



CHAPTER III

CONCEPTUAL FRAMEWORK AND HYPOTHESIS

HYPOTHESIS.

From the concept mentioned in the Chapter I that the competence derived from the standard job description of the Department of Provincial Hospital, Ministry of Public Health can be representative for common competence required on the job at various general hospital (both government and private). The common competence now is named as "Standard Competence".

In order to evaluate the quality of graduates from various school, the graduates' professional competence will be measured according to how attainable to the standard competence.

Sackett, Haynes, and Tugwell (1985) stated that clinical performance was influenced by individual motivation to upgrade himself to attain competence, clinical competence (required from school or training program), and barriers (clinical performance = clinical competence + motivation - barriers). Performance review was also taken into account of improvement of clinical performance. How attainable of standard competence can be assumed as dependent on the above factors. When the

graduates are launched into the society as professional roles, the knowledge learned from school is split from their brain bit by bit as the time progress. The recovery of knowledge, skill, and attitude are gained by practice clinical performance (Sackett, 1985). Within one year of working experience, it can be assumed that the graduates recover their abilities to the level that they have when immediately completed the BSc. program. So the new graduates or the immediate completing graduates (within 1 year) is considered to be the direct product of that curriculum.

Maintenance and advancing of performance depend upon how adequate of preparation of the graduates to job required competence and individual motivation which are influenced by the educational program; and the barriers expressed as the opportunities to perform tasks or as clinical experience to be exposed. In general hospital, the clinical experience is assumed to be in similar exposure. So the barriers is less concerned and are not considered as a factor influencing to the different of performance of individual.

1st hypothesis The professional competence of the 1990 graduates suit to the standard competence.

In Thailand there are four school of physical therapy. One old school (Siriraj Hospital, Mahidol University), two middle age schools (Khon Kaen and

Chiangmai University, under the Faculty of Associated Medical Sciences), and one new private institution (Rangsit College). This study will be implemented on graduates of those first three schools. Consideration on the age of the school, the graduates' abilities are probable different among schools because of many factors such as; quality of the faculty, modernization of curriculum etc. This come to the following hypothesis.

2nd hypothesis The professional competence of the new graduates from three schools are different.

In this study some educational factors will be considered to relate with the new graduates' professional competence. These are in the areas of curriculum, quality of teacher, teaching-learning, students' activities, student counselling, facilities. The opinion of the new graduates to various educational factors will be used for analysis of correlation with the new graduates' self-appraised professional competence. Although these opinion are come from the observation of the factors during studying in the program which contaminated with individual bias, they closely relate to the true educational factors. So the opinion of the new graduates are probable to represent the educational factors during implementing of the curriculum of the school from which the graduates completed. Another reason to use the opinion of new graduates to correlate

with professional competence is the limitation of statistical analysis. The statistics do not allow the calculation of the pair of the data from different population (e.g. the opinion of the teacher to various educational factors are correlated with the graduates' self-appraised professional competence).

Another interested factor to be associated with new graduates' professional competence is academic achievement. This composes of Grade Point Average (GPA) and grade point average of all clinical practice course of the new graduates. These suggest the following hypothesis.

3rd hypothesis The opinion of the new graduates to some educational factors are associated with the self-appraised professional competence of the new graduates.

4th hypothesis The academic achievement of the new graduates are associated with their self-appraised professional competence.

The competence of individual is probable to increase when the graduate gains more year of experience. Although they are exposed to the same degree, they have the different competence and go to the static phase. Because the motivation takes more important action on further advancing of performance.

Motivation in this meaning are such self-initiated attitude, problem solving skill. The study of development of the graduates' competence in consecutive year of experience can demonstrate how adequate of preparation of the program in these motivation. But the longitudinal study can not be performed because of time constraint. The cross sectional study of measuring the difference of new graduates and their one year more experienced senior (1989 graduates) can be assumed as representative of the longitudinal study; and as assessment of difference of competence of overall graduates which differed by time of experience. These assumptions suggest the following hypothesis;

5th hypothesis The professional competence of the new graduates and 1989 graduates are different.

Research Objectives.

1. To evaluate the professional competence of the new physical therapy graduates from three schools in Thailand who work as physical therapist in general hospital upon the standard competence.
2. To compare the level of professional competence of the new graduates from different schools.
3. To study the opinion of the new graduates to various educational factors during studying the physical therapy program.
4. To study the relationship between the opinion

of the new graduates' to some educational factors of physical therapy program and the graduates' self-appraised professional competence.

5. To study the relationship between the academic achievement of the new graduates and the graduates' self-appraised professional competence.

6. To compare the professional competence between the new graduates and the 1989 graduates.

Operational Definition.

Professional competence	Combined abilities of skill and/or knowledge and/or attitude in practice of physical therapy task.
Educational factors	The educational events of each physical therapy program during the new graduates were studying. These include 6 areas of interested; curriculum, quality of teacher, teaching-learning, students' activities, student counseling, facilities.
New graduates	The one who completed BSc. programme in Physical Therapy and received degree in the year 1990.
1989 graduates	The one who completed BSc. programme in Physical Therapy and received degree in the year 1989.
Supervisors	The ones who are the immediate superior

of the graduates (both new and 1989 graduates).

- General hospital** The hospital that supply services for many types of patients.
- Standard job description** Physical therapy job description defined the Division of Provincial Hospital as a common criterion for performance appraisal among the Physical Therapy Unit of any types of hospitals under that department.
- Standard competence** The competence required on the physical therapy health care function, only curative and rehabilitative part in both government and private general hospital which derived from standard job description. They are categorized into 9 areas.
- Interpersonal relations and communication skills** Behaviors important to building patient understanding, trust, and compliance. Interpersonal relations skills cover those build patients' acceptance such as; empathy, warmth, respect etc. Communication skills cover those important to information flow such as; verbal and nonverbal communication, listening skill etc.
- Professional** Attitudes toward professional practice

ethics and attitudes	and ethical behaviors.
Continued education behaviors	Ability to evaluate own needs, acquisition of knowledge from various sources, and attitudes toward lifelong education.
Personal quality	Personal attributes or characteristics important to physical therapist, interpersonal living and working relationship.
Evaluative skills	Skills to perform evaluative procedures as; history taking, examining by using general and special evaluative procedures.
Treatment skills	Skills to use various treatment techniques and therapeutic treatment approach, electrotherapeutics, and prophylactic procedures.
Planning and treatment of common diseases	Global abilities in planning and implementing the treatment procedure for common types of diseases.
Qualities supporting to primary health care	Behaviors or attribute important to support the primary health care policy.
Clinical problem solving skills	Ability or thinking process for selecting evaluative procedures, interpretation of information and determination of clinical problems, setting and prioritizing goals, identification of treat-

ment alternatives, selection of the most appropriate treatment in relation to the clients' needs, measurement of outcome and reassessment.

Basic Assumption.

1. The new graduates in this study are capable of evaluating their own educational experience and are capable of doing so even when one year have elapsed.
2. The supervisors rated the performance of the graduates on observation of actual performances.

Limitation.

1. Questionnaire is only one instrument to measure graduates' professional competence. Other methods cannot be used in this study.
2. Graduates' professional competence in various areas are only evaluated from graduates' self-appraisal and supervisors' opinion.