

CHAPTER 3

RESEARCH METHODOLOGY

3.1 RESEARCH QUESTIONS

Primary Research Question

What are the factors affecting score of job satisfaction of professional nurses in a 500-bed private hospital in Bangkok?

Secondary Research Questions

1. What is the level of overall job satisfaction of professional nurses in a 500-bed private hospital in Bangkok?
2. What are the strategic issues in the perspective of professional nurses to improve level of job satisfaction?

3.2 RESEARCH OBJECTIVES

1. To describe and identify the factors affecting score of job satisfaction of professional nurses in a 500-bed private hospital in Bangkok.
2. To study the over all job satisfaction of professional nurses in a 500-bed private hospital in Bangkok.
3. To explore the strategic issues to improve the level of job satisfaction of professional nurses in a 500-bed private hospital.

3.3 HYPOTHESIS

1. Demographic data such as age, marital status, education, and salary are associated with job satisfaction.
2. General work related factors such as length of service, shift hour, nursing division, and distance to work are associated to job satisfaction.
3. Specific work related factors such as income, autonomy, task requirement, organizational policy, interaction, and professional status are associated with job satisfaction.

3.4 ASSUMPTIONS

"Job satisfaction" is a phenomenon that hospital organizations desire to maximize.

3.5 RESEARCH DESIGN

To describe the characteristics of population and assess the inter-relationship with different factors within that population at one time, **cross-sectional descriptive study** is chosen in this study.

3.6 SAMPLE SPECIFICATION

Target Population

Target population of this study was the professional nurses who work in a 500-bed private hospital in Bangkok.

Sample Population

Sample was a section of the population drawn from the target population. The criteria for selecting sample population in this study was as followed.

Inclusion Criteria

1. Professional nurses who were working in a 500-bed private hospital on full time with at least one year.
2. Those who were agree to participate and answer the questionnaire.

Exclusion Criteria

1. Professional nurses who had not complete one year of service effective from the date of data collection.
2. Nurse manager, assist nurse managers, and ward head nurses were excluded.

3.7 SAMPLING TECHNIQUE

In this study, sampling procedure was used in two phases. One was selection of a 500-bed private hospital, and the other was selection of professional nurses. The selection of 500-bed private hospital was made by simple random sampling technique. Only one 500-bed private hospital was selected (for feasibility of the study). The selection of professional nurses was tended to enroll all professional nurses working in that selected hospital who met the eligibility criteria. For this study, there were two hospitals that gave the permission to collect data (Phyathai 2 hospital and Bangkok hospital). After considering about convenience of the time and hospital coordination, the Phyathai 2 hospital was selected.

3.8 SAMPLE SIZE

This study included all professional nurses in the Phyathai 2 hospital who met the eligibility criteria in that particular period. The sample population consisted of 260 staff nurses. Of these, 236 (90.76%) professional nurses were identified for whom complete data was available and those subjects were included in this study.

3.9 OUTCOME MEASUREMENT

The dependent variable of this study was the **score of overall job satisfaction**, which was calculated from the score of item number 7 in part 3 of the questionnaire.

The independent variables were the factors affecting job satisfaction of professional nurses. These outcomes were considered as: -

- Age
- Marital status
- Education
- Salary
- Nursing division
- Length of service
- Shift hour
- Distance to work
- Income
- Autonomy
- Task requirement
- Interaction
- Organizational policy
- Professional status

3.10 INSTRUMENTATION

The instrument used in this study was a self-administered questionnaire. The index of work satisfaction questionnaire designed by Stamps and Piedmonte in 1986 based on basic theories of Maslow and Herzberg that was modified and developed by Acharee Chitpakdee (1993). A slight modification was done to suit this study.

The questionnaire composed of 4 parts

Part 1: Demographic data and general work related factors which composed of age, sex, marital status, education, salary, length of service, shift hour, nursing division, and distance to work.

Part 2: Job satisfaction questionnaire, which consisted of six components: income, autonomy, task requirement, organizational policy, interaction, and professional status. Each component was weight equally. (Appendix)

Components	Number of items	Positive questions	Negative questions
Income	6	1,14,32	8,21,44
Autonomy	8	13,26,43	7,17,20,30,31
Task requirement	6	22,24,29	4,11,36
Organizational policy	7	5,25,40,42	12,18,33
Interaction	10	3,6,16,19,37	10,23,28,35,39
Professional status	7	2,15,34,38	9,27,41

Part 3: Overall job satisfaction and job satisfaction in 6 components (income, autonomy, task requirement, organizational policy, interaction, and professional status).

The criteria of rating points on job satisfaction

Response mode	Positive score	Negative score
Strongly disagree	1	7
Disagree	2	6
Mostly disagree	3	5
Undecided	4	4
Mostly agree	5	3
Agree	6	2
Strongly agree	7	1

The scale score was between 1-7 scores (with total mean score range from 1-7), higher score means higher job satisfaction. Stamps and Piedmonte (1986) mentioned that the mean score less than 4 was indicated as low level of job satisfaction and divided the level of job satisfaction into 3 levels;

Mean	Level of Job Satisfaction
Less than 4.00	Low
4.00-5.50	Medium
5.51-7.00	High

Part 4: Suggestions and strategies to improve job satisfaction in the perspective of professional nurses (opened-end questions)

3.11 VALIDITY AND RELIABILITY

Before gathering the data, a plan to improve the questionnaire was considered as following.

1. Content validity was assessed by the opinion of the experts. Three content experts in human resource management and two in nursing management were asked to comment on the content completeness. After critical discussion with experts, some questions were adjusted to ensure the content completeness.
2. Reliability: To assess the instrumental reliability emphasizing internal consistency by Cronbach's alpha statistics which assess the correlation among items in scale of part 2. For this study, thirty professional nurses from Phyathai 2 hospital were taken as sample for testing the reliability of the instrument. The results showed the coefficient of reliability for job satisfaction was 0.89, which was acceptable.

3.12 DATA COLLECTION

1. The researcher posted the permission letters to five 500-bed private hospitals defined in the operational definition. Two private hospitals (Bangkok hospital and Phyathai 2 hospital) had permitted to collect the data. For the sake of convenience of the time and other constraint, the Phyathai 2 hospital was chosen as the setting for data collection.
2. The formal permission letter from the faculty of Medicine, Chulalongkorn University was sent to the director of the Phyathai 2 hospital to ask for cooperation.
3. The questionnaires were distributed. The professional nurses were contacted by the researcher and were requested to respond and complete the questionnaire to the best of their responses. The questionnaires were given back to the researcher in the sealed envelopes. Thus, the confidentiality was ensured.
4. The questionnaire was to be returned within two weeks due to the different shifts and weekend schedules of the

- respondents. Thereafter the researcher would have to collect any remaining questionnaire within another two weeks. Therefore, about four weeks was required for data collection.
5. Of the 260 questionnaire distributed, 236 completed questionnaire were returned, which a 90.76% response rate.

3.13 DATA ANALYSIS

All of the data collected were recorded in the data-recording sheet. The researcher entered these data into computer using the computer program for data entry by Epi info and then they were converted to analyze by SPSS program (Statistics Package for Social Science).

1. The statistics used for describe demographic data was descriptive statistics in term of frequency, percentage, mean and standard deviation.
2. The statistics used to find the single variable (demographic characteristics and general work related factors) that has the strongest association with the dependent variable were T-test (for two category variables) and one-way anova (for multiple category variables) by setting the statistical significant at 0.05 alpha level.
3. Stepwise multiple regression model was used to determine the factors affecting the score of job satisfaction.

3.14 ETHICAL CONSIDERATION

This study involved two levels of cooperation, hospital level and individual level. At private hospital level, the authorities had the right to refuse or cooperate at the beginning of the project. Also, individual participants had the right to cancel their cooperation. Moreover, they were allowed to resign from this study at any time. Thus, written informed consent in this study was not required. It was ensured that the result obtained from this study would be described in general terms without mentioning any name or revealing any identity.

3.15 LIMITATION

1. The results from this study represented only the findings from a 500-bed private hospital. It may not make any generalization about the government hospital or other settings.
2. Data collection was done with a limited period of time during the outbursts of economic crisis of the country (IMF Era); that the hospital itself was undergoing a managerial transformation and change, thus, both situations may affect the result of the study somewhat.

3.16 EXPECTED BENEFITS OF THE STUDY

1. The result is expected to be beneficial for hospital management in many ways. The research findings can provide feedback to the hospital and nursing administrators, to provide the information for better organizational planning.
2. The organization will benefit with some possible indirect consequences such as decrease in frequent rate of absenteeism and turnover, save time and money for frequent new recruitment, increase the retention of skilled and experienced personnel.
3. The organization will improve the quality and quantity of productivity of the hospital.
4. The patients will receive indirect benefits because the hospital improves the productivity.