nursing staffs and nursing students could predict and explain 6.7% of variance of the adaptation to clinical practice of nursing students. Therefore, a teaching in clinic practice for nursing students should encourage more on helping-trust relationship between nursing staffs and nursing students.

2. Implication for nursing research

2.1 The study should be repeated for a better measurement of relationship between nursing staffs and nursing students when they actually have that helping-trust relationship.

2.2 The helping-trust relationship questionnaire should be revised for a better measurement of relationship between instructor and nursing students.

2.2 Further research should include other factors that may be related to the adaptation to clinical practice such as sense of coherent, and student activity.

2.3 Further research should study on nursing students who have high level of adaptation to clinical practice.

BIBLIOGRAPHY

- Admi, H. (1997). Nursing students' stress during the initial clinical experience. *Journal of Nursing Education, 36* (7), 323-327.
- Beck, D.L., et al. (1997). Perceived level and sources of stress in university professional school. *Journal of Nursing Education, 36*(4), 180-186.
- Beck, D.L., & Srivastava, R. (1991). Perceived level and sources of stress in baccalaureate nursing students. *Journal of Nursing Education, 30*(3), 127-133.
- Beck, T.C. (1992). Caring between nursing students and physically/mentally handicapped children: A phenomenological study. *Journal of Nursing Education, 31*(31), 361-366
- Bell, L.M. (1991). Learning a complex nursing skill: Student anxiety and the effect of preclinical skill evaluation. *Journal of Nursing Education, 30*(5), 222-226
- Bigger, T., Zimmerman, R. S., & Alpert, G. (1988). Nursing, Nursing education, and anxiety. *Journal of Nursing Education, 27*(9), 411-417
- Brooks, L. K. (1990). The relationship between clinical decision-making skills in nursing and general critical thinking abilities of senior nursing students in four type of nursing programs. *Journal of Nursing Education, 29*(9), 391-399
- Brown, B.J., & Chinn, P.L. (1982). *Nursing Education: Practical Methods and Models*. London: An Aspen Publication.
- Chan, D. (2002). Development of the clinical learning environment inventory: using the theoretical framework of learning environment studies to assess nursing students' perceptions of the hospital as a learning environment. *Journal of Nursing Education, 41*(2), 69-75.
- Clinton, M., & Nelson, S. (1996). *Mental Health & Nursing Practice*. Australia: Prentice Hall.
- Griffith, J. W., & Bakanauskas, A. J. (1983). Student-instructor relationships in nursing education. *Journal of Nursing Education, 22*(3), 104-107.

- Gwele, N. S., & Uys, L. R. (1998). Levels of stress and academic performance in baccalaureate nursing students. *Journal of Nursing Education, 37* (9), 404-407.
- Haack, M.R. (1988). Stress and impairment among nursing students. *Research in Nursing & Health, 11*, 125-134.
- Hamilton, V., & Warburton, D.B. (1977). *Human stress and Cognition*. New York: John Wiley & Son.
- Jones, M., & Johnston, D. (1997). Distress, stress and coping in first-year student nurses. *Journal of Advance Nursing, 26*, 475-482.
- Kleehammer, K., Hart, A. L., & Keck, J.F. (1990). Nursing student's perceptions of anxiety producing situations in the clinical setting. *Journal of Nursing Education, 29*(4), 183-187.
- Lazarus, R. S. & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer publishing.
- Lees, S. & Ellis, N. (1990). The design of a stress-management program for nursing personal. *Journal of Advance Nursing, 15*, 946-961.
- Mahat, G. (1996). Stress and coping: First-year Napalese nursing students in clinical setting. *Journal of Nursing Education, 35*(4), 163-169.
- Nicol, A., A. M., & Pexman, P. M. (1999). *Presenting Your Findings A Practical Guide for Creating Table* Washington, DC: American Psychological Association.
- Oerman, M. H., & Standfest, K. M. (1997). Differences in Stress and Challenge in Clinical Practice among AND and BSN Students in Varying Clinical Courses. *Journal of Nursing Education, 36*(5), 228-232
- Panaga, K.D. (1988). Stresses and threats reported by baccalaureate students in relation to an initial clinical experience. *Journal of Nursing Education, 27*(9), 418-424
- Rhead, M. (1995). Stress among student nurses: is it practical or academic? *Journal of Clinical Nursing, 4*, 369-376.
- Riyaphun, S. (2003). *Emotional intelligence and adaptation to clinical practice of nursing students at Kuakarun nursing college*. A thesis of the degree of

master of nursing science, Psychiatric and Mental health nursing, Faculty of graduate studies, Mahidol university.

Roy, C., & Andrew, A. H. (1999). *The Roy adaptation model*. Stamford: Appleton & Lange.

Schweer, J.E. (1968). *Creatives Teaching in Clinical Nursing*. New York: Springer.

Watson, J. (1985). *The philosophy and science of caring*. Boston: Little, Brown.

Watson, J. (1988). *Human science and human care*. Norwalk, Appleton-Century-Crofts.

In Thai

กัญต์กนิษฐ เกษมพงษ์ทองดี. (Kanganit Kasampongthongdee). (B.E. 2546). *ปัจจัยที่ส่งผลต่อการปรับตัวของนักศึกษาพยาบาล วิทยาลัยพยาบาลบรมราชชนนี จังหวัดนนทบุรี. ปรินญาการศึกษามหาบัณฑิต สาขาจิตวิทยาการศึกษา. บัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ.*

ชลิกร บุญประเสริฐ (Chaleekron Boonprasert) (B.E. 2543). *ความสัมพันธ์ระหว่างปัจจัยส่วนบุคคล เจตคติต่อวิชาชีพพยาบาล ความเข้มแข็งในการมองโลก สภาพแวดล้อมของสถาบัน และการปรับตัวของนักศึกษาพยาบาล วิทยาลัยพยาบาลสังกัดกระทรวงกลาโหมและสำนักงานตำรวจแห่งชาติ วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต สาขาวิชาการพยาบาลศึกษา บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย.*

ธวัชชัย วรพงศธร. (Thavachai vorapongsathorn)(B.E.2532). *ข้อพิจารณาการใช้สถิติการถดถอยพหุคูณสำหรับงานวิจัย. วารสารวิจัยวิทยาศาสตร์การแพทย์, 3(1), 55-62.*

ธวัชชัย วรพงศธร. (Thavachai vorapongsathorn) (B.E. 2540). *หลักการวิจัยทางสาธารณสุขศาสตร์. พิมพ์ครั้งที่3. กรุงเทพฯ: จุฬาลงกรณ์มหาวิทยาลัย.*

- นิภา นิธยาณ(Nipa Nothyayon) . (B.E. 2520). *การปรับตัวและบุคลิกภาพ : จิตวิทยาเพื่อการศึกษาและชีวิต*. กรุงเทพฯ: สารศึกษาการพิมพ์.
- นิภา รุจนันตกุล(Nipa Rujanuntakul). (B.E. 2541). *การประเมินทัศนคติความเครียดในการเรียนวิชาประสบการณ์ทางคลินิกของนักศึกษาพยาบาล วิทยาลัยพยาบาลพระจอมเกล้า จังหวัดเพชรบุรี*. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต สาขาวิชาการพยาบาล ผู้ใหญ่ บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.
- นุชมาศ แจ่มหมื่นไวย้(Nuchamart Cheangmoenwai). (B.E. 2539). *การวิเคราะห์สัมพันธภาพเชิงช่วยเหลือของนักศึกษาพยาบาล ขณะฝึกปฏิบัติงานในคลินิกของอาจารย์ วิทยาลัยพยาบาล ภาคตะวันออกเฉียงเหนือ สังกัดกระทรวงสาธารณสุข*. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต สาขาวิชาการพยาบาลศึกษา บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย.
- ประภาวดี เหล่าพูลสุข(Prapawadee Laopoolsuk). (B.E. 2539). *ปัญหาการปรับตัวและสุขภาพจิตของนิสิตชั้นปีที่ 1 มหาวิทยาลัยบูรพา จังหวัดชลบุรี*. วิทยานิพนธ์ปริญญาสังคมสงเคราะห์ศาสตรมหาบัณฑิต มหาวิทยาลัยธรรมศาสตร์.
- พ่องศรี ศรีมรกต ,วนิดา เสนะสุทธิพันธ์ และชมชื่น สมประเสริฐ(Pongsri Srimorakot, Vanida Senasoottipun, and Chomchaen Somprasert). (B.E. 2532). *รายงานการวิจัยเรื่อง การศึกษาติดตามระดับความวิตกกังวลและภาวะสุขภาพจิตของนักศึกษาพยาบาลชั้นปีที่ 3-4 ระหว่างปีการศึกษา 2531-2532*. กรุงเทพฯ. มหาวิทยาลัยมหิดล.

- เพยาวี พูลเจริญ(Payaow Puljareon). (B.E. 2524). *เปรียบเทียบผลของการให้คำปรึกษากับแบบรายบุคคลที่มีต่อการปรับตัวของนักศึกษาพยาบาลโรงเรียนพยาบาลรามาชิดิ. วิทยานิพนธ์ปริญญาโท มหาวิทยาลัยศรีนครินทรวิโรฒ ประสานมิตร*
- ภาวินี สุทธิพิเชฐภักดิ์ (Pavinee Sutheepichettapun).(B.E. 2545). *การปรับตัวต่อการปฏิบัติงานพยาบาลเพื่อเข้าสู่มาตรฐานระบบคุณภาพในโรงพยาบาลของนักศึกษาพยาบาลวิทยาลัยพยาบาลเกื้อการุณย์ กรุงเทพมหานคร. ปริญญาการศึกษามหาบัณฑิต วิชาเอกจิตวิทยาการศึกษา. บัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ.*
- วัลลภา ตันติสุนทร(Vallaphar Tantisoonthorn). (B.E.2532). *ความสัมพันธ์ระหว่างปัจจัยที่คัดสรรกับความเครียด:และระหว่างความเครียดกับผลสัมฤทธิ์ทางการศึกษาของนักศึกษาพยาบาล วิทยาลัยพยาบาลอุดรดิตถ์. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต สาขาพยาบาลสาธารณสุข บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.*
- วารุณี เกตุอินทร์(Varunee Ketin). (B.E.2542). *สัมพันธ์ภาพเชิงช่วยเหลือและไว้วางใจกับความเครียดในการฝึกปฏิบัติการพยาบาลทางคลินิกของนักศึกษาพยาบาลในวิทยาลัยพยาบาลสังกัดกระทรวงสาธารณสุข.วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต สาขาการพยาบาลเด็ก บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.*
- วารุณี แจ่มกระจาย(Warunee Jamgrajai). (B.E.2540). *การปรับตัวของนักศึกษาพยาบาลวิทยาลัยพยาบาลเกื้อการุณย์ สำนักการแพทย์ กรุงเทพมหานคร. ปริญญาการศึกษา มหาบัณฑิต วิชาเอกสุขภาพศึกษา. บัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ.*

สรสวาท ชัยครุณ(Sornsawart Chidaroon). (B.E.2537). ความสัมพันธ์ระหว่างสัมพันธภาพเชิงช่วยเหลือของอาจารย์และนักศึกษากับประสบการณ์ปฏิบัติการพยาบาลทางคลินิกของนักศึกษาพยาบาลในสถาบันอุดมศึกษาเอกชน.วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต สาขาวิชาการพยาบาลศึกษา บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย.

สมสร เชื้อหิรัญ วิทยา นาควัชระ และวาสนา แฉล้มเขตร (Somsorn Chauhirun, Vidhaya Nakavachara and Wasana Chalamket). (B.E.2523). รายงานการวิจัยเรื่อง การสำรวจปัญหาสุขภาพจิตนักศึกษาพยาบาล คณะพยาบาลศาสตร์ มหาวิทยาลัยมหิดล. กรุงเทพมหานคร: มหาวิทยาลัยมหิดล.

สุจิตรา แพสุพัฒน์. (Sujitra Paesuputt). (B.E.2542). สัมพันธภาพเชิงช่วยเหลือและความเครียดในการฝึกปฏิบัติการพยาบาล ของนักศึกษาพยาบาล วิทยาลัยพยาบาลกองทัพเรือ. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต สาขาการพยาบาลเด็ก บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.

สุทธิรัตน์ พิมพ์พงษ์ (Soottrirat Pimpong). (B.E.2518). การศึกษาองค์ประกอบที่มีผลต่อการเรียนภาคปฏิบัติของนักศึกษาพยาบาลมหาวิทยาลัยมหิดล. ปริญญานิพนธ์การศึกษามหาบัณฑิต มหาวิทยาลัยศรี นครินทรวิโรฒ.

สุมาลี สุวรรณภักดี (Sumalee Suwunpugdi). (B.E.2541). ปัจจัยที่เกี่ยวข้องกับการปรับตัวของนักศึกษาพยาบาลวิทยาลัยพยาบาลในเขตภาคใต้ สังกัดกระทรวงสาธารณสุข. ปริญญาการศึกษามหาบัณฑิต วิชาเอกการอุดมศึกษา. บัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ.

สุวิริยา สุวรรณโคตร(Suviriya Suvannakote) . (B.E.2538). *ความสัมพันธ์ระหว่าง ปัจจัยส่วนบุคคล อ้อมโนทัศน์ ผลสัมฤทธิ์ทางการเรียน กับ การปรับตัวของนักศึกษาพยาบาล วิทยาลัยพยาบาลในภาคตะวันออกเฉียงเหนือ สังกัดกระทรวงสาธารณสุข. วิทยานิพนธ์ปริญญาพยาบาลศาสตรมหาบัณฑิต, สาขาวิชาการพยาบาลศึกษา บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย.*

เสาวลักษณ์ เจนวิริยะกุล(Saowaluck Janeviriyakul). (B.E.2536). *การศึกษาความสามารถในการปรับตัวของนักศึกษาพยาบาลคณะพยาบาล มหาวิทยาลัยขอนแก่น. ปริญญาโท การศึกษามหาบัณฑิต มหาวิทยาลัยศรีนครินทรวิโรฒ มหาสารคาม.*

APPENDIX

APPENDIX A
Human rights to protect subject's participation
(การพิทักษ์สิทธิผู้เข้าร่วมการวิจัย)

คำชี้แจง สำหรับนักศึกษาที่เข้าร่วมการวิจัยทุกท่าน

เรื่อง ขอความร่วมมือในการตอบแบบสอบถาม

เรียน นักศึกษาพยาบาล

ดิฉัน นางเนาวรัตน์ สุขณะล้ำ นักศึกษาพยาบาลปริญญาโท สาขาการพยาบาลจิตเวชและสุขภาพจิต คณะแพทยศาสตร์ โรงพยาบาลรามาธิบดี มหาวิทยาลัยมหิดลขณะนี้กำลังทำวิทยานิพนธ์เรื่อง ปัจจัยที่มีความสัมพันธ์กับการปรับตัวในการฝึกภาคปฏิบัติของนักศึกษาพยาบาล วิทยาลัยพยาบาลศรีมหาสารคาม เพื่อ นำผลการวิจัยไปใช้เป็นประโยชน์ในการส่งเสริมการปรับตัวในการฝึกภาคปฏิบัติของนักศึกษาพยาบาล ให้มีประสิทธิภาพในรุ่นต่อไป

ดิฉันจึงใคร่ขอความร่วมมือจากนักศึกษา ในการตอบแบบสอบถามทั้งสามส่วนคือ ส่วนที่ 1 แบบสอบถามเกี่ยวกับข้อมูลส่วนบุคคล ส่วนที่ 2 เป็นแบบสอบถามการปรับตัวในการฝึกภาคปฏิบัติของนักศึกษาพยาบาล และส่วนที่ 3 เป็นแบบสอบถามความสัมพันธ์เชิงช่วยเหลือและไว้วางใจต่อนักศึกษาพยาบาลของพยาบาลประจำการ เวลาที่ใช้ในการตอบแบบสอบถามประมาณ 60 นาที

ในการตอบแบบสอบถามนี้ ไม่มีข้อมูลใดถูกหรือผิด ข้อมูลที่ท่านตอบจะถูกปกปิดไว้เป็นความลับและจะนำผลมาสรุปในภาพรวม โดยไม่รายงานเป็นรายบุคคลและจะไม่มีผลต่อคะแนนหรือผลการเรียนของผู้ตอบแต่อย่างใด นักศึกษามีสิทธิจะตอบรับหรือปฏิเสธการเข้าร่วมวิจัยครั้งนี้โดยอิสระ ถ้าท่านยินดีเข้าร่วม โปรดเซ็นชื่อในที่ว่างในแบบฟอร์ม และตอบแบบสอบถาม โดยครบถ้วนด้วย จักเป็นพระคุณยิ่ง

ยินดีเข้าร่วมการวิจัย

ลงชื่อ.....

(.....)

ขอขอบคุณที่ให้ความร่วมมือ

เนาวรัตน์ สุขณะล้ำ

ผู้วิจัย

APPENDIX B

Questionnaire

(แบบสอบถาม)

ส่วนที่ 1 ข้อมูลส่วนบุคคลของนักศึกษาพยาบาล

ท่านมีอายุ.....ปี.....เดือน

ชั้นปีของท่านคือ

- () ปีที่2
() ปีที่3
() ปีที่4

ท่านมีรายได้.....บาท/เดือน

ท่านมีรายจ่าย.....บาท/เดือน

รายได้ที่ท่านได้รับมีความเพียงพอหรือไม่

- () เพียงพอ
() ไม่เพียงพอ

ส่วนที่ 2 แบบสอบถามการปรับตัวในการเรียนภาคปฏิบัติ

คำชี้แจงในการตอบแบบสอบถามชุดนี้ประกอบด้วยข้อความเกี่ยวกับการปรับตัวในการ

เรียนภาคปฏิบัติจำนวน45ข้อ ให้นักศึกษาอ่านข้อความแต่ละข้อ แล้วเลือกตอบตามความเป็นจริงที่

เหตุการณ์นั้นเกิดขึ้นกับตัวของท่านมากน้อยเพียงใดในช่วงการฝึกปฏิบัติการพยาบาลในคลินิก ใน

ภาคการศึกษาที่ผ่านมา โดยทำเครื่องหมาย (√) ตรงกับระดับการเกิดเหตุการณ์เพียงระดับเดียว

คำตอบในแต่ละช่องมีความหมาย ดังนี้

เกิดเป็นประจำ	หมายถึง	เหตุการณ์นั้นเกิดขึ้นกับท่านมากที่สุด
เกิดบ่อยครั้ง	หมายถึง	เหตุการณ์นั้นเกิดขึ้นกับท่านมาก
เกิดปานกลาง/พอดี	หมายถึง	เหตุการณ์นั้นเกิดขึ้นกับท่านไม่มากไม่น้อย
เกิดบางครั้ง	หมายถึง	เหตุการณ์นั้นเกิดขึ้นกับท่านเป็นส่วนน้อย
ไม่เกิด	หมายถึง	เหตุการณ์นั้นไม่เคยเกิดขึ้นกับท่านเลย

ตัวอย่าง

ข้อความ	ระดับการเกิดเหตุการณ์				
	เกิดเป็นประจำ	เกิดบ่อยครั้ง	เกิดปานกลาง/พอดี	เกิดบางครั้ง	ไม่เกิด
00. ฉันมีอาการหน้ามืดหรือเวียนศีรษะ			√		

ข้อความ	ระดับการเกิดเหตุการณ์				
	เกิดเป็นประจำ	เกิดบ่อยครั้ง	เกิดปานกลาง/พอดี	เกิดบางครั้ง	ไม่เกิด
1. ฉันมีอาการหน้ามืดหรือเวียนศีรษะ					
2. ฉันรู้สึกหายใจไม่อิ่มและเหนื่อยหอบ					
3. ฉันรู้สึกเบื่ออาหาร					
4. ฉันมีอาการคลื่นไส้อาเจียน					
5. ฉันมีอาการท้องอืด					
6. ฉันมีอาการท้องผูก					
7. ฉันมีอาการท้องเสีย					
8. ฉันพักผ่อนได้เพียงพอ					
9. ฉันรู้สึกเหนื่อยง่ายเมื่อออกกำลังกาย					
10. ฉันไม่มีปัญหาในการนอนหลับ					
11. ฉันมีไข้					
12. ฉันมีอาการคันตามผิวหนัง					
13. การรับรู้ของฉันไม่ค่อยดี					
14. ฉันรู้สึกปวด					
15. ฉันมีอาการปากและคอแห้ง					
16. ฉันไม่รู้สึกอ่อนเพลีย					
17. ฉันมีความจำไม่ดี					
18. ฉันมีอาการง่วงไม่คงที่					

ข้อความ	ระดับการเกิดเหตุการณ์				
	เกิด เป็นประจำ	เกิด บ่อย ครั้ง	เกิด ปาน กลาง	เกิด บาง ครั้ง	ไม่ เกิด
19. ฉันรู้สึกเครียด					
20. ฉันรู้สึกพึงพอใจในรูปร่างหน้าตาและลักษณะโดยรวมของฉัน					
21. ฉันมีความเป็นตัวของตัวเอง					
22. ฉันรู้สึกวิตกกังวลใจในการปฏิบัติกิจกรรมการพยาบาล					
23. ฉันเชื่อว่าการฝึกปฏิบัติงานจะทำให้ฉันเป็นพยาบาลที่ดีได้					
24. ฉันรู้สึกเบื่อหน่าย ท้อแท้ในการขึ้นฝึกงาน					
25. ฉันรู้สึกว่าคุณค่าในตัวเองลดลงเมื่อขึ้นฝึกงานบนคลินิก					
26. ฉันรู้ว่าควรจัดการกับสิ่งที่มาคุกคามฉันอย่างไร เพื่อให้เกิดผลดีที่สุด					
27. ฉันรู้สึกผิดเมื่อให้การพยาบาลผู้ป่วยไม่ถูกต้อง					
28. ฉันรู้สึกมีคุณค่าเมื่อได้ช่วยเหลือผู้ป่วย					
29. ฉันเตรียมให้การช่วยเหลือผู้ป่วยที่ได้รับมอบหมายอย่างเต็มความสามารถทุกครั้ง					
30. ฉันล้มเหลวในการฝึกปฏิบัติงาน					
31. ฉันไม่มั่นใจในการฝึกปฏิบัติงาน					
32. ฉันมีความรับผิดชอบในการดูแลผู้ป่วยที่ได้รับมอบหมาย					
33. ฉันปฏิบัติตัวในฐานะนักศึกษาพยาบาลได้ดี					
34. ฉันพยายามฝึกปฏิบัติงานด้วยความถูกต้องและปลอดภัย					

ข้อความ	ระดับการเกิดเหตุการณ์				
	เกิด เป็น ประจำ	เกิด บ่อย ครั้ง	เกิด ปาน กลาง	เกิด บาง ครั้ง	ไม่ เกิด
35. ฉันไม่สามารถแสดงบทบาทของนักศึกษาพยาบาลได้ดีเท่าที่คิด					
36. ฉันรู้สึกคุ้นเคยมากขึ้นในการปฏิบัติงานในคลินิก					
37. ฉันยังไม่รู้สึกถึงความเป็นพยาบาลถึงแม้ว่าฉันให้การดูแลผู้ป่วยที่ได้รับมอบหมายได้					
38. ฉันไม่กล้าขอความช่วยเหลือจากอาจารย์ แพทย์พยาบาลหรือเจ้าหน้าที่อื่นๆแม้จะเป็นเรื่องที่จำเป็น					
39. เพื่อน ผู้ป่วย ญาติ ให้ความไว้วางใจฉันในการทำกิจกรรมต่างๆ					
40. ฉันและเพื่อนให้การช่วยเหลือซึ่งกันและกันเสมอ					
41. เมื่อฉันประเมินว่าไม่สามารถตัดสินใจในการปฏิบัติการพยาบาลได้ ฉันปรึกษาอาจารย์ แพทย์พยาบาลหรือเจ้าหน้าที่อื่นๆ					
42. ฉันรู้สึก "โดดเดี่ยว" ไม่สามารถพึ่งใครได้เมื่อขึ้นปฏิบัติงานบนคลินิก					
43. ฉันรู้สึกอึดอัดใจ เมื่อต้องทำงานร่วมกับเพื่อนพยาบาล หรือเจ้าหน้าที่อื่นๆที่ไม่สนิท					
44. ฉันเข้ากันได้กับบุคลากรในคลินิก					
45. ฉันมีแหล่งประโยชน์ที่จะขอความช่วยเหลือได้เมื่อขึ้นปฏิบัติงานในคลินิก					

ส่วนที่ 3 แบบสอบถามสัมพันธภาพเชิงช่วยเหลือและไว้วางใจ

คำชี้แจงในการตอบ ให้นักศึกษาได้พิจารณาจากประสบการณ์ที่ได้ขึ้นฝึกปฏิบัติการพยาบาลบนคลินิกภายใต้การดูแลของพยาบาลวิชาชีพในภาคการศึกษาที่ผ่านมาแล้ว และอ่านเหตุการณ์ในแต่ละข้อแล้วทำเครื่องหมาย(✓) ลงในช่องที่กำหนดให้ตามความมากน้อยของเหตุการณ์ที่เป็นจริงตามที่ท่านได้ประสบมา และเลือกตอบจากตัวเลือกดังนี้

- ไม่เกิดขึ้น หมายถึง เหตุการณ์ไม่เกิดขึ้นกับตัวท่าน
- เกิดบางครั้ง หมายถึง เหตุการณ์เกิดขึ้นกับตัวท่านเพียงบางครั้ง
- เกิดบ่อยครั้ง หมายถึง เหตุการณ์เกิดขึ้นกับตัวท่านประมาณครึ่งหนึ่งของเหตุการณ์
- เกิดส่วนมาก หมายถึง เหตุการณ์เกิดขึ้นกับตัวท่านเป็นส่วนมาก
- เกิดทุกครั้ง หมายถึง เหตุการณ์เกิดขึ้นกับตัวท่านทุกครั้ง

เหตุการณ์	ไม่ เกิด ขึ้น	เกิด บาง ครั้ง	เกิด บ่อย ครั้ง	เกิด ส่วน มาก	เกิด ทุก ครั้ง
1.พยาบาลวิชาชีพให้โอกาสท่านได้ซักถาม พุดคุยเรื่องที่ท่านต้องการ					
2.พยาบาลวิชาชีพไวต่อการรับรู้ความรู้สึกที่เกิดขึ้นของ ท่านได้ทันที					
3.พยาบาลวิชาชีพแสดงท่าทีเต็มใจรับฟังปัญหาและความคิดเห็นของท่าน					
4.พยาบาลวิชาชีพพูดสะท้อนความรู้สึกของท่านให้ตระหนักถึงปัญหาและความรู้สึกของตนเอง					
5.พยาบาลวิชาชีพแสดงที่ท่าและพูดว่าเข้าใจและยอมรับความรู้สึกที่มีอยู่ของท่าน					
6.พยาบาลวิชาชีพให้การต้อนรับท่านด้วยอัธยาศัยไมตรีที่ดี อบอุ่นเป็นกันเองเมื่อขึ้นฝึกปฏิบัติงาน					
7.พยาบาลวิชาชีพทักทายและได้ถามทุกข์สุขของท่าน					

กรุณาตอบให้ครบทุกข้อ

เหตุการณ์	ไม่ เกิด ขึ้น	เกิด บาง ครั้ง	เกิด บ่อย ครั้ง	เกิด ส่วน มาก	เกิด ทุก ครั้ง
8.พยาบาลวิชาชีพได้ให้กำลังใจกับท่านในการฝึกปฏิบัติ					
9.พยาบาลวิชาชีพติดตามไต่ถามและช่วยเหลือท่านให้มีความก้าวหน้าในการฝึกปฏิบัติการพยาบาล					
10.พยาบาลวิชาชีพให้ความช่วยเหลือเมื่อทราบว่าท่านต้องการความช่วยเหลือ					
11.พยาบาลวิชาชีพมีท่าทีที่เต็มใจช่วยสอนและฝึกท่านให้เกิดความชำนาญในการปฏิบัติการพยาบาล					
12.พยาบาลวิชาชีพแสดงความชื่นชมต่อท่านเมื่อท่านปฏิบัติงานได้เป็นที่พอใจ					
13.พยาบาลวิชาชีพให้ความรู้แก่ท่านอย่างไม่ปิดบังความรู้ที่มีอยู่					
14.พยาบาลวิชาชีพแสดงความจริงใจในการให้คำตักเตือนต่อข้อบกพร่องและให้คำแนะนำที่เป็นประโยชน์ต่อตัวท่าน					
15.พยาบาลวิชาชีพปฏิบัติตามข้อตกลงที่มีกับนักศึกษาได้					
16. พยาบาลวิชาชีพรักษาความลับส่วนตัวที่ท่านต้องการปกปิดได้					
17.พยาบาลแสดงความรู้สึกพอใจหรือไม่พอใจตามที่เป็นอย่างจริงออกมาให้ท่านทราบได้					

Table 4 Percentage (%) of Nursing Students' Answers in each Sub-scale of the Helping-Trust Relationship Classified by Subscale and by Total (n=174)

Helping-trust relationship Sub-scales	Answered Scale (%)				
	never	rarely	some times	Fre- quently	very fre- quently
Empathy					
1. Nursing staffs gave you chances to ask questions and make comments.	9.8	43.7	32.2	14.4	0
2. Nursing staffs could sense your feelings right away.	1.7	21.8	38.5	36.8	1.1
3. Nursing staffs showed willingness to listen to your problems and opinions.	2.9	33.9	48.3	14.4	.6
4. Nursing staffs discussed and analyzed your problems and feelings.	2.9	33.3	41.3	20.1	2.3
5. Nursing staffs showed and say that they understood and accepted your feelings.	1.1	27.0	44.3	25.9	1.7
Non-possessive warmth					
6. Nursing staffs welcomed you with warmth and friendliness when you started your clinical practice.	10.3	43.7	36.2	9.8	0

Table 4 Percentage (%) of Nursing Students' Answers in each Sub-scale of the Helping-Trust Relationship Classified by Sub-scale and by Total (n=174) (Cont.)

Helping-trust relationship	Answered Scale				
	Never	Rarely	Some Times	Fre- quently	Very Fre- quently
7. Nursing staffs greeted you and had easy conversation.	6.9	31.0	36.8	23.6	1.7
8. Nursing staffs gave you encouragement during your clinical practice.	5.2	27.0	45.4	20.1	2.3
9. Nursing staffs followed up and helped you to improve in clinical practice.	5.2	38.5	40.2	15.5	.6
10. Nursing staffs helped you when they knew that you needed help.	6.3	41.4	37.4	13.8	1.1
11. Nursing staffs showed willingness to teach and train you in nursing care.	8.0	44.8	39.7	7.5	0
Congruence or Genuineness					
12. Nursing staffs praised you for your good work.	3.4	33.9	36.2	23.6	2.9
13. Nursing staffs transferred all the knowledge they had.	9.8	43.1	35.6	10.9	.6
14. Nursing staffs were sincere in making suggestions to you.	8.0	39.1	33.9	18.4	.6
15. Nursing staffs were able to follow agreements with nursing students.	5.7	39.7	33.9	17.8	2.9
16. Nursing staffs could keep your secrets.	7.5	31.0	37.9	19.0	4.6
17. Nursing staffs expressed their feelings, both satisfaction and dissatisfaction.	6.9	31.6	35.6	21.8	4.0

BIOGRAPHY

NAME	Mrs. Nouvarat Suknalum
DATE OF BIRTH	21 September 1969
PLACE OF BIRTH	Roi-ed, Thailand
INSTITUTIONS ATTENDED	Sapasittiprasong Ubon Nursing, College,1988-1992 Diploma in Nursing Science Equivalent to Bachelor of Science in Nursing Mahidol University,2001-2005 Master of Nursing Science (Psychiatric and Mental Health Nursing)
POSITION&OFFICE	1992-Present, Srimahasarakham Nursing College Mahasarakham, Thailand Position: Instructor