

**JOB SATISFACTION OF STAFF NURSES AND
THEIR PERCEPTION ON HEAD NURSES' LEADERSHIP:
A STUDY IN SAKAEO PROVINCIAL HOSPITAL, THAILAND**



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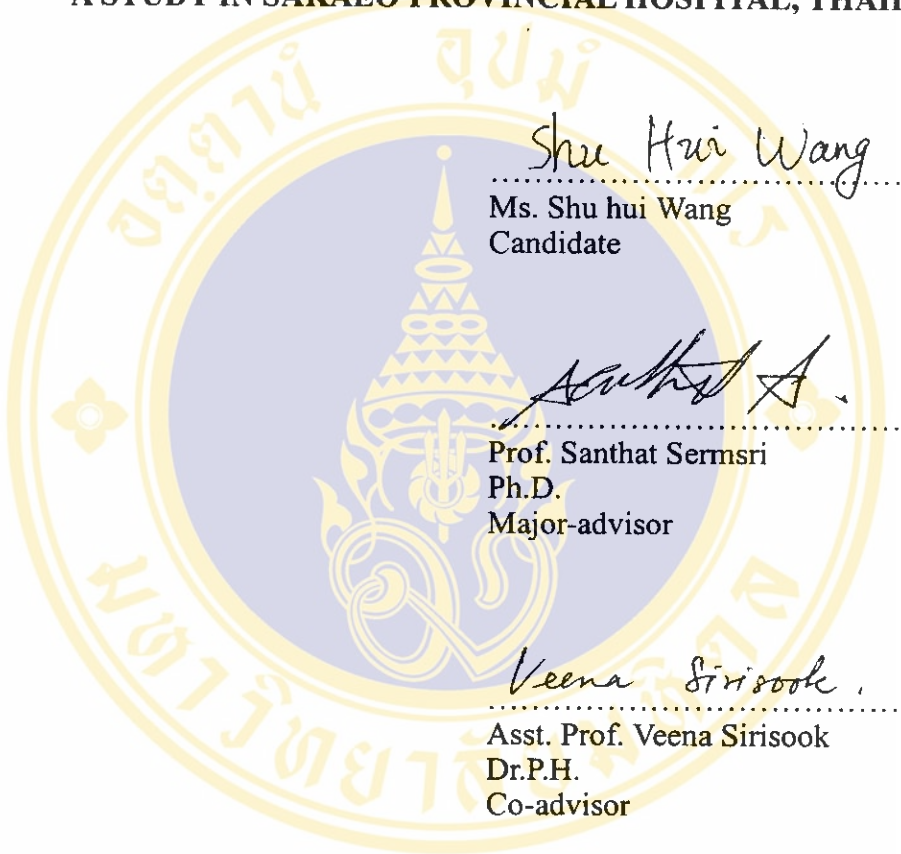
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ABSTRACT

This study aimed to investigate the level of job satisfaction and perception on head nurses' leadership among staff nurses in Sakaeo Provincial Hospital, Thailand.

The research design was a cross-sectional and descriptive study. The study population was all staff nurses who were working in this hospital. The research instrument was a self-administrated questionnaire. Data were analyzed by using descriptive statistics such as frequency, percents, means, and standard deviations. Moreover, for analytical statistics, Spearman rank correlation and Chi-square tests were employed.

The research results showed that the level of staff nurses' job satisfaction and their perception of head nurses' leadership were moderate levels (73.7%, and 79.6% respectively). There was significant association between staff nurses' job satisfaction and their perception on head nurses' leadership. There was also a significant association between staff nurses' job satisfaction and duration of working as a nurse as well as duration of working in this hospital ($P < 0.05$).

The findings of this study are important for understanding the role of head nurses because the level of staff nurses' job satisfaction is partly due to leadership role of head nurses. Managers should implement a clear policy to stimulate job satisfaction through preparing head nurses for their position.

KEY WORDS: JOB SATISFACTION/, PERCEPTION/, LEADERSHIP/, STAFF NURSES

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CONTENTS

	Page
ACKNOWLEDGEMENTS.....	iii
ABSTRACT.....	iv
LIST OF TABLES.....	vii
LIST OF FIGURES.....	ix
CHAPTER	
I INTRODUCTION	
1.1 Rationale and Justification.....	1
1.2 Research Question.....	5
1.3 Research Objective.....	5
1.4 Conceptual framework.....	7
1.5 Research Hypothesis.....	8
1.6 Operational definition.....	8
1.7 Limitation of the study.....	12
II LITERATURE REVIEW	
2.1 Concept and theories of job satisfaction.....	13
2.2 Related research of job satisfaction of nursing.....	20
2.3 Concept and theories related to leadership	29
2.4 Related researches on head nurses' leadership and job satisfaction of staff nurses.....	38
III RESEARCH METHODOLOGY	
3.1 Study design.....	42
3.2 Study population.....	42
3.3 Place of study	42
3.4 Sampling technique.....	42
3.5 Sample size.....	42
3.6 Research Instruments.....	43
3.7 Data collection.....	48
3.8 Data analysis.....	49
IV RESULTS	
Results.....	51
V DISCUSSION	
Discussion.....	77

CONTENTS (Cont.)

Page

VI	CONCLUSION AND RECOMMENDATION	
6.1	Conclusion.....	85
6.2	Recommendation.....	86
	REFERENCES.....	89
	APPENDIX	
A.	Questionnaire.....	96
B.	Frequencies, percents, means and standard deviations of staff nurses' opinion concerning their job.....	104
C.	Means, standard deviations, minimums and maximums of staff nurses' opinion concerning their job	112
	BIOGRAPHY.....	118

LIST OF TABLES

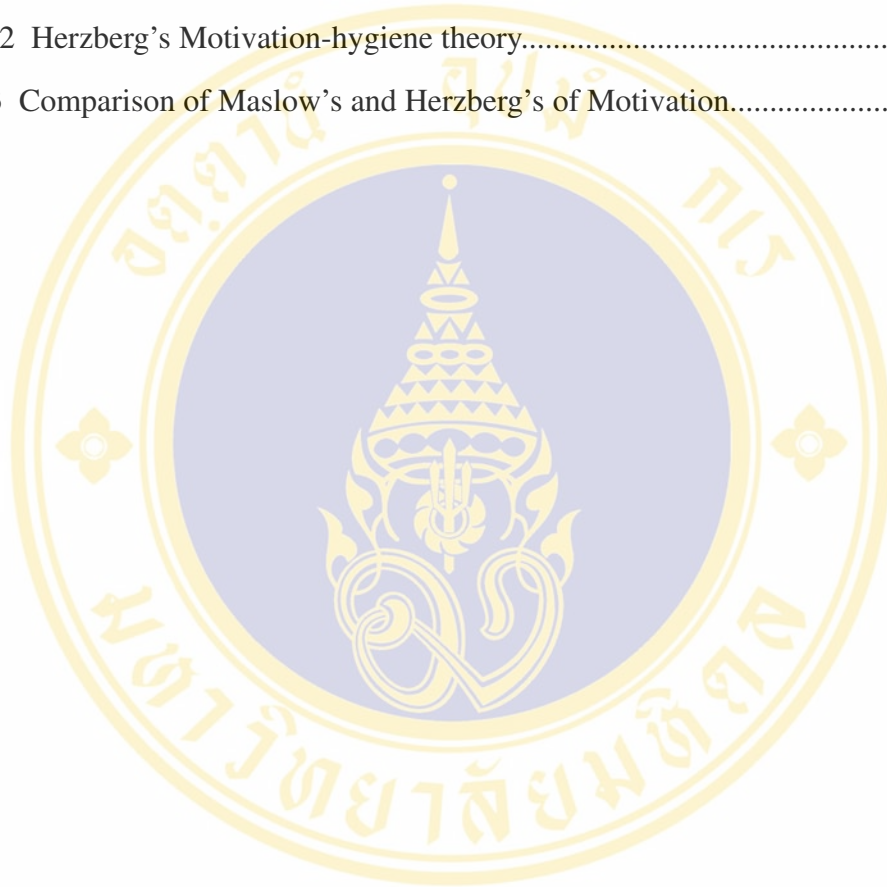
TABLE	Page
1	Numbers and Percents of subjects from each clinical nursing unit in Sakaeo Provincial Hospital..... 43
2	Reliability coefficients of the staff nurses' job satisfactions (alpha)..... 48
3	Reliability coefficients of the staff nurses' perception on head nurse' leadership (alpha) 48
4	Frequencies, percents, means and standard deviations of the respondents characteristics (n=145) 54
5	Frequencies, percents, means, standard deviations, medians, minimums, maximums and levels of staff nurses' job satisfaction (concerning motivation factors) (n=145) 56
6	Frequencies, percents, means, standard deviations, medians, minimums, maximums and levels of staff nurses' job satisfaction (concerning hygiene factors) (n=145) 58
7	Frequencies, percents, means, standard deviations, medians, minimums, maximums and levels of staff nurses' perception on head nurses' leadership(n=145) 60
8	Association between staff nurses' perception on head nurses' leadership(in detail) and job satisfaction by using Spearman rank correlation test..... 63
9	Association between staff nurses' perception on head nurses' leadership(in detail) and job satisfaction by using Chi-square test..... 66
10	Association between staff nurses' perception on head nurses' leadership and job satisfaction concerning motivation factor (in detail)by using Chi-square test..... 69

LIST OF TABLES (Cont.)

TABLE	Page
11 Association between staff nurses' perception on head nurses' leadership and job satisfaction concerning hygiene factors (in detail) by using Chi-square test.....	71
12 Association between the staff nurses' personal characteristics and job satisfaction by using Chi-square test.....	75
13 Frequencies, percents of staff nurses' perception on head nurse' leadership.....	104
14 Frequencies, percents of staff nurses' job satisfaction concerning motivator factors for each item.....	106
15 Frequencies, percents of staff nurses' job satisfaction concerning hygiene factors for each item.....	108
16 Means, standard deviations, minimums and maximums of staff nurses' perception on head nurse' leadership.....	112
17 Means, standard deviations, minimums and maximums of staff nurses' job satisfaction concerning motivator factors.....	113
18 Means, standard deviations, minimums and maximums of staff nurses' job satisfaction concerning hygiene factors.....	115

LIST OF FIGURES

FIGURE	Page
1 Maslow's hierarchy of needs theory.....	15
2 Herzberg's Motivation-hygiene theory.....	19
3 Comparison of Maslow's and Herzberg's of Motivation.....	22



CHARTER I

INTRODUCTION

1.1 Rationale and justification of the study

Provincial hospitals take important responsibility for health care in every province, Thailand. Many patients from difference district under very serious condition come to provincial hospital for health care. Therefore, hospital staff nurses facing with crisis and tragedy on their daily work. The large quantity of work involved in caring for critically ill persons, compounded by the variety, complexity, and urgency of the tasks intensifies the likelihood that nurses will become exhausted, discouraged, burn-out, and dissatisfied with their job (1). Therefore, staff nurses are prime candidates for job satisfaction and dissatisfaction.

Currently limited resources of health system and the need for expanded, empowered professional role especially for staff nurses in the face of growing demands for quality and efficiency in the delivery of health care services at provincial hospital level, are among the most pressing issues faced by the staff nurses executives as well as by the management of every hospital throughout the world .Job structures, functions, and expectations within the health care field are changing rapidly. As a result of among other things (limited financial resources and increased service demands), the introduction of professionals and expanding and increasingly sophisticated medical technology that demands new job procedures. New approach to the way work is done, notably the team approach, alter job tasks, roles, and relationships. These changes suggest that satisfaction with job of staff nurses may also be altered.

Among careers, nurses like others work to meet their needs, aspirations and

satisfactions. The complexity of the social and technological environment for patient care can lead to specialization and depersonalization of job and work. This alienates staff nurses and the quality of their work declines. From this point of view, it may relate to job satisfaction, which may lead to the high turnover rate of nurses.

High turnover and absenteeism rates are reported to be related to job dissatisfaction, while low absenteeism is associated with job satisfaction. The problem of nurse shortage has emerged and became a serious issue in most countries around the world. The issue not only affect standard of nursing but also the quality of patients' lives (2) The shortage of nurses has been recognized as a problem again in America since early 1990s. The report paints an alarming picture of the short fall of nurses, which started at 199,400 in 1990 to 874,900 in the year 2020. Besides, there is some prediction about the shortage of nurses in the 21st century may be even worst than 1990 crisis. .According to the studies on turnover rate and shortage of nurses, the greatest cause for leaving the nursing profession was job dissatisfaction (3).

Job satisfaction in nursing and health care organization is lower compared with other types of organization; job and role characteristics are related to job satisfaction as well as performance (4).

One study suggested that dissatisfaction staff nurses can negatively influence patient care; patients' compliance with treatment, and subsequently decreased quality may result in lengthened hospital stays and reimbursement sanctions with a resultant loss of health and health care expenses, there is evidence. However, that improving staff nurses' job satisfaction can improve performance and the quality of care that patients receives (5).

Several studies have referred to staff nurses' job satisfaction related to leadership

behavior of head nurses (6, 7, 8). Head nurse as the first line manager takes important responsibility for each unit who operate with staff nurses apply the hospital's policies for quality of care.

The head nurses' responsibility is to provide leadership so that those staff nurses would have self-confidence and feel secure to improve productivity, efficiency and job satisfaction (9).

Head nurse is the chief or highest commander of the unit. She uses her authority or influential relationship with staff nurses to achieve goals.

Likewise, the need to develop head nurse' leadership skills has never been greater as reform of healthcare is being addressed at national, provincial, and community levels. Leadership skills of head nurse also are necessary for team building at the organizational level. Ensuing successful recruitment, retaining a cohesive staff nurses, and maintaining a high-quality practice depend on successful team building.

Leadership behavior impacts on job satisfaction. At present, both governmental and private hospital is focusing on increasing efficiency and the quality of services. Patients need staff nurses who have responsibility, ability, and authority for management decisions. Managers should use shared governance with subordinates by providing power and opportunities that lead to the improvement of staff nurses' job satisfaction (10).

It is a personal as well as a management goal in every profession to maximize job satisfaction. This situation indicated a greater need of information about job satisfaction of staff nurses, and factors influencing it which could the hospital management in the development and implementation of appropriate strategies and programs to enhance the

higher level of satisfaction. Thereby, could increasing productivity, efficiency, quality of care, and patient's satisfaction at this resource constraint situation.

Sakaeo Province is the 74th province of Thailand. It is in divided into 9 districts, 59 tambons, and 637 villages. 1 provincial administrate organization, 8 municipalities, and 59 tambons administrate organizations. It there is 7,195.44 square kilometers, 531,149 populations, including 267,963 male and 263,186 female.

According to this province is in the rural area, shortage of human health, resources, complexity distribution of human resources, and brain drain but the health care providers who work closely to the people in the provincial hospitals have the role in their public health working to increase opportunistic for well accessibility in medical care, good quality of services, and equity for the people. The health care providers become the most important human health resource in Sakaeo medical care system. In Sakaeo Province there is 1 general hospital i. e. Sakaeo Provincial Hospital.

Sakaeo Provincial Hospital located in boundary between Thailand and Cambodia, it was founded in 1982. It is a polyclinic with advance equipment and technique, representing a broad cross-section of specialty areas. The hospital is staffed by 416 medical professional persons, including 138 doctors, 10 pharmacists and 208 nurses and 60 other professional staff. The hospital consists of 20 clinical department, 6 laboratories, and 16 administrative units. The 231-bed hospital there was 201, 965 outpatients, 17,739 inpatients and 8680 operations every year. Sakaeo Provincial Hospital takes important responsibility for health care in Sakaeo Province, many patients from difference districts and under very serious condition, some patients are immigrations. Therefore, Staff nurses' workloads as well as nursing care quality are quite high. Sakaeo Provincial Hospital is a good model for provincial hospital. Therefore, selected this hospital for study on job satisfaction of staff nurses and their

perception on head nurses' leadership is necessary and useful. The usefulness of the study result will help to reduce staff turnover and absenteeism or improve quality of patient care. The information could also be used as bench-mark data for future study .With this purpose, this study of job satisfaction of staff nurses and their perception on head nurses' leadership is emerged.

1.2 Research Questions:

- What is the current level of job satisfaction of the staff nurses employed by Sakaeo Provincial Hospital?
- What is the level of perception on head nurses' leadership based on the opinion of staff nurses in Sakaeo Provincial Hospital?
- Is there association between staff nurses' job satisfaction and their perception on head nurses' leadership in Sakaeo Provincial Hospital?
- What are personal characteristics associations with the job satisfaction of staff nurses employed by Sakaeo Provincial Hospital?

1.3 Research Objectives

1.3.1 General Objective

- To study association between staff nurses' job satisfaction and their perception on head nurses' leadership in Srakaeo Provincial Hospital, Thailand

1.3.2 Specific Objectives

- To assess the level of staff nurses' job satisfaction in Sakae Provincial Hospital.
- To study the level of perception on head nurses' leadership among staff nurses in Sakaeo Provincial Hospital.

- To determine the relationship between staff nurses' job satisfaction and personal characteristics in Sakaeo Provincial Hospital.

1.4 Conceptual Framework

According to literature review, the variables used in the study are as followings:

1.4.1 Independent variables

Personal characteristics

- Age
- Marital status
- Highest educational level
- Duration of working as a nurse
- Duration of working in this hospital
- Work position
- Monthly income
- Department of working

Perception on leadership

- Idealized influence
- Inspirational motivation
- Individualized consideration
- Intellectual stimulation

1.4.2 Dependent variable

Job satisfaction

Motivator factors

- Achievement
- Recognition
- Work itself
- Responsibility

- Advancement

Hygiene factors

- Salary and benefits
- Technical-supervision
- Job security
- Working conditions
- Interpersonal relationship
- Hospital policy and administration

INDEPENDENT VARIABLES

DEPENDENT VARIABLES

Perception on leadership

- Idealized influence
- Inspirational motivation
- Individualized consideration
- Intellectual stimulation

Job satisfaction

- Motivator factors
- Hygiene factors

Personal Characteristics

- Age
- Marital status
- Highest educational level
- Duration of working as a nurse
- Duration of working in this hospital
- Work position
- Monthly income
- Department of working

1.5 Research Hypothesis

- There are associations between staff nurses' perception on head nurse' lead ship and job satisfaction in Srakaeo Provincial Hospital.

- There are relationships between staff nurses' personal characteristics and job satisfaction in Sakaao Provincial Hospital.

1.6 Operational Definition

Personal Characteristics: refer to the characteristics of staff nurses consisting of age, marital status, and highest educational level, work position, duration of working as a nurse, duration of working in this hospital, monthly income, and department of working.

- **Age:** refers to the age counted in year last birthday of the day of the survey, according to demographic characteristic in divide into 3groups as ≤ 24 , 25-34, and ≥ 35 years old.

- **Marital Status:** refers to the marital status of staff nurses consisting of single, married, and others (widower, separated and divorced).

- **Highest educational level:** refers to the last education completion of staff nurses consisting of diploma, bachelor degree, and master degree.

- **Work position:** refers to the status of working of staff nurses consisting of registered nurse and technical nurse.

- **Duration of working as a nurse:** refers to the duration in year that staff nurses

have performed nursing work since graduating in divided into 3 groups i.e. < 5, 5-10,, and > 10 years.

- **Duration of working in this hospital:** refers to the duration in year that staff nurses have performed nursing work in Sakaeo Provincial Hospital in divided into 3 groups i.e. < 5, 5-10, and > 10 years.

- **Monthly income:** refers to the current salary of the staff nurse; include overtime payment and special auxiliary allowance. According to PC-position classification standard of monthly income (from 1-11 levels) in Thailand can be in divide into 3 groups as <11,120; 11,120-17,950; and >17,950 (11,120 Baht at 6 level, and 17,950 Baht at 7 level of monthly income).

- **Department of working:** refers to nursing unit where that staff nurse are working in Sakaeo Provincial Hospital in divided into 2 groups, i.e. unit of medical system group (including medical unit, pediatric, psychiatric, O.P.D, special room for patient and others such as social medical and primary care unit). Because of these departments there were daily order task, the staff nurses could follow the rules and criteria for work. On the other hand, unit of surgical system group (including surgical unit, I.C.U, obstetric & gynecological, operation room, emergency). Because of these departments there were many emergency cases occurring every day, the staff nurses have to rush to work and try their best to manage everything by themselves, maybe, they get stress for their work.

Perception on head nurses' leadership: refers to thoughts and feelings of staff nurses in Sakaeo Provincial Hospital on head nurses' administrative activities in working, in term of idealized influence, individualized consideration, inspirational motivation, and intellectual stimulation which based on Bass's transformational leadership theory.

- **Idealized influence:** is a positive and compelling quality of a head nurse that makes staff nurses want to be led by her.

- **Individualized consideration:** means that head nurse pay attention to each individual's need for achievement and growth by acting as a coach or mentor. So, staff nurses are developed to successively higher levels of potential.

- **Inspirational motivation:** means that head nurse behave in ways that motivate staff nurses by providing meaning and challenge to their staff nurses' work.

- **Intellectual stimulation:** means that head nurse stimulate staff nurses' effort to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways.

Staff nurse: refer to registered nurse and technical nurse with at least qualification in nursing.

Job satisfaction: refers to feelings or positive opinions of staff nurses related to the current jobs in Sakaeo Provincial Hospital. Having job satisfaction is willing to do one's best to fulfill the organization goal. In this study, it means two aspects; motivate factors and hygiene factors which are based on Herzberg's Theory.

Motivator factors: refer to factors which motivate staff nurses to put their effort in their work to achieve goals, it can promote job satisfaction. As followings:

- **Achievement:** means feeling proud of being able to work and solve problems successfully.

- **Recognition:** means to be trusted, reliable for other colleagues and be admired

from their accomplishment.

- **Work itself:** means the work characteristic such as a chance to use abilities, a challenging work, creativity, and workload and work difficulty.

- **Responsibility:** means to be fully responsible for work, have power to work them, have new duties and be the important people who cause the success of work.

- **Advancement:** means a progression in work whether higher positions, knowledge, skills or work responsibilities.

Hygiene factors: refer to factors which operate work smoothly and prevent job dissatisfaction. As followings:

- **Salary and benefits:** means monthly income including overtime payment and special auxiliary allowance.

- **Technical-supervision:** means the style to control workers, give suggestions, use the justice, accept opinions and solve problems by using technical skill.

- **Job security:** means thing that relate to job security, for example, security of organization, tenure.

- **Working conditions:** means the provision of convenient facilities, happy condition and work safety.

- **Interpersonal relationship:** means the form of being together, interaction, mutual understanding and ability to work together smoothly.

- **Hospital policy and administration:** means the management criteria which encourage participation and equality.

1.7 Limitation and scope of study

Data collection with limited time and applying a self-administered questionnaire, as well as this study was conducted in Sakaeo Provincial Hospital, due to this scope of this study was limited. Therefore, the result may not be generalized to other hospitals.

1.8 Expected outcomes

- To know the degree of job satisfaction and factors associated with satisfaction of staff nurses .The result can be a guideline for enhancing their job satisfaction and work efficiency in Sakaeo Provincial Hospital.

- To know the level of perception on head nurses' leadership. The findings can be a guideline for the management for training head nurses before and duration of promotion in Sakaeo Provincial Hospital.

- This method may be improving transformational leadership of head nurses as well as be raising staff nurses' job satisfaction in Sakaeo Provincial Hospital.

CHAPTER II

LITERATURE REVIEW

In this research, researcher has studied the relationship between staff nurses' personal characteristics and job satisfaction with perception on head nurses' leadership in Srakaeo provincial Hospital. Thailand.

The related literature for this study included staff nurses' job satisfaction, leadership on head nurses. The review of the literature is presented as followings:

- Concept and theories related to job satisfaction.
- Related researches of job satisfaction of staff nurses.
- Concept and theories related to head nurses' leadership
- Related researches of head nurses' leadership

2.1 Concept and theories of job satisfaction

2.1.1 Definition of job satisfaction

Job satisfaction has been defined in various ways. Job satisfaction is a multidimensional construct with a variety of definitions and related concepts, which have been studied in a diversity of disciplines from early this century until now. Social psychologists and scholars interested in job organization have conducted many studies of job satisfaction. In this research, it means two factors; motivate factors and hygiene factors which based on Herzberg's theory.

According to Herzberg, et al, referred to job satisfaction as a people's attitude toward their work, which they find a source for their good or bad feeling about the job (11).

Locke gives a comprehensive definition of job satisfaction as a pleasure positive emotional state resulting from the appraisal of one's job or job experience (12).

Organ and Bateman described job satisfaction as "a person's attitudes toward or about the job". In general, job satisfaction comprises the attitudes toward the job as the whole (13).

Some one suggested that the term job satisfaction and job attitudes were typically used interchangeably. Both referred to affective orientations on the part of individuals toward task roles that they were presently occupying. Positives toward the job were conceptually equivalent to job satisfaction. Negative attitudes toward the job were equivalent to job dissatisfaction (14).

Miner quantified job satisfaction in terms of the gratification of strong needs in the workplace, and the degree of discrepancy between what a person expected to receive from a job and what that person perceived was actually received (15). The outcome of the combination of many attitudes the employees have toward their work and other factors generally related to their work and their life (16).

Cumbey & Alexander, Defined job satisfaction is the individual's feeling regarding a job and a function of the events or opportunities in the work situation that gives a feeling of well-being (17).

Job satisfaction result from the perception that one's job fulfils or allows the fulfillment of one's own important job values, proving and to a degree that those values are congruent with one's needs. Such a definition outlines the cognitive processes which lead to the affective experience of job satisfaction, suggesting that it is essentially a personal experience. It is therefore possible that different sources of

satisfaction and dissatisfaction may be experienced by individuals within the same occupational group. This means variation in the experience of job satisfaction may be evident among different sections of the nursing workforce, and in different local work environments (18).

Thus, it can be summarized that job satisfaction is a subjective positive feeling or attitude state that a person possesses in a diversity of dimensions to the job itself and to the job environment, it can be affected by social factors, family factors, and the person's psychological condition. Eventually, it enables effectiveness of work performance in terms of productivity and target accomplishment.

2.1.2 Theories associated with job satisfaction.

Various theories relate job satisfaction, the following section attempts to describe some of the major theory which have been used to diagnose motivation in the workplace.

Maslow's hierarchy of needs theory

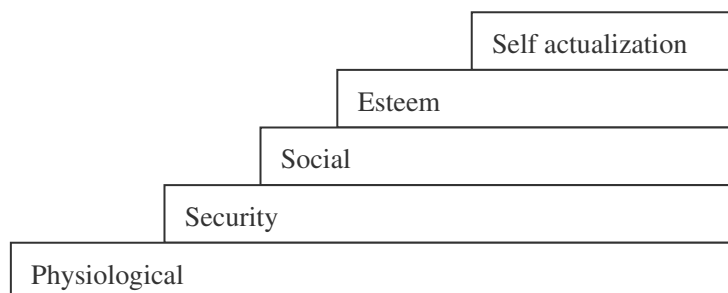


Figure 1 Maslow's hierarchy of needs theory (19)

Source: Bateman Snell. Management: Building competitive Advantage, 4th edition, New York: Macmillan, 1998.

Maslow's Theory described human motivation as a hierarchy of five needs, ranging from the most basic physiology needs to the highest needs for self-actualization (20, 21).

- **Physiological needs:** are the most rudimentary; the requirements are survival needs including food, water, shelter, clothing, medicine, sex, and comfort. In the job environment, a manager could satisfy these needs by offering salaries and wages that allow employees to buy these basic needs, clean air, water fountains, no objectionable odors or noises, and a comfortable temperature.

- **Security needs:** these kinds of needs arise after the physical needs are met to one's satisfaction. People desire to feel security, freedom from risk or danger, free from coercion, and also free from threats to their physical and emotional sense of security. A person's desire for physical safety and protection as well as job security are represented in this category. Managers could support this need by providing salaries, job security, safe job circumstances (both physical and emotional safety), and health insurance.

- **Social needs:** in this stage, an individual's desire for social relationship and affection are addressed both inside and outside of the work environment. These needs relate to social interactions. People desire companionship, friendship, and inclusion in the group. Managers might satisfy social needs by offering sport teams, lunches, parties, and work group.

- **Esteem needs:** the ensuing level is the need to master work, hold a position of prestige, receive public recognition, demonstrate competence, and feel self-esteem. Satisfaction of these needs can result in feeling of weakness; helplessness, and inferiority, work-related activities that help individuals meet esteem needs include successfully completing projects, being recognized by peers and supervisors, and being

offered organization titles.

- **Self-actualization:** at the apex of the pyramid is a self-actualization need, the desire to grow or develop to full potential. Which represent the need to maximize the use of one's skills, abilities and potential? Managers could help employees meet their needs by providing appropriate automation, opportunity for training and a flexible work schedule. When a person works to achieve self-actualization needs, his skills and ability will grow stronger, but they may never completely be fulfilled.

In 1935, Abraham Maslow developed the first and most well-known needs theory. This theory defined a hierarchy of needs that individual human desires to fulfill. There are four assumptions (22):

- After one need is fulfilled or responded, that need will not longer be a motivation or incentive, but there will be a need in the higher level.

- Structures of needs is complicated and various and have effects on individuals' behaviors.

- In general, the higher level of need will not occur if the need in the lower level is not fulfilled or responded.

- There are more methods to respond to needs in the higher level than in the lower level.

Organization and managers should strive to meet unsatisfied needs. According to Maslow, the lowest unsatisfied need level become the most powerful or important need to the individual. The lower levels of needs do not necessarily motivate an individual. However, once lower-level needs are met, a person will act to satisfy needs at the next highest level. Motivation is increased at work when the esteem and self-actualization needs are being satisfied. Consequently, research has indicated that there are actually

only two or three relevant categories of needs and that the order of their importance varies from one individual to another. In addition, Maslow's theory cannot be labeled as universal due to the variation in its sequencing of needs from country to country.

Herzberg's Motivation-Hygiene Theory

Frederick Herzberg's theory (11) on motivation was another relatively simplistic model of job satisfaction. This theory specifically addresses human needs at work. The two-factor theory describes motivation factors as factors that produce job satisfaction, and hygiene factors as factors leading to job dissatisfaction. Motivators describe features of job's content including achievement, recognition, work itself, responsibility, and advancement. Herzberg and his associates believed that these criteria, when maximized, motivate a person to work harder and ultimately improve job performance. On the other hand, hygiene factors that fulfill physiological, security, or social needs-satisfy an individual's lower-order needs. Thus, preventing dissatisfaction among those listed were salary, technical-supervision, job security, working conditions, interpersonal relations, hospital policy and administration. Herzberg believed that in order for a person to want to work harder, hygiene factors had to be at an acceptable level. In essence, hygiene factors did not directly lead to increased performance levels.

Frederick Herzberg's two-factor motivation need theory, mean that workers are motivated by two types of needs: needs relating to working condition as hygiene factors or extrinsic factor and needs relating to the work itself as motivation factors or intrinsic factors. The lack of such extrinsic factors as satisfactory pay, adequate technical-supervision, enlightened agency policies and administration, good working conditions, and job security cause job dissatisfaction. The intrinsic factors are opportunities for growth and advancement, challenging aspects of the work, added responsibility with which an employee may be assumed to experience job satisfaction

(24, 25). Although, hygiene factors in themselves do not motivate, they are needed to create an environment that encourages staff nurses to move on to the higher-level needs (26).

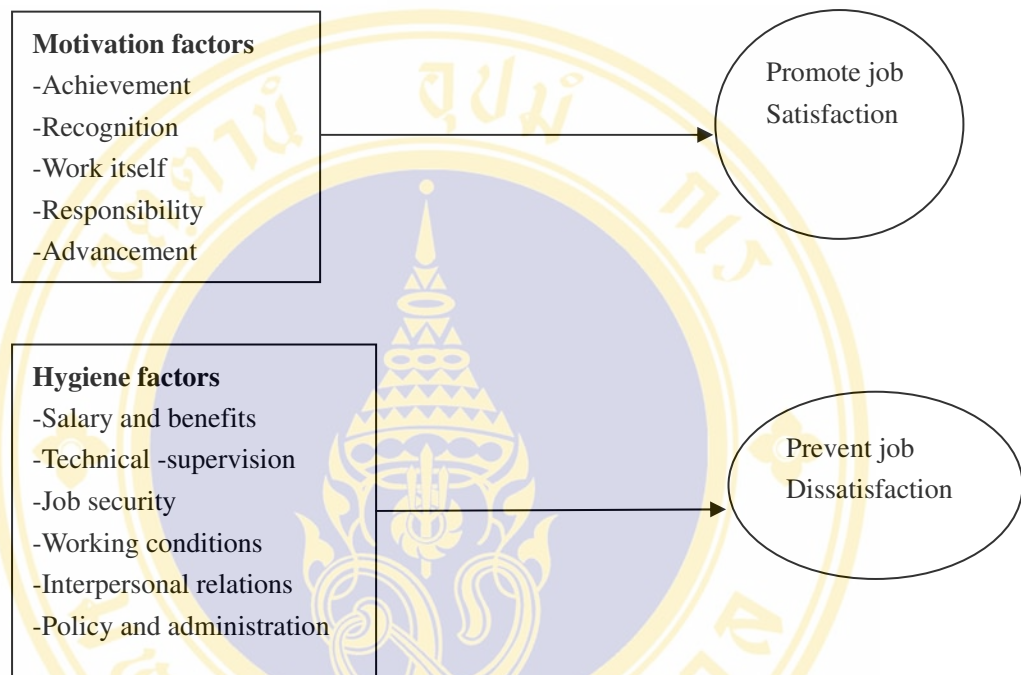


Figure 2 Herzberg's motivation-hygiene theory (23)

Source: Greengerg & Barn, 1993:167

(1) Motivation factors or intrinsic factors: are the primary causes of job satisfaction. They are intrinsic to the job and relate directly to the real nature of the job that a person performed. Different person requires different kinds and degrees of motivation. Lack of motivation factors lead to job dissatisfaction, but increasing of these factors causes job satisfaction. The following are examples of intrinsic factors:

- **Achievement:** job accomplishment, performance, are measurable achievement resulted from goal satisfaction in the specified time, ability to resolve problem and difficulties that satisfy individuals and co-workers, and satisfaction for each job.

- **Recognition:** is the state of being recognized by superiors, co-workers, advisee or external persons. Recognition can be in the form of praise, admiration, supports or others actions that imply the admiration including being assigned to an important job.

- **Work itself:** this factor represents the positive and negative feeling toward the work itself whether the job is mentally challenging, personally interesting or boring, difficult or easy, or innovative so that it allows individuals to learn and develop themselves.

- **Responsibility:** is the individuals' satisfaction in being assigned to an important job and authorized to make a job accomplishing decision.

- **Advancement:** the factor refers to the chance to be promoted to higher position in present organization, the development of new know-how and skills, training and, opportunity for higher education.

(2) **Hygiene factors or extrinsic factors:** are extrinsic to the job, and they are parts of the job environment. When hygiene factors that a manager is offering are of low of quality, employees feel job dissatisfaction. Hygiene factors in themselves do not motivate but they are needed to create an environment that encourages the employees toward the higher-level needs. The following are some examples of extrinsic factors:

- **Salary and benefits:** this factor comprises of the returns from work such as wages, salary, income and benefits including welfare and vacation.

- **Technical –supervision:** includes the ability of supervisor in managing, fairness and equity including the willingness of supervisor to give subordinates suggestions, advises, helps and responsibility.

- **Job security:** refers to the feeling and attitude toward the security in workplace, the security of the organization, the security in position, and reputation of the organization.

- **Working conditions:** represents the physical condition that facilitates work such as light, ventilation, tools and equipment, building and facilities. This factor includes also the provision of enough equipment and balance of workload and the amount of workforce in the organization.

- **Interpersonal relations:** refer to relationship among peers subordinates, and supervisors. In an organization with high-quality social supports, the employees will enjoy working and these will be high production.

- **Hospital policy and administration:** this factor means the managing and administrating the organization, empowerment and interpersonal communication. The policy must have a clear direction, appropriate work distribution and must initiate a participative management.

There is a strong relationship between Herzberg's and Maslow's theories. Herzberg's hygiene factors compare with Maslow's with lower needs and motivation factors like Maslow's to higher needs.

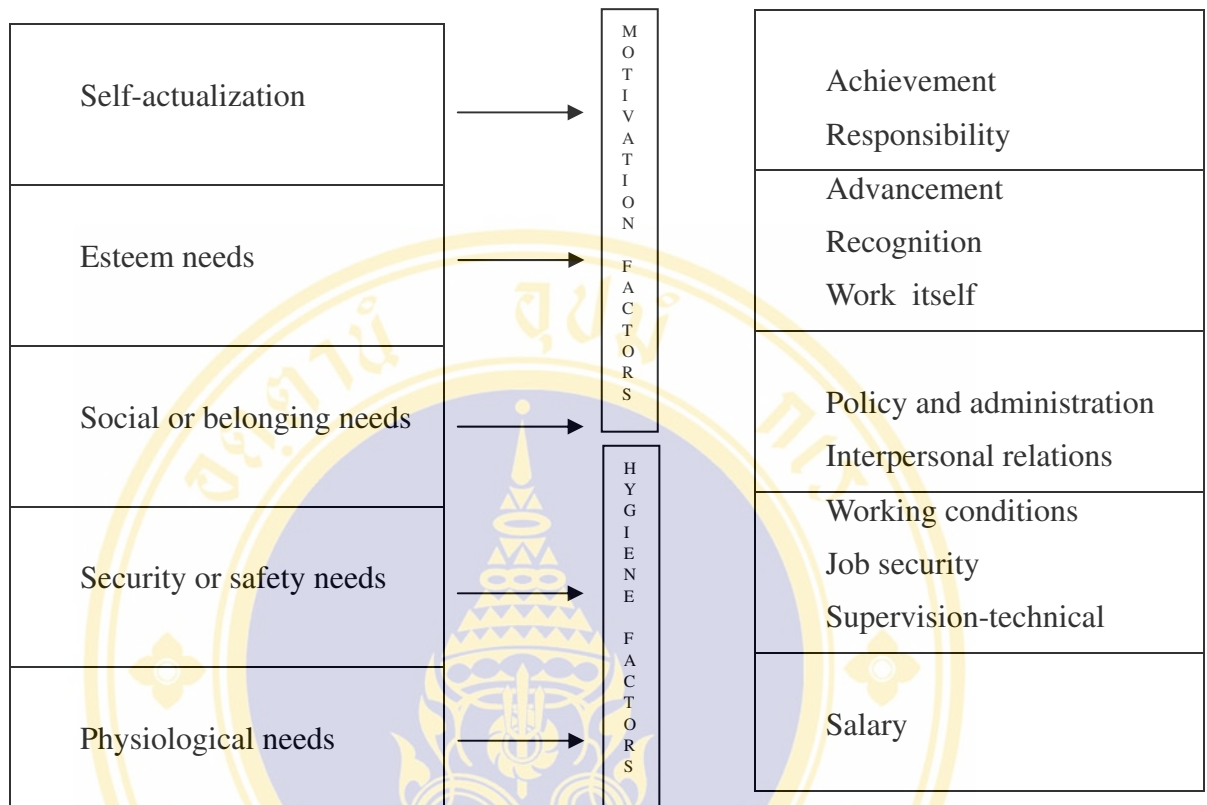


Figure 3: Comparison of Maslow's and Herzberg's theory (27)

Source: Koontz et al, 1982:403

2.2 Related researches on job satisfaction of nursing

Nursing plays important roles to the society in providing health care services to people, their families and communities (28). The nursing profession has been concerned with job satisfaction since the late 1930s. Nahm (17) found that factors that differentiate satisfied from nurses who with dissatisfaction were interest in work, general adjustment, relationship with supervisors, hours of work, income and opportunities for advancement. Until the 1970s, most research about job satisfaction had been conducted in the area of applied psychology. Few of those studies involved nurses. there has been increasing awareness of turnover, absenteeism, burnout, resignation, alienation as a series of problem in nursing and job dissatisfaction as a

contributing factor, and a great deal of research has been conducted on job satisfaction in nursing (3).

One study showed that the director of nursing, head nurses, and supervisors had the greatest amount of job satisfaction. Also, the lowest amount of job satisfaction was reported by the staff nurses level (29). The five motivating factors identified by Herzberg(11) as determiners of job satisfaction were achievement, recognition, work itself, responsibility, and advancement which had been reported as being causes of dissatisfaction about salary and benefit , technical-supervision, job security, working conditions, and interpersonal relation, as well as policy and administration, which were some of the hygiene factors that were suggested by Herzberg.

Another study also proposed that six work-related factors of job satisfaction for registered nurses were payment, professional status, and interactions with physicians, autonomy, task requirement, and organizational policies (30).

Cavanagh (31) used the questionnaire developed by Price and Mueller (32) to study the job satisfaction of 22 staff nurses who worked in the greater Los Angeles area. The findings showed that the positive effects on job satisfaction were benefits, participation in decision-making, promotion, routine, communication and salary, while the negative effect with job satisfaction were opportunity, integration, education, and justice.

Yamashita suggested that the negative influence of job satisfaction was an opportunity for promotion and favorable working conditions (33).

Similarly, Parsons reported that the most significant factors in nurses' job satisfaction were autonomy, benefits, task variety, promotional opportunities and level

of education (34).

2.2.1 Factors related to job satisfaction

Many different factors seem to contribute to job satisfaction or dissatisfaction among employees. Most research on the causes of job satisfaction has focused on various aspects of work conditions faced by employees. The major factors influencing job satisfaction could be part in two factors, personal characteristics and work factors.

Personal characteristics

- **Age:** job satisfaction increase with age, the lowest job satisfaction was reported by the youngest workers. Many young staff nurses were disappointed with their first jobs because they fail to find sufficient challenge and responsibility. Older staff nurses were more satisfied than younger staff nurses with their jobs. Older staff nurses reported greater job congruence, higher salaries and rank, and higher internal locus of control (35). The reason for increase satisfaction with age have been suggested involving either the adjustment of the individual to the job or differences in the job between younger and older account for the age-satisfaction relation, including a better match between desired and actual job condition and higher salary. Older staff nurses may bring certain rewards that result in higher satisfaction (36). Suwanna L. (37) support by found evidence for increase in satisfaction with age in nurses. Furthermore, Gilmer (38) points out the different of the desire for security with age. The older staff nurses have less saleable service. The feeling of security is a strong reason for liking job. But the young, the opportunity for advancement are a basic concern.

- **Marital status:** married staff nurses who were living with spouse had more job satisfaction than those who single or living along. Because, married staff nurses

have emotional and mental support from their spouse (37).

- **Highest educational level:** it was found that job satisfaction tend to be increased with level of education. Therefore, staff nurses in higher education have more opportunity for a good work, more skill and performance, and more challenge and creation. However, some studies have shown that education has a slight negative relationship with job satisfaction, the higher the level of formal education, the more likely a person is to be dissatisfied with the job. One explanation is that better educated persons have higher expectations and believe that their work should provide greater fulfillment and responsibility. Most jobs do not satisfy these expectations (35).

- **Duration of nursing:** in general, job satisfaction tends to increases with nursing experience. During the initial stage of employment, new staff nurses tend to be satisfied with their jobs. This period involves the stimulation and challenge of developing skill and abilities. And the work may seem attractive just because it is new. This early satisfaction wanes unless employees receive evidence of progress and growth. After a few years on the job, discouragement is common, often being brought on by the feeling that advancement in the hospital is too low, job satisfaction appears to increase after a number of years of experience and to improve steadily thereafter. The relationship between job satisfaction and length of work experience parallels the relationship with age (35). Supported by Suwanna L. (37) who found the evidence of increase of job satisfaction with nursing experience of staff nurses. So, longer length of duration of working as a nurse, the more job satisfaction with staff nurses. .

- **Work position:** job satisfaction tends to increase with level of position, therefore, staff nurses in higher level of position, the greater is the opportunity for the satisfaction of motivator needs and the greater are the autonomy, challenge, and responsibility of the work. Satisfaction of esteem and self-actualization needs also

increases with higher level of position (39). Many researches found that staff nurses in higher position or management nurses would have more job satisfaction than nurses in lower position (40).

However, some studies found the personal characteristics i.e. age, marital status; educational level, nursing experience, and working position are not related to staff nurse's job satisfaction.

In addition, factors of work could be categorized as followings (12) (41):

- **Nature of work:** generally, work that satisfies the needs of employees is work that provides opportunities to use one's value skill and abilities, perceived importance and challenge of the work, and variety. Also a job that has just sufficient difficulty, amount of work, responsibility, autonomy, and complexity also satisfies the needs of employees. Autonomy, or control over work activities is a major factors in job satisfaction in the nursing professions.

- **Work environment:** employees are satisfied with physical surroundings that are not dangerous or uncomfortable. The most significant and common predictors of job satisfaction for nurses are adequate staffing ,scheduling of work hours, relationship with co-workers , a clean work environment, adequate equipment and supplies.

- **Career advancement opportunities:** that is important to nurses are professional growth opportunities, continuing education, and opportunities for promotion or transfer to different clinical areas.

- **Supervision or management:** there is strong correlation between management style and staff nurses job satisfaction. The supervision actions include a number of

factors , such as decision-making, friendliness, praising good performance, leading and motivating staff, ensuring an adequate working environment, and listening to subordinate' opinions.

- **Salaries and benefits:** have taken on an increased importance to nurse in term of job satisfaction. The most satisfied groups typically earn higher salaries than others do. Money is a complex symbol; it represents more than material goods and services. Income level is associated with social status, lifestyle and independence.

2.2.2 Relationship between job satisfaction and aspects of employee behavior

Most adults spend about half their work hours in job-related activities. The satisfaction they derive from their job is an important for their life. As we know that satisfied employees usually have better attendance and turnover records, less union activity, and better performance than do less satisfied employees. Job satisfaction also leads to non job satisfaction, in that being satisfied with one's work seems to make most people more satisfied with their network endeavors as well (21).

Avery and Baker (42) concluded the relationship between job satisfaction and aspects of employee's behavior as followings:

- Job satisfaction is negatively related to job turnover. In other words, satisfied employees tend to stay and dissatisfied ones leave.

- Satisfaction is negatively related to with behavior such as absenteeism and lateness: satisfied employees tend to come to work on time and tend not to take sickness.

- Job satisfaction is possibility related to the extent to which an individual is preoccupied with, or involved in, the job. Researchers are, however, not sure whether satisfaction come first or is the result of the job involvement.

- Job satisfaction is positively related to morale, which can be defined as the satisfaction of a group of workers.

- Job satisfaction is only minimally correlated with job performance and productivity, that is, a satisfied worker is not necessarily highly productive or competent.

- Job satisfaction is positively related to overall satisfaction with life out work.

Schultz proposed the relationship between job satisfaction and job behavior as followings (35):

- Productivity, research suggests a positive relationship between satisfaction and productivity.

- Counterproductive behavior, high job satisfaction has been related to social behavior that is, to helpful behavior directed at customers, co-worker, and supervisors, to the benefit of employees and their organization.

- Absenteeism, absence from work is the by-product of employee job dissatisfaction. People who dislike their jobs will be more likely to miss work than people who like their jobs.

- Turnover, factors related to high turnover include job dissatisfaction. Turnover also related to poor promotion opportunities, and dissatisfaction with supervision and with pay.

In other words, job satisfaction may cause positive effect of performance behavior like good performance, decrease turnover rate and absenteeism.

In summary, a number of studies about job satisfaction have been conducted among nurses since 1940. From the studies on job satisfaction of nurses, it was found that nurses had moderate degree of job satisfaction, Job satisfaction continues to be a major concern to the profession and society. The result of these studies indicated that

many factors could effect the level of nurses' job satisfaction, such as achievement, recognition, work itself, responsibility, and advancement as motivator factors, in addition, other factors that affect job dissatisfaction of staff nurses are salary and benefits, technical-supervision, job security, working conditions, interpersonal relations, polity and administration, , as hygiene factors. The above empirical findings support the proposition that staff nurses who have high job satisfaction would provide effective job performance, quality of nursing care, and patient satisfaction. Thus, the Motivation-Hygiene Theory is of interest for application in this research.

2.3 Concept and theories related to leadership

2.3.1 Definition of leadership

Many experts have proposed several definitions of leadership according to their individual attitudes and interests in it.

Richard L. Daft refers to leadership as an influence relationship among leaders and followers who intend real changes that reflect their shared purposes (43).

Cook, W.C. Hunsaker, L. P. and Coffey,E.R. proposed leadership as the act of providing direction, energizing others, and obtaining their voluntary commitment to the leader's vision. Leader as a person, who creates a vision and goals, then energizes others to voluntarily commit to that vision (44).

Kouzes& Posner defined leadership as the art of mobilizing others to want to struggle for shared aspirations. Without want to in the definition, the meaning of leadership is significantly altered. Choice, internal motivation, and inner desire disappear. Leadership then implies something less than voluntary involvement on the

part of constituents (45).

Heinz and Harold saw leadership as influence, the art, or process of influencing people so that they will strive willingly and enthusiastically towards the achievement of organizational goals (46).

Joseph C. R. definite leadership as an influence relationship among leaders and followers who intended real changes that reflected their shared purposes (47).

Krekeler and Roos established leadership as being able to make others aware of it (48).

McCloskey and McCain defined leadership as “the process of influencing people to accomplish goals, whereas management as moving an organization toward achievement of its goals” (49).

Bass defined leadership as an individual’s ability to influence and direct a group, subordinates or follower to cooperate actively in the job toward goal attainment (50).

In summary, the leader can make others willing to serve and release collective capacities and emotional attitudes, and that may be related fruitfully to the solution of the group’s problems. As a process, leadership is the use of non-coercive influence to direct and coordinate the activities of the group members toward goal accomplishment. As a property, leadership is the set of characteristics attributed to those who are perceived to use such influence successfully.

In this study leadership refers to transformational leadership it based on Bass’s concepts (50).

2.3.2 Transformational leadership

Transformational leadership is characterized by the ability to bring about significant change. Transformational leaders have the ability to lead change in the organization's vision, strategy, and culture as well as promote innovation in products and technologies. Transformational leaders do not use tangible incentives to control specific transactions with followers. Instead, they focus on intangible qualities such as vision, shared values, and ideas in order to build relationships, give larger meaning to diverse activities, and find common ground to enlist followers in the change process. Transformational leadership is based in the personal values, beliefs, and qualities of the leader rather than on an exchange process between leaders and followers (43).

To use this approach in the workforce, one must first understand exactly what transformational leadership is. In the simplest terms, transformational leadership is a process that changes and transforms individuals. In other words, transformational leadership is the ability to get people to want to change, to improve, and to be led. It involves assessing associates' motives, satisfying their needs, and valuing them (51). Therefore, a transformational leader could make the company more successful by valuing its associates.

Wolf and colleagues define transformational leadership as “an interactive relationship, based on trust that positively impacts both the leader and the follower. The purposes of the leader and follower become focused, creating unity, wholeness and collective purpose.” The high-performing transformational leader demonstrates a strong commitment to the profession and the organization and is willing to tackle obstacles using group learning. This self-confidence comes from a strong sense of being in control. These transformational leaders also are able to create synergistic

environments that enhance change. Change occurs because the transformational leader's futuristic focus values creativity and innovation. The transformational leader also values organizational culture and values strongly, perpetuating these same values and behaviors in their staff (41).

There are four components of transformational leadership (also known as the "four 'I's"): These factors are highly interrelated and always present. They are idealized influence (charisma), inspiration motivation, individualized consideration, and intellectual stimulation (50).

- Idealized influence (charisma)

The Webster's New World Dictionary definition of charisma is "a special quality of leadership that captures the popular imagination and inspires unswerving allegiance and devotion." (52). Charisma is a positive and compelling quality of a person that makes many others want to be led by her. It was also to be seen in the reactions of followers. It was their loyalty to the specific and exceptional sanctity, heroism or exemplary character of an individual person and of the normative patterns or order revealed or ordained by her (53).

Robert J. House (54) developed a theory of charismatic leadership that defined charisma in terms of its effects. A charismatic leader, according to House, is any person who brings about certain outcomes to an unusually high degree. The nine Charismatic effects are as follows: 1) Group member trust in the correctness of the leader's beliefs; 2) Similarity of group members' beliefs to those of the leader; 3) Unquestioning acceptance of the leader; 4) Affection for the leader; 5) Willing obedience to the leader 6) Identification with and emulation of the leader; 7) Emotional involvement of the group member or constituent in the mission; 8) Heightened goals of the group member; 9)

Feeling on the part of group members that they will be able to accomplish, or contribute to, the accomplishment of the mission.

Charismatic leaders who these leaders are admired, respected, and trusted. Followers identify with and want to emulate their leaders. Among the things the leader does to earn credit with followers is to consider followers' needs over his or her needs. The leader shares risks with followers and is consistent in conduct with underlying ethics, principles, and values.

A key dimension of charismatic leadership is that it involves a relationship or interaction between the leader and the people being led. Furthermore, the people accepting the leadership must attribute charismatic qualities to the leader. Charismatic leadership is possible under certain conditions. The beliefs of the constituents must be similar to those of the leader, and unquestioning acceptance of and affection for the leader must exist. The group members must willingly obey the leader, and they must be emotionally involved both in the mission of the charismatic leader and in their own goals. Finally, the constituents must have a strong desire to identify with the leader.

Bass studied subordinate's opinion to a considerable degree in industrial, educational, governmental, and military leaders. He found that many followers described their organizational superior as someone who made everyone enthusiastic about assignments, who inspired devotion to the organization, who commanded respect from everyone, who had a special gift of seeing what was really important, and who had a sense of mission. The entranced subordinates had complete faith in leaders with charisma and felt good to be near them. Subordinates were proud to be associated with the charismatic leaders' capacity to overcome any obstacle (50).

Consequently, leaders use charisma to make them and their followers have a feeling of satisfaction and acceptance. They are interested in followers and encourage the

group to accomplish the task. They are able to motivate and articulate the future, encourage others, and get job done together (55).

Idealized influence describes managers who are exemplary role models for associates. Managers with idealized influence can be trusted and respected by associates to make good decisions for the organization.

- Inspirational motivation

Leaders behave in ways that motivate those around them by providing meaning and challenge to their followers' work. Individual and team spirit is aroused. Enthusiasm and optimism are displayed. The leader encourages followers to envision attractive future states, which they can ultimately envision for themselves.

Inspirational motivation describes managers who motivate associates to commit to the vision of the organization. Managers with inspirational motivation encourage team spirit to reach goals of increased revenue and market growth for the organization.

- Individualized consideration

Leaders pay attention to each individual's need for achievement and growth by acting as a coach or mentor. Followers are developed to successively higher levels of potential. New learning opportunities are created along with a supportive climate in which to grow. Individual differences in terms of needs and desires are recognized.

Individualized consideration is a consistently important aspect of leader-subordinate relationship. It has been found to contribute to subordinate

satisfaction with the leader and in many circumstances to subordinates' productivity. It is central to participative management and focuses on the employee's needs for growth and participation in decisions affecting his work and career (50).

Individual consideration describes managers who act as coaches and advisors to the associates. Managers with individual consideration encourage associates to reach goals that help both the associates and the organization.

- Intellectual stimulation

Leaders stimulate their followers' effort to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways. There is no ridicule or public criticism of individual members' mistakes. New ideas and creative solutions to problems are solicited from followers, who are included in the process of addressing problems and finding solutions.

Intellectual stimulation describes managers who encourage innovation and creativity through challenging the normal beliefs or views of a group. Managers with intellectual stimulation promote critical thinking and problem solving to make the organization better.

Transformational leadership's intellectual stimulation means the arousal and change in followers of problem awareness and problem solving, of thought and imagination, of beliefs and values, rather than arousal and change in immediate action. Intellectual stimulation is seen in the discrete jump in the followers' conceptualization, comprehension and discernment in the nature of the problems faced and their solutions (50).

According to Burns's theory, transformational leadership shapes and alters the goals and values of followers to achieve a collective purpose that benefits society (56). Transformational leadership is commitment to a vision and empowering others to achieve that vision. The leader meshes with followers on deeply held values. Leaders and followers raise one another to higher levels of motivation and morality (57, 58).

Although the transformational leadership is held as the current ideal, many leadership theorists, including Bass and associate (50) and Dunham and Klafehn (58), sound a warning about transformational leadership. Although transformational qualities are highly desirable, they must be coupled with the more traditional transactional qualities of the day-to-day managerial role. Both sets of characteristics need to be present in the same person in varying degree. According to Bass and associates, the transformational leader will fail without traditional management skills.

2.3.3 Strengths and weaknesses of transformational leadership

As with any theory or approach to leadership, strengths and weaknesses become evident. Northouse (51) identifies the strengths and weaknesses of the transformational leadership approach as followings:

- Strengths are widely researched (using well-known leaders), effectively influence associates on all levels (from one-on-one to the whole organization), and strongly emphasize associates' needs and values.

- Weaknesses have many components that seem too broad, treat leadership more as a personality trait than as a learned behavior, and have the potential for abusing power.

2.3.4 Applying transformational leadership

Because transformational leadership covers a wide range of aspects within leadership, there are no specific steps for a manager to follow. Becoming an effective transformational leader is a process. This means that conscious effort must be made to adopt a transformational style. Understanding the basics of transformational leadership and the four I's can help a manager apply this approach. According to Northouse (51), a transformational leader has the following qualities:

- Empowers followers to do what is best for the organization;
- Is a strong role model with high values?
- Listens to all viewpoints to develop a spirit of cooperation;
- Creates a vision, using people in the organization;
- Acts as a change agent within the organization by setting an example of how to initiate and implement change;
- Helps the organization by helping others contribute to the organization.

2.3.5 Conclusion

Transformational leadership is a vital role for effective managers because leader effectiveness determines the success level of the organization. According to Hesselbein and Cohen (59), organizations that take the time to teach leadership are far ahead of the competition. By becoming familiar with the transformational leadership

approach and combining the four 'I's, managers can become effective leaders in the business world.

Transformational leadership can be applied in one-on-one or group situations. Using this approach, the manager (leader) and the associates (followers) are "transformed" to enhance job performance and help the organization is more productive and successful.

2.4 Related researches on head nurses' leadership and job satisfaction of staff nurses

Rangrisombatsiri, M. Studied leaders of department heads as related to subordinates' moral and job satisfaction. The sample consisted of 258 subordinates working in 18 divisions and other equivalent offices in the office of the permanent secretary for public health. The major research findings indicated that the level of leadership of superiors regarding both personal and work relations were moderate and had positive relationship (60).

Mc Neese-Smith studied by comparing two research studies of managerial leadership at hospital in Seattle and Los Angeles. The purpose of the research was to determine whether the use of certain leadership by department managers made a difference in employees outcomes, specifically job satisfaction, productivity, and commitment to organization. The conceptual framework for the investigations reported in this study derives from Kouzes and Posner's model of leadership. The instrument developed by Kouzes and Posner (the leadership practices inventory), the scales measure the use of the five leadership practices, which has 30 questions, 6 to measure each of the five leadership. The leadership are scores on a five-point Likert-type scale

(1=rarely; 5=very frequently). Internal consistency has been demonstrated, using Cronbach's alpha (0.81 to 0.98). Pre-test reliability has been shown ($r=0.93$ to 0.95). In Mc Neese-Smith's study described, internal consistency also was demonstrated (Cronbach's alpha= 0.97 to 0.98) (61).

Medley, Faye, Larochelle, Diane R. Studied relationship of head nurse's leadership with staff nurse job satisfaction was investigated using the leadership paradigm of transformational (TF) and transactional (TA) leadership. The Multifactor Leadership Questionnaire and the Index of Work Satisfaction were completed by 122 staff nurses employed throughout acute care community hospitals in many patient areas. The results of this study indicated that staff nurses in acute care hospitals do perceive their head nurses as demonstrating TA and TF leadership styles. However, the factors associated with TF and TA is at variance with those achieved by other types of professional leaders. No significant relationship was demonstrated between TA leadership style and job satisfaction. Head nurses with high TF scores were more likely to have staff nurses with higher job satisfaction scores and longer association with their staff nurses than TA leaders, which may indicate that the TF leadership style promotes retention and prevents turnover (62).

Chitonnom (63) studied leadership of head nurses in Maharaj Nakorn Chiangmai Hospital and Danket, J (64) studied at Community Hospital Region 10 using Kouzes and Posner's model of leadership, the same results were found in both studies, the leadership of head nurses was at a moderate level.

One research studied relationship between registered nurses' personal factors, leadership behavior of head nurses and morale of registered nurses, Department of Health, Bangkok Metropolitan Administration; it was found that the overall leadership was at a moderate level (65).

According to the study of Puntongpum nursing directors perceived their transformational and transactional leadership higher than their staff nurses. The nursing directors and staff nurses have the same perception about transformational leadership that it is higher than transactional leadership (66). Similarly, Dunham and Klafehn (58) found that executive nurses and immediate staff members perceived the quality of transformational leadership to be higher than transactional leadership. The executive nurses had higher scores of transformational and transactional leadership than the immediate staff members. Also, McDaniel and Wolf (2) reported that executive nurses and middle administrators had consistently higher self-assessment scores than staff nurses' assessment of the leader scores. The executive nurses and middle administrators felt the predominance of transformational leadership reflected in the work satisfaction of staff nurses.

In conclusion, developed leadership is necessary in the nurse organization. : Leadership in head nurses can be used to influence and motivate others toward the attainment of group and individual goals. Transformational leadership is being committed, having a vision of what could be accomplished, and empowering others with the vision. Transformational leadership is not effective if it stands along. Transformational leadership must be effective in the management of the day-to-day, ordinary operations considered to be the scope of transactional leadership. Therefore, head nurses must perform managerial functions by the integration of both transformational leadership and transactional leadership, and consequently the main target of the organization can be success.

In summary

This literature review was based on the researchers' objectives, in order to determine the association between job satisfaction and its related factors. It had pointed out that job satisfaction and dissatisfaction were derived from achievement, recognition, work itself, responsibility, advancement; salary and benefits, technical-supervision, job security, working condition, interpersonal relationship, as well as hospital policy and administration.

The fore going review of literature suggests that job satisfaction can be best examined; using personal characteristics which were age, marital status, highest educational level, and job related factors such as work position, duration of nursing, monthly income.

The literature review revealed that many factors may be associated with job satisfaction, such as personal characteristics, as well as leadership. Thus, the researcher aims to study the level of staff nurses' job satisfaction, and the level of perception on head nurses' leadership, as well as relationship between staff nurses' perception on head nurses' leadership and job satisfaction. The findings from this study will be useful guideline in areas of nursing administration, nursing research and hospital policy.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research design

This cross-sectional research was designed to study job satisfaction of staff nurses and their perception on head nurses' leadership in Sakaeo Provincial Hospital, Thailand.

3.2 Study population

The target population of this study was total of staff nurses (145), including registered nurses (112) and technical nurses (33) who perform in the nursing profession in Sakaeo Provincial Hospital, Thailand.

However, the total staff nurses in Sakaeo Provincial Hospital were not all chosen as subjects for this study. The criteria for subjects' selection were as followings:

- Staff nurses have worked in Sakaeo Provincial Hospital for at least one year all included.
- Excluded head nurses and the director nurse.

Table 1 Number and Percent of subjects from each clinical nursing unit in Sakaeo Provincial Hospital.

Clinical nursing unit	Number	Percent
1. Surgical	14	9.66
2. Medical	18	12.41
3. Pediatric	11	7.59
4. Psychiatric	3	2.07
5. ICU	13	8.97
6. OPD	11	7.59
7.Obstetric& Gynecological	19	13.10
8. Operation room	14	9.66
9. Emergency	12	8.28
10. Special room unit	19	13.10
11.Others	11	7.59
Total	145	100

Source: Sakaeo Provincial Hospital Office

As Table 1 showed that in Sakaeo Provincial Hospital have 11 clinical nursing units, moreover, for special room unit including special care for patient; for others unit including social medicine, primary care unit. For ear-nose-throat, eye, dermatology, rehabilitation as so on has not inpatient clinical nursing unit.

3.6 Research instruments

A self-administered questionnaire was used as the instrument to collect the data about job satisfaction of staff nurses and their perception on head nurses’ leadership in Sakaeo Provincial Hospital. The questionnaire based on Herzberg’s two-factor theory, was designed and developed by researcher from the concept and theory denoted in the literature review, relevant researches, and suggestions as well as recommendation from

Disagree 2 points

Strongly disagree 1 point

Result interpretation

The perception on head nurses' leadership in Sakaeo Provincial Hospital was classified into 3 levels, i.e. high, moderate and low level, both in terms of overall and in detail.

The classification was done by group reference using mean and standard deviation.

Low $< \bar{X} - S.D.$

Moderate $= \bar{X} \pm S.D$

High $> \bar{X} + S.D.$

Score Range

Meaning

$< \bar{X} - S.D.$ Perception on head nurses' leadership degree is low

$\bar{X} \pm S.D$ Perception on head nurses' leadership degree is moderate

$> \bar{X} + S.D.$ Perception on head nurses' leadership degree is high

Part 3: Staff nurses' job satisfaction questionnaire

Questions assessed the job satisfaction of staff nurses in Sakaeo Provincial Hospital Based on Herzberg's two-factor theory, where two different sets of factors emerged; it is consisting of 54 items:

Motivation factors indicators

- Achievement 5 questions (21 22 23 24 25)
- Recognition 5 questions (26 27 28 29 30)
- Work itself 5 questions (31 32 33 34 35)
- Responsibility 5 questions (36 37 38 39 40)
- Advancement 5 questions (41 42 43 44 45)

Hygiene factors indicators

- Salary and benefits 5 questions (46 47 48 49 50)
- Technical-supervision 5 questions (51 52 53 54 55)
- Job security 5 questions (56 57 58 59 60)
- Working condition 5 questions (61 62 63 64 65)
- Interpersonal relations 5 questions (66 67 68 69 70)
- Hospital policy and administration 4 questions (71 72 73 74)

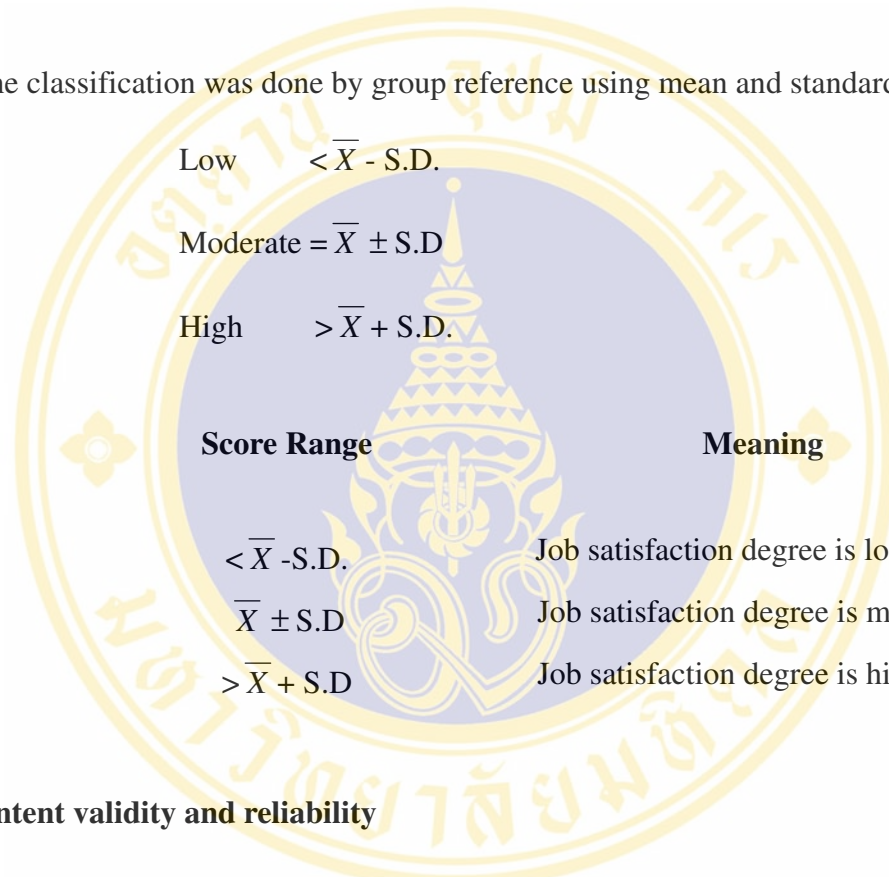
The questions consist of favorable statements or positive statement with the following rating scale.

Degree of satisfaction	Score
Strongly agree	5 points
Agree	4 points
Not Sure	3 points
Disagree	2 points
Strongly disagree	1 point

Result interpretation

The job satisfaction of staff nurses in Sakaeo Provincial Hospital were classified into 3 levels, i.e. high, moderate and low level, both in terms of overall and in detail.

The classification was done by group reference using mean and standard deviation.



Content validity and reliability

Validity: before data collecting, content validity of questionnaire were up graded by research committee, for examine the correctness, validity, language usage and clearness. Then, the questionnaire was improved to be more valid, after that were translated from English into Thailand language. Then, researcher made pre-test for validity of questionnaire, according to result of pre-test revised content again.

Reliability: Pre-test for reliability of questionnaire was used in another similar situation hospital (Singburi Provincial Hospital) with 32 staff nurses during December, 2003. Then, the answers were analyzed to test the questionnaire’s reliability by using

Crobach's alpha coefficient. For job satisfaction questionnaire there was 0.89 point of reliability (It was shown in Table 2). For perception on head nurses' leadership questionnaire there was 0.84 point of reliability (It was shown in Table 3).

Table 2 Reliability coefficients of staff nurses' job satisfactions (alpha).

Coefficients of the job satisfactions scale	Mean	S.D.	Alpha
Total scale items (54 items)	202.54	17.72	0.89
Motivation factors(25 items)	99.86	7.82	0.84
Hygiene factors(29 items)	102.61	12.40	0.93

Table 3 Reliability coefficients of staff nurses' perception on head nurse' leadership (alpha).

coefficients of the staff nurses' perception on head nurse' leadership	Mean	S.D.	Alpha
Total scale items (20 items)	78.12	5.17	0.84
.Idealized influence(5 items)	19.87	1.16	0.86
.Inspirational motivation (5 items)	20.13	1.43	0.90
Individualized consideration(5 items)	19.00	2.00	0.80
Intellectual stimulation(5 items)	19.10	2.31	0.82

3.5 Data collection

Following Faculty of Graduate Studies and institutional approval, data were collected based on the following procedures:

- The letter issued from Faculty of Graduate Studies, Mahidol University was submitted to the head of Sakaeo Provincial Hospital nursing office for asking give the detail of the research project and permission to collect data.

- The population of study from nurse profiles of each nursing division was examined in order to select eligible subjects.

- The researcher visited wards, introduced herself, explained the objectives of the study, and requested cooperation from staff nurses in each clinical section to send questionnaires to the subjects.

- The questionnaires were collected and checked for completion, and then analyzed.

3.6 Data analysis

Assessed data were analyzed by using Minitab 13 version as followings:

- The personal characteristics data were reported by using descriptive statistics: frequencies, percents, means, standard deviations, minimums, and maximums.

- The staff nurses' job satisfaction was analyzed by using descriptive statistics: frequencies, percents, means, standard deviations, median, minimums, and maximums.

- The staff nurses' perceptions on head nurses' leadership were analyzed by using descriptive statistics: frequencies, percents, means, standard deviations, median, minimums, and maximums..

- Investigation of relationship between staff nurses' perception on head nurses' leadership and job satisfaction were reported by using both of Spearman rank correlation and Chi-square test .The statistical significance level was set at 0.05 alpha levels.

- Investigations of the relationship between staff nurses' personal characteristics and job satisfaction were evaluated by using Chi-square test. The statistical significance level was set at 0.05 alpha levels.



CHAPTER IV

RESULTS

This research was aimed to study job satisfaction of staff nurses and their perception on head nurses' leadership in Sakaeo Provincial Hospital, Thailand. One hundred and forty-five staff nurses had participated and the questionnaires were completed.

This chapter presents the findings of the study. The data analysis was conducted to describe demographic characteristics of the respondents, job satisfaction and perception on head nurses' leadership. The analysis was also used to examine the relationships between staff nurses' perception on head nurses' leadership and job satisfaction. Therefore, this chapter is presented in five parts as follows:

Part 1: Personal characteristics of the staff nurses.

Part 2: The staff nurses' job satisfaction.

Part 3: The staff nurses' perception on head nurses' leadership.

Part 4: Relationship between staff nurses' perception on head nurses' leadership and job satisfaction.

Part 5: Relationship between staff nurses' personal characteristics and job satisfaction.

4.1 Part 1: Staff nurses personal characteristics

The personal characteristics of staff nurses in Sakaeo Provincial Hospital that were investigated included their age, marital status, highest educational level, duration of working as a nurse, duration of working in this hospital, current work position, monthly income (Baht), and department of working are presented in Table 4.

The respondents of this study were consisting of 145 staff nurses. Their ages ranged from 22 to 59 years old, with the mean age of 30.5 years old, and standard deviation of 7.195 years old. Most of the respondents (55.86%) were between 25 and 29 years old. About eight percent (8.28) of them were 24 years old of age and younger. Approximately twenty percent (21.38) of the staff nurses were in the age of 35 years old or over.

With respect to marital status, a majority of these staff nurses (57.93%) were single, followed by married (38.62%). Others (included divorced, widow, separated) were very few at only 3.45%. Regarding their education, the majority of the respondents (76.55%) had a bachelor degree. Followed by those who had diploma, they were 20.00 percent, and master degree was only 3.45 percent. For the working position of the staff nurses, most of them were registered nurses (77.24%), and only 22.76 % of them were technical nurses.

This study also found that range of duration of working as a nurse was 1 year to 34 years, with the mean of 8.38 years, and standard deviation of 7.06 years. Less than 5 years of duration of working as a nurse were nearly thirty-five percent (34.48), more than 10 years were 26.21%. Most (39.31%) of the staff nurses' duration of working as a nurse that ranged from 5 to 10 years.

This study also showed that range of duration of working in this hospital was 1 year to 27 years. The mean of 7.45 years and with standard deviation 6.08 years, Less than 5 years of duration of working in this hospital were nearly thirty-six percent (35.86), more than 10 years were 20.69%. Most (43.45%) of the staff nurses' duration of working in this hospital that ranged from 5 to 10 years.

It was also found that the range of monthly income was from 6,000 Baht to 27,000

Baht, with the mean of 12,978 Baht monthly incomes, and standard deviation of 4,395 Baht. The majority of respondents (41.38%) had monthly income lower than 11,120 Baht and other group had monthly income from 11,120 to 17,950 Baht (41.38%). For those who had monthly income more than 17,950 were at 17.24 percent.

According to the staff nurses' department of working, those that who came from unit of medical system group (including medical unit, pediatric, psychiatric, O.P.D, special room for patient and others such as social medical and primary care unit) were 49.66 percent. . Because of these departments there were daily order task, the staff nurses could follow the rules and criteria for their work. On the other hand, those who came from unit of surgical system group (including surgical unit, I.C.U, obstetric & gynecological, operation room, emergency) were 50.34 percent. Because of these departments there were many emergency cases occurring every day, the staff nurses had to rush to work and try their best to manage everything by themselves. They always get stress for their work (Detail was showed in Table 4).

Table 4 Frequencies, percents, means and standard deviations of the respondents characteristics (n=145).

Characteristics	Frequency	Percentage
Age (years)		
≤24	12	8.28
25-29	81	55.86
30-34	21	14.48
≥35	31	21.38
$\bar{x} = 30.48$, S.D.= 7.20, Min = 22, Max = 59.		
Marital status		
Single	84	57.93
Married	56	38.62
Divorced/separated/widow	5	3.45
Educational level		
Diploma	29	20
Bachelor degree	111	76.55
Master degree	5	3.45
Duration of working as a nurse (years)		
< 5	50	34.48
5-10	57	39.31
>10	38	26.21
$\bar{x} = 8.38$, S.D. = 7.06, Min = 1, Max = 34.		
Duration of working in this hospital (years)		
< 5	52	35.86
5-10	63	43.45
>10	30	20.69
$\bar{x} = 7.46$, S.D. = 6.08, Min = 1, Max = 27.		
Work position		
Registered nurse	112	77.24
Technical nurse	33	22.76
Total	145	100
Monthly income (Baht)		
< 11,120	60	41.38
11,120-17,950	60	41.38
>17,950	25	17.24
$\bar{x} = 12,978$ S.D.= 4,395 Min = 6,000 Max = 27,000.		
Department of working		
Surgical system unit	73	50.34
Medical system unit	72	49.66

Part 2: The staff nurses' job satisfaction

According to mean and standard deviation, the levels of staff nurses' job satisfaction were divided into 3 levels, i.e. high, moderate and low level.

Based on the components of job satisfaction theory, the groups of satisfaction were divided into two aspects, i.e. motivation group and hygiene group. The former group was consists of the following domain, including achievement, recognition, work itself, responsibility, and advancement. The later group was consists of salary and benefits, technical-supervision, job security, working conditions, interpersonal relation as well as hospital policy and administration.

In overall job satisfaction of staff nurses, it was found that there was 13.11 percent at a high level and 73.10 percent at a moderate level, there were only 13.79 percent at a low level, with mean of 3.68 point and standard deviation of 0.32 point. It was showed in Table 5.

For the first group "motivation", 67.59 percent staff nurses are at a moderate level of motivation of job satisfaction, 15.17 percent at a high level and 17.24 percent at a low level of motivation of job satisfaction respectively, with mean of 3.99 point and standard deviation of 0.31 point. Under motivation domain, i.e. achievement, recognition, work itself, responsibility, and advancement, the percents of staff nurses in a high level were at 11.03, 6.21, 14.4, 13.79 and 13.10 percent respectively. And for motivation group, achievement, recognition, work itself, responsibility, and advancement those with in a moderate level were at 75.17, 68.97, 69.60, 47.48 and 69.66 percent respectively. It had been shown also that the staff nurses had low level of motivation including achievement, recognition, work itself, responsibility, and advancement, were at 13.79, 24.83, 15.8, 11.72, and 17.24 percent respectively. It was

also showed in Table 5.

Table 5 Frequencies, percents, means, standard deviations, medians, minimums, maximums and levels of job satisfaction (concerning motivation factors).

Items	Levels of job satisfaction (n=145).					
	High		moderate		low	
	n	%	n	%	n	%
Overall satisfaction	19	13.11	106	73.10	20	13.79
Mean=202.54, S.D.=17.70, Media=204.00, Minimum=161.00, Maximum=263.00.						
Motivation factors	22	15.17	98	67.59	25	17.24
Mean =99.86, S.D. = 7.82, Media = 100.00, Minimum = 80.00, Maximum = 123.00.						
Achievement	16	11.03	109	75.17	20	13.79
Mean =20.41, S.D. = 1.87, Media = 20.00, Minimum = 16.00, Maximum =25.00.						
Recognition	9	6.21	100	68.97	36	24.83
Mean = 19.17 S.D. = 1.96 Media = 20.00 Minimum = 13.00 Maximum =25.00						
Work itself	21	14.4	101	69.6	23	15.8
Mean = 20.63, S.D. = 2.48, Media = 20.00, Minimum =13.00, Maximum =25.00.						
Responsibility	20	13.79	108	47.48	17	11.72
Mean =20.10, S.D. = 2.15, Media = 20.00, Minimum = 15.00, Maximum =25.00.						
Advancement	19	13.10	101	69.66	25	17.24
Mean = 19.56, S.D. = 2.48, Media = 20.00, Minimum = 10.00, Maximum =24.00.						

For second group of hygiene factors, the majority of the staff nurses (71.72%) were at a moderate level, and 11.72 percent at a high level and 16.55 percent at a low level and with mean of 3.76 point and standard deviation of 0.48 point. Under hygiene

factors, such as salary and benefits, technical-supervision, job security, working conditions, interpersonal relation as well as hospital policy and administration were at high level (16.55, 9.66, 15.17, 15.17, 13.79 and 13.10 percent respectively.).And under hygiene factors, such as salary and benefits, technical-supervision, job security, working conditions, interpersonal relation as well as hospital policy and administration, a majority were at moderate level (70.34, 71.72, 69.66, 65.52, 78.62 and 66.21percent respectively).It had also shown that the staff nurses had low level of hygiene factors in salary and benefits, technical-supervision, job security, working conditions, interpersonal relation as well as hospital policy and administration at 13.10, 18.62, 15.17, 19.31, 7.59, and 20.69 percent respectively(Detail showed in Table 6).

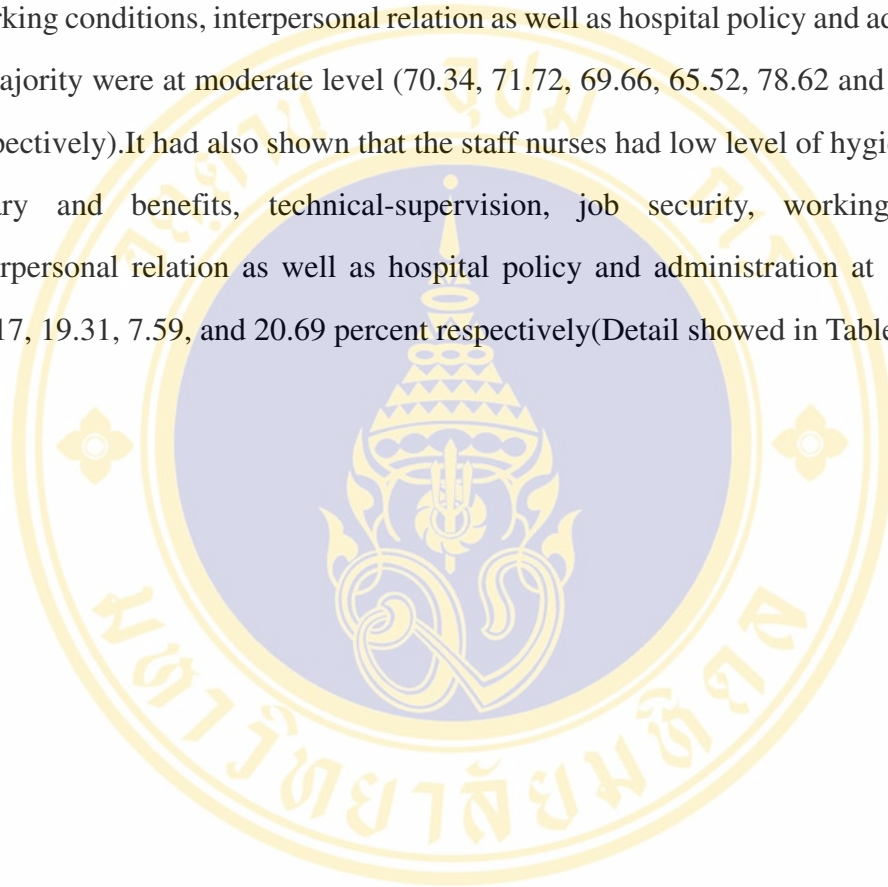


Table 6 Frequencies, percents, means, standard deviations, medians, minimums, maximums and levels of job satisfaction (concerning hygiene factors).

Items	Levels of job satisfaction (n=145).					
	High		moderate		low	
	n	%	n	%	n	%
Hygiene factors Mean =102.61, S.D. = 12.40, Media = 104.00, Minimum = 69.00, Maximum =141.00.	17	11.72	104	71.72	24	16.55
Salary and benefit Mean = 15.48, S.D. = 3.57, Media = 16.00, Minimum = 5.00, Maximum =23.00.	24	16.55	102	70.34	19	13.10
Technical -supervision Mean =18.10, S.D. = 3.07, Media = 19.00, Minimum =8.00, Maximum = 25.00.	14	9.66	104	71.72	27	18.62
Job security Mean =18.08, S.D. = 2.75, Media = 18.00, Minimum = 8.00, Maximum = 25.00.	22	15.17	101	69.66	22	15.17
Working conditions Mean = 15.80, S.D. = 3.37, Media =16.00, Minimum =7.00, Maximum =25.00.	22	15.17	95	65.52	28	19.31
Interpersonal relations Mean =19.88, S.D. = 2.12, Media = 20.00, Minimum = 14.00, Maximum =25.00.	20	13.79	114	78.62	11	7.59
Hospital policy and administration Mean = 15.28, S.D. = 2.26, Media = 16.00, Minimum = 9.00, Maximum =20.00.	19	13.10	96	66.21	30	20.69

4.3 Part 3: The staff nurses' perception on head nurses' leadership

According to mean and standard deviation, the levels of the staff nurses' perception on head nurses' leadership in SaKaeo Provincial Hospital were divided into 3 levels, i.e. high, moderate and low level. It is presented in the Table 7.

In overall the staff nurses' perception on head nurses' leadership is moderate level. 15.17 percent of the staff nurses' perception on head nurses' leadership at a high level, 71.03 percent at a moderate level, and there were only 13.79 percent at a low level of perception on head nurses' leadership, with mean of 3.85 points, and standard deviation of 0.54.

According to the scores of the staff nurses' perception on head nurses' leadership when concerning idealized influence factor. There was 9.66 percent at high level and 75.17 percent at moderate level; there was only 15.17 percent at low level of perception on head nurses' leadership, with mean of 3.84 points, and standard deviation of 0.56.

For inspirational motivation factor there was 14.48 percent were having high level and 74.48 percent were having moderate level, and there was only 11.03 percent were having low level of perception on head nurses' leadership, with mean of 3.94 points, and standard deviation of 0.58 points.

According to the scores of the staff nurses' perception on their head nurses' leadership when concerning individualized consideration factor, there was 11.72 percent at high level, 74.48 percent at moderate level, and there was only 13.79 percent at low level of perception on head nurses' leadership, with mean of 3.76 points, and standard deviation of 0.65 points.

For intellectual stimulation factor, it was found that 11.03 percent were having high level, 75.86 percent were having moderate level, and there was only 13.10 percent were having low level of perception on head nurses' leadership, with mean of 3.84 points, and standard deviation of 0.60 point.

Table 7 Frequencies, percents, means, standard deviations, medians, minimums, maximums and levels of staff nurses' perception on head nurses' leadership .

Items	Levels of Leadership Behavior (n= 145)					
	High		Moderate		Low	
	n	%	n	%	n	%
Overall Leadership	22	15.17	103	71.03	20	13.79
	Mean = 76.99, S.D. = 10.80, Media = 79.00, Min = 41.00, Max = 100.00.					
Idealized influence	14	9.66	109	75.17	22	15.17
	Mean = 19.23, S.D. = 2.80, Media = 20.00, Min = 9.00, Max = 25.00.					
Inspirational motivation	21	14.48	108	74.48	16	11.03
	Mean = 19.74, S.D. = 2.82, Media = 20.00, Min = 10.00, Max = 25.00.					
Individualized consideration	17	11.72	108	74.48	20	13.79
	Mean = 18.80, S.D. = 3.23, Media = 20.00, Min = 7.00, Max = 25.00.					
Intellectual stimulation	16	11.03	110	75.86	19	13.10
	Mean = 19.21, S.D. = 3.00, Media = 20.00, Min = 8.00, Max = 25.00.					

4.4 Part 4: Relationship between staff nurses' perception on head nurses' leadership and job satisfaction

The findings defined the correlation of staff nurses' perception on head nurses' leadership with overall job satisfaction by total and part. The results showed that staff nurses' perception on head nurses' leadership ($r = + 0.59$, $P = 0.00$) were positive and moderate correlation with the total score of staff nurses' job satisfaction.

Idealized influence($r=+0.58$, $P=0.00$) and individualized consideration ($r=+0.54$, $P=0.00$) were the aspects of leadership, both of them were positive and moderate correlation with the total score of staff nurses' job satisfaction. Meanwhile, inspirational motivation($r= +0.48$, $P=0.00$,) and intellectual stimulation($r= +0.49$, $P=0.00$) leadership behavior both of them were also positive and moderate correlation with the total score of staff nurses' job satisfaction. The values of correlation were significant $P<0.01$ level.

From the analysis of the relationship between staff nurses' perception on head nurses' leadership and motivation factors by using Spearman rank correlation test ($r=+0.45$, $P=0.00$), there was positive and moderate correlation.. And for staff nurses' perception on head nurses' leadership (in detail) in terms of idealized influence($r=+0.43$, $P=0.00$) as well as individualized consideration($r=+0.54$, $P=0.00$) also were positive and moderate correlation with the total score of staff nurses' motivation factors of job satisfaction. For the analysis of the relationship between motivation factors and inspirational motivation ($r=+0.40$, $P=0.00$) as well as intellectual stimulation ($r=+0.37$, $P=0.00$) there were positive and low correlation with the total score of staff nurses' motivation factors of job satisfaction. The values of correlation were significant $P<0.01$ level.

Upon analysis of the relationship between overall staff nurses' perception on head nurses' leadership and hygiene factors by using Spearman rank correlation test ($r=+0.55$, $P=0.00$), there was positive and moderate correlation. And for staff nurses' perception on head nurses' leadership (in detail) in terms of idealized influence($r=+0.52$, $P=0.00$) as well as individualized consideration($r=+0.50$, $P=0.00$) also there were positive and moderate correlation with the total score of staff nurses' hygiene factors of job satisfaction. For the analysis of the relationship between hygiene factors and inspirational motivation ($r=+0.46$, $P=0.00$) as well as intellectual

stimulation ($r=+0.44$, $P=0.00$) there were positive and moderate correlation with the total score of staff nurses' hygiene factors of job satisfaction. The values of correlation were significant $P<0.01$ level.

When considered in each aspect, it was found that they have positive relation in each aspect both of in low and moderate levels. Overall perception on head nurses' leadership with overall job satisfaction had much more relation than other aspect in the moderate level. For motivation factors had less positive relation ($r=+0.45$, $P=0.00$) than hygiene factors ($r=+0.55$, $P=0.00$) with the staff nurses' perception on head nurses' transformation leadership. The values of correlation were significant $P<0.01$ level.

From the analysis of the relationship between the staff nurses' perception on head nurses' transformational leadership and job satisfaction by Spearman rank correlation coefficient test was found that transformational leadership had relation in moderate level with job satisfaction ($r = +0.59$, $P= 0.00$) . The values of correlation were significant $P<0.01$ level.

The relationship between staff nurses' perception on head nurses' leadership and job satisfaction were associated. Therefore, the higher staff nurses' perception on head nurses' leadership the higher job satisfaction .These relationships were analyzed by Spearman rank correlation coefficient. The details were showed in Table 8.

Table 8 Association between staff nurses’ perception on head nurses’ leadership and job satisfaction by using Spearman rank correlation test.

	Overall perception of leadership (r)	Idealized influence (r)	Inspirational motivation (r)	Individualized consideration (r)	Intellectual stimulation (r)
Overall job satisfaction	+0.59*	+0.58*	+0.48*	+0.54*	+0.49*
Motivator factors	+0.45*	+0.44*	+0.40*	+0.43*	+ 0.37*
Hygiene factors	+0.55*	+ 0.52*	+0.46*	+0.50*	+ 0.44*

* P<0.01

In this study, it was also by using chi-square for testing relationship between staff nurses’ job satisfaction and their perception on head nurses’ leadership.

Because of target population of this study is small, there are only 145 respondents. So, levels of staff nurses’ perception on head nurses’ leadership and job satisfaction are regrouped into two levels, i.e. high and low level.

Chi-square was used to examine the relationship between staff nurses’ perception on head nurses’ leadership and job satisfaction., it is found that the relationship do exist with the value of $\chi^2=27.32$, P=0.00. The results of testing relationships between staff nurses’ perception on head nurses’ leadership and job satisfaction was showed in Table 9.

It was revealed that overall staff nurses’ perception on head nurses’ leadership and overall job satisfaction. That is, the group which had high level of perception on head nurses’ leadership was eighty percent (80.26) of high level of job satisfaction compared with those was lower at twenty percent (19.24) of low level of job satisfaction. And the

other group, which had low level of perception on head nurses' leadership that was nearly forty percent (37.68) of high level of job satisfaction compared with those, was higher at sixty percent (62.32) of low level of job satisfaction. However, the testing presented that there was significant association between overall perception on head nurses' leadership and overall job satisfaction by using Chi-square test ($\chi^2=27.32$, $P=0.00$).

The study results also showed that the group which had high level of idealized influence perception on head nurses' leadership was nearly eighty percent (77.63) of high level of job satisfaction compared with those was lower at twenty percent (22.37) of low level of job satisfaction. And the other group which had low level of idealized influence perception on head nurses' leadership was nearly thirty percent (31.88) of high level of job satisfaction compared with those was higher at seventy percent (68.12) of low level of job satisfaction. However, the testing presented that there was significant association between idealized influence perception on head nurses' leadership and overall job satisfaction by using Chi-square test ($\chi^2=30.70$, $P=0.00$)

For perception on inspirational motivation of head nurses' leadership, it was found that the group which had high level of perception on inspirational motivation of head nurses' leadership was nearly eighty percent (77.63) of high level of job satisfaction compared with those was lower at twenty percent (22.37) of low level of job satisfaction. And the other group which had low level of perception on inspirational motivation of head nurses' leadership was nearly fifty percent (50.72) of high level of job satisfaction compared with those was also fifty percent (49.28) of low level of job satisfaction. However, the testing presented that there was significant association between perception on inspirational motivation of head nurses' leadership and overall job satisfaction by using Chi-square test ($\chi^2=11.48$, $P=0.00$)

According to analysis for perception on individualized consideration of head nurses' leadership, Chi-square test ($\chi^2=18.24$, $P=0.00$) had showed that there was significant association between perception on individualized consideration of head nurses' leadership and overall job satisfaction. It was found that the group which had high level of perception on individualized consideration of head nurses' leadership was eighty percent (81.58) of high level of job satisfaction compared with those was lower at nearly twenty percent (18.42) of low level of job satisfaction. And the other group which had low level of perception on individualized consideration of head nurses' leadership was nearly fifty percent (47.83) of high level of job satisfaction compared with those was also nearly fifty percent (52.17) of low level of job satisfaction.

Concerning perception on intellectual stimulation of head nurses' leadership, Table 9 was also showed that there was significant association between perception on intellectual stimulation of head nurses' leadership and overall job satisfaction. It was found that the group which had high level of perception on intellectual stimulation of head nurses' leadership was seventy percent (69.74) of high level of job satisfaction compared with those was lower at nearly thirty percent (30.26) of low level of job satisfaction. And the other group which had low level of perception on intellectual stimulation of head nurses' leadership was nearly forty percent (43.48) of high level of job satisfaction compared with those was higher nearly sixty percent (56.52) of low level of job satisfaction. Chi-square test ($\chi^2=10.19$, $P=0.00$).

Table 9 Association between perception on head nurses' leadership (in detail) and job satisfaction by using Chi-square test.

Items	Levels of job satisfaction					
	High		Low		Total	
	n	%	n	%	n	%
Overall perception on leadership						
High	61	80.26	15	19.24	76	100
Low	26	37.68	43	62.32	69	100
Total = 145	$\chi^2 = 27.32$		df=1		P=0.00	
Idealized influence						
High	59	77.63	17	22.37	76	100
Low	22	31.88	47	68.12	69	100
Total = 145	$\chi^2 = 30.70$		df=1		P=0.00	
Inspirational motivation						
High	59	77.63	17	22.37	76	100
Low	35	50.72	34	49.28	69	100
Total = 145	$\chi^2 = 11.48$		df=1		P=0.00	
Individualized consideration						
High	62	81.58	14	18.42	76	100
Low	33	47.83	36	52.17	69	100
Total = 145	$\chi^2 = 18.24$		df=1		P=0.00	
Intellectual stimulation						
High	53	69.74	23	30.26	76	100
Low	30	43.48	39	56.52	69	100
Total = 145	$\chi^2 = 10.19$		df=1		P=0.00	

*P< 0.01

From the analysis of the association, the study results also showed that there was significant association ($P < 0.05$) between overall perception on head nurses' leadership and job satisfaction (in detail). When considered in each aspect, it was found that significant association between perception on head nurses' leadership and job satisfaction (in detail) by using Chi-square test ($\chi^2 = 27.32$, $P = 0.00$), excluding work itself ($\chi^2 = 0.07$, $P = 0.78$), as well as salary and benefit ($\chi^2 = 3.61$, $P = 0.06$).

For motivator factors of job satisfaction, there was significant association between overall perception on head nurses' leadership and motivator factors of job satisfaction by using Chi-square test ($\chi^2 = 11.96$, $P = 0.00$). The result of testing showed that the group which there was high level of motivator factors of job satisfaction was sixty percent (62.07) of high level of perception on head nurses' leadership compared with those was lower at nearly forty percent (37.93) of low level of perception on head nurses' leadership. And the other group which there was low level of motivator factors of job satisfaction was nearly thirty percent (32.76) of high level of perception on head nurses' leadership compared with those was higher nearly seventy percent (67.24) of low level of perception on head nurses' leadership.

For work itself factor of job satisfaction, it was found that the group which there was high level of work itself factor of job satisfaction was forty-five percent (45.98) of high level of perception on head nurses' leadership compared with those was higher at nearly fifty-five percent (54.02) of low level of perception on head nurses' leadership. And the other group which there was low level of work itself factor of job satisfaction was nearly fifty percent (48.28) of high level of perception on head nurses' leadership compared with those was similar fifty percent (51.72) of low level of perception on head nurses' leadership. However, the testing presented that there was no significant association between perception on head nurses' leadership and work itself factor of job

satisfaction by using Chi-square test ($\chi^2=0.07$, $P=0.79$).

For responsibility factor of job satisfaction, it was found that the group which there was high level of responsibility factor of job satisfaction was forty percent (37.93) of high level of perception on head nurses' leadership compared with those there was higher at sixty percent (62.07) of low level of perception on head nurses' leadership. And the other group which there was low level of responsibility factor of job satisfaction was nearly thirty percent (31.03) of high level of perception on head nurses' leadership compared with those was higher seventy percent (68.97) of low level of perception on head nurses' leadership. However, the testing presented that there was no significant association between perception on head nurses' leadership and responsibility factor of job satisfaction by using Chi-square test ($\chi^2=0.73$ $P=0.39$). Detail was showed in Table 10.

Table 10 Association between staff nurses’ perception on head nurses’ leadership and job satisfaction concerning motivation factor (in detail)by using Chi-square test.

Items	Levels of leadership behavior					
	High		Low		Total	
	n	%	n	%	n	%
Overall job satisfaction						
High	61	70.11	26	29.89	87	100
Low	15	25.86	43	74.14	58	100
Total		$\chi^2 = 27.32$	df= 1			P=0.00
Motivator factors						
High	54	62.07	33	37.93	87	100
Low	19	32.76	39	67.24	58	100
Total		$\chi^2 = 11.96$	df= 1			P=0.00
Achievement						
High	48	55.17	39	44.83	87	100
Low	15	25.86	43	74.14	58	100
Total		$\chi^2 = 12.17$	df= 1			P=0.00
Recognition						
High	58	66.67	29	33.33	87	100
Low	15	25.86	43	74.14	58	100
Total		$\chi^2 = 23.18$	df= 1			P=0.00
Work itself						
High	40	45.98	47	54.02	87	100
Low	28	48.28	30	51.72	58	100
Total		$\chi^2 = 0.07$	df= 1			P=0.79
Responsibility						
High	33	37.93	54	62.07	87	100
Low	18	31.03	40	68.97	58	100
Total		$\chi^2 = 0.73$	df= 1			P=0.39
Advancement						
High	60	68.97	27	31.03	87	100
Low	22	37.93	36	62.07	58	100
Total		$\chi^2 = 37.13$	df= 1			P=0.00

* P< 0.01

For hygiene factors of job satisfaction, the results of testing showed that the group which there was high level of hygiene factors of job satisfaction seventy percent (72.41) of high level of perception on head nurses' leadership compared with those was lower at nearly thirty percent (27.59) of low level of perception on head nurses' leadership. And the other group which there was low level of hygiene factors of job satisfaction was nearly thirty percent (29.31) of high level of perception on head nurses' leadership compared with those was higher nearly seventy percent (70.69) of low level of perception on head nurses' leadership. However, the testing presented that there was significant association between perception on head nurses' leadership and hygiene factors of job satisfaction by using Chi-square test ($\chi^2=26.14$, $P=0.00$).

For salary and benefits factor of job satisfaction, it was found that the group which there was high level of salary and benefits factor of job satisfaction was sixty percent (57.47) of high level of perception on head nurses' leadership compared with those there was lower at nearly forty percent (42.53) of low level of perception on head nurses' leadership. And the other group which there was low level of salary and benefits factor of job satisfaction was nearly forty percent (41.38) of high level of perception on head nurses' leadership compared with those there was higher nearly sixty percent (58.62) of low level of perception on head nurses' leadership. However, the testing presented that there was no significant association between perception on head nurses' leadership and salary as well as benefits factor of job satisfaction by using Chi-square test ($\chi^2=3.60$, $p=0.06$). (See detail in Table 11).

Table 11 Association between staff nurses' perception on head nurses' leadership and job satisfaction concerning hygiene factors (in detail) by using Chi-square test.

Items	Levels of leadership behavior				Total	
	High		Low		n	%
	n	%	n	%		
Hygiene						
High	63	72.41	24	27.59	87	100
Low	17	29.31	41	70.69	58	100
Total	$\chi^2 = 26.14$		df= 1		P=0.00	
Salary and benefits						
High	50	57.47	37	42.53	87	100
Low	24	41.38	34	58.62	58	100
Total	$\chi^2 = 3.61$		df= 1		P=0.06	
Technical-supervision-						
High	69	79.31	18	20.69	87	100
Low	10	17.24	48	82.76	58	100
Total	$\chi^2 = 54.06$		df= 1		P=0.00	
Job security						
High	69	79.31	18	20.69	87	100
Low	10	17.24	48	82.76	58	100
Total	$\chi^2 = 52.68$		df= 1		P=0.00	
Working conditions						
High	53	60.92	34	39.08	87	100
Low	25	43.10	33	56.90	58	100
Total	$\chi^2 = 4.44$		df= 1		P=0.03	
Interpersonal relations						
High	68	78.16	19	21.84	87	100
Low	27	46.55	31	53.45	58	100
Total	$\chi^2 = 15.39$		df= 1		P=0.00	
Hospital policy and administration						
High	61	70.11	26	29.89	87	100
Low	23	39.66	35	60.34	58	100
Total	$\chi^2 = 13.25$		df = 1		P=0.00	

* P< 0.01

Part 5 Relationship between staff nurses' personal characteristics and job satisfaction

Because of target population of this study is small, there are only 145 respondents. So, staff nurses' some personal characteristics were regrouped into two groups for testing the association between staff nurses' personal characteristics and job satisfaction.

Based on three levels (high, moderate and low level) of job satisfaction, the results of testing relationships between staff nurses' personal characteristics and job satisfaction detail has been showed in Table 12.

It was revealed that the age group of 29 years old or less than 12.90% at a high level of job satisfaction compared with age of over 29 years old 13.46% , with moderate level of job satisfaction 69.89% compared with age of over 29 years old 78.85% , and for low level of job satisfaction 17.20% compared with age of over 29 years old 7.69% . However, the testing presented that there was no significant association between staff nurses' age and job satisfaction by using Chi-square test ($\chi^2 = 2.56, P=0.28$).

The study results also showed that marriage (including divorced/widow/separated) group 14.75% at high level of job satisfaction compared with single group 11.90%. With moderate level of job satisfaction 70.42% compared with single group 77.05%, and for low level of job satisfaction 8.20% compared with single group 17.86%. Nevertheless, those who were divorced and widowed as well as separated group there was only a few cases (5 respondents), so regrouping with marriage group. However, using Chi-square test there was no significant association between staff nurses' marital status and job satisfaction ($\chi^2 = 2.83, P=0.24$).

For highest educational level of the staff nurses, it was found that there was no statistically significant association between staff nurses' highest educational levels and job satisfaction ($\chi^2 = 0.56$, $P = 0.76$). Nevertheless, those who had attained to bachelor degree (including master degree) group 12.07% at high level of job satisfaction compared with diploma group 17.24%. With moderate level of job satisfaction 74.14% compared with diploma group 68.97%, and for low level of job satisfaction 13.79% compared with diploma group 13.79%.

According to work position, those staff nurses who were technical nurses group 18.18% at high level of job satisfaction compared with registered nurse group 11.61%. With moderate level of job satisfaction 66.67% compared with registered nurse group 75.00%, and for low level of job satisfaction 15.15% compared with registered nurse group 13.39%. However, using Chi-square test there was no significant association between staff nurses' work position and job satisfaction ($\chi^2 = 1.14$, $P = 0.56$).

Concerning duration of working as a nurse (years), Table 12 showed that there was significant association between staff nurses' duration of working as a nurse and job satisfaction ($\chi^2 = 6.73$, $P = 0.03$). Those staff nurses who had worked 5 years or less than group 12.86% at high level of job satisfaction compared with longer 5 years group 13.33%. With moderate level of job satisfaction 65.71% compared with longer 5 years group 80.00%, and for low level of job satisfaction 21.43% compared with longer 5 years group 6.67%.

According to the duration of working in this hospital among the staff nurses, same table was also showed that there was significant association between staff nurses' duration of working in this hospital and job satisfaction ($\chi^2 = 6.36$, $P = 0.04$). Those staff nurses who had worked 5 years or less than group 14.86% at high level of job

satisfaction compared with longer 5 years group 11.27%. With moderate level of job satisfaction 64.86% compared with longer 5 years group 81.69%, and for low level of job satisfaction 20.27% compared with longer 5 years group 7.04%.

The monthly income (Baht) was presented in the same table, which revealed that those staff nurses who had monthly income 11,120(Baht) or less than group 15.00% at high level of job satisfaction compared with over 11,120 9(Baht) group 11.76%. With moderate level of job satisfaction 71.67% compared with over 11,120 9(Baht) group 74.12%, and for low level of job satisfaction 13.33% compared with over 11,120 9 (Baht) group 14.12%. However, the testing presented that, there was no significant association between staff nurses' job satisfaction and monthly income by using Chi-square test ($\chi^2 = 0.33$, $P = 0.85$).

According to the staff nurses' department of working, those who came from unit of medical system group (including medical unit, pediatric, psychiatric, O.P.D, special room for patient and others such as social medical and primary care unit) group 15.28% at high level of job satisfaction compared with unit of surgical system group (including surgical unit, ICU, obstetric & gynecological, operation room, and emergency) 10.96%. With moderate level of job satisfaction 73.61% compared with unit of surgical system group 72.60%, and for low level of job satisfaction 11.11% compared with unit of surgical system group 16.44%. However, the same table also showed that there was no significant association between staff nurses' department of working and job satisfaction ($\chi^2 = 1.27$, $P = 0.53$). It was showed in table 12.

In summary, Table 12 showed that association between staff nurses' personal characteristics and job satisfaction in Sakaeo Provincial Hospital. It was found that most of personal characteristics there were no significantly related to job satisfaction, Such as age, marital status, highest educational level, working position, monthly

income, and department of working. But duration of working as a nurse, and duration of working in this hospital there were significant association with job satisfaction ($P < 0.05$).

Table 12 Association between the staff nurses’ personal characteristics and job satisfaction by using Chi-square test.

Personal Characteristics	Levels of job satisfaction						Total	
	High		Moderate		Low			
	n	%	n	%	n	%	n	%
Age(years)								
≤29	12	12.90	65	69.89	16	17.20	93	100
>29	7	13.46	41	78.85	4	7.69	52	100
Total=145	$\chi^2 = 2.56$		df = 2		P = 0.28			
Marital Status								
Single	10	11.90	59	70.42	15	17.8	84	100
Marriage	9	14.75	47	77.05	5	8.20	61	100
Total=145	$\chi^2 = 2.83$		df = 2		P = 0.24			
Highest educational level								
Diploma	5	17.24	20	68.97	4	13.7	29	100
Bachelor degree	14	12.07	86	74.14	16	13.7	116	100
Total=145	$\chi^2 = 0.56$		df = 2		P = 0.76			
Work position								
Registered nurse	13	11.61	84	75.00	15	13.3	112	100
Technical nurse	6	18.18	22	66.67	5	15.1	33	100
Total=145	$\chi^2 = 1.14$		df = 2		P = 0.56			
Duration of working as a nurse (years)								
≤5	9	12.86	46	65.71	15	21.43	70	100
>5	10	13.33	60	80.00	5	6.67	75	100
Total=145	$\chi^2 = 6.74^*$		df = 2		P = 0.03			

* $p < 0.05$

Table 12 Association between the staff nurses' personal characteristics and job satisfaction by using Chi-square test(cont.).

Personal Characteristics	Levels of job satisfaction							
	High		Moderate		Low		Total	
	n	%	n	%	n	%	n	%
Duration of working in this hospital years)								
≤5	11	14.86	48	64.86	15	20.27	74	100
>5	8	11.27	58	81.69	5	7.04	71	100
Total=145	$\chi^2 = 6.36^*$		df = 2		P = 0.04			
Monthly income (baht)								
≤11,120	9	15.00	43	71.67	8	13.33	60	100
>11,120	10	11.76	63	74.12	12	14.12	85	100
Total=145	$\chi^2 = 0.33$		df = 2		P = 0.85			
Department of working								
Unit of surgical system	8	10.96	53	72.60	12	16.44	73	100
Unit of medical system	11	15.28	53	73.61	8	11.11	72	100
Total=145	$\chi^2 = 1.27$		df=2		P = 0.53			

*p<0.05

The result in this chapter was to present the levels of staff nurse' job satisfaction and their perception on head nurses' leadership, as well as analyzing the relationship between staff nurses' job satisfaction and their perception on head nurses' leadership, also analyzing the relationship between staff nurses' personal characteristics and job satisfaction including findings of the variable, that is able to explain the results of this study, one more quite important aspects was revealed in this chapter part 4 is that there was significant association staff nurses' perception on head nurses' leadership with job satisfaction. The result was in accordance with hypothesis that was set. Researcher will discuss this in Chapter V.

CHAPTER V

DISCUSSION

Based on the objectives of the study, there are various important features to be discussed in this chapter. These are personal characteristics, levels of staff nurses' job satisfaction and perception on head nurses' leadership, as well as the association between staff nurses' job satisfaction and independent variables.

5.1 Levels of staff nurses' job satisfaction

The results of this study showed that overall staff nurses' job satisfaction was at a moderate level (percent = 73.10). One possible explanation was that the majority of subscale of motivator factors and hygiene factors were at a moderate level. These findings are shown in details as below:

Motivator factors We could conclude with certainly those motivator factors of job satisfaction which originate from the nature of the job itself can create job satisfaction. In this study most staff nurses perceived motivation at a moderate level (percent = 67.59) that was achievement, recognition, work itself, responsibility, and advancement that could present as follow:

- **Achievement** This study showed that achievement of the staff nurses' job satisfaction was at a moderate level (percent =75.17) .This result showed that most staff nurses solve the problem and work their job towards the goal of attainment when staff nurses could work successfully with head nurses and colleagues accepted it, and the patient relied upon it. These made staff nurses feel high self-esteem and self-respect, and happy to be in the nursing profession. The value of working achievement could

lead nurses to meet their needs at the top of the hierarchy of Maslow that was self-actualization.

- **Recognition** This study revealed that the level of recognition of the staff nurses' job satisfaction were at a moderate (percent = 68.97), because staff nurses perceived that their head nurses provided the important personnel value praise and thanks when they could work successfully. Mcneese-Smith (61) showed that praise, thanks and recognition affected job satisfaction. Conversely, job dissatisfaction was created by not offering recognition.

- **Work itself** This study showed that majority staff nurses' satisfaction in work itself was at a moderate level (percent =69.6), because of the nursing profession was rather different from other occupations. They felt that they could serve and help patients and they are proud of nursing profession. They also thought that their work was more challenging and interesting than others.

- **Responsibility** This study showed that responsibility of staff nurses' job satisfaction were at a moderate level (percent =47.48), because of staff nurses had responsibility in their job, participated in decision-making, take responsibility for outcome of patients care .Euprahem (67) stated that responsibility was an ethical and moral principle that all nurses should take. Responsibility was the job concerning human life. When staff nurses had high responsibility, it could lead them to greater achievement and motivate them to job satisfaction.

- **Advancement** This study revealed that the level of advancement of staff nurses' job satisfaction were at a moderate (percent = 69.66). In the job of nursing care, staff nurses must work hard. Panyarachun and Danpradit (68) report that one of the causes of resignation from nursing profession of staff nurses that was hard working. In addition,

staff nurses tried to find higher positions by increasing their knowledge. They attempted to exhibit their skills and capabilities to head nurses with the hope of being promoted. Wolf and Orem (41) stated that the opportunity of being promoted to higher position was a factor creating job satisfaction.

Hygiene factors For hygiene factors did not produce job satisfaction, if staff nurse were received adequately hygiene factors, they simply produced neutral feelings with the realization that basic maintenance needs. It could define the detail as follow.

- **Salary and benefits** This study showed that the salary and benefits of staff nurses' job satisfaction were at a moderate level (percent = 70.34), because of the majority of samples have salary and benefits range of from 11,200 to 17,950 Baht per month and their job must be high responsibility for caring the patients in rotation through 24 hours. In comparison with many other careers, they must come into contact with a high-risk environment. They expected to get higher salaries and fair benefits. Cavanagh (31) suggested that the distributive justice of salaries and benefits was associated with job satisfaction.

- **Technical-supervision** Head nurses were the first line managers who work closely with staff nurses. They should be responsible for supervision, such as administrative competence, technical competence, and human relation competence. Additionally, head nurses are the superior staff of each unit and had a great impact on motivation in the group (26). In fact, head nurses had not received preparation for being effective managers and leaders, but were appointed based on their seniority. Hence, there were managers with limited supervision and management skills. Therefore, the perception of most of staff nurses about technical-supervision job satisfaction was at a moderate level (percent = 71.72).

- **Job security** This study revealed that staff nurses are satisfied at a moderate level of job security of their job satisfaction (percent = 69.66). It can be said that most of staff nurses feel assured to work with the government and is secure. When they retire, they will get their pension. Swansburg (69) defined that job security is related to the second level of Maslow's hierarchy of needs. Humans all have common desires to avoid hazards of life, and economic instability. Hence, individuals and organization often need some assurance.

- **Working condition** The finding revealed that working conditions of staff nurses' job satisfaction were at a moderate level (percent = 65.52). One possible conclusion is that staff nurses' working condition made them stress and led to job satisfaction. So, the overall reason upon this study was fallen into a moderate level of job satisfaction. Wolf and Orem (41) stated that the working condition where nurses perform their work there was a significant impact on their job satisfaction. The factors related with job satisfaction include adequate staffing, scheduling of work hours, a clean work environment, adequate equipments and supplies.

- **Interpersonal relations** The finding of this subcategory was at a moderate level (percent = 78.62) of staff nurses' job satisfaction. In fact, the job of the nursing profession is characterized by a heavy dependence on teamwork. Teamwork needs not only collaboration but also admiration of each another and was stimulated by trust, support, and agreements. Cavanagh (31) indicated that good relationship could promote an organizational climate for acceptance and working together with happiness.

- **Hospital policy and administration** The finding of hospital policy and administration of staff nurses' of job satisfaction was at a moderate level (percent = 66.21). Clearly, effective leadership and management could influence staff nurses' perceptions of their job performance and role in the health care organization directly.

In conclusion, majority of staff nurses were satisfied with their jobs at moderate level. However, another one more point was that by 6.21% and 4.14% respectively disagreed and strongly disagreed that they like their job more than others.

5.2 Levels of staff nurses' perception on head nurses' leadership

This study showed that staff nurses' perception on their head nurses' leadership in general were at a moderate level (percent = 71.03). Baker (70) stated that leaders who exhibit transformational leadership could participate effectively in the working environment. Head nurses should use their role and function to improve job performance and in setting challenging goals.

- **Idealized influence** Most of staff nurses perceived idealized influence of head nurses' leadership was at a moderate level (percent = 75.17). One possible explanation was that some times staff nurses have seen some problems of head nurses' leadership, such as devotion, sanctity, heroine or exemplary character. Morrison and others (7) Stated that idealized influence of head nurses' leadership was significantly related to performance, leader effectiveness, and follower' job satisfaction.

- **Inspirational motivation** Staff nurses perceived inspirational motivation of head nurses' leadership was also at a moderate level (percent = 74.48), because of head nurses open the opportunities to staff nurses to show their ability to achieve the goals and paid strong attention to finish her job.

- **Individualized consideration** Head nurses exhibited individualized consideration of head nurses' leadership by responding to individualized needs delegating a job involving each individual's responsibility, understanding the strengths and weakness of each individual, giving advice, help and support as well as

encouraging their staff nurses' self development . Clearly, staff nurses need better characteristics of head nurses. Thus, majority of staff nurses perceived individualized consideration of head nurses' leadership at a moderate level (percent = 74.48). When head nurses used appropriate authority and accountability for decentralization, the decentralized management had an effect on higher job satisfaction.

- **Intellectual stimulation** Most of staff nurses received their head nurses' intellectual stimulation leadership was at a moderate level (percent = 75.86). When head nurses demonstrated intellectual stimulation that staff nursing required head nurses' intellectual activity in the tasks of analysis, implementation, formulation, interpretation and evaluation. In this way discerned, comprehended, and articulated to staff nurses the opportunities and threats their organization is facing and by comparing it with other organizations' strengths and weakness (50).

In summary, head nurses exhibited transformational leadership in terms of idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation. It was found that according to most of staff nurses' perception on head nurses' leadership in Sakaeo Provincial Hospital was at a moderate level.

5.3 Associations between staff nurses' job satisfaction and independent variables

Associations between staff nurses' job satisfaction and independent variables including two aspects, one is the personal characteristics of staff nurses, another one is the perception on head nurses' leadership based on staff nurses' perceive.

5.3.1 Associations between staff nurses' job satisfaction and perception on head nurses' leadership

This study revealed that there was significant association between staff nurses' job satisfaction and perception on head nurses' leadership. The P-value by using Spearman rank correlation and Chi-square test both of them were significant at 0.05 levels. The explanation was that the higher staff nurses perceived on head nurses' leadership, the higher staff nurses were satisfied with their job. When head nurses exhibited transformational leadership, it could make staff nurses' enthusiastic, creative, and cooperative enterprises. One study (48) stated that the cause of burnout and resignation of the nurses due to management system, dissatisfaction to manager, shortage of preparation to head nurses' position.

At present, head nurses must accept and move toward achieving a new vision through planned change. Head nurses, staff members, and the organization have a responsibility to each other. This responsibility translates to a sense of values, empathy, understanding, caring, and mutual support. When head nurses used transformational leadership, it would make staff nurses proud and self-satisfied, so leading to job satisfaction. Heinz (46) showed that a transformational leader's ability created a new vision that could instill within staff nurses the commitment to change and acceptance of the new culture and strategy of the new organization. The findings were similar to Chimvong (6) who reported that transformational leadership had a significant positive correlation with job satisfaction ($r= 0.458, P<0.05$).

5.3.2 Associations between staff nurses' job satisfaction and personal characteristics

Based on Herzberg's two-factor theory, socio-demographic factors affect job satisfaction of staff nurses. Although, this study revealed that most of socio-demographic characteristic variables of staff nurses there was no significant association with staff nurses' job satisfaction by using statistical method of Chi-square test. The possible explanations were that for age, marital status, highest educational level, work position, monthly income, and department of working no relate with their job satisfaction, because of perceive of these factors from their own, no from their job. Just only duration of working as a nurse and duration of working in this hospital there were significant associations with job satisfaction by using statistical method of Chi-square($P = 0.03$ and $P = 0.04$ respectively). One possible conclusion is that the longer length of working as a nurse and length of working in this hospital, the higher staff nurses satisfied with their jobs. Clearly, staff nurses worked their jobs in the long time, they could understand and adapt to working environment better than others.

In summary, chapter V discussed the results of the research by objectives and hypothesis that was set, found that job satisfaction and transformation leadership both of them were at moderate level (percent =73.10, and percent = 71.03, respectively). From this study it was found that there was significant association between staff nurses' job satisfaction and perception on head nurses' leadership.

CHAPTER VI

CONCLUSION AND RECOMMENDATION

6.1 Conclusion

This cross sectional study aimed to determine levels of staff nurses' job satisfaction and their perception on head nurses' leadership, as well as to investigate relationships between staff nurses' perception on head nurses' leadership and job satisfaction in Sakaeo Provincial Hospital. The findings disclosed the current status of staff nurses' job satisfaction and their perception on head nurses' leadership. This study was conducted from January 7th to February 2nd, 2004. The target population of this study was staff nurses who had worked in Sakaeo Provincial Hospital. There was 145 staff nurses participated from 11 clinical units. The research instrument was based on the concept of Herzberg's two-factor theory of job satisfaction and Bass's concept of transformational leadership as the frameworks of the study. The instrument used for data collection was a self-administrative questionnaire that was consisting of two parts: personal characteristics data form and scales concerning staff nurses' job satisfaction and their perception on head nurses' leadership. The reliability of staff nurses' job satisfaction scale and perception on head nurses' leadership scale were 0.89 and 0.84 respectively. Descriptive statistics, including Chi-square tests and Spearman rank correlation tests were employed for data analysis. The results of this study according to the hypothesis state they were accepted are as the followings:

-The percentage of staff nurses on their job satisfaction was at a moderate level (73.10%). The two main aspects of job satisfaction, including motivator factors and hygiene factors were also at a moderate level (67.59%, and 71.72% respectively).

- The level of perception on head nurses' leadership according to staff nurses' perspective was also at a moderate level (71.03%). Moreover, the aspects of leadership in term of idealized influence (75.17%), inspirational motivation (74.48%), individualized consideration (74.48%), and intellectual stimulation (75.86%), they all indicated at moderate levels.

- There was a significant association between the staff nurses' job satisfaction and perception on head nurses' leadership by using Chi-square test ($\chi^2 = 27.32$, $P < 0.01$). However, in correlation analysis, the association between the two variables showed to be at a moderate level ($r = 0.59$, $P < 0.01$).

- There was also a significant association between staff nurses' job satisfaction and duration of working as a nurse as well as duration of working in this hospital by using Chi-square test ($\chi^2 = 6.74$, $P\text{-value} = 0.03$ and $\chi^2 = 6.36$, $P\text{-value} = 0.04$ respectively).

6.2 Recommendations

The findings of this study provide several important implications for the nursing profession, including nursing administration, and nursing research.

6.2.1 Implications for nursing administration

- These findings provide evidence that staff nurses had a moderate level of job satisfaction. Especially in recognition, salary and benefits, technical-supervision, working conditions, as well as hospital policy and administration, there were lowest level of job satisfaction. Therefore, the staff nurses' job satisfaction could be improved by improving motivation for these factors, such as accepting of staff nurses' opinion,

promoting salary and benefits, supervisions more with understand, providing sufficient equipments for staff nurses' work, and explaining of the policy before any tasks were assigned to staff nurses.

- These findings also provide evidence that staff nurses had a moderate level of perception on head nurses' leadership, especially in idealized influence and individualized consideration which were lowest levels of perception on head nurses' leadership. One possible explanation was that some times staff nurses had seen some problems of head nurses' leadership. So, head nurses must make a good model for staff nurses. Besides this, head nurses have to give recommendation for staff nurses individually.

- The findings revealed that there was significant association between staff nurses' perception on head nurses' leadership and job satisfaction. Thus, the policing, planning, and high ranking authorities in this field should realize the importance of leadership role by training head nurses in their leadership roles.

6.2.2 Implications for further nursing research.

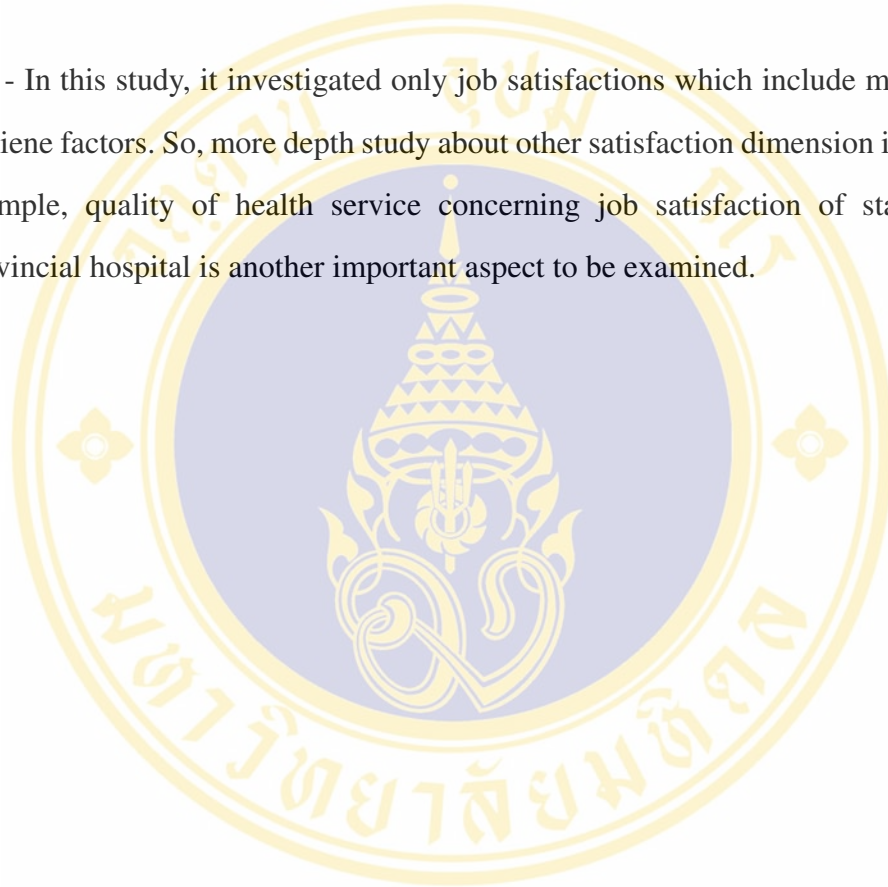
- For this study, the research instrument may be able to not reflect real feeling of staff nurses on head nurses' leadership and job satisfaction. Therefore, for further research, if using interview and in-depth interview may provide more qualitative information and also compliment to the information on quantities as this research was done.

- This research to use on only the transformational leadership and personal characteristics of staff nurses. So, for future, research needed to be identifying additional factors, so that more factors influencing job satisfaction can be explained and

predicted.

-In this study, since on head nurses' leadership was measured by staff nurses' perception. So, for future research should be directly explore head nurses' behaviors.

- In this study, it investigated only job satisfactions which include motivation and hygiene factors. So, more depth study about other satisfaction dimension is needed. For example, quality of health service concerning job satisfaction of staff nurses in provincial hospital is another important aspect to be examined.



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APPENDIX A
QUESTIONNAIRES
ON

Job satisfaction of staff nurses: A study in Sakaeo Provincial Hospital,
Thailand

Dear staff nurses:

I am Shu Hui Wang, a student from China studying at AIHD in Mahidol University for MPH M course. In order to fulfill the master degree, I have to conduct this research. Therefore, I would like to study job satisfaction of staff nurses in your hospital.

The major objectives of this study are to investigate your opinion about your job, your answers to the questions will be completely confidential and no one will be able to link your name to the answer that you have given. Please feel free to answer the questions giving a true reflection of your satisfaction. Your answer will be highly appreciated and the answer will serve as an invaluable guideline for further implementation and researches. This questionnaire contains two sections which are: section 1: personal characteristics data and section 2: questions concerning your opinion about your job. Please answer every question in its' sequence in the questionnaire and please look through the questionnaire to be sure that all the questions were answered before return it back to the person who distributed it to you .

Thank you very much for your participation and for giving your precious time as well as your kind cooperation.

Shu Hui Wang

Faculty of Graduate Studies,

Mahidol University

Section 2: Your opinion concerning your job

Instruction: In this part, please read each statement and then choose only one appropriate answer for each question by checking '✓' in the box and complete all questions.

This part has 74 questions, each is provided with 5 answers as following:

SA=Strongly Agree, A= Agree, NS=Not Sure,
D=Disagree, SD= Strongly Disagree.

No.	Factor Statement	your opinion				
		SA	A	NS	D	SD
1	Your head nurse is a good model for you.					
2	You feel proud of being your head nurse' staff.					
3	Your head nurse sacrifices her benefits for the sake of group benefits.					
4	Your head nurse has self confidence for work.					
5	You respect your head nurse' actions.					
6	Your head nurse has creative ideas to do new job.					
7	Your head nurse gives enthusiasm to your work.					
8	Your head nurse open opportunities to you for show your ability to achieve job.					
9	Your head nurse stimulates you to feel that the job is important.					

Section 2: Your opinion concerning your job (cont.)

	Factor Statement	your opinion				
		SA	A	NS	D	SD
10	Your head nurse pays strong attention to finish her job.					
11	Your head nurse gives recommendation for you individually.					
12	Your head nurse treats you by being concerned about your personality.					
13	Your head nurse listens to your story.					
14	Your head nurse spends time to give you useful suggestions when you need.					
15	Your head nurse supports you to show your ability to solve problem in your work.					
16	Your head nurse discusses about the problem of your unit with you.					
17	Your head nurse improves the old pattern to new one for working.					
18	Your head nurse gives support to solve the problem by using new methods.					
19	Your head nurse use evidence to analyze the cause of the problems.					
20	Your head nurse stimulates you to show your opinion for work.					
21	You are able to complete the task on time.					
22	You are able to use ability to solve problems.					
23	Your job is important to patients' health.					
24	You receive compliments given when you complete the tasks.					

Section 2: Your opinion concerning your job (cont.)

	Factor Statement	your opinion				
		SA	A	NS	D	SD
25	The knowledge and experience gained help you to develop your work.					
26	Your opinion is accepted in your work.					
27	The supervisors accept your knowledge and working ability.					
28	You are trusted and assigned to do important tasks.					
29	Your work need to use knowledge, skills, and ability.					
30	You receive the respect from people in the society.					
31	Your work being able to serve and help patients.					
32	You are proud of your nursing profession.					
33	Your work is challenging and interesting.					
34	You like your job more than others.					
35	Your work needs creativity.					
36	You have freedom in making a decision at work.					
37	You discuss patient care problems with doctors.					
38	You take responsibility for outcome of your work.					
39	You have to finish the entire job related to patients care before you go back home.					
40	You have to perform other works in addition to your responsibility.					

Section 2: Your opinion concerning your job (cont.)

	Factor Statement	your opinion				
		SA	A	NS	D	SD
41	The supervisors give you opportunity to gain more knowledge.					
42	You have a chance to create job performance.					
43	You have had a chance to attend trainings in order to increase skill and ability.					
44	You are being promoted based on you performing well.					
45	You are being supported to continue your higher education level.					
46	Your salary is reasonable for the quantity and quality of your work.					
47	You are happy with the welfare provided by the hospital.					
48	You like rules and process of having sick leave, and vacation.					
49	You are happy with the accommodation provided by hospital.					
50	Your salary have makes you have well being in society.					
51	The supervisors understand your working problems.					
52	The supervisors treat you as like as others equally.					
53	The supervisors come to give comments and suggestions about your work.					
54	The supervisors accept your opinions for working.					

Section 2: Your opinion concerning your job (cont.)

	Factor Statement	your opinion				
		SA	A	NS	D	SD
55	The supervisors are good leaders with knowledge and ability.					
56	You feel that you have a secured job.					
57	You would like to do this job as long as you want.					
58	You are having a good relationship with your supervisors.					
59	The supervisors are responsible to your work.					
60	Security provided for you when you take afternoon and night shifts.					
61	You are satisfied for current location of the hospital.					
62	There are enough staff nurses to do the efficient work in your unit.					
63	There are sufficient equipments provided for your work.					
64	There are enough useful manuals provided for your work.					
65	You are satisfied for the number of patients under your responsibility.					
66	You have good relationship with your colleagues.					
67	Your supervisors are friendly and kindly to you.					
68	Whenever you face any problems your colleagues are pleased to help you.					

Section 2: Your opinion concerning your job (cont.)

	Factor Statement	your opinion				
		SA	A	NS	D	SD
69	You and your colleagues work friendly as a team.					
70	You adjust yourself to understand your colleagues.					
71	You are accepting administrative policy of your hospital.					
72	You are given opportunity to raise opinions to improve the work.					
73	The policy is explained before a task is assigned to you.					
74	You are willing to follow the rules and criteria for work.					

APPENDIX B

Table 13 Frequencies, percents of staff nurses' perception on head nurse' leadership .

Variables	SA	A	NS	D	DS
	n	n	n	n	n
	%	%	%	%	%
	38	91	15	1	0
Idealized influence	26.21	62.76	10.34	0.69	0
Your head nurse is a good model for you.	10	80	44	11	0
	6.90	55.17	30.34	7.59	0
You feel proud of being your head nurse staff.	20	84	38	2	1
	13.79	57.93	26.21	1.38	0.69
Your head nurse sacrifices her benefits for the sake of group benefits.	18	91	31	4	1
	12.41	62.76	21.38	2.76	0.69
Your head nurse has self-confidence for work.	35	92	15	3	0
	24.14	63.45	10.34	2.07	0
You respect your head nurse actions.	15	101	24	4	1
	10.34	69.66	16.55	2.76	0.69
	47	87	10	1	0
Inspirational motivation	32.41	60.00	6.90	0.69	0
Your head nurse has creative ideas to do the new job.	22	82	34	5	2
	15.17	56.55	23.45	3.45	1.38
Your head nurse of ward gives enthusiasm to your work.	19	94	26	6	0
	13.10	64.83	17.93	4.14	0
Your head nurse open the opportunities to you for shows your ability to achieve the job.	25	93	23	3	1
	17.24	64.14	15.86	2.07	0.69
Your head nurse stimulates you to feel that the job is important.	31	98	13	2	1
	21.38	67.59	8.97	1.38	0.69
Your head nurse pays strong attention to finish her job.	32	90	20	3	0
	22.07	62.07	13.79	2.07	0

Table 13 Frequencies, percents of staff nurses' perception on head nurse' leadership(cont.)

Variables	SA	A	NS	D	DS
	n	n	n	n	n
	%	%	%	%	%
	28	97	17	3	0
Individualized consideration	19.31	66.90	11.72	2.07	0
Your head nurse gives recommendation for you individually.	18	79	31	14	3
	12.41	54.48	21.38	9.66	2.07
Your head nurse treats you by being concerned about your personality.	14	85	36	9	1
	9.66	58.62	24.83	6.21	0.69
Your head nurse listens to your story.	16	84	32	11	2
	11.03	57.93	22.07	7.59	0.38
Your head nurse spends time to give you useful suggestions when you need.	21	91	23	8	2
	14.48	62.76	15.86	5.52	1.38
Your head nurse supports you to show your ability to solve problem in your work.	15	110	15	2	3
	10.34	75.86	10.34	1.38	2.07
	31	100	10	4	0
Intellectual stimulation	21.38	68.97	6.90	2.76	0
Your head nurse discusses about the problem of your unit with you.	17	91	29	7	1
	11.72	62.76	20.00	4.83	0.69
Your head nurse improves the old pattern to new one for working.	20	90	30	2	3
	13.79	62.07	20.69	1.38	2.07
Your head nurse gives support to solve the problem by using new methods.	21	81	36	3	4
	14.48	55.86	24.83	2.07	2.76
Your head nurse use evidence to analyze the cause of the problems.	20	94	27	3	1
	13.79	64.83	18.62	2.07	0.69
Your head nurse stimulates you to show your opinion for work.	17	107	14	4	3
	11.72	73.79	9.66	2.76	2.07

Table 14 Frequencies, percents of the staff nurses' job satisfaction concerning motivator factors for each item

Motivator factors items	SA	A	NS	D	DS
	n	n	n	n	n
	%	%	%	%	%
	63	82	0	0	0
Achievement	43.45	56.55	0	0	0
You are able to complete the task on time.	15	99	25	6	0
	10.34	68.28	17.24	4.14	0
You are able to use ability to solve problems	15	110	20	0	0
	10.34	75.86	13.79	0	0
Your job is important to patients' health.	81	62	2	0	0
	55.86	42.76	1.38	0	0
You receive compliments given when you complete the tasks.	10	76	53	5	1
	6.90	52.41	36.55	3.45	0.69
The knowledge and experience gained help you to develop your work.	66	77	2	0	0
	45.52	53.10	1.38	0	0
	42	99	4	0	0
Recognition	28.97	68.28	2.76	0	0
Your opinion is accepted in your work.	4	79	56	5	1
	2.76	54.48	38.62	3.45	0.69
The supervisors accept your knowledge and working ability.	4	89	51	1	0
	2.76	61.38	35.17	0.69	0
You are trusted and assigned to do important tasks.	9	85	48	1	2
	6.21	58.62	33.10	0.69	1.38
Your work needs to use knowledge, skills, and ability.	72	71	1	1	0
	49.66	48.97	0.69	0.69	0
You receive the respect from people in the society.	9	99	36	1	0
	6.21	68.28	24.38	0.69	0

Table 14 Frequencies, percents of the staff nurses' job satisfaction concerning motivator factors for each item(cont.).

Motivator factors items	SA	A	NS	D	DS
	n	n	n	n	n
	%	%	%	%	%
	68	74	3	0	0
Work Itself	46.90	51.03	2.07	0	0
Your work being able to serve and help patients.	68	75	2	0	0
	46.90	51.72	1.38	0	0
You are proud of your nursing profession.	69	64	11	0	1
	47.59	44.14	7.59	0	0.69
Your work is challenging and interesting.	46	82	15	2	0
	31.72	56.55	10.34	1.38	0
You like your job more than others.	26	44	60	9	6
	17.93	30.34	41.38	6.21	4.14
Your work needs creativity.	35	92	14	4	0
	24.14	63.45	9.66	2.76	0
	51	92	2	0	0
Responsibility	35.17	63.45	1.38	0	0
You have freedom in making a decision at work.	20	64	46	11	4
	13.89	44.44	31.72	7.64	2.78
You discuss patient care problems with doctors.	21	93	24	6	1
	14.48	64.14	16.55	4.14	0.69
You take responsibility for outcome of your work.	53	87	4	1	0
	36.55	60.00	2.76	0.69	0
You have to finish the entire job related to patients care before you go back home.	45	93	6	1	0
	31.03	64.14	4.14	0.69	0
You have to perform other works in addition to your responsibility.	31	95	18	1	0
	21.38	65.52	12.41	0.69	0

Table 14 Frequencies, percents of the staff nurses' job satisfaction concerning motivator factors for each item(cont.).

Motivator factors items	SA	A	NS	D	DS
	n	n	n	n	n
	%	%	%	%	%
Advancement	40	95	9	1	0
	27.59	65.52	6.21	0.69	0
The supervisors give you opportunity to gain more knowledge.	31	96	14	3	1
	21.38	66.21	9.66	2.07	0.69
You have a chance to create job performance.	14	108	21	2	0
	9.66	74.48	14.48	1.38	0
You have had a chance to attend training in order to increase skill and ability.	24	102	11	6	2
	16.55	70.34	7.59	4.14	1.38
You are being promoted based on you performing well.	12	93	38	2	0
	8.28	64.14	26.21	1.38	0
You are being supported to continue your higher education level.	35	61	39	8	2
	24.14	42.07	26.90	5.52	1.38

Table 15 Frequencies, percents of job satisfaction concerning hygiene factors for each item.

Hygiene factor items	SA	A	NS	D	DS
	n	n	n	n	n
	%	%	%	%	%
Salary and Benefits	6	68	59	11	1
	4.14	46.90	40.69	7.59	0.69
Your salary is reasonable for the quantity and quality of your work.	9	42	42	32	20
	6.21	28.97	28.97	22.07	13.79
You are happy with the welfare provided by the hospital.	2	34	45	43	21
	1.38	23.45	31.03	29.66	14.48

Table 15 Frequencies, percents of job satisfaction concerning hygiene factors for each item (cont.).

Hygiene factor items	SA	A	NS	D	DS
	n	n	n	n	n
	%	%	%	%	%
	6	68	59	11	1
Salary and Benefits	4.14	46.90	40.69	7.59	0.69
You are happy with the accommodation provided.	13	83	24	19	6
Your salary have makes you have well being in society.	8.97	57.24	16.55	13.10	4.14
	6	50	55	23	11
	4.14	34.88	37.93	15.86	7.59
	20	98	23	4	0
Technical- supervision	13.79	67.59	15.86	2.76	0
The supervisors understand your working problems.	6	64	61	9	5
The supervisors treat you as like as others equally.	4.14	44.14	42.07	6.21	3.45
The supervisors come to give comments and suggestions about your work.	9	72	46	12	6
The supervisors accept your opinions for working.	6.21	49.66	31.72	8.28	4.14
	12	97	27	6	3
	8.28	66.90	18.62	4.14	2.07
	7	92	38	8	0
	4.83	63.45	26.21	5.52	0
	17	96	23	7	2
	11.72	66.21	15.86	4.83	1.38
	20	98	23	4	0
Job Security	13.79	67.59	15.86	2.76	0
You feel that you have a secured job.	36	68	36	2	3
	24.83	46.90	24.83	1.38	2.07
You would like to do this job as long as you want.	22	50	57	6	10
You are having a good relationship with your supervisors.	15.17	34.48	39.31	4.14	6.90
	16	98	29	2	0
	11.03	67.59	20.00	1.38	0

Table 15 Frequencies, percents of job satisfaction concerning hygiene factors for each item (cont.).

Hygiene factor items	SA	A	NS	D	DS
	n	n	n	n	n
	%	%	%	%	%
	20	98	23	4	0
Job Security	13.79	67.59	15.86	2.76	0
The supervisors are responsible to your work.	12	98	29	5	1
	8.28	67.59	20.00	3.45	0.69
Security provided for you when you take afternoon and night shifts.	6	44	57	24	14
	4.14	30.34	39.31	16.55	9.66
	6	72	58	9	0
Working Condition	4.14	49.66	40.00	6.20	0
You are satisfied for current location of the hospital.	22	102	15	6	0
	15.17	70.34	10.34	4.14	0
There are enough staff nurses to do the efficient work in your unit.	2	45	41	33	24
	1.38	31.03	28.28	22.76	16.55
There is sufficient equipments provided for your work.	1	29	38	46	31
	0.69	20.00	26.21	31.72	21.38
There are enough useful manuals provided for your work.	6	64	43	24	8
	4.14	44.14	29.66	16.55	5.52
You are satisfied for the number of patients under your responsibly.	6	74	35	23	7
	4.14	51.03	24.14	15.86	4.83
	34	103	8	0	0
Interpersonal Relationship	23.45	71.03	5.52	0	0
You have good relationship with your colleagues	28	104	13	0	0
	19.31	71.72	8.97	0	0
Your supervisors are friendly and kindly to you.	19	98	22	3	3
	13.10	67.59	15.17	2.07	2.07
Whenever you face any problems your colleagues are pleased to help you.	14	93	35	3	0
	9.66	64.14	24.14	2.07	0

Table 15 Frequencies, percents of job satisfaction concerning hygiene factors for each item (cont.).

Hygiene factor items	SA	A	NS	D	DS
	n	n	n	n	n
	%	%	%	%	%
	34	103	8	0	0
Interpersonal Relationship	23.45	71.03	5.52	0	0
You and your colleagues work friendly as a team.	21	107	17	0	0
	14.48	73.79	11.72	0	0
You adjust yourself to understand your colleagues.	21	112	11	1	0
	14.48	77.24	7.59	0.69	0
Hospital Policy and Administration	0	84	56	5	0
	0	57.93	38.62	3.45	0
You are accepting administrative policy of your hospital.	16	85	30	9	5
	11.03	58.62	20.69	6.21	3.45
You are given opportunity to raise opinions to improve the work.	14	98	24	7	2
	9.66	67.59	16.55	4.83	1.38
The policy is explained before a task is assigned to you.	13	92	31	9	0
	8.97	63.45	21.38	6.21	0
You are willing to follow the rules and criteria for work.	31	95	16	3	0
	21.38	65.52	11.03	2.07	0

APPENDIX C

Table 16 Means, standard deviations, minimums and maximums of staff nurses' perception on head nurse' leadership.

Variables	Mean	S.D.	Min	Max
Idealized influence	19.23	2.80	9.00	25.00
Your head nurse is a good model for you.	3.61	0.73	2.00	5.00
You feel proud of being your head nurse staff.	3.83	0.70	1.00	5.00
Your head nurse sacrifices her benefits for the sake of group benefits.	3.83	0.70	1.00	5.00
Your head nurse has self-confidence for work.	4.10	0.65	2.00	5.00
You respect your head nurse actions.	3.86	0.65	1.00	5.00
Inspirational motivation	19.74	2.82	10.00	25.00
Your head nurse has creative ideas to do the new job.	3.81	0.78	1.00	5.00
Your head nurse of ward gives enthusiasm to your work.	3.87	0.68	2.00	5.00
Your head nurse open the opportunities to you for shows your ability to achieve the job.	3.95	0.69	1.00	5.00
Your head nurse stimulates you to feel that the job is important.	4.08	0.65	1.00	5.00
Your head nurse pays strong attention to finish her job.	4.04	0.67	2.00	5.00
Individualized consideration	18.80	3.23	7.00	25.00
Your head nurse gives recommendation for you individually.	3.66	0.90	1.00	5.00
Your head nurse treats you by being concerned about your personality.	3.70	0.76	1.00	5.00
Your head nurse listens to your story.	3.70	0.82	1.00	5.00

Table 16 Means, standard deviations, minimums and maximums of staff nurses' perception on head nurse' leadership (cont.).

Variables	Mean	S.D.	Min	Max
Individualized consideration	18.80	3.23	7.00	25.00
Your head nurse spends time to give you useful suggestions when you need.	3.83	0.79	1.00	5.00
Your head nurse supports you to show your ability to solve problem in your work.	3.91	0.67	1.00	5.00
Intellectual stimulation	19.21	3.00	8.00	25.00
Your head nurse discusses about the problem of your unit with you.	3.80	0.73	1.00	5.00
Your head nurse improves the old pattern to new one for working.	3.84	0.75	1.00	5.00
Your head nurse gives support to solve the problem by using new methods.	3.77	0.82	1.00	5.00
Your head nurse use evidence to analyze the cause of the problems.	3.89	0.68	1.00	5.00
Your head nurse stimulates you to show your opinion for work.	3.90	0.71	1.00	5.00

Table 17 Means, standard deviations, minimums and maximums of staff nurses' job satisfaction concerning motivator factors.

Motivator factors items	Mean	S.D.	Min	Max
Achievement	20.41	1.87	16.00	25.00
You are able to complete the task on time.	3.85	0.65	2.00	5.00
You are able to use ability to solve problems	3.96	0.49	3.00	5.00
Your job is important to patients' health.	4.54	0.53	3.00	5.00
You receive compliments given when you complete the tasks.	3.61	0.70	1.00	5.00

Table 17 Mean, standard deviation, minimums and maximums of staff nurses' job satisfaction concerning motivator factors (cont.).

Motivator factors items	Mean	S.D.	Min	Max
Achievement	20.41	1.87	16.00	25.00
The knowledge and experience gained help you to develop your work.	4.44	0.53	3.00	5.00
Recognition	19.17	1.96	13.00	25.00
Your opinion is accepted in your work.	3.55	0.65	1.00	5.00
The supervisors accept your knowledge and working ability.	3.66	0.54	2.00	5.00
You are trusted and assigned to do important tasks.	3.68	0.67	1.00	5.00
Your work needs to use knowledge, skills, and ability.	4.48	0.55	2.00	5.00
You receive the respect from people in the society.	3.80	0.55	2.00	5.00
Work Itself	20.63	2.47	13.00	25.00
Your work being able to serve and help patients.	4.46	0.53	3.00	5.00
You are proud of your nursing profession.	4.38	0.69	1.00	5.00
Your work is challenging and interesting.	4.19	0.67	2.00	5.00
You like your job more than others.	3.52	0.99	1.00	5.00
Your work needs creativity.	4.09	0.67	2.00	5.00
Responsibility	20.10	2.15	15.00	25.00
You have freedom in making a decision at work.	3.59	0.92	1.00	5.00
You discuss patient care problems with doctors.	3.88	0.72	1.00	5.00
You take responsibility for outcome of your work.	4.32	0.56	2.00	5.00
You have to finish the entire job related to patients care before you go back home.	4.26	0.56	2.00	5.00
You have to perform other works in addition to your responsibility.	4.08	0.60	2.00	5.00

Table 17 Mean, standard deviation, minimums and maximums of staff nurses' job satisfaction concerning motivator factors (cont.)

Motivator factors items	Mean	S.D.	Min	Max
Advancement	19.56	2.48	10.00	24.00
The supervisors give you opportunity to gain more knowledge.	4.06	0.67	1.00	5.00
You have a chance to create job performance.	3.92	0.54	2.00	5.00
You have had a chance to attend training in order to increase skill and ability.	3.97	0.73	1.00	5.00
You are being promoted based on you performing well.	3.79	0.60	2.00	5.00
You are being supported to continue your higher education level.	3.82	0.91	1.00	5.00

Table 18 Mean, standard deviation, minimums and maximums of staff nurses' job satisfaction concerning hygiene factors.

Hygiene factor items	Mean	S.D.	Min	Max
Salary and benefits	15.48	3.57	5.00	23.00
Your salary is reasonable for the quantity and quality of your work.	2.92	1.15	1.00	5.00
You are happy with the welfare provided by the hospital.	2.68	1.03	1.00	5.00
You like rules and process of having sick leave.	3.23	1.02	1.00	5.00
You are happy with the accommodation provided.	3.54	0.97	1.00	5.00
Your salary have makes you have well being in society.	3.12	0.98	1.00	5.00

Table 18 Mean, standard deviation, minimums and maximums of staff nurses' job satisfaction concerning hygiene factors (cont.).

Hygiene factor items	Mean	S.D.	Min	Max
Technical-supervision	18.10	3.08	8.00	25.00
The supervisors understand your working problems.	3.39	0.82	1.00	5.00
The supervisors treat you as like as others equally.	3.46	0.89	1.00	5.00
The supervisors come to give comments and suggestions about your work.	3.75	0.75	1.00	5.00
The supervisors accept your opinions for working.	3.68	0.65	2.00	5.00
The supervisors are good leaders with knowledge and ability.	3.82	0.75	1.00	5.00
Job security	18.10	3.07	8.00	25.00
You feel that you have a secured job.	3.91	0.86	1.00	5.00
You would like to do this job as long as you want.	3.47	1.03	1.00	5.00
You are having a good relationship with your supervisors.	3.88	0.60	2.00	5.00
The supervisors are responsible to your work.	3.79	0.67	1.00	5.00
Security provided for you when you take afternoon and night shifts.	3.03	1.01	1.00	5.00
Working condition	15.80	3.37	7.00	25.00
You are satisfied for current location of the hospital.	3.97	0.65	2.00	5.00
There are enough staff nurses to do the efficient work in your unit.	2.78	1.10	1.00	5.00
There is sufficient equipments provided for your work.	2.47	1.06	1.00	5.00
There are enough useful manuals provided for your work.	3.25	0.97	1.00	5.00
You are satisfied for the number of patients under your responsibly.	3.34	0.96	1.00	5.00

Table 18 Mean, standard deviation, minimums and maximums of staff nurses' job satisfaction concerning hygiene factors (cont.).

Hygiene factor items	Mean	S.D.	Min	Max
Interpersonal Relationship	19.88	2.12	14.00	25.00
You have good relationship with your colleagues	4.10	0.52	3.00	5.00
Your supervisors are friendly and kindly to you.	3.88	0.73	1.00	5.00
Whenever you face any problems your colleagues are pleased to help you.	3.81	0.62	2.00	5.00
You and your colleagues work friendly as a team.	4.03	0.51	3.00	5.00
You adjust yourself to understand your colleagues.	4.06	0.50	2.00	5.00
Hospital Policy and Administration	15.28	2.26	9.00	20.00
You are accepting administrative policy of your hospital.	3.68	0.88	1.00	5.00
You are given opportunity to raise opinions to improve the work.	3.79	0.74	1.00	5.00
The policy is explained before a task is assigned to you.	3.75	0.70	2.00	5.00
You are willing to follow the rules and criteria for work.	4.06	0.64	2.00	5.00

BIOGRAPHY

NAME: Shu hui Wang

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A large, semi-transparent watermark of the Mahidol University logo is centered on the page. The logo is circular with a blue and gold color scheme, featuring a central emblem with a stupa and a caduceus, surrounded by Thai script.