

CHAPTER IV

THE STUDY SAMPLE

This study aims on assess the quality of graduates and the factors influencing on it.

The New Graduates

1. Target population.

The target population is the population on which the investigator may apply the result. The target population in this study is the graduates of three schools (Mahidol University. Khon kaen University, and Chiangmai University) who completed the BSc. Programme in 1990 and work as full time physical therapist in general hospital (governmental, private)

2. The population sampled.

The population sampled is that population selected from the target population for studying and making conclusion. The population sampled were the population that meet the following criteria.

2.1 <u>Inclusion criteria</u>. The graduates who were working as full time physical therapists in general hospital (private, government) during the time of data collection.

2.2 Exclusion criteria.

- (a) The graduates who do not work in Thailand.
- (b) The graduates who work as physical therapists in special facilities which received specific types of patient such as; home care facilities, sport clinic etc.
- (c) The graduates who were working as physical therapists in special facilities which received specific types of patient such as; home care facilities, sport clinic etc.

3. Sample size.

In order to take all target population as many as possible, the graduates who working in one university hospital (tertiary hospital) were included. This lead to the problem that;

- (a) The physical therapy division in this hospital was divided into various subdivisions according to the type of specialty (e.g. neurological condition).
- (b) The consequence was the graduates in this hospital were still not working in some subdivisions, in other words, not had experience in some specialties. However, almost all graduates passed all subdivisions, in other words, had experiences in almost all sub-categories of diseases which were eligible to this study except the miscellaneous conditions.

(c) The method of one supervisor rating on one graduate was violated. To solve this problem, one graduate was allowed to evaluate by many supervisors, the heads of any subdivisions. Furthermore, the questionnaire was divided according to the supervisors as follow; (i) the head of the subdivision in which the graduate was working at that time; was allowed to respond on part 1 (personal background) and all competence items in part 2 except the items "planning and treatment of common diseases" in the disease conditions which were not his/her specialty, (ii) the head of the subdivisions in which the graduate had already passed; was allowed to respond on the rest of the questionnaire.

The number of subjects in target and sampled populations as all a whole and as separated schools were showed in the table 4.1.

Table 4.1 The number and percentage of the target and the sampled populations of the new graduates as a whole and as separated schools

Population	*M.U.		K.K.U.		C.M.U.		ALL	
	No.	8	No.	8	No.	8	No.	8
Target	52	100.00	18	100.00	13	100.00	83	100.00
Sampled	38	73.07	9	50.07	6	46.15	53	63,86

^{*}M.U. = Mahidol University; K.K.U. = Khon Kaen University; C.M.U. = Chiangmai University

Other Sources of Data.

1. 1989 graduates.

The one more year senior of the new graduates were included to study about the development of the professional competence as increasing time of working by comparison these with the professional competence of the new graduates. The criteria used in sample specification of the new graduates were also used in inclusion of the subjects. All of the target population were included into study except those did not meet the criteria. The problem in the new graduates was also arisen in this group and was solved in the same way. The sample size was showed in the table 4.2.

Table 4.2 The number and percentage of the target and the sampled populations of the 1990 graduates as a whole and as separated schools

Population	*M.U.		K.K.U.		C.M.U.		ALL	
	No.	8	No.	8	No.	8	No.	8
Target	44	100.00	16	100.00	12	100.00	72	100.00
Sampled	32	72.73	11	68.75	3	25.00	46	63.89

^{*}M.U. = Mahidol University; K.K.U.= Khon Kaen University; C.M.U. = Chiangmai University

2. Supervisors as employers.

Immediate supervisors or the direct supervisors will be selected to give the data on

graduates' professional competence. If the graduates are the head of the Physical Therapy unit, the immediate supervisors will be the head of the Physical Medicine and Rehabilitation Department. If they are only staffs, the immediate supervisors will be the head of the Physical Therapy Unit. The immediate supervisors will rate the graduates' professional competence on each specified item in each competence area except in the areas of clinical problem solving skills, evaluative skills, treatment skills, and planning and treatment of common diseases. These four competence areas will be done as overall rating.

Rating by the head is used to minimize the bias from graduates self-appraisal on their professional competence. The bias will be occurred when graduates overestimate their own performance (Choosak Tiengtrong, n.d.). The another advantage is the useful feedback from the users or the employers of school production.

One month of contact with the graduate is eligible criteria for inclusion of the head to this study.

The number and percentage of the target and sampled population were the same with both graduates group.

The Violation of One to One Rating Method.

The study allowed one supervisor to rate one graduate. In fact, there were some hospitals which more than one graduate were working and the ratio of the supervisors to the graduates was not 1:1. This problem was solved by allowing one supervisor to rate on many graduate on each supervisors. The final ratio was ranked from 1:2 to 1:6. This solution also reduced load in replying the questionnaire.