THE QUALITY OF WORK-LIFE FOR NURSE PRACTITIONERS: A CASE STUDY OF INTENSIVE CARE UNITS

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A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF SCIENCE
(HUMAN DEVELOPMENT)
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2016

Thesis
entitled

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THE QUALITY OF WORK-LIFE FOR NURSE PRACTITIONERS: A CASE STUDY OF INTENSIVE CARE UNITS
was submitted to the Faculty of Graduate Studies, Mahidol University
for the degree of Master of Science (Human Development)
on
August 29, 2016

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ACKNOWLEDGEMENTS

This thesis dissertation has been kept on track and seen through to completion with the encouragement and support of numerous people. I would like to express my thanks to all those who have contributed in many ways to the success of this study.

First of all, I am extremely grateful to my advisor, Lect. Athiwat Jiawiwatkul and Asst. Prof. Dalapat Yossatorn, for having granted me kindness and useful recommendations in addition to offering assistance, corrections and support. Next, I would like to thank all of my teachers for having imparted knowledge and provided good models for me to follow, while fostering in me a sense of conscientiousness to improve myself and benefit the profession and society.

I most gratefully acknowledge Assoc. Prof. Suriyadeo Tripathi, M.D., the director of National Institute for Child and Family Development, Mahidol University. I also would like to thank the staff, particularly for their valuable help as well as the help of all of my colleagues at the National Institute for Child and Family Development of Mahidol University.

I would like to thanks Lect. Manasanan Namsomboon, Chair, Faculty of Education, Silpakorn University, Prof. Chulalak Komoltri, the Epidemiology Clinic, and Assoc. Prof. Kanokporn Udomittipong, Department of Pediatrics, Faculty of Medicine Siriraj Hospital for showing me kindness and giving me consultation beneficial to this research.

I would like to thank my fellow students in the 11th Class and my Kalayanamit Friends, brothers and sisters who loved everyone for their love, care, support and warm feelings. They have always been at my side during happy and hard moments to push me and motivate me. and colleagues for their kindness, generosity and great support. I would like to thank all executives and staff of this hospital for their support and assistance in data collection. Furthermore, I would like to express my gratitude to all subjects for their cooperation and sacrifice of valuable time in completing the questionnaires and providing information for the benefit of the research. I would like to thank Miss Thochaporn Tesasil, Nurse Inspector (Specialist) Pediatric Nursing Division, Faculty of Medicine Siriraj Hospital for serving as the qualified expert in examining the research instrumentation.

Lastly, I would like to thank my father and my mother (Prasert-Nanthaporn Boonnuchapirak), my grandmother (Pongsree Tungkajitti), Mr.Tapptapont Klaibunna and the rest of my family who sincerely raised me with their care and love as well as showing me the joy of intellectual pursuit and for their support, which was an important supporting drive behind the present study.

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ABSTRACT

This research was conducted to study the quality of work-life for nurse practitioners; a case study of intensive care units by implementing the conceptual framework of the Thai Health Promotion Foundation (THPF) which divided quality of working life into physical, psychological and emotional dimensions. Data were collected from individual questionnaires given to 252 nurse practitioners in the intensive care unit. The statistics employed in the study for quantitative data analysis consisted of descriptive statistics. The hypothesis was tested by employing t-test statistics, Correlation Analysis, one-way ANOVA and Regression analysis.

Based on the findings, the personal factors of chronic diseases and job satisfaction among different nurse practitioners revealed nurses to have different overall and individual quality of working life was able to predict overall quality of working life scores with statistical significance at 0.001 . This study recommends future studies to study the factors with potential influence on quality of working life such as hospital policies, organization values, technological advances, etc. In addition, future studies should be conducted to study guidelines for promoting and improving quality of life for nurse practitioners in the intensive care unit in order for practitioners to have greater work efficiency.

KEY WORDS: QUALITY OF WORK-LIFE / NURSE PRACTITIONERS/ INTENSIVE CARE UNITS / HAPPINOMETER / EMPLOYYEE ENGAGEMENT

174 pages

คุณภาพชีวิตการทำงานของพยาบาลระดับปฏิบัติการ กรณีศึกษาหออภิบาลผู้ป่วยระยะวิกฤต
THE QUALITY OF WORK-LIFE FOR NURSE PRACTITIONERS: A CASE STUDY OF INTENSIVE CARE UNITS.

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บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาคุณภาพชีวิตการทำงานของพยาบาลระดับปฏิบัติการ กรณีศึกษาหออภิบาลผู้ป่วยระยะวิกฤต โดยใช้กรอบแนวคิดของสำนักงานกองทุนสนับสนุนการสร้างเสริมสุขภาพ (สสส.) ซึ่งแบ่งคุณภาพชีวิตการทำงานออกเป็นด้านกาย จิตใจ และอารมณ์ โดยเก็บรวบรวมแบบสอบถามชนิดตอบด้วยตนเองจากพยาบาลระดับปฏิบัติการในหออภิบาลผู้ป่วยระยะวิกฤต จำนวน 252คน สถิติที่ใช้ในการวิจัยสำหรับวิเคราะห์ข้อมูลเชิงปริมาณ ได้แก่ สถิติเชิงพรรณนา ทดสอบสมมติฐานด้วยสถิติทดสอบที สหสัมพันธ์ การวิเคราะห์ความแปรปรวนทางเดียว และการวิเคราะห์การแปรปรวนถดถอย

จากผลการศึกษาพบว่าปัจจัยส่วนบุคคลด้านโรคประจำตัวและปัจจัยด้านระดับความพึงพอใจในงานของพยาบาลระดับปฏิบัติการที่แตกต่างกันจะมีคุณภาพชีวิตการทำงานโดยรวมและรายด้านที่แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.001 เมื่อพิจารณาค่าสัมประสิทธิ์การถดถอยของตัวพยากรณ์ พบว่า ตัวแปรการมีโรคประจำตัว ระดับการศึกษา และระดับความพึงพอใจในงานในภาพรวม สามารถพยากรณ์คะแนนคุณภาพชีวิตการทำงานในภาพรวม ได้อย่างมีนัยสำคัญทางสถิติ ข้อเสนอแนะในการทำวิจัยครั้งต่อไปคือ ควรมีการศึกษาปัจจัยอื่นๆ ที่อาจส่งผลต่อคุณภาพชีวิตการทำงาน เช่น นโยบายของโรงพยาบาล ค่านิยมขององค์กร ความก้าวหน้าทางเทคโนโลยี เป็นต้น และควรศึกษาแนวทางในการส่งเสริมและพัฒนาคุณภาพชีวิตพยาบาลระดับปฏิบัติการ ในหออภิบาลผู้ป่วยระยะวิกฤต เพื่อให้ผู้ปฏิบัติงานมีประสิทธิภาพในการทำงานเพิ่มมากขึ้น

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CHAPTER I
INTRODUCTION

1.1 Background and Significance of the Findings

Quality of Work Life is an important component or dimension in quality of life. A significant human development guideline is the Quality of Work Life improvement for agency workers enabling workers to work happily. Therefore, Quality of Work Life reflects job satisfaction and employee engagement to the organization of employees at every level of the agency, which is a result of care, attention and importance placed on employees as the most valuable resource by building good environments and work systems. The results are participation in work, safety and good living conditions in working life, personnel capacity improvement and maintenance of balance between working life and private life (European Foundation for the Improvement of Living Conditions, 2002).

Organizations are the center of people working together as a single work unit to perform activities based on set objectives. For many organizations to achieve success, one key factor that motivates employees that cannot be overlooked is employee happiness (Metee Piyakun, 2011) because human resources are a key component of organizations. And if the members of an organization are happy, the organization will increase in work quantity and quality, creativity and innovation in addition to reducing stress and conflict in the organization. The results will be an organization that is able to progress and develop effectively (Janya Dasa, 2011). Moreover, happiness is what humans need to live. If organization members are happy, the result will be high productivity, better service, better work and service quality, reduced rates of employee absenteeism or late arrivals at work, strength in the organization, better work environment, reduced employment termination rates, reduced expenses in recruiting and training new employees, improved organization image and reduced employee dissatisfaction (Chanwit Wasantanarat, 2008). Therefore, occupational happiness is an important factor for creating benefits in

pushing for successful work. Building happiness in the workplace is considered an important factor enabling easy personnel management in the organization. Employee engagement to the organization is also important and necessary for influencing the organization's goals and success, especially in organizations with specific characteristics. Organization success is partly caused by an organization's personnel because the personnel perform the duty of carrying out the organization's missions to achieve goals and achieve success. The personnel will dedicate physical and psychological energies based on personnel knowledge and capacity for the organization's business by giving primary consideration to the organization's interests, which is an expression of dedication and devotion to the organization. This is entirely the result of employee engagement to the organization on the part of organization personnel. Thus, employee engagement to the organization can be a good indicator of organization efficiency. According to the aforementioned data, employee engagement to the organization is vital in causing the personnel to dedicate physical and psychological energies to the organization's success. Therefore, building personnel employee engagement to the organization is important for organizations (Boonjaisri Satitnarangkoon, 2008).

Based on data from the Nursing Council, the current nursing labor situation that has been studied to estimate the demand for nurses over the next ten years by the health demand method from service use by Thais and foreigners reveals that Thailand will need nurses at a rate of one nurse per population of 400 people in 2010 – 2019, or approximately 163,500 – 170,000 people. The population census in 2010 showed 65.4 people living in Thailand to have a need for approximately 163,500 nurses while there are 130,388 nurses younger than 60 years working in the healthcare service sector nationwide. Based on the aforementioned data, approximately 33,112 nurses remain missing from every sector such as nurses under the jurisdiction of public and private hospitals (Arunrat Kanta, 2013).

Nurses are considered the largest group of personnel on healthcare teams and in organizations who are important in providing healthcare services. Although medical organizations have implemented technological progress in organizations, technological advancements have been unable to replace nursing staff. Furthermore, the nursing profession provides services in response to social needs in the area of

healthcare services at the personal, family and community levels in healthy or sick communities. The aim is to provide care, assistance, recovery, prevention and health promotion in addition to helping doctors treat diseases by using specific nursing knowledge. Nurses work to provide attentive care for patients with physical and psychological safety and comfort for patients. Nurses also contribute to preventing disability, helping patients recover, encouraging patients, assessing patients' conditions, monitoring patients, recording reports on symptoms and changes in addition to making decisions to help patients in case of emergency (Udomrat Sanguansiritam, 2007). Apart from being hard work requiring 24-hour shift work, nursing work requires a high degree of responsibility and readiness to confront every situation, including depression, grief, pressure, confrontation with urgency and stress nearly the entire time. Nurses also cope with numerous risk factors causing health problems, infections and work injuries affecting quality of working life. Therefore, nursing shortages are not only a problem of the profession but also a problem for the healthcare service system because nurses are currently found to have an attrition rate of 4.4 percent per year. Therefore, interest in the Quality of Work Life of professional nurses is important (Wijit Srisupan, 2009).

The World Health Organization (1993) (WHO) is an organization that functions to coordinate public health work and has defined "healthy workplace" as a place where workers and supervisors work together by making continual modifications to protect and promote health, safety and living conditions of all workers with sustainability. A healthy workplace has components in four dimensions consisting of physical components, psychological components, social components and intellectual components.

The Happy Workplace Office, Thai Health Promotion Foundation (THPF), also had concepts consistent with the WHO in creating hospitable workplace or happy organizations in the 11th National Economic and Social Development Plan (2012 – 2016) with emphasis on connections between the following six capital categories: natural capital, physical capital, social capital, human capital, financial capital and cultural capital. The aforementioned represent a challenge and opportunity for the Thai economy to adapt to the new global environment and trends for global changes over the next 20 years. According to the 11th National Economic and Social

Development Plan, all six the aforementioned capital categories obviously closely resemble the dimensions of quality of life and happiness in humans. Therefore, promotion of quality of life and occupational happiness is the main goal of agencies from every sector. The aim is to promote Thai workers in becoming quality labor with good physical, psychological and spiritual health conditions. The THPF is an agency that recognizes the importance and supports the building of happy organizations for employees or personnel with eight conceptual frameworks in building a happy workplace, namely, happy body, happy heart, happy society, happy relaxation, happy brain, happy soul, happy money and happy family. All of the aforementioned concepts are happiness covering all four dimensions of comprehensive happiness, namely, the physical, psychological, social and intellectual (spiritual) dimensions (Thai Health Promotion Foundation, 2008).

At present, rapid advances in healthcare evolution have increased the population and mean age of the population, thereby rapidly increasing the number of service recipients while nursing personnel are declining in numbers or suffering from higher resignation rates from the profession. Consequently, nursing labor rates are inconsistent with service recipient needs in addition to causing a shortage of professional nurses with rising trends (Marisa Sombatboon, 2009). Furthermore, according to the data collection of a public hospital in Bangkok, nursing resignation rates were found to be high in 2011 – 2013 with many causes such as unclear occupational progress, new jobs with better opportunity for occupational progress, displeasure with shift work, dissatisfaction with work systems, travel/relocation problems, desire to return home in line with family wishes, workplace environment problems, work atmosphere problems, work system and administration problems, a desire for continued education, dissatisfaction with wages and dissatisfaction with various benefit systems. In addition, the work experience of nurses with the highest resignation rate was 1 – 10 years at 94.4, 88.5 and 83.9 percent in 2011 – 2013, respectively. In addition, practicing nurses in the intensive care unit (ICU) were found to have high resignation rates, especially practicing nurses with work experience of 2 – 10 years who had received skill training in various areas in addition to knowledge, expertise, special ability in the care of critical patients, expertise with a variety of medical equipment and specificity in use with patients.

Based on the aforementioned data, the researcher is interested in studying the Quality of Work Life of practicing nurses: A Case Study of Intensive Care Units by using the eight happy workplace conceptual frameworks of the Happy Workplace Office, Thai Health Promotion Foundation (THPF), due to comprehensive coverage of all four dimensions: physical, psychological, social and intellectual (spiritual) dimensions. In addition to benefits, this study will learn of the relationship between quality of working life, job satisfaction, work happiness and employee engagement to the organization among practicing nurses: A case study of nurses in the intensive care unit, the data obtained may be able to implemented as guidelines in promoting and developing working-aged adults to have physical, psychological, social and intellectual happiness, especially work happiness with the ability to adapt and live with capacity suitable for development in each aspect of adulthood.

1.2 Objective

1. To study the Quality of Work Life of practicing nurses in the intensive care unit.

2. To study the factors correlated with personal factors, job satisfaction, employee engagement and Quality of Work Life of practicing nurses in the intensive care unit.

3.To study and compare the differences between personal factors, job satisfaction and employee engagement influencing Quality of Work Life of practicing nurses in the intensive care unit.

4.To implement the findings as guidelines and recommendations for developing Quality of Work Life for practicing nurses in the intensive care unit.

1.3 Hypotheses

1.3.1 Differences in the personal factors of practicing nurses will result in different quality of working life.

1.3.2 Differences in the job satisfaction of practicing nurses will result in different quality of working life.

1.3.3 Differences in employee engagement of practicing nurses will result in different quality of working life.

1.3.4 The aforementioned factors will influence the work of practicing nurses in the intensive care unit.

1.4 Definitions

Quality of Work Life means the living conditions of a person at work in meeting physical, psychological, emotional and social happiness caused by work environment, satisfaction and employee engagement to the organization of the person and agency with implementation of the Happinometer to measure quality of work life among organization personnel.

Job satisfaction means overall positive feelings of the person towards the person, work and work environments. Job satisfaction will cause a person to feel enthusiasm and determination to work, including morale and encouragement, which will help employees work successfully to meet set goals.

Employee engagement means the fact that the person accepts the organization's goals with a good attitude and feeling as a loyal member of the organization, no thought of leaving the organization and willingness to dedicate physical and mental energies in working or performing acts in the interests of the organization.

Nurses means practicing nurses working in an intensive care unit in various departments at a public hospital in Bangkok.

Intensive care unit means a ward caring for patients in critical condition who have complications from multiple co-morbidities. This is a group of patients who need to receive continual care with detailed vital sign monitoring instruments at all times.

1.5 Scope of the Study

In this study, the researcher set the scope of the study as follows:

1.5.1 Content: This research studied factors influencing and affecting Quality of Work Life among practicing nurses in intensive care units by implementing the concept of the Happinometer and dividing groups of Quality of Work Life based on human development concepts and theories in adulthood and working-age in the bio, psycho and social aspects as follows: Physical quality of life of practicing nurses in intensive care units (Bio) (Happy Body, Happy Brain), psychological and emotional quality of life (Psycho) (Happy Relax, Happy Soul) and social quality of life (Happy Heart, Happy Society, Happy Money and Happy Family). The factors expected to have influence on Quality of Work Life consist of personal factors, job satisfaction and employee engagement to the organization.

1.5.2 Population: Practicing nurses. Case Study: An Intensive Care Unit at A Public Hospital in Bangkok.

1.5.3 Population Sampling: Quantitative data collection was used by stratified sampling and simple random sampling in order to obtain samples with equal opportunity for selection and calculating for samples to be used as a representation of the population according to Taro Yamane's formula (1973).

1.6 Expected Benefits

1.6.1 Awareness of factors affecting and influencing the Quality of Work Life of practicing nurses in an intensive care unit at a public hospital in Bangkok.

1.6.2 Data on personal factors, satisfaction and employee engagement of practicing nurses in an intensive care unit to use in planning personnel development and resource allocation in the agency studied.

1.6.3 Guidelines for agencies leading to promotion of personnel quality of life and agency development, especially in reducing the problem of personnel resignations.

1.6.4 Ability to implement the findings in planning personnel resource management for practicing nurses in an intensive care unit.

CHAPTER II
LITERATURE REVIEW

The researcher studied the following concepts, theories and researches related to the present study to collect research data by studying and researching from the books, articles and research reports:

2.1 Concepts and theories related to development in adulthood.

2.2 Concepts and theories related to quality of working life.

2.3 Happy Workplace and the Happinometer.

2.4 Concepts and theories related to job satisfaction.

2.5 Concepts and meanings of Employee engagement to the organization.

2.6 Intensive care unit contexts and nurses' roles, duties and responsibilities in the intensive care unit.

2.7 Related Studies.

2.1 Development in Adulthood Concepts and Theories

Because adulthood is divided into three stages consisting of early adulthood, mid-adulthood and late adulthood with different physical, psychosocial and intellectual development, studies of the differences between each period of adulthood are important for promoting and supporting happiness in working to move in an appropriate direction for each period of adulthood or working age.

2.1.1 Definition of Adulthood

Penpilai Rutakananon (2006) stated that adulthood is composed of persons aged 20 years and up by dividing adulthood into three stages consisting of the following:

1) Early adulthood or young men/women aged 20 – 25 years to 40 years: This age is marked by mature physical, psychological and emotional development

with readiness for roles to choose guidelines for living in the area of occupations, spouses and meaningful relationships with other persons.

2) Mid-adulthood or middle-aged persons aged 40 years to 60 – 65 years are at an age where adults have passed through a period of family and work life with security and success in life.

3) Late adulthood or senior adults aged 60 – 65 years and up are in an age of physical, psychological and social role deterioration. Adaptation to deterioration and confrontations at the end of life is important for living at this age.

Havighurst (1972; cited in Suwat Wattanawong, 1995) divided an individual's development into six stages. The first three stages are related to childhood and adolescence while the three latter stages are related to development in adulthood. Havighurst divided each period of adulthood as follows:

1) Early Adulthood – Persons aged 18 – 35 years have the following significant burdens and duties: Beginning to have a secure occupation, choosing a spouse, beginning family life, learning to live with the spouse, looking for a residence and having a home, raising children, seeking appropriate social groups for personal habits such as membership in associations or clubs in addition to having responsibility as a good citizen.

2) Middle Adulthood – Persons aged 35 – 60 years have the following significant burdens and duties: Beginning to have secure foundations and maintain economic status including good and appropriate livelihood standards for foundations, appropriately adapting to adulthood roles as parents, accepting the reality of changes within the family, supporting children and grandchildren who are usually adolescents and engaging in conduct as a happy adult with social responsibilities, reputations or success as a good citizen, having interests and spending free time in age-appropriate recreational activities, accepting and adapting to the physical changes of adults at this age.

3) Later Maturity – Persons aged 60 years and up should have the following roles and duties: Roles and relationships related to persons who are of the same age with similar interests, holding meetings to discuss issues with people of the same age or participating in occasional social activities, learning and adapting to physical deterioration and general health, adjusting to retirement from work and

reduced income, adapting to the possibility of a spouse's death and widowhood, determining satisfactory residence where adults in later maturity may have to live with children, grandchildren or in villages for aging people, etc.

Based on the aforementioned definitions, the researcher concluded that adulthood means persons aged 18 years and up who can be divided into three groups consisting of early adulthood, middle adulthood and late adulthood. In this study, the researcher presents concepts and theories of early and middle adulthood because this age is when adults spend time with colleagues, which is consistent with the samples in this study.

2.1.2 Development in Adulthood

2.1.2.1 Early Adulthood

1) Physical development at this age is complete in nearly every area. Most young adults have attractive features without the awkwardness or acne encountered in adolescence. In the initial stage of early adulthood, adults have mature muscles with further opportunity to increase in strength until the age of 30 years (PenpilaiRutakananon, 2006). Nervous systems in early adults were developed since when adults were infants in the womb. Adults will continue to undergo brain growth, even in adolescence or early adulthood. Furthermore, adults will have maximum weight at this age. If brain waves are measured with an electroencephalograph (EEG), mature brain waves will be encountered among persons aged 19 – 20 years. And in some cases, mature brain waves may be encountered in persons aged 30 years (Wang &Busse, 1974; cited in Penpilai Rutakananon, 2006).

2) Psychological and social development at this age have numerous theories explaining psychological and social phenomena in the area of thoughts, emotions or behaviors such as the following:

Erikson (1963) divided human personality development into eight steps as follows:

1. Trust vs. Mistrust (Age 0 – 1 Years).
2. Autonomy vs. Doubt (Age 2 – 3 Years).
3. Initiative vs. Guilt (Age 4 – 5 Years).
4. Industry vs. Inferiority (Age 6 – 12 Years).

5. Identity vs. Role Confusion (Age 12 – 17 Years).

6. Intimacy vs. Isolation (Age 18 – 34 Years).

7. Generativity vs. Self-Absorption (Age 35 – 60 Years).

8. Integrity vs. Despair (Age 60 Years And Up).

At Step 6, the person will begin to enter early adulthood (Intimacy vs. Isolation). This intimacy is not exclusive to sexual relationships or marriage and may also mean normal friendships, ability to participate and understand others along with patience for people in general. On the contrary, persons who do not seek intimacy will make efforts to become isolated or destroy persons thought to be a danger to that person (Penpilai Rutakananon, 2006).

Havighurst (1972; cited in PenpilaiRutakananon, 2006) stated that development in early adulthood consists of courting and selecting spouses for marriage, learning to adapt and live with spouses, having children and beginning parenthood roles, raising children and responding to the needs of each child, learning household management, responsibilities and duties, starting occupations or continuing education, having responsibility for general society and involvement in social groups with persons who share similar interests or characteristics. Maturity or adulthood meant a condition promoting the person to have good physical and psychological living conditions. Mature persons will have developed values, accurate personal image, secure behaviors and emotions, satisfactory relationships with others and intellectual knowledge (Penpilai Rutakananon, 2006).

Allport (1961; cited in Penpilai Rutakananon, 2006) outlined the conditions related to maturity in the following seven areas:

1) Extension of the self means the fact that a person has more self-understanding and environmental understanding while children have understanding only in families. This boundary will grow as children mature and have friends, schools, communities, friends from opposite gender, interest in occupations, ethics and public responsibilities. This helps the person have more relationships with others and participate in more experiences and emotions related to others.

2) Relationships and warming to others means the ability to provide closeness, love others, communicate with others to have understanding, sensitivity to the needs of others, patience for others, friendliness, love and sacrifice.

3) Emotional security means self-acceptance and emotional acceptance without allowing emotions to have power over the person's life, endurance for doubts and confidence in personal expressions.

4) Realistic perception: Allport did not mean mature persons will not employ defense mechanisms. However, mature persons will not use these mechanisms until personal perceptions become distorted.

5) Possession of skills and competencies mean mature persons will exert effort toward personal skills and display personal efficiency including pride in work.

6) Knowledge of the self means self-knowledge in three areas consisting of knowledge regarding what can be done, knowledge regarding what cannot be done and knowledge regarding what should be done.

7) Establishing a unifying philosophy of life means ideals, needs and values that indicate a way of life and living according to outlined goals. Mature persons will be able to accept failure when unable to achieve goals.

Based on the aforementioned development in early adulthood, early adulthood can be summarized as the period when the body has full growth with changes in psychological and social development, meaning early adults will begin to seek spouses, certainty and secure occupations along with having responsibility as good citizens, etc., in addition to having maturity. According to Erikson's concept, early adulthood is in the sixth step of personality development (Intimacy vs. Isolation).

2.1.2.2 Middle-Adulthood

1) Physical development – Aging in middle adulthood is displayed physically such as thinning hair and increasing baldness with grey hair among men. Most women and men will have grey hair at an approximate age of 50 years with the skin losing firmness and having wrinkles. Women enter menopause, which will mostly take place in the late 40s or early 50s. Hormones in the body change with impact on psychological conditions such as temperamental emotions, fatigue and

anxiety. Symptoms of menopausal women can also be encountered among men. For example, some men feel flashing heat similar to women. In the area of memory, although persons in middle adulthood have deteriorated short-term memory, not every person has deterioration in short-term memory while long-term memory improves with persons in middle adulthood being able to remember the details of what happened ten years previously better than events occurring ten minutes ago (Penpilai Rutakananon, 2006).

2) Psychological and Social Development – In middle adulthood, psychological and social development concur with Erikson's personality development in Step 7 (Generativity vs. Self-Absorption). Middle adulthood is an age with readiness to fully benefit society if each step of development in the past proceeded well with care and responsibility for children to be happy, including instruction for children to be good people in the future. On the contrary, without success, the person will lose hope, become tired of life, self-absorbed and take no responsibility for society (Khun Khru Dek, 2006).

Harvighurst (1972; cited in Penpilai Rutakananon, 2006) stated that development in middle adulthood is composed of helping adolescent children grow to become responsible and happy adults with responsibility for society and the country leading to and maintaining job satisfaction, development of activities in free-time, good spousal relationships, acceptance and adaptation to the physiological changes of middle-aged adults, including adaptation to elderly parents.

Robert Peck (1968; cited in Penpilai Rutakananon, 2006) divided the age of 40 – 50 years into four stages of adaptation as follows:

1) Valuing Wisdom vs. Valuing Physical Powers – With more experience, middle-aged adults have more wisdom in selecting choices and making decisions than younger adults. Thus, successful adults at this age are adults who assign greater value to wisdom than physical powers in addition to using this as an instrument for self-evaluation and problem-solving.

2) Socializing vs.. Sexualizing in Human Relationships – Middle-aged adults will live together with understanding and care rather than sex.

3) Cathectic Flexibility vs. Cathectic Impoverishment – This means emotional flexibility can change the use of emotions from one person to another.

4) Mental Flexibility vs. Mental Rigidity – People at this age need to have flexible thoughts and actions including open-mindedness for new ideas because people at this age have reached their highest status in life with the belief that they have an answer for every problem, causing refusal to be open to new ideas or methods for solving problems.

According to the division of adulthood, adults obviously have full physical growth, firm skin and freshness when entering early adulthood. Psychologically, early adults have more secure behaviors and emotions than adolescents in addition to having personal understanding and understanding of the surrounding environment, etc. When entering middle adulthood, there are physical changes among adults such as grey hair, wrinkled skin, reduced hormone levels, deteriorated memory including psychological and social changes in order to fully benefit society from experience. Persons with families will help adolescents grow to become responsible and happy adults, etc. Therefore, studies of the differences in each stage of adulthood are important in promoting and supporting happiness in working in an appropriate direction for each of the aforementioned period of adulthood or working-age.

In this study, the researcher divided the sample group’s ages based on Erikson’s concept (1963) consisting of early adults aged 18 – 34 years and middle-aged adults aged 35 – 60 years.

2.2 Concepts on Quality of Working Life

The definition of quality of working life includes happiness in working. Therefore, if quality of working life is mentioned, quality of working life may be able to reflect happiness in working of an employee or person. Therefore, the researcher gathered the following definitions and components for quality of working life.

2.2.1Definitions of Quality of Working Life

Hackman and Suttle (1974) stated that quality of working life means responses to the happiness and satisfaction of every worker in the organization at the employee, supervisory, managerial or owner level. In addition to building satisfaction, good quality of life also influences social, environmental, economic conditions and products. Most importantly, quality of working life leads to job satisfaction and employee engagement to the organization, thereby reducing absence, resignation and accident rates.

Cascio (1992; cited in SakchaiKusawad, 2005) stated quality of working life mean happy feelings of every member in the organization from working together and succeeding at achieving goals with the opportunity to participate in decision-making, designating guidelines for improvement with consideration given to work environments, work processes, good relationships between colleagues including opportunity for growth and advancement. Furthermore, quality of working life is the expectation and need of each working and each worker will have different needs.

Knox (1995; cited in Sakchai Kusawat, 2005) stated quality of working life means living conditions of a person who has to have complete physical and psychological health for adaptation to work environments.

Potjanee Jotewarawat (2002) defined quality of working life as everything related to jobs and work with the primary goal of responding to job satisfaction and happiness to lead to organization success and employee work quality.

Sanseern Techaburapa (2002) defined quality of working life as feelings among employees to create job satisfaction, happiness in working and good mental health from work experience, which influenced employee and organizational efficiency.

The fact that the aforementioned definitions of quality of working life were given meant quality of working life can be summarized as a person's living conditions when working which respond to physical, psychological, emotional and social health as a result of work environment, satisfaction and employee engagement to the organization of the person and the organization.

2.2.2 Components of Quality of Working Life

Walton (1974) summarized the criteria for quality of working life as being composed of the following items:

1) Adequate and fair compensation, meaning compensation in the form of monthly wages or other financial and non-financial benefits.

2) Safe and health working conditions, meaning environmental preparations to facilitate convenience, comfort and safety for employees.

3) Opportunity to continuously grow and develop human capacities, meaning the fact that every employee will have different opportunities for progress in life or growth at different levels, depending on each person's conditions such as economic status, level of education, attitude, needs, values and personality, etc.

4) Social integration in the work organization, meaning cooperation among employees in the organization to work in formal and informal relationships, which will help improve quality of working life among employees because employees will receive honesty from colleagues, equality in the organization and no discrimination.

5) Balance between role of work and personal life.

Huse and Cumming (1985) presented significant characteristics as quality of work life in eight aspects consisting of the following:

1) Adequate and Fair Compensation: Adequate and fair compensation means sufficient income and remuneration deemed appropriate and fair by workers.

2) Safe and Healthy Environment: Safe and healthy environment means employees work in places and environments with no negative effects on health and risks.

3) Development of Human Capacities: Development of human capacities means workers had the opportunity to develop work capacity.

4) Growth: Growth means the fact that workers have the opportunity to advance in occupations and positions with security.

5) Social Integration: Social integration means the fact that workers are accepted by colleagues, the fact that the workplace has a friendly atmosphere, acceptance and opportunity for interaction with others.

6) Constitutionalism: Constitutionalism means the organization has equality and fairness in administration, employees' rights and individuality were respected and supervisors listened to employees' opinions.

7) Total Life Space: Total life space means a condition where the person has balance in life when working and when free from work, whereby employees have time to relax from duties and responsibilities.

8) Social Relevance: Social relevance means agency activities carried out with no social responsibilities will reduce work and occupational value among workers.

Bruce and Blackburn (1992; cited in Sunet Namkotsri, 2010) shared views regarding the main components of quality of working life as follows:

1) Fair and sufficient compensation.

2) Safe working conditions with no health hazards.

3) Opportunity to develop capacity by performing meaningful work and seeking new work guidelines.

4) Progress and security including opportunities to develop knowledge, skills and capabilities in addition to feeling job security.

5) Social integration means the opportunity to interact between employees and executives.

6) The fact that employees work in conditions without anxiety and the fact that employees have equal opportunity to advance.

7) Free time means the ability to appropriately divide time between personal affairs and work affairs.

8) Social acceptance with pride for responsibilities and the employer.

According to all of the aforementioned components of quality of working life, quality of working life components can be concluded to be in the same direction of receiving fair compensation, good interactions with others and social acceptance, occupational progress and development of personal work capacity, safe physical and psychological work environments and balance between work life and private life.

2.3 Happy Workplace and the Happinometer

The National Economic and Social Development Plan, 11th Edition (2012 – 2016) in the Royal Thai Government Gazette on 14 December 2011 used concepts from the 8th – 10th National Economic and Social Development Plans by adhering to "the sufficiency economy policy" which places "people as the center of development" and "balances development" in every dimension with emphasis on strategies for human quality development to have better living conditions and quality of life. Thus, the Happy Workplace center under the Happy Workplace Support Bureau, Thai Health Promotion Foundation (THPH), has created guidelines for building happy workplaces by building eight basic happiness issues responding to human needs in many dimensions such as happy body, happy heart, happy relax, happy soul, happy money, happy brain, happy family and happy society as indicators of "overall happiness of work" in every organization to reflect the population's happiness and quality of life (Kokkorn Klaiyam and Atiwat Jiawiwatkun: 2011). Happy workplaces have the objective of presenting knowledge about happy organizations in three parts, namely, the definition of happy organizations in order to have understanding of the definition and importance of happy organization, happy working condition conceptual frameworks and guidelines for building happy organizations.

Chanwit Wasantanarat (2010) stated organizations that build happiness in working require every member to cooperate to build happy workplaces in order for the workplace to become a second home for workers.

Dive (2004) stated organizations capable of achieving obligations with ability to grow and develop organization personnel at the same time.

Lowe (2004) stated organizations with work environments that benefit employees' health and higher performance.

Smet, Loch and Schaninger (2007) stated organizations with good working capabilities and employees who share a purpose with the organization will emphasize modifying work processes and having operational guidelines in support of one another.

According to the aforementioned definitions, happy organizations can be summarized as organizations which are able to motivate and build physical and mental happiness among every member of the organization, build feelings as part of the organization and be ready to effectively and successfully carry out the organization's missions according to goals.

2.3.1 Happy Workplace Importance

Happy workplaces are the main concept for working with the primary target group of "organization workers" who are considered important and the core strength of the family, the organization, the community and society by promoting and developing policies to build knowledge and push for quality of working life networks because happy workers will have positive effects on the organization's performance and sustainable happiness in the family, community and society.

Thus, building happiness in working is a key factor in organization management with emphasis for every employee in an organization to have happiness at work. This happiness will result in increased creativity and efficiency in assignments, reduced stress from working and reduced conflict in the organization's environment. Happiness from working can be considered as water nourishing more positive adjustment and improvement trends in worker behaviors.

2.3.2 Healthy Workplace Framework (WHO)

The World Health Organization (Burton, 2010) set guidelines for promoting healthy workplaces to push for efficiency, production and competitive capacity of the organization. The organization will have to consider guidelines in four areas with the following details:

1. Physical environment means workplace conveniences such as structures, air, machinery, furniture, products, chemicals, materials and processes in workplaces with impact on physical and psychological safety including health and

livelihood of employees. Physical environment is a base for safety and happiness in occupations with influence on work, illness, injury and may cause disability or death.

2. Psychosocial environment means the organization, work, corporate culture, attitude, beliefs, values and practices affecting physical and psychological happiness of employees. Psychosocial environment may cause stress from causes such as inadequately clear policy and guidelines of practice in the organization including lack of support for healthy forms of living, etc.

3. Sources of happiness for individuals in the workplace mean environments that support healthcare services, news, resources and opportunities prepared by the company or organization for employees or support and motivation to modify or maintain methods for living happiness along with monitoring and supporting physical and psychological health.

4. Company community is the connection between the community and the company consisting of activities, skills, expertise and other resources, company employee engagements, physical and social community conditions affecting physical and psychological health, safety and happiness of employees and family.

For Thailand, Chanwit Wasantanarak (2010), Happy Private Workplace Manager, Thai Health Promotion Foundation, stated happy workplaces need to have several key components consisting of teamwork, happiness and creativity. Chanwit Wasantanarak presented eight concepts and principles for building happy workplaces consisting of the following:

1. Happy Body – Good physical and psychological health from knowing how to live, eat, sleep and be happy.

2. Happy Heart – Generosity is most important when humans will live with others. Workers have to think of others and be generous because we cannot be alone in this world. We need to know how to share appropriately.

3. Happy Relax – Relax and know how to relax in life to prevent being over pressured. If there is stress from work, there have to be methods for relaxing at work or even in private life. Workers need to know how to relax appropriately.

4. Happy Brain – Seek knowledge. Humans survive by studying to improve ourselves at all times from various sources in order to lead to professionalism and security or advancement at work. In short, study to learn and teach others in what you know.

5. Happy Soul – Morals are an important basic need for humans to live together in society by having shame and fear of only bad personal actions in working as a team. Good morals will lead to happy workplaces based on faith in religion and morals for living.

6. Happy Money – Knowing how to spend and manage personal incomes and expenses; knowing how to save and spend; knowing how to keep few debts and live appropriately because people in today's society cannot refuse being indebted but can manage expenses appropriately.

7. Happy Family – Giving importance to the family will cause the family to have warmth, security and good morale in working as immunity to help confront with the future or obstacles in life.

8. Happy Society – A good society has two dimensions consisting of a workplace society and a society outside the workplace. Every human has to have love, unity and generosity for the society in which they live in order to have a good society and environment.

Building workplace happiness is not the duty of a single person in the organization but the duty of every person in the organization to unite and create happiness in the workplace so the workplace becomes a second home for workers.

In building happy workplaces, work balance has to be created physically, psychologically, socially and intellectually to drive the organization to become a quality organization or an excellent organization in the future by depending on leadership to push for complete happiness in four areas consisting of the following:

1. Physical happiness consists of having occupations, occupational safety or safe work environments for lives and property, safety from toxins, equipment, tools and machinery, good physical health with occupational health for workers and families.

2. Psychological happiness consists of awareness, peacefulness, beauty and goodness from adherence to religious principles.

3. Social happiness consists of relationship building in the organization and between organizations by building cooperation networks, strong societies, helping one another, knowing how to spend, sufficiency and reason, building a fair society to have equality and build work opportunities, build motivation for success, build morale in the organization and peaceful societies with reconciliation and effective problem-solving.

4. Intellectual happiness consists of promotion for the personnel in knowing how to think, do and solve problems with freedom to receive confidence in working, exchange learning, create a society of learning to build new innovations and make decisions based on the capacity of duties and responsibilities.

Happy organization members who work based on expertise and receive improvement for proper knowledge and capabilities resulting in the obtaining of talent in the organization, which will certainly influence the organization's product to achieve specified goals.

2.3.3 Happinometer Measurement

2.3.3.1 Happiness Measurement/Evaluation

Many types of happiness measurement are currently available for use such as the Thai Happiness Index – 15 (THI – 15) created by the Department of Mental Health, Ministry of Public Health, the Oxford Happiness Inventory (OHI) of Argyle, Martin and Crossland (1989), the Happinometer of the Happy Workplace Center and the Institute for Population and Social Research, Mahidol University. The researcher is, therefore, interested in implementing the Happinometer to accompany data collection because the types of measurements of happiness among workers and questions are consistent with lifestyles of workers in industrial operating facilities and the service sector including Thai government agencies (Sirinan Kittisuksanit and colleagues, 2012). Thus, the researcher was interested to implement the Happinometer to accompany data collection in this study.

2.3.3.2 Definition of the Happinometer

The Happinometer or a happiness measuring meter is a handbook for measuring quality of life and happiness among workers in organizations from every sector and the general population. The Happinometer is easy, convenient

and cost-effective to use with quick results. The form concretely surveys happiness with a handbook to provide explanations in every place and time.

The Happinometer is a self-survey instrument for organization employees to indicate current status and possible improvements for employees in the organization which comes with a simple, interesting and attractive handbook for employees to complete survey forms personally. The Happy Workplace Center under the Happy Workplace Bureau, Thai Health Promotion Foundation (THPF), has played a role in developing knowledge, networks and public policies to create an effective workplace health promotion model for linking with the health of related personnel, family, society and the community in order to have better health with the main goal of systematically developing work instruments along with developing strategic cooperation networks to support work growth and expansion of organizations interested to participate in the project in the future.

The Happinometer was developed based on the “Quality of Working Life” measuring instrument created by the “Research Project on Quality of Working Life among Workers in Industrial and Service Sector Operating Facilities” of 2008 with support from the Happy Workplace Promotion Center, the Thai Health Promotion Foundation (THPH) and the “Project to Develop Salary Systems, Wages, Incentives and Quality of Life for Civil Servants: A Study to Develop Standard Criteria of Quality of Life Indicators for Civil Servants” of 2009, which was sponsored by OCSC. Both projects were performed by the Institute for Population and Social Research, Mahidol University.

Thus, the Happinometer is an interesting instrument that attracts organization workers and the general public to complete survey forms and learn the results immediately. Most importantly, organization managers can use the outcomes to manage organization health at every level with accuracy and satisfaction. Furthermore, the general public can utilize the findings to promote quality of working life and personal happiness.

The Happinometer is a model for effective health promotion in the organization capable of linking with health conditions of the personnel, family, society and related com munities to have better health in order to become a handbook and instrument for measuring quality of life and happiness of workers in various

organizations with concreteness and efficiency including the ability to utilize the findings to immediately promote quality of life and happiness (Sirinan Kittisuksan and colleagues.

The Happinometer organized dimensions to concur with the eight happiness issues based on the concepts of the Happy Workplace Support Bureau, Thai Health Promotion Foundation (THPF), consisting of eight dimensions, namely, happy body, happy relax, happy heart, happy soul, happy family, happy society, happy brain and happy money. The Happinometer added another dimension, which was happy work-life, a dimension with emphasis on measuring feelings and experiences of persons working with the organization (Sirinan Kittisuksatit and colleagues, 2012). However, because the researcher was interested in the eight work happiness in line with concepts of the Happy Workplace Organization of the Thai Health Promotion Foundation (THPH) (Chanwit Kittisuksatit and colleagues, 2011), the ninth dimension in this study, happy work-life, which had questions consistent with questions for the job satisfaction variable was excluded by the researcher without analyzing with other dimensions of happiness.

The eight happy dimensions of the happinometer will have a total of 41 indicators as follows (the researcher excluded the ninth dimension with 15 indicators):

1. Happy body means the fact that a person has good physical health, proportionate, good/appropriate consumption behavior and satisfaction in physical health conditions.

This dimension has six indicators consisting of BMI, obesity, exercise, smoking, alcohol consumption and satisfaction toward physical health.

2. Happy heart means the fact that a person has a public mind to participate in benefiting the general public while having kindness for the people surrounding that person.

This dimension has nine indicators consisting of feelings of generosity, support for surrounding people, teamwork, relationships as siblings and communication with colleagues in the organization, transfer and

exchanges of work, benefiting the general public and participation in activities with benefit for society.

3. Happy soul means the fact that the person is aware of morals, sportsmanship and gratitude.

This dimension has five indicators consisting of support for art, culture, religion, giving alms and performing religious activities, forgiving, acceptance, apology and repaying benefactors.

4. Happy relax means the fact that a person is able to manage time in each day to rest with quality, be satisfied with managing personal problems and living easily in comfort.

This dimension has five indicators consisting of sufficiency in relaxing, relaxation activities, stress, living according to expectations and management of problems in life.

5. Happy brain means the fact that a person is aware and enthusiastic in learning new knowledge to adapt and be ready for change at all times.

This dimension has three indicators consisting of seeking new knowledge, self-improvement and opportunities for self-improvement.

6. Happy money means the fact that a person has spending discipline with ability and satisfaction in managing income, expense and savings systems for each month.

This dimension has four indicators consisting of debt payments, debt clearing, savings and remuneration sufficiency.

7. Happy family means the fact that a person has employee engagement, reliability, confidence and warmth among family members.

This dimension has three indicators consisting of time spent with family members, activities performed with family members and happiness with family.

8. Happy society means the fact that a person has a good relationship with neighbors without causing trouble for others, taking advantage of others and deteriorating society.

This dimension has six indicators consisting of relationship with neighbors, compliance with social rules, safety in life and property, support requested from community members, peaceful society and the fact that a person can live happily in society.

2.3.4 The Happinometer was tested for accuracy and reliability (Sirinan Kittisuksatit and colleagues, 2012) based on the following:

1. The instrument was studied for content validity by reviewing related literature and meeting with experts in the fields of quality of life, happiness and mental health on nine occasions in order to consider the validity of the contents requiring assessment.

2. The instrument was studied for validity based on structure by performing factor analysis (except for questions which qualified experts deemed necessary without considering factor loading).

3. Instrument reliability was studied with Cronbach's Alpha Coefficient categorized based on main components.

In conclusion, this study will use the Happinometer as a measure of quality of working life among nurse practitioners at the intensive care unit.

2.4 Concepts and Theories Related to Job Satisfaction

Another important factor influencing quality of working life is job satisfaction. According to Diener (1984), happiness was defined as satisfaction in life and an assessment of overall quality of life of the person based on the criteria of that person. Satisfaction in life includes jobs as a component. The researcher studied concepts and theories related to job satisfaction as follows:

2.4.1 Definition of Job Satisfaction

Mathis and Jackson (1994; cited in Siriwan Kongchamnanlikit, 2007) defined job satisfaction as a positive emotional outcome assessed based on work experience influenced by internal and external environments.

Vecchio (2006) stated that job satisfaction meant the person's ideas or feelings toward a job as a result of work experience, communication with others and the person's work expectations.

Spector (2006) stated job satisfaction meant an attitudinal variable reflecting the person's feelings regarding the overall view of all work and various angles or areas of the job by studying how people feel about working.

Sirintorn Sae-Chua (2010) stated academics, researchers and practitioners in the past have not clearly specified definitions between "Job Satisfaction" and "Operationalizing Happiness". Write and Cropanzano (2007; cited in SirintornSae-Chua, 2010) collected past findings related to similarities and differences between "Operationalizing Happiness" and "Job Satisfaction". Many academics have stated that operationalizing happiness and job satisfaction are different, meaning job satisfaction is specific satisfaction within the scope of work evaluated based on feelings and perception via work experience using preference or non-preference with narrow definitions and no inclusion of other areas in life other than work. In the meantime, studies of operationalizing happiness emphasize parts related to employees such as employees' families, friends and colleagues even at the societal level. These studies have wide-ranging scopes in levels of living for the entire life with coverage of job satisfaction such as the Hawthorne Studies which obtained more outcomes than job satisfaction in the areas of emotions, feelings, attitude, sentiments and tones leading to hedonism. In the past, operationalizing happiness and job satisfaction were related to performance. Therefore, researchers have defined satisfaction and happiness as closely connected words since in the past. The word "Happiness" has meanings in terms of emotional experiences, good feelings when the person experienced positive emotions and has low negative emotions (Write and Cropanzano, 2007; cited in Sirintorn Sae-Chua, 2010).

According to the definitions of job satisfaction, job satisfaction can be summarized to mean the overall positive feelings of a person toward the job and work environments. Job satisfaction will cause the person to feel enthusiastic and determined to work in addition to having morale and encouragement which will contribute to successful operations according to goals.

2.4.2 Job Satisfaction Components

Vroom (1964) summarized job satisfaction in six components consisting of the following:

1) Supervision – Satisfaction in supervisors was found to be a more important component in creating job satisfaction than job security, job characteristics, work environment, promotion and income.

2) Work Group – The work group is a factor causing job satisfaction as evident based on the study of George Garith and Jones (2005; cited in Jedsupa Lalitananpong, 2008) who studied and found the work group to be a factor causing high satisfaction because the work group usually works together with similar job characteristics and most of the work group has similar experiences such as education backgrounds.

3) Job Content – Interesting, challenging and variety of responsibilities in job content will help the person have job satisfaction in line with the study of Locke (1996; cited in Jedsupa Lalitananpong, 2008) who conducted a study finding job characteristics to be the number-one component causing interest and desire to learn new knowledge. Furthermore, task difficulty and appropriate workloads for each person will create job satisfaction. This concurred with the study of Robbins (1993; cited in Jedsupa Lalitananpong, 2008) who found the person to have job satisfaction when working at jobs with opportunities to use skills and capabilities with variety in working and feedback on performance. Unchallenging jobs cause boredom while excessively challenging jobs easily create feelings of being at risk for failure. Under the aforementioned conditions, jobs with appropriate challenges will create happiness and job satisfaction.

4) Salary or Wages – Salary or wages are important to job satisfaction and the potential of employees staying with the job and the organization. When importance of job satisfaction was ranked, salary or wages were found to be less important than security and safety, opportunity to advance, policies and management. However, salary or wages were more important than job characteristics, supervision, communication and various job and welfare conditions.

5) Promotional Opportunity – Promotional Opportunity is a factor that causes satisfaction in line with the study of Robbins (1993; cited in Jedsupa

Lalitananpong, 2008) who studied and found promotional opportunity and promotions to help the person have more growth, responsibilities and increased social status. Thus, persons with promotional opportunity had more job satisfaction.

6) Hours of Work – The work of each person is related to how the person spends free time and not only related to how the person spends time in general. The job of each person influences society and family, thereby influencing job satisfaction in each person.

Robin (2001) analyzed job satisfaction components in six areas consisting of the following:

1) Challenge – Challenge means tasks enabling the person to use a variety of skills, capabilities and independence in working with feedback data on how the work performed by the person was assessed.

2) Equitable Rewards – Equitable rewards means fair and no unclear policies for paying wages and in work progress.

3) Supportive Working Condition – Supportive working conditions include work environments facilitating personal and work convenience.

4) Supportive Colleagues.

5) Personality-Job Fit – Personality-job fit means persons with work capabilities and talents fitting the job will be able to achieve success at work and have potential for job satisfaction.

6) Personal Characteristics – An example of personal characteristics is race. Normally, white employees will have more job satisfaction than colored employees, etc. Job satisfaction demonstrated itself to be important to the organization and if there is no satisfaction among organization personnel, this will become an obstacle for effective work and success according to the organization's goals while also leading to various problems such as stress, conflict with colleagues, conflict at work and families, absences from work or resignation in the future.

2.4.3 Theories Related to Job Satisfaction

Pichit Pitaktepsombat and colleagues (2011) stated the Job Satisfaction Theory was developed by Kornhauser & Sharp (1962). Since 1932, studies related to

satisfaction have grown more extensive with the following examples of theories related to job satisfaction in which the researcher is interested:

1. The Hierarchy of Needs

Maslow (1954, 1970; cited in Aadmodt, 2007) believed five main principles of needs and satisfaction need to be received before a person will move to the next step. Maslow's needs had five steps as follows: biological needs, safety needs, social needs, ego needs and self-actualization needs. Aadmodt related Maslow's needs to various examples related to work in the organization and led to satisfaction in each step as follows:

1) Biological Needs – Biological needs are needs such as food, air, water and living space.

2) Safety Needs – When biological needs are met, the person will seek personal safety needs. Safety needs cover psychological and physical needs.

3) Social Needs – When the first two needs have been met, the person will have motivation to work and, at that time, the person will have social needs related to working with others, development of relationships with others and feel as part of the organization. The organization will make efforts to satisfy employees' social needs in multiple ways. For example, company cafeterias have facility preparations and social opportunities for employees, company parties that will help employees' families get to know one another and sports programs such as bowling and softball provide opportunities for employees to play together in a neutral environment. This is very important for the organization to satisfy social needs. If job characteristics do not support social activities such as janitors or late-night guards who have few opportunities to meet people at work, employees will have very little opportunity to meet new friends.

4) Ego Needs – When social needs are met, the person will proceed to the next step, which is ego needs or the need for acceptance and success. The organization can help satisfy this need by praising, rewarding, supporting, increasing wages, reputations and many other options.

5) When the person has friends, rewards and high salaries, the person may not have perfect motivation for work any longer because self-actualization needs were not met. This need is the fifth and last need in Maslow's Needs Hierarchy.

Therefore, people who work at the same machine for twenty years may have dissatisfaction and low work motivation before seeking new challenges. If unable to seek new challenges, the person will become dissatisfied and unmotivated. However, in some jobs, self-actualization needs can be easily met. Therefore, variety in job characteristics and new problems will create challenges and lead to higher motivation.

2. Two-Factor Theory

Herzberg's (1959) Two-Factor Theory proposed that a person has two needs consisting of motivating factors and hygiene factors with the following details:

1) Motivating factors or intrinsic factors mean factors causing a person to be satisfied and have motivation to work in the organization are factors causing job satisfaction, which increases work efficiency. When organized in Maslow's Hierarchy of Needs, these motivating factors will be the fourth or fifth needs or ego needs and self-actualization needs. Factors in this area consist of promotional opportunity, work success, praise, assignments to higher responsibilities and promotions.

2) Hygiene factors or health factors prevent the person from feeling job dissatisfaction as benefits received by the person from the organization. Hygiene factors will be related to work environment such as organization policy, supervision characteristics, co-worker relationships, work conditions, salary or wages. These factors are physical factors, security needs and employee engagement needs, which are social needs in the first, second and third ranks based on Maslow's Hierarchy of Needs.

3. ERG Theory

Alderfer (1969; cited in Surapong Jarernpan, 1994) presented the ERG theory by categorizing human needs into three levels from low to high needs as follows:

1) Existence needs are human needs to exist and are related to physical and security needs. This need is a basic need.

2) Related needs are the need for relationships with other persons consisting of social relationships and social environments surrounding the person.

3) Growth needs are a person's internal needs for self-development. The person has a need for progress, success and development to fully utilize personal capabilities by seeking to further opportunities and new experiences. The person can be successful in challenging opportunities.

Table 2.1 Comparison of Theories Related to Job Satisfaction

	Herzberg's (1959) Two-Factor Theory	**Maslow's (1954, 1970) Hierarchy of Needs**	**Alderfer's (1969) ERG Theory**
Needs	Motivating Factors	Self-Actualization Needs	Growth Needs
		Ego Needs	
	Hygiene Factors	Social Needs	Related Needs
		Safety Needs	Existence Needs
		Physical Needs	

Source: Wanwisa Sangprachum (2004)

Table 2.1 compared various theories related to job satisfaction theories. In this study, the researcher implemented Herzberg to specify factors influencing happiness in working because the theory was accepted in the area of management in the organization with coverage of variables related to happiness in working.

2.4.4 Job Satisfaction Effects

Spector (2006) demonstrated significant effects of job satisfaction on employees in the organization as follows:

1) Job Performance – Job satisfaction was related to performance. According to the study of Judge, Thoresen, Bono and Patton (2001) who conducted a meta-analysis of 312 studies, a moderate correlation was encountered between performance and overall job satisfaction.

2) Absence – Absence was caused by multiple factors. Job dissatisfaction was once of the causes of absence. According to the study of Hackett

and Guion (1985), absence was found to have the greatest correlation with natural job satisfaction.

4) Physical Health and Psychological Well – Being – According to the study, job satisfaction was found to be related to health variables. For example, a study found dissatisfied employees to record themselves with physical symptoms such as problems in sleeping more than employees who were satisfied (Begley & Czajka, 1993).

5) Life Satisfaction – Life satisfaction was considered an indicator of overall happiness or emotional happiness.

Work was considered to be a primary component in the lives of employed persons. Thus, job satisfaction and life satisfaction were correlated.

According to the aforementioned job satisfaction effects, if a person has no job satisfaction, the person may affect the organization's existence (Spector, 2006) such as ineffective work, absences and resignation. If the organization found employees to be satisfied in any area or have dissatisfaction in any area, the organization will use this data to improve areas in which employees were dissatisfied with in order to create job satisfaction and prevent effects from the aforementioned job dissatisfaction such as absence, resignation and promotion of good effects from employees' job satisfaction.

2.5 Concepts and Definitions of Employee engagement to the Organization

2.5.1 Definition of Employee engagement to the Organization

Pimchanok Pengnaren (2004) stated of employee engagement to the organization as the feelings and behavior of a person toward an organization by feeling in agreement with goals and values of the organization in the same direction along with using capabilities and completely exerting efforts to help the organization achieve success and desire to work for the organization without ideas or desire to resign.

Buchanan (1974; cited in Pichit Pitaktepsombat and colleagues, 2011) defined employee engagement to the organization as a partisan feeling and employee engagement to the organization's goals, values and working according to personal roles to achieve the organization's goals and values.

Kanter (1968; cited in Pichit Pitaksombat and colleagues, 2011) defined employee engagement to an organization as a person's willingness to dedicate physical energy to loyally working for the organization; differences in the area of employee engagement resulted from different behavioral needs among employees which were specified by the organization. The characteristics of the correlations were specified in three types as follows:

1. Continuance employee engagement regarding the person's knowledge and understanding with consideration given to expenses and profits. For example, when related persons were encountered, expenses in leaving the system were found to be higher than expenses to remain in the system, which will cause the person to stay in the system for profit. Thus, continuance employee engagement may be said to be employee engagement to social roles in the system.

2. Cohesion employee engagement is related to the beginning of the person's positive emotional feelings, which will bind members with the community where satisfaction will occur from involvement by every member of the group. If the group has high cohesion, the group will not resist or be jealous of one another. This system will continue to exist if members maintain cohesion with one another.

3. Control employee engagement is employee engagement where the person adheres to the group's standards and respect group authority related to the fact that the group began assessing positive values, the need for actions by the system and being assessed as right such as morals, ethics, logic and personal values. Therefore, obedience to the aforementioned needs is necessary for social standards and punishments in the system need to consider suitability.

Steers (1988) stated the employee engagement to an organization meant actions demonstrating strong relationships of persons who feel employee engagement and cohesion with the organization.

According to the aforementioned definitions, employee engagement to the organization can be summarized as the fact that a person has feelings of acceptance of the organization's goals, good attitude, partisan feelings with the organization, loyalty with no thought of resigning from the organization and willingness to dedicate physical and mental energy to work or perform actions to benefit the organization.

2.5.2 Importance of Employee engagement to the Organization

Buchanan (1974; cited in Pichit Pitaktepsombat and colleagues, 2011) had the opinion that employee engagement to the organization was a highly important attitude for the organization for the following reasons:

1) Employee engagement to the organization can predict job entry/exit rates among organization members. This concept had more coverage than job satisfaction with the ability to reflect general results whereby the person can respond to the overall organization while job satisfaction reflects the person's response to the job or part of the job.

2) Employee engagement to the organization pushes for organization workers to work better than persons without employee engagement to the organization due to the fact that members feel ownership in the organization and contribute to building the organization's efficiency.

3) Employee engagement to the organization connects between organization member goals and the organization's goal or help for the organization to achieve goals.

4) Employee engagement to the organization helps reduce external control as a result of employees' love and employee engagement to the organization.

5) Employee engagement to the organization indicates organization efficiency.

Steers (1977) stated attitude and behavior influenced employee engagement to the organization with significance as follows:

1) Persons truly employee engagement to the organization will have greater participation in the organization's work and lower absence rates than persons with low employee engagement to the organization.

2) Employees engagement to the organization will want to stay with the organization. Steers raised the study of Porter and colleagues (Porter & other, 1974) as evidence and found employee engagement to the organization to be a representative in predicting resignations.

3) The fact that persons who are highly employee engagement to the organization feel as one with the organization and belief in the organization will help the person participate in work more from the feeling that the person is an important cog driving the organization to achieve goals.

4) Based on the definitions of employee engagement to the organization, persons who are highly employee engagement to the organization can be expected to have the determination to exert efforts for the organization, which will be converted into good quality results.

Kast and Rosenzweig (1985; cited in Atiwat Jiawitatkun, 2010) placed importance on employee engagement to the organization and stated the person's motivation and efforts to be a variable influencing increased productivity. If a person has high employee engagement to an organization and recognizes the importance of the organization's goals, the organization can be believed to have high performance. Thus, managers who want to make improvements or increase productivity by using human resources will need to know how to build at atmosphere of cooperation and personal employee engagement to the organization.

According to the aforementioned definitions of employee engagement to the organization, explanations regarding the importance of employee engagement to the organization were found to be in the same direction consisting of the following:

1) Employee engagement to the organization can predict job entry/exit rates among organization members.

2) Persons who have high employee engagement to the organization will dedicate to work for the organization or have high performance.

3) High personal employee engagement to the organization will help reduce absence rates.

4) The fact that the person has high employee engagement to the organization will help the person feel as part of the organization with more participation in work.

2.5.3 Employee engagement to the Organization Components

Buchanun (1974) stated employee engagement to the organization components consisted of the following:

1) Identification – Willingness to work, acceptance of the organization's values and objectives and feeling a sense of belonging to the organization.

2) Involvement – Willingness to work or fully participate in the organization's activities based on personal roles.

3) Loyalty – Loyalty, employee engagement to the organization and desire to remain with the organization.

Porter and colleagues (1974) stated employee engagement to the organization components consisted of the following:

1) Acceptance of the organization's goals and values means the fact that a person has positive attitudes toward the organization with a feeling of ownership and belonging to the organization in addition to having values in the same direction as other persons in the organization.

2) Dedicate physical and mental energy to work means the fact that a person is willing to work at full capacity for the organization to achieve success.

3) Desire to maintain membership in the organization means the fact that a person is loyal and proud to be a part of the organization with no desire to resign and leave for other jobs with the same characteristics and higher remuneration.

Steers and Porter (1979; cited in Jarern Wongprachanukun, 2005) summarized employee engagement to the organization in two concepts consisting of the following:

1) Attitude employee engagement : is the fact that the person feels as part of the organization with employee engagement as a member of the organization with opinions in the same directions as the organization, the same values and goals as the organization along with the willingness to dedicate to work for the organization's success.

2) Behavioral employee engagement : is employee engagement to the organization in the area of behavioral expressions stemming from various

factors a person receives from the organization such as respect as a person with seniority and high remuneration, resulting in employee engagement to the organization without desire to lose benefits from the organization. Both areas of employee engagement to the organization were found to have received interest to study than other areas.

Allen and Meyer (1990) stated employee engagement to the organization was composed of the following three characteristics:

1) Affective employee engagement means employee engagement from employees' feelings as members of the organization, unity with the organization and willingness to be dedicated to the organization.

2) Continuance employee engagement means employee engagement based on the organization's basic remuneration in exchange for each employee to remain with the organization, which is a calculation of employees' costs in leaving the organization and existing opinions and compensation received by employees from the organization.

3) Normative employee engagement means employee engagement from the employees' conscientiousness from being a member of the organization. Employees feel that employees require employee engagement and loyalty to the organization in return for what employees received from the organization when employees have become members of the organization.

Allen and Meyer (1990) stated that, in addition to all three components of employee engagement to the organization linking employees to the organization and reducing resignation rates similar to employee engagement to the organization in other definitions, forms of linking were different in that employees with high affective employee engagement will remain with the organization because employees want to remain with the organization while employees with high continuance employee engagement will remain with the organization because employees need to remain with significant consideration if employees have to resign and employees with high normative employee engagement will remain with the organization because employees feel they ought to remain with the organization and hold the opinion that what employees receive from the organization result in a feeling that employees should stay to repay what employees have received.

Table 2.2 Table Comparing Employee engagement to the Organization Components

Buchanun (1974)	**Porter and Colleagues (1974)**
1. Identification 2. Involvement 3. Loyalty	1. Acceptance of the Organization's Goals and Values 2. Willingness to Work for the Organization's Benefit 3. Strong Need to Maintain Membership in the Organization
Steers and Porter (1979; Cited in Jarern Wongprachanukun, 2005)	**Allen andMeyer (1990)**
1. Attitude Employee engagement 2. Behavioral Employee engagement	1. Affective Employee engagement 2. Continuance Employee engagement 3. Normative Employee engagement

Based on all of the aforementioned concepts of Employee engagement to the organization components, the researcher is interested in implementing the concept of Porter and colleagues (1974) and Steers and Porter (1979) as study guidelines because employee engagement to the organization components covered attitude and behaviors.

2.6 Intensive Care Unit Contexts and Nurses' Roles, Duties and Responsibilities in the Intensive Care Unit

2.6.1 Characteristics of Critical Patients

Critical patients are patients with emergency illnesses, acute illnesses, problems, complications and life-threatening conditions, risks or critical and life-threatening physical problems in sudden and unexpected incidents or with potential causes from worsening and life-threatening chronic diseases causing patients to require immediately support. Critical patients need care, close and continual

monitoring and follow-up of abnormal symptoms in order to live and prevent potential complications. Critical patients need care and treatment with high-technology, specialized and complex medical instruments and equipment (Sujitra Lim-amnuaysan, 2008).

2.6.2 Intensive Care Units

Intensive care units mean patient wards providing care for critical patients with multiple complications. Critical patients require continuous care with sensitive vital sign monitors at all times with high-technology and specialized medications, respirators, pacemakers and other medical equipment. Nurses providing care for critical patients require knowledge, expertise and specialized skills and capabilities to care for critical patients with ability to observe patients' symptom changes along with the ability to monitor and interpret basic laboratory test results.

2.6.3 Roles, Scopes, Duties and Responsibilities of Nurse Practitioners in the Intensive Care Unit

Nursing care for critical patients is care for patients with life-threatening problems by emphasizing treatment to enable patients survive and adapt to normal conditions. Therefore, intensive care unit nurses need to monitor, care and assist patients to be safe and coordinate with other healthcare team personnel. Care for critical patients is a service provided by nurses for all types of critical patients admitted to the hospital in the intensive care unit, which includes the neonatal intensive care unit, the pediatric intensive care unit, the internal medicine, surgical or specialized intensive care units such as heart disease patient wards, etc. Care for critical patients is dependent on the management of each hospital. Professional nurses who provide care need to use knowledge and capabilities to care for critical/emergency patients. Professional nurses receive special skills training to use special equipment to care for critical/emergency patients to have safety from life-threatening complications and preventable complications. Intensive care unit nurses require training in clinical situations with the ability to use high technology and medical equipment related to care in addition to monitoring and assessing patients, especially in assessments related to circulation and the respiratory system in order to

quickly, accurately and safely lead to comprehensive care planning while also promoting, preventing and rehabilitating patients by adhering to patient-centered multi-disciplinary work principles.

Critical and emergency conditions also have psychosocial conditions, psychological and spiritual development processes in addition to being conditions with physical changes. Thus, care for critical and emergency patients is complicated and requires individual care where nurses must be able to assess and determine if patients are in a life-threatening condition on the basis of necessary anatomical and physio-pathologicical knowledge. Nurses should have accurate knowledge and understanding of nursing science, nursing theories and nursing conceptual framework by using the nursing process to solve patients' problems. This is not limited to only patients. Nurses also have to care for patients' families and relatives who had anxiety, restlessness, lack of understanding and many questions during critical and emergency conditions. Because healthcare technology is developed at all times, nurses need to understand healthcare technology implementation and humanity of individuals to provide the most effective care (Michael Reij, 2005).

Nurse practitioners in the intensive care unit are persons who graduated with a bachelor's degree in nursing and a license as a practitioner of the nursing and midwifery profession to provide healthcare services for service users according to the scope of work, which includes basic health problem-solving and the solving of complex problems in providing special nursing care by receiving training in courses on the care of critical patients with roles, duties and responsibilities divided into three areas as follows:

1. In providing nursing care, nurses need to use basic knowledge to provide care directly for patients and families in the intensive care unit by using the nursing process to plan comprehensive care, using nursing care standards to control service quality and cooperating with associated healthcare teams to care for patients and families.

2. In management, nurses participate in managing care in patient wards or agencies to develop and maintain service provision quality.

3. In the professional aspect, nurses participate in academic development for nursing personnel to provide education for service users along with participating in research and implementing the findings to improve care quality.

2.7 Related Studies

2.7.1 Factors Related to Quality of Working Life among Nurses

Chatsuda Pattamasukon (1998) studied the quality of working life among 240 nurses in hospitals under the jurisdiction of the 3rd Army Area and found quality of working life among nurses to be at a moderate level. When quality of working life was considered separately, nurses were found to have moderate quality of working life in every area with the area of adequate and fair wages having the lowest mean score (M = 2.53).

Niyada Puijarern (2002) studied the correlations between personal factors, employee engagement to the organization and quality of working life among nurse practitioners under the jurisdiction of the Ministry of University Affairs. The sample group was composed of 373 nurse practitioners working in hospitals under the jurisdiction of the Ministry of University Affairs. Data were collected using questionnaires, employee engagement to the organization and quality of working life among nurse practitioners. Based on the findings, nurse practitioners were found to be at a moderate level, employee engagement to the organization was found to be high, income and work experience were not related to quality of working life among nurse practitioners while employee engagement to the organization was found to be positively correlated with quality of working life among nurse practitioners at a moderate level.

Kanitta Traipak (2005) studied the correlations between personal factors, employee engagement to the organization, personnel participation in work and quality of working life of nurse practitioners in hospitals under the Bangkok Medical Service Department. The samples were composed of 403 nurses and data were collected using questionnaires. According to the findings, quality of working life and personnel participation in work of nurses were high and employee engagement to the

organization of nurses was moderate. In the meantime, personal factors such as level of education and work experience were not related to quality of working life among nurses.

2.7.2 Factors Related to Happiness in Working

2.7.2.1 Age: Age is a personal characteristic studied for relationships with happiness in working. For example, Panida Kacha (2008) explained age to be positively correlated with happiness in working among nurses (r = .232) with statistical significance at 0.01. Similarly, Arunee Unhawarakorn (2006) and Chawinan Puetsaka (2001) found age to be correlated with physical, psychological, emotional, intellectual and social development while also contributing to happiness in working. According to Jongjit Lertwiboonmongkon (2003), age was positively correlated with happiness in working among nurses at government university hospitals (r = .178) with statistical significance at 0.05. This was the same for the study of Nantaporn Busarakamwadee and Yuwaman Sripanyawutisak (2008) who studied the factors influencing happiness in working among nurses at Nakhon Nayok Hospital (r = .191) with statistical significance at 0.05 and found age to be correlated with happiness in working.

2.7.2.2 Marital Status: According to Lucas et al. (2003) who studied the concepts related to types of happiness from changes in marital status, changes in marital status were found to be related to changes in satisfaction in later life and married persons were found to be happier than unmarried persons. In addition, changes in marital status influenced job satisfaction. This concurred with Kesinee Kaoyangyuen (2003) who studied certain biosocial and psychological characteristic factors related to nursing practice and job satisfaction among nurse practitioners working in the intensive care unit of a center hospital and found married nurse practitioners to have higher job satisfaction than single nurse practitioners because married nurses receive support from spouses who helped nurses to vent frustrations from work and helped one another to make problem-solving decisions. In addition, marital status was found to be correlated with quality of working life. According to Jongjit Lertwiboonmongkon (2003), marital status was related to happiness in working of nurses with statistical significance at 0.05. Moreover, Kim and McKenry (2002)

found married persons to have greater happiness than other groups. Furthermore, according to Napatchon Rodtiang (2007), marital status was found to be correlated with happiness in working. Married personnel under the jurisdiction of health centers in the northeastern region, Department of Health, Ministry of Public Health, were found to have more happiness. This finding contradicted the studies of Chutimon Fapinyo (2009), Jantakrit Krittam (2010) and Sukanya Intadode (2007) who studied relationships between organizational citizenship behaviors, need to participate in the organization and happiness in working.

2.7.2.3 Salary, Income and Wages: Adequate income enables individuals to respond to basic needs in life such as food, accommodations, safety, recreation and social status. High salaries and good income will also help to reduce stress perception and increase happiness (Jobs & Gerson, 2001). Most people believe more money means more happiness and the rich are happier than the poor because people believe money can buy happiness. Although it is not true happiness, money can be used to buy homes and vehicles to build status among friends or acquaintances (Niwet Hemwachirawarakorn, 2007). With less income, happiness will become less, especially among people with poor and unequal status. Income is a factor that determines happiness in society because humans have happiness or unhappiness from comparison with others (Layard, 2002). This concurs with the study of Traitip Leucha (2009) who found happiness in working to be correlated with income and wages when studying among the staff working at the Kamphaeng Phet Provincial Social Development and Human Security Office. This was similar to Hamilton (2006) who found nurses' income to be an important factor for job satisfaction. Furthermore, Jarupan Kaewluan (2001), Narumon Rerngosot (2004) and the Community Happiness Research Center (2008) found income to be correlated with job satisfaction with statistical significance at 0.05. In addition, Kesinee Kaoyangyuen (2003) found nurse practitioners with high economic status to have higher job satisfaction than nurse practitioners with low economic status with statistical significance at 0.05.

2.7.2.4 Work Experience: Work experience is a personal factor causing job satisfaction and enabling happy work. Persons who work for a long time have opportunities to be promoted to higher positions, thereby increasing pride in working. Nurses who work for a long time have been found to have skills and

expertise in clinical practice, resulting in more learning and experience including good ability to understand problems. Thus, nurses gain confidence in making job decisions (Orawan Likitpornsawan and colleagues, 2010). When accompanied by additional training, especially in specific work training to increase work experience (Booyen, 1993), work experience enabled individuals to assess separate situations to determine which factors help to improve work, which helped to reduce stress (PattaraPuakpan, 2002). This demonstrated work experience to be related to job satisfaction among persons who worked for a long time and accumulated work knowledge and expertise (Preeyaporn Wonganutararot, 2004). When working for a long time, individuals learn more and have more expertise (Sano Tiyao, 2001). This concurs with the study of Rungnapa Poonnart (1999) who explained that work duration was related to job satisfaction ($r = .150$) with statistical significance at 0.05. Similarly, Jiraporn Praetuan (2000) found the work experience of different nurses to result in different degrees of job satisfaction. Job satisfaction is a dimension of happiness in working. Persons who studied personal characteristics in the area of work life and work experience associated with happiness in working included Napatchon Rodtiang (2007) who found work life to be positively correlated with happiness in working. This concurs with Jantakrit Krittam (2010) who found employees with a work life of eleven years and up to have more happiness in working than employees with a work life of ten years or less. The findings also concurred with Chutimon Fapinyo (2009) who found personnel with a work life of more than five years and personnel with a work life of less than one year to have higher mean happiness in working than the personnel with a work life of 1 – 3 years and personnel with a work life of 3 – 5 years. The findings of Chutimon Fapinyo (2009) conflicted with Napat Jittirapap (2011) who found workers with different work life to have no different happiness in working. Because hospital working conditions require coordination with various agencies with people of different ages, workers had different work lives and work requiring coordination with different agencies created good relationships and friendships with co-workers. Hence, different work life did not cause employees to have different happiness (Napat Jittirapap, 2011).

2.7.3 Factors Related to Job Satisfaction

Kanyaporn Srisook (1999) studied “Motivational Factors for Employees at the Operational Level in Northern Industrial Estates” and found most of the employees to have job satisfaction in every motivational factor by placing high importance on working conditions, supervision, relationships with colleagues, company policies and management, relationships with supervisors, private life, wages, job security, relationships with others, work positions, work success, opportunity for occupational progress, career progress, responsibilities in duties and work, job characteristics and acceptance from others. Most of the employees were found to be satisfied with almost every motivational factors which maintained overall psychological health at high levels such as relationships with colleagues, job security, work positions, relationships with supervisors, relationships with others, private life, supervision, working conditions, company policies and management except for wages in which most employees had low satisfaction. Furthermore, employees had high satisfaction toward nearly every motivational factor which stimulated work such as job characteristics, opportunity for occupational progress, work success, responsibilities in duties and work and acceptance from others, except for career progress for which employees had low satisfaction.

Mantana Senatam (2002) studied “Job Satisfaction of Krung Thai Bank Public Co., Ltd. Employees in Lampang” and found employees to have medium mean overall job satisfaction. In detail, employees were found to have high satisfaction in the areas of work achievements and respect while having moderate satisfaction in job characteristics and progress. In the area of employees’ job satisfaction toward supporting factors, employees were found to have moderate mean values. Employees were found to have high satisfaction in the area of relationships with supervisors, relationships with colleagues, positions in agencies, personal living conditions and job security. Employees were found to have moderate satisfaction in factors such as salaries and welfare, opportunity for advancement in the future, relationship with subordinates, policies and management, working conditions and supervision methods used by supervisors.

2.7.4 Factors Related to Employee engagement to the Organization

2.7.4.1 Workplace Relationships: According to studies of employee engagement to the organization related to happiness in working, workplace relationships or social relationships in a workplace were found to be an important factor in creating happiness in working among organization personnel. When both parties share mutual concern, good feelings occur in working together (Supanee Saritwanit, 2006). This finding concurred with Diener and Seligman (2004) who stated that workplace relationships were an important component of good living conditions and happiness in working, which will lead to good workplace relationships. Humans require support from the people around them, creative relationships and feelings of being a part of society. Workplace relationships are an external factor influencing job satisfaction based on Herzberg's concept (1968), which concurs with the findings of Napatchon Rodtiang (2007) who found workplace relationships to be related to happiness in working with ability to predict happiness in working among personnel under the jurisdiction of health centers in the northeastern region, Department of Health, Ministry of Public Health. Furthermore, Somyot Nawikarn (2001) stated organizations where the personnel have good relationships with one another and operate smoothly will succeed in line with goals while good and effective communication will help the personnel understand one another with cooperation in working and joint goal outlining, which allowed every member of the organization to share responsibility resulting in the personnel being committed to work and producing good work quality (BoonjaiSrisatitnarakoon, 2008). Organizations need to build interpersonal relationships by supporting or showing interest (NapatJittirapap, 2011). Individual areas of happiness in working such as generosity, good society, relaxation, learning, peacefulness and freedom from debt were found to be positively correlated with employee engagement to the organization. Organizations need to build interpersonal relationships by supporting or showing personal interest in addition to allowing the personnel to become involved in expressing opinions or making decisions because decisions influence job satisfaction and work conditions (Tongchai Somboon, 2006). This finding concurs with Traitip Luecha (2009) who found happiness in working of the staff working at the Kamphaeng Phet Provincial Social Development and Human Security Office to be correlated with relationships within the agency. This

was similar for Benjawan Siho (1999) who found interpersonal relationships to be positively correlated with the job satisfaction of nurses while also being in agreement with Pattamaporn Sapchaipong (2002) who found nurse practitioners' work environments in the dimension of relationships to be positively correlated with nurse practitioners' job satisfaction (r = .732) with statistical significance at 0.05. The findings were the same as those of Mantanee Chaichuwong (2001) who found organization atmosphere in the dimension of interpersonal proximity to be positively correlated with job satisfaction (r = .407) with statistical significance at 0.01. In the meantime, Jiraporn Praetuan (2000) found relationships between colleagues of different nurses to result in different job satisfaction with statistical significance at 0.05. Moreover, Verplanken (2004) found interpersonal relationships to be able to predict job satisfaction direction of nurses in the part of relationships with supervisors while Hamilton (2006) found different interactions between patient ward heads and nurses to have different influence on nurses' work. In addition, Nittaya Sangawong and Ariwan Uamtanee (2003) found exchanges between the heads of patient wards and nurses in hospitals under the Ministry of Defense to be positively correlated with job satisfaction (r = .678) with statistical significance at 0.01). This was similar to Sirintorn Sae-Chua (2010) who conducted a qualitative study and found good relationships with supervisors to be correlated with happiness in working and Pattaya Wanasook (2009) who studied factors influencing happiness in working among police officers at the Provincial Police Headquarters Region 5, Chiangmai, and found the factor of workplace relationships to be correlated with happiness.

2.7.4.2 Career Progress: In career progress, opportunity to take leave to continue education or opportunities to progress in job positions indicates job security and is a component that facilitates work motivations (Herzberg, 1968) while promoting happiness and satisfaction in working. The organization's support for self-improvement among the personnel for career progress by providing training and support for employees to continue education at a higher level to increase work capacity and efficiency (Traitip Luecha, 2009) allowed the personnel to progress and grow in their field of work and in the organization, thereby creating job satisfaction (Supanee Saritwanit, 2006). Career progress creates happiness and job satisfaction among personnel, which responds to personnel needs and causes employees' lives to

have value and pride in job success (Prapatsorn Chantasattakan, 2001). In addition, career progress will motivate the personnel to willingly work for the organization with efficiency. The fact that the personnel receive a response from the organization to receive happiness and job satisfaction concurs with Traitip Luecha (2009) who studied the staff working at the Kamphaent Phet Provincial Social Development and Human Security Office and found happiness in working to be correlated with career progress opportunities. In addition, Janpen Sittiwong (2002) conducted a study and found career progress opportunities and accumulation of capabilities and skills to be related to job satisfaction with statistical significance at 0.01. Similarly, Suwanna Lilasettakun (1999) found career progress opportunities to be positively correlated with job satisfaction among nurse practitioners. Furthermore, Narumon Rerngosot (2004) conducted a study and found sub-district public health officials who received different additional education to have different job satisfaction with statistical significance at 0.05.

2.7.4.3 Workplace Morale and Encouragement Building: Workplace morale and encouragement building influenced more effective work in the form of rewards, end-of-year bonuses and praises, which resulted in job satisfaction and happiness in working (Herzberg, 1968). Job satisfaction may be a result of praise from supervisors, encouragement from colleagues, remuneration or hope for promotion to higher positions including job security. Persons with good morale and encouragement to work will have success and good performance. This concurs with Nipon Kemnak (2000) who found organization atmosphere in the area of giving rewards to be related to job satisfaction among public health civil servants at Nakhon Nayok Provincial Public Health Office. This was the same for Mantanee Chaichuwong (2001) who found organization atmosphere in the dimension of morale and encouragement to be correlated with job satisfaction among health center workers ($r = .537$) with statistical significance at 0.01. Furthermore, Gerald and Dorothee (2004) conducted as study and found reward to be positively correlated with job satisfaction among midwife nurses.

2.7.4.4 Work Environment: Good physical and psychological environments are important to work motivation (Herzberg, 1968) and safe and health promoting working conditions were a component of quality of working life, which is a

significant factor influencing happiness in working. Good environments help promote the working capacity of every employee, support excellence in working at full capacity, attract nurses to love the organization and have high job satisfaction and build dedication to work with good patient-care outcomes (International Council of Nurses, 2007). Physical work environments such as place arrangements, temperature and sounds will help to build work atmospheres (Supanee Saritwanit, 2009). Work-related environments with conveniences to facilitate good work by the personnel (Siriwan Serirat, Somchai Hirankitti and Tanawat Tangsinsapsiri, 2007) influenced satisfaction and emotions. Positive feelings in working can create results leading to desirable goals of the organization (Traitip Luecha, 2009) with the personnel perceiving more work safety and less opportunity for error, thereby resulting in happiness in working. This concurs with the study of Rattapon Jittawikun and Sajeemat Na-Wichian (2000) who studied perceived safety at work with effects on happiness in working of operator-level employees and found the personnel who perceived high work safety in the area of physical and psychological readiness to have higher happiness in working than the personnel who perceived work safety in the area of physical and psychological readiness. This was the same for the study of Traitip Luecha (2009) who found happiness in working to be correlated with work environment. According to studies among the staff working at Kamphaeng Phet Provincial Social Development and Human Security Office, safe working conditions were an important factor contributing to workers' happiness and job satisfaction (Rambur, Palumbo, McIntosh & Mongeon, 2003). In addition, Chusri Manokan and Ariwan Uamtanee (2007) studied suitable environmental components in working for nurse practitioners working at government hospitals and found physical environments to have influence on work and workers' psychological conditions, giving workers encouragement to perform quality work effectively. Similarly, Pattamaporn Sapchaipong (2002) found nurses' working conditions to be positively correlated with job satisfaction ($r = .595$) with statistical significance at .05. The findings were similar to studies conducted overseas. A research report from Chiumento Company, London, United Kingdom, on the Happiness at Work Index of 2007 among 547 samples who were employees in the illumination business found employees with high work happiness to also have high employee engagement to the organization. Issaree

Tongkam (2011) conducted a study with similar characteristics on guidelines for building happy organizations in Don Kamin Municipality, ThaMaka, Kanchanaburi, with a total of 29 samples who were municipality managers and workers. Based on the findings, the samples provided the following recommendations regarding guidelines for building a happy organization: Managers should allow employees to express opinions, work needs and have familiarity among supervisors and colleagues along with ability to serve as advisors at work. Furthermore, activities should be carried out with employees participating directly as project and activity participants by performing activities in all eight areas of happiness factors (happy body, happy brain, happy relaxation, happy heart, happy soul, happy money, happy family and happy society. In supporting employee participation in the organization's projects, the organization should be a happy organization. Moreover, activities that are components of all eight happy organization areas should be carried out continually and regularly to encourage love and unity among employees until employees have happiness in working and feel like a family.

Based on studies, researches and reviews of researches related to happiness in working domestically and abroad, personal factors such as age, work life, education, income and marital status are the factors studied for happiness in working. In addition to personal factors, quality of working life, employee engagement to the organization and job satisfaction were studied with happiness in working. The researcher studied and reviewed concepts related to happiness in working, quality of working life, employee engagement to the organization including job satisfaction and summarized the following research conceptual framework.

2.8 Summary of Concepts and Theories into Research Framework

According to all studies on the concepts and theories related to development in adulthood with coverage of physical development, psychological and emotional development and social development, concepts and theories related to quality of working life, happy workplaces and the Happinometer, concepts and theories related to job satisfaction, concepts and definitions of employee engagement to the organization, intensive care unit contexts, roles, duties and responsibilities of

nurse practitioners in the intensive care unit, including other related studies, the researcher summarized concepts and theories into a research framework on quality of working life among nurse practitioners in the intensive care unit in this study as follows: Personal factors (gender, age, marital status, chronic diseases, level of education, work durations, monthly income and additional work income), job satisfaction (wages, career progress, personnel relationships, supervisor relationships, workplaces and work success) and employee engagement to the organization (acceptance of the organization's goals and values, dedication of physical and psychological energies to work and desire to maintain membership in the organization) were independent factors with dependent factors consisting of nurses' quality of working life. The Happinometer from the Happy Private Workplace Plan, Thai Health Promotion Foundation (THPF) in each dimension was used as an dependent variable by reorganizing and implementing concepts and theories related to human development in adulthood with coverage of physical development, psychological and emotional development and social development as follows:

1. Physical Development: The researcher chose the Happinometer in the area of happy body and happy brain. Happy body promoted employees' physical and psychological health while happy brain promoted employees to seek knowledge and self-improve at all times.

2. Psychological and Emotional Development: The researcher selected the Happinometer in the area of happy relax and happy soul. Happy relaxation allowed employees to relax from stress at work and happy soul promoted religious activities for employees to have morals in living with peaceful and relaxed minds.

3. Social Development: The researcher selected the Happinometer in the area of happy heart, happy society, happy money and happy family. Happy heart encouraged generosity, happy society supported generosity to the community, the workplace and the home, happy money supported employees to manage personal spending and promote savings while happy family supported employees to build strong and warm families.

Based on the literature review and related studies, the researcher wrote the research conceptual framework in Figure 2.1.

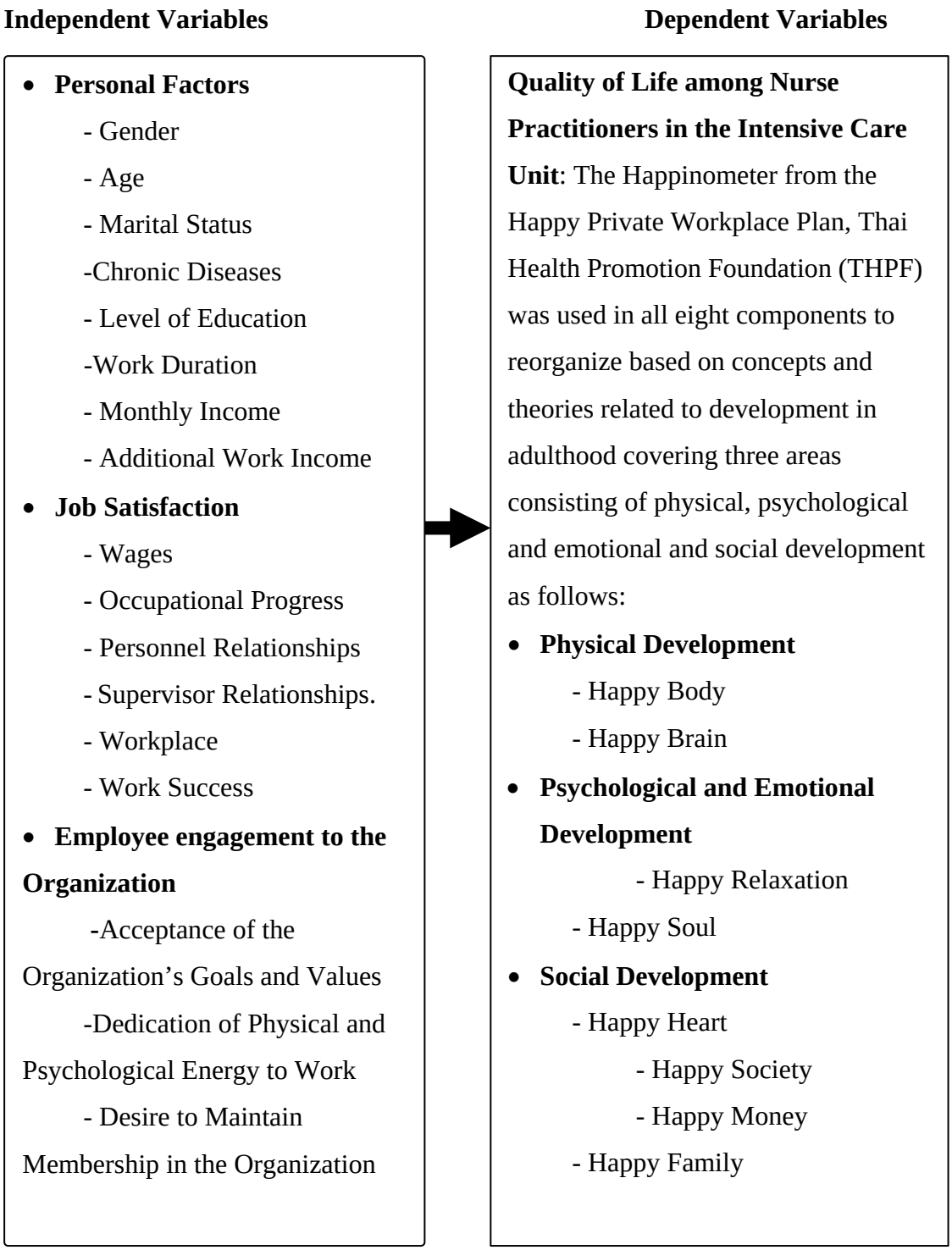

Figure 2.1 Conceptual Framework

CHAPTER III
METHODOLOGY

The researcher conducted this quantitative study of quality of working life among nurse practitioners: a case study of an intensive care unit with the following procedures in research methodology:

3.1 Population

The population of this study was composed of 487 nurse practitioners with at least one year of experience from working at 17 intensive care unit departments at a government hospital in Bangkok (not including the heads of patient wards in each department).

3.2 The Sample Group

In randomizing the population sample used in quantitative data collection, the researcher performed stratified sampling and simple random sampling to obtain data on 1 October 2014 to allow the sample group to have equal opportunity for selection and calculate the samples who will be used to represent the population according to the formulas of Taro Yamane, 1973).

Formula: $n = N/ (1+Ne^2)$

Whereby: n = Sample Group

N = Population

E = Sample Randomization Deviation Set at 5 Percent

Formula $n = N/(1+Ne^2)$

$n = 487/ (1+(487)\times 0.05^2)$

$n = 487/(1+(487) \times 0.0025)$

$n = 220$

The sample size was calculated at 220 samples. Furthermore, in order to ensure that the samples to had a sufficient number to be a good representation of the population and to prevent incomplete data collection, the sample size was increased by 20 percent from 220 nurse practitioners at the intensive care unit to 264 nurse practitioners at the intensive care unit.

3.3 Randomization Method

The samples were selected by stratified sampling by dividing based on proportions before performing simple random sampling to obtain sample sizes for each patient ward by calculating percentage of 264 nurse practitioners at 17 intensive care units calculated into ratios according to Table 3.1.

Table 3.1 Population, Sample Ratio and Sample Numbers

Each Intensive Care Unit	**Population No.** (Samples)	**Percentage**	**Sample No.** (Samples)
1. ICU1	50	10.3	27
2. ICU2	22	4.5	12
3. ICU3	18	3.7	10
4. ICU4	18	3.7	10
5. ICU5	17	3.5	9
6. ICU6	37	7.6	20
7. ICU7	30	6.2	16
8. ICU8	40	8.2	22
9. ICU9	32	6.6	17
10. ICU10	15	3.1	8
11. ICU11	30	6.2	16
12. ICU12	48	9.9	26
13. ICU13	23	4.7	12
14. ICU14	27	5.5	15
15. ICU15	28	5.7	16
16. ICU16	27	5.5	15
17. ICU17	25	5.1	13
Total	**487**	**100**	**264**

Data as of 1 October 2014 from a Public Hospital in Bangkok

3.4 Research Variables

3.4.1 Independent Variables consisted of the following:

3.4.1.1 Personal factors consisted of gender, age, marital status, chronic diseases, level of education, work durations, monthly income and additional work income.

3.4.1.2 Employee engagement to the organization based on the concepts of Porter and colleagues (1974) and Steers and Porter (1979; cited in Jarern Wongprachanukun, 2005) was composed of three components, namely, acceptance of the organization's goals and values, dedication of physical and psychological energies in working and desire to maintain membership in the organization.

3.4.1.3 Job satisfaction according to Herzberg's concept (1959) consisted of wages, career progress, personnel relationships, supervisor relationships, the workplace and work success.

3.4.2 Dependent Variables consisted of quality of life among nurse practitioners in the intensive care unit. The researcher implemented the Happinometer from the Happy Private Workplace Plan, Thai Health Promotion Foundation (THPF) in each dimension was as dependent variables by reorganizing groups and implementing concepts and theories related to human development in adulthood with coverage of physical development, psychological and emotional development and social development as follows:

1. Physical Development: The researcher chose the Happinometer in the area of happy body and happy brain. Happy body promotes employees' physical and psychological health while happy brain promotes employees to seek knowledge and self-improve at all times.

2. Psychological and Emotional Development: The researcher selected the Happinometer in the area of happy relaxation and happy soul. Happy relaxation allows employees to relax from stress at work and happy soul promotes religious activities for employees to have morals in living with peaceful and relaxed minds.

3. Social Development: The researcher selected the Happinometer in the area of happy heart, happy society, happy money and happy family. Happy heart encourages generosity, happy society supports generosity to the community, the workplace and the home, happy money supported employees to manage personal spending and promote savings while happy family supported employees to build strong and warm families.

3.5 Instrumentation

Instrumentation was composed of instruments used in quantitative and qualitative research.

3.5.1 Quantitative Research Instruments – The instruments used in this study were questionnaires composed of four parts as follows:

3.5.1.1 Part 1 - Personal Factors Questionnaire: The personal factors questionnaire was composed of questions related to gender, marital status, chronic diseases, level of education, work duration, monthly income and additional work income.

3.5.1.2 Part 2 - The Quality of Working Life Measurement Scale : The researcher requested permission to use the happiness survey form of Sirinan Kittisuksatit and colleagues (2012), which was a personal happiness survey form for workers in the government sector and the private sector based on the concepts of the Thai Health Promotion Foundation (THPF, 2012). The questionnaire had a total of 41 questions with multiple choice answers in the following areas: six questions in the area of happy body, nine questions in the area of happy heart, five questions in the area of happy soul, five questions in the area of happy relaxation, three questions in the area of happy brain, four questions in the area of happy money, three questions in the area of happy family and six questions in the area of happy society. Criteria for quality of working life divided quality of working life into four levels to explain the samples' quality of working life by using mean score criteria to calculate percentage scores as follows:

0.00 – 24.99 points = Poor quality of working life

25.00 – 49.99 points = Medium quality of working life

50.00 – 74.99 points = Good quality of working life

75.00 – 100 points = Excellent quality of working life

3.5.1.3 Part 3 – Employee engagement to the Organization Measurement Scale : The researcher implemented the form from the form of Supreeya Samosorn (2002) and Athiwat Jiawiwatkul (2010) based on the concept of Porter and colleagues (1974) and Steers and Porter (1979; cited in Jarern Wongprachanukun, 2005). The instrument contained three components consisting of nine questions in the area of acceptance of the organization's goals and values, ten questions in the area of dedication of physical and psychological energies in working and nine questions in the area of desire to maintain membership in the organization.

3.5.1.4 Part 4 – Job Satisfaction Measurement Scale: The researcher created the measurement scale by implementing the measurement scale of Narumon Ponjarern (2007), Tanida Rimdusit (2008) and Athiwat Jiawiwatkul (2000) based on Herzberg's concept (1959) with 37 questions consisting of six dimension of job satisfaction, namely, five questions in the area of wages, five questions on occupational progress, seven questions on relationships with colleagues, eight questions regarding relationships with supervisors, seven questions on work environments and five questions on work success. In Parts 3 and 4, each level had the following interpretations and scoring criteria:

5 Means Strongly Agree

4 Means Agree

3 Means Uncertain

2 Means Disagree

1 Means Strongly Disagree

Scoring Criteria in Parts 3 – 4: Scoring criteria was organized into three levels consisting of high, medium and low levels by dividing

levels, determining width of class interval and using the following formula for determining class interval as described by Sirichai Kanchanawasee (2007):

$$\text{Class Interval} = \frac{\text{Range}}{\text{Classes}} = \frac{\text{Maximum Score} - \text{Minimum Score}}{\text{Classes}} = \frac{5 - 1}{3} = 1.33$$

The following scoring criteria were obtained for employee engagement to the organization and job satisfaction:

3.68 – 5.00 points = High scores
2.34 – 3.67 points = Medium scores
1.00 – 2.33 points = Low scores

3.6 Instrument Quality Testing

1. Instrument content validity was determined by presenting questionnaires to advisory professors to test questionnaire accuracy and present questionnaires to advisory professors to make modifications to be complete.

2. Instrument reliability was tested by trying out questionnaires for the first time to determine individual question quality such as categorization power.

3. During the second tryout, the questionnaires were tested in no less than 30 samples similar to the sample group to determine quality for the entire questionnaire and determining quality by using the method of reporting Cronbach's Alpha Coefficient with significance at .05 (Sirichai Kanchanawasee, 2007).

4. The real questionnaires were created for implementation among the samples in the study.

3.7 Data Collection Methods

Data collection for the study on quality of working life among nurse practitioners: a case study of intensive care units involved the following procedures:

1. The researcher contacted a public hospital in Bangkok to request data and data collection.

2. The researcher presented a letter to request cooperation in data collection from the Dean to that government hospital.

3. Quantitative data were collected by bringing research questionnaires to contact the Research and Information Division, Nursing Department of that hospital. The researcher delivered research questionnaires to various patient wards. The staff of the Research and Information Division of that hospital explained methods for answering questionnaires to the heads of nursing departments, patient wards and nurse practitioners in all 17 intensive care units to be aware of research questionnaire details and questionnaires were gathered and returned in two weeks, which was an appropriate time to allow the samples sufficient time to answer questionnaires. This period of time was insufficient for the samples to forget to answer questionnaires.

3.8 Data Analysis

Quantitative data analysis was performed using the Statistical Package for the Social Sciences (SPSS for Windows) by using statistics to analyze and test.

1. Analysis with descriptive statistics consisted of:

Part 1 – Data on personal factors were analyzed using frequency and percentage.

Part 2 – Quality of working life, job satisfaction and employee engagement to the organization were analyzed using mean and standard deviation.

2. The hypothesis was tested using correlation analysis, one-way ANOVA and t-test statistics. Multiple linear regression analysis involved more than one independent variable. The addition of related independent variables in the analysis will result in higher analysis accuracy.

3.9 Research Ethics

Data collection concurred with research ethics and details consisting of the researcher requesting certification from the human research ethics committee of the agency that granted the researcher permission to collect data and conduct the study by protecting the rights of research participants as follows:

1. This study was aware of personal rights and willingness to provide data with consent. The researcher explained the research objectives, methodology and questionnaire contents.

2. Data from the respondents will be kept confidential and used by the researcher in overall analyses with no disclosure of individual data. After the analysis and full report had been written, the researcher destroyed all documents.

3. Data providers in this study were allowed to not answer questions with no requirement to notify the researcher of reasons with no effects on the respondents.

CHAPTER IV
DATA ANALYSIS OUTCOME

This study explored the quality of working life of practicing nurses: a case study of an intensive care unit. Data were collected using questionnaires completed in person by the samples. The researcher sent 264 sets of questionnaires to the population group and received 252 questionnaires back (95.45%) out of 220 samples. The findings are presented in the following order:

Part 1 – Personal Data of the Sample Group

Part 2 – Findings from Analysis of Quality of Working Life, Job Satisfaction and Employee engagement to the Organization.

Part 3 – Findings of the Analysis of Relationships between Personal Factors, Job Satisfaction Factors, Employee engagement t to the Organization Factors and Quality of Working Life Levels.

Part 4 – Findings from Analysis of Multiple Factors Influencing Quality of Working Life among Practicing Nurses at the Intensive Care Unit.

4.1 Part 1 – Personal Data of the Sample Group

Concerning the demographic data of practicing nurses at the intensive care unit in the sample group, most of the samples were found to be females (94.8%) and males (5.2%). Most of the samples were under 30 years of age (43.3%), followed by 36 – 40 years (22.6%). When marital status was considered, most of the samples were found to be single (77.4%), followed by those who were married (20.2%). Most of the samples were found to have no chronic diseases. Regarding level of education, most of the samples were found to have graduated with a bachelor's degree (81.7%), followed by a master's degree (18.3%) as shown in Table 4.1.

Over half of the samples had work experience of 0 – 10 years (56.3%), followed work experience of 11 – 20 years (24.6%) and work experience of 20 years

and up (19.1%). In the area of monthly income, most of the samples were found to have a monthly income of 25,001 – 35,000 baht (43.3%), followed by 15,000 – 25,000 baht (29.8%) and 50,001 and up (9.8%). When asked about supplemental income, over half of the samples had supplemental income (65.5%) and no supplemental income (34.5%) as shown in Table 4.1.

Table 4.1 Demographic Data of Practicing Nurses, Intensive Care Unit

Independent Variables		**No. (n=252)**	**Percent (100.0)**
Gender	: Male	13	5.2
	Female	239	94.8
Age (Years):	: < 30	109	43.3
	30-35	42	16.7
	36-40	57	22.6
	> 40	44	17.4
Marital Status	: Single	195	77.4
	Married	51	20.2
	Divorced/Separated/Widowed	6	2.4
Chronic Disease	: No	202	80.2
	Yes	50	19.8
Level of Education	: Bachelor's Degree	206	81.7
	Master's Degree	46	18.3
	Higher than Master's Degree	0	0.0
Work Experience (Years)	: 0-10	142	56.3
	11-20	62	24.6
	> 20	48	19.1
Monthly Income (baht)	: 15,000 – 25,000	75	29.8
	25,001- 35,000	109	43.3
	35,001- 50,000	43	17.1
	≥ 50,001	25	9.8
Supplemental income	: Yes	165	65.5
	No	87	34.5

4.2 Part 2 – Findings of the Analysis of Quality of Life in the Physical, Psychological, Emotional and Social Aspects, Job Satisfaction and Employee engagement to the Organization of Practicing Nurses in the Intensive Care Unit

Quality of working life had scoring criteria divided into four levels composed of poor quality of working life (0.00 – 24.99), medium quality of working life (25.00 – 49.99), good quality of working life (50.00 – 74.99) and excellent quality of working life (75.00 – 100).

Scoring criteria to classify job satisfaction and employee engagement to the organization levels had scoring criteria for each level consisting of high for 3.68 – 5.00 points, medium for 2.34 – 3.67 points and low for 1.00 – 2.33 points.

In the area of quality of working life in all 252 samples, the overall findings revealed most of the samples to have good quality of working life (84.1%), excellent quality of working life (12.7%) and medium quality of working life (3.2%). In the meantime, when persons with poor quality of working life were considered for physical, psychological, emotional and social quality of life, all three areas were found to have the best quality of working life, followed by very good quality of working life and medium quality of working life. When each area of quality of working life was considered, quality of working life in the area of good health, good education, good relaxation, good society, good financial health and good family including happiness in working was the same as the overall view which had excellent quality of working life as the highest ratio except for the areas of happy soul and happy heart, which found the highest ratios of nurses with excellent quality of working life to be 53.6 percent and 51.6 percent, respectively, as shown in Table 4.2.

Table 4.2 Percentage of Quality of Working Life of Practicing Nurses at the Intensive Care Unit

Quality of Working Life	Number (Percent) (Nurse)				$\bar{x}$	SD
	Poor	Medium	Good	Excellent		
Happy Body	0 (0.0)	14(5.5)	192 (76.2)	46 (18.3)	65.38	10.19
Happy Brain	0 (0.0)	24 (9.5)	192 (76.2)	36 (14.3)	59.02	10.76
Happy Relax	0 (0.0)	51 (20.2)	177 (70.2)	24 (9.6)	74.11	9.96
Happy Soul	0 (0.0)	6 (2.4)	111 (44.0)	135 (53.6)	73.70	11.47
Happy Heart	0 (0.0)	8 (3.2)	114 (45.2)	130 (51.6)	55.64	20.39
Happy Society	0 (0.0)	40 (15.9)	158 (62.7)	54 (21.4)	62.74	16.02
Happy Money	0 (0.0)	49 (19.5)	111 (44.0)	92 (36.5)	65.37	11.64
Happy Family	0 (0.0)	99 (39.3)	106 (42.1)	47 (18.6)	64.60	19.34
Physical Quality of Working Life: Happy Body, Happy Brain	0 (0.0)	13 (5.2)	203 (80.6)	36 (14.3)	65.38	8.44
Psychological and Emotional Quality of Working Life: Happy Relaxation, Happy Soul	0 (0.0)	3 (1.2)	213 (84.5)	36 (14.3)	66.36	8.35
Social Quality of Working Life: Happy Heart,Happy Society, Happy Money, Happy Family	0 (0.0)	27 (10.7)	168 (66.7)	57 (22.6)	66.76	11.19
Overall Quality of Working Life	0 (0.0)	8 (3.2)	212 (84.1)	32 (12.7)	66.36	7.69

In the area of job satisfaction among the sample group, most of the samples were found to have high overall job satisfaction at 65.1 percent, followed by medium job satisfaction (34.9%). When job satisfaction was considered in terms of individual areas, job satisfaction in the area of work behaviors, attitude toward the organization, job characteristic motivation factors, responsibility motivation factors, acceptance motivation factors, security support factors and command support factors had the same job satisfaction levels as overall job satisfaction. Most of the samples had high job satisfaction, followed by job satisfaction, respectively, except for job satisfaction in the area of advancement motivation factors, welfare and income support factors and management policy support factors, in which nurses were found to have medium job satisfaction, followed by medium and low satisfaction, respectively, as shown in Table 4.3.

Table 4.3 Number and Percentage of Job Satisfaction of Practicing Nurses, Intensive Care Unit

Job Satisfaction	Number (Percentage) (Nurse)			$\bar{x}$	SD
	Low	Medium	High		
Work Behaviors	2 (0.8)	43 (17.1)	207 (82.1)	4.12	0.51
Attitude toward the Organization	3 (1.2)	90 (35.7)	159 (63.1)	3.83	0.55
Advancement Motivation Factors	15 (6.0)	128 (50.8)	109 (43.3)	3.46	0.66
Job CharacteristicMotivation Factors	5 (2.0)	40 (15.9)	207 (82.1)	3.99	0.60
Responsibility Motivation Factors	2 (0.8)	107 (42.5)	143 (56.7)	3.69	0.57
Acceptance Motivation Factors	3 (1.2)	85 (33.7)	164 (65.1)	3.74	0.58
Welfare and Income Support Factors	26 (10.3)	137 (54.4)	89 (35.3)	3.33	0.71
Security Support Factors	1 (0.4)	25 (9.9)	226 (89.7)	4.18	0.56
Command Support Factors	19 (7.5)	113 (44.8)	120 (47.6)	3.44	0.73
Management Policy Support Factors	18 (7.1)	128 (50.8)	106 (42.1)	3.41	0.72
Overall Job Satisfaction	0 (0.0)	88 (34.9)	164 (65.1)	3.74	0.42

Concerning the sample group's employee engagement to the organization, the overall findings found most of the samples to have high employee engagement to the organization in every area (77.8%) and samples with medium employee engagement to the organization were encountered at 22.2 percent while no samples were found to have low employee engagement to the organization. When level of employee engagement to the organization was considered in terms of individual aspects consisting of acceptance of organization goals and values, willingness to work and desire to maintain membership, every areas was found to have the same employee engagement to the organization as overall employee engagement to the organization with the highest ratio encountered in high employee engagement to the organization, followed by medium and low employee engagement to the organization, respectively, as shown in Table 4.4.

Table 4.4 Number and Percentage of Employee engagement to the Organization of Practicing Nurses, Intensive Care Unit

Employee engagement to the Organization	Number (Percentage) (Nurse)			$\bar{x}$	SD
	Low	Medium	High		
Acceptance of Organization Goals and Values	1 (0.4)	67 (26.6)	184 (73.0)	3.86	0.49
Willingness to Work	2 (0.8)	22 (8.7)	228 (90.5)	4.15	0.47
Desire to Maintain Membership	3 (1.2)	68 (27.0)	181 (71.8)	3.89	0.55
Overall Employee engagement to the Organization	0 (0.0)	56 (22.2)	196 (77.8)	3.97	0.45

4.3 Part 3 – Findings from Analysis to Compare between Personal Factors, Job Satisfaction, Employee engagement to the Organization and Quality of Working Life of Practicing Nurses in the Intensive Care Unit

4.3.1 Physical Quality of Working Life

Based on the comparison of the mean scores for physical quality of working life, the sample group with different ages, chronic diseases, experience (years) and monthly income (baht) had different means scores for physical quality of working life in terms of various statistics with statistical significance (Table 4.5)

Mean physical quality of working life scores of the samples under 30 years of age was found to be different from the samples aged 36 – 40 years and the samples aged more than 40 years and up with statistical significance at 0.001. The samples under 30 years of age were found to have higher mean physical quality of working life scores (3.44) than the samples aged 36 – 40 years (3.18) and the samples aged 40 years and up (2.94). Furthermore, the samples aged 40 years and up were found to have lower mean physical quality of working life scores (2.94) than samples aged 30 – 35 years (3.29) and samples aged 36 – 40 years.

Mean physical quality of working life of the samples with no chronic diseases was found to be different from the samples with chronic diseases with statistical significance at 0.001. The samples without chronic diseases were found to

have higher mean physical quality of working life scores (3.35) than the samples with chronic diseases (2.94).

The mean quality of working life scores of the samples with work experience of 0 – 10 years differed from the samples with work experience of 10 – 20 years and more than 20 years with statistical significance at 0.001. The samples with work experience of 0 – 10 years were found to have a higher mean physical quality of working life score (3.40) than samples with work experience of 11 – 20 years (3.13) and samples with work experience of more than 20 years (3.07).

The mean physical quality of working life scores of the samples with mean monthly income of 35,001 – 50,000 baht per month differed from samples with monthly income at 25,001 – 35,000 baht and samples with monthly income of 50,001 – and up baht with statistical significance at 0.05. The samples with monthly income of 35,001 – 50,000 baht were found to have a lower mean physical quality of working life score (3.10) than the samples with monthly income of 25,001 – 35,000 baht (3.30) and the samples with monthly income of 50,001 – and up baht (3.41).

Table 4.5 Outcomes from Comparison of Mean Physical Quality of Working Life Scores

Physical Quality of Working Life		**N**	**Mean**	**S.D**	**P-Value**	**Multiple comparison**
Gender	Male	13	3.27	0.41	0.972	
	Female	239	3.27	0.42		
Age (Years)	<30(1)	109	3.44	0.37	**<0.001**	0.172 (1 VS 2), **<0.001**(1 VS 3)***, **<0.001**(1 VS 4)***, 0.606(2 VS 3), **<0.001**(2 VS 4)***, **0.013**(3 VS 4)*
	30-35 (2)	42	3.29	0.38		
	36-40 (3)	57	3.18	0.38		
	>40 (4)	44	2.94	0.41		
Marital Status	Single(1)	195	3.30	0.41	0.117	
	Married(2)	51	3.19	0.42		
	Divorced/Separated/Widowed (3)	6	3.06	0.64		

Table 4.5 Outcomes from Comparison of Mean Physical Quality of Working Life Scores (cont.)

Physical Quality of Working Life		N	Mean	S.D	P-Value	Multiple comparison
Chronic Disease:	No	202	3.35	0.37	**<0.001**	
	Yes	50	2.94	0.46		
Level of Education	Bachelor's Degree	206	3.25	0.43	0.089	
	Master's Degree	46	3.36	0.38		
Work experience (Year)	0-10 (1)	142	3.40	0.39	**<0.001**	**<0.001**$^{(1\ VS\ 2)***}$, **<0.001**$^{(1\ VS\ 3)***}$, 0.793$^{(2\ VS\ 3)}$
	11-20 (2)	62	3.13	0.39		
	> 20 (3)	48	3.07	0.43		
Monthly Income (baht)	15,000 – 25,000 (1)	75	3.27	0.46	0.016	0.993$^{(1\ VS\ 2)}$, 0.222$^{(1\ VS\ 3)}$, 0.558$^{(1\ VS\ 4)}$, **0.048**$^{(2\ VS\ 3)*}$, 0.792$^{(3\ VS\ 4)}$ **,0.020**$^{(3\ VS\ 4)*}$
	25,001- 35,000 (2)	109	3.30	0.38		
	35,001- 50,000 (3)	43	3.10	0.39		
	≥ 50,001 (4)	25	3.41	0.47		
Supplemental Income:	Yes	165	3.25	0.41	0.358	
	No	87	3.30	0.44		
Overall Job Satisfaction	Medium	88	3.22	0.45	0.154	
	High	164	3.30	0.40		
Overall Employee engagement to the Organization	Medium	56	3.28	0.40	0.767	
	High	196	3.26	0.43		

Remarks: * Statistical significance was 0.05. ** Statistical significance was 0.01. *** Statistical significance was 0.001.

4.3.2 Psychological and Emotional Quality of Working Life

According to the comparison of mean psychological and emotional quality of working life scores, the samples with different ages, marital status, chronic disease and work experience (years) were found to have different mean psychological and emotional quality of working life scores with statistical significance (Table 4.6).

The mean psychological and emotional quality of working life scores of the samples under 30 years of age were found to be different from the samples aged 36 – 40 years and the samples aged 40 years and up with statistical significance at 0.001. The samples under 30 years of age were found to have higher mean psychological and emotional quality of working life scores (3.50) than the samples aged 36 – 40 years (3.16) and the samples aged 40 years and up (3.08).

The mean psychological and emotional quality of working life scores of single samples was found to be different from the married samples with statistical significance at 0.05. The single samples were found to have higher mean psychological and emotional quality of working life scores (3.36) than married samples (3.18).

The mean psychological and emotional quality of working life scores of the samples without chronic diseases differed from the samples with chronic diseases with statistical significance at 0.001. The samples without chronic diseases were found to have higher mean psychological and emotional quality of working life scores (3.37) than the samples with chronic diseases (3.11).

The mean psychological and emotional quality of working life scores of the samples with work experience of 0 – 10 years differed from the samples with work experience of 11 – 20 years and the samples with work experience of more than 20 years with statistical significance at 0.001. The samples with work experience of 0 – 10 years were found to have higher mean psychological and emotional quality of working life scores (3.46) than the samples with work experience of 11 – 20 years (3.16) and the samples with work experience of more than 20 years (3.12).

Table 4.6 Comparison of Mean Psychological and Emotional Quality of Working Life Scores

Psychological and Emotional Quality of Working Life		N	Mean	S.D	P-Value	Multiple comparison
Gender	Male	13	3.37	0.33	0.650	
	Female	239	3.32	0.42		
Age (Years)	<30(1)	109	3.50	0.38	**<0.001**	0.053$^{(1\ VS\ 2)}$, **<0.001**$^{(1\ VS\ 3)***}$,**<0.001**$^{(1\ VS\ 4)***}$, 0.256$^{(2\ VS\ 3)}$, **0.031**$^{(2\ VS\ 4)***}$, 0.893$^{(3\ VS\ 4)}$,
	30-35 (2)	42	3.31	0.36		
	36-40 (3)	57	3.16	0.42		
	>40 (4)	44	3.08	0.36		
Marital Status	Single(1)	195	3.36	0.42	**0.013**	**0.017**$^{(1\ VS2)***}$, 0.527$^{(1\ VS\ 3)}$, 0.998$^{(2\ VS\ 3)}$
	Married(2)	51	3.18	0.40		
	Divorced/Separated/Widowed (3)	6	3.15	0.28		
Chronic Disease:	No	202	3.37	0.39	**<0.001**	
	Yes	50	3.11	0.48		
Level of Education	Bachelor's Degree	206	3.32	0.39	0.876	
	Master's Degree	46	3.33	0.52		
Work Experience (Year)	0-10 (1)	142	3.46	0.37	**<0.001**	**<0.001**$^{(1\ VS\ 2)***}$, **<0.001**$^{(1\ V3\ 4)***}$, 0.953$^{(2\ VS\ 3)}$
	11-20 (2)	62	3.16	0.40		
	> 20 (3)	48	3.12	0.41		
Monthly Income (Baht)	15,000 – 25,000 (1)	75	3.31	0.43	0.157	
	25,001- 35,000 (2)	109	3.31	0.38		
	35,001- 50,000 (3)	43	3.24	0.39		
	≥ 50,001 (4)	25	3.52	0.53		
Supplemental Income:	Yes	165	3.29	0.41	0.200	
	No	87	3.36	0.43		
Overall Job Satisfaction	Medium	88	3.26	0.46	0.131	
	High	164	3.35	0.39		
Overall Employee engagement to the Organization	Medium	56	3.29	0.42	0.613	
	High	196	3.33	0.42		

Remarks: * Statistical significance was 0.05. ** Statistical significance was 0.01. *** Statistical significance was 0.001.

4.3.3 Social Quality of Working Life

Based on the comparison of mean social quality of working life scores, the samples with different ages, chronic diseases, level of education, work experience (years), monthly income (baht), overall job satisfaction and overall employee engagement to the organization were found to have different mean social quality of working life scores with statistical significance (Table 4.7).

The mean social quality of working life score of the samples aged 40 years and up was found to be different from the samples under 30 years of age and the samples aged 30 - 35 years with statistical significance at 0.05. The samples aged 40 years and up were found to have higher mean social quality of working life scores (3.55) than the samples under 30 years of age (3.28) and the samples aged 30 – 35 years (3.23).

The mean social quality of working life score of the samples without chronic diseases was found to be different from the samples with chronic diseases with statistical significance at 0.05. The samples without chronic diseases were found to have higher mean social quality of working life scores (3.39) than the samples with chronic diseases (3.13).

The mean social quality of working life score of the samples who received education to the level of a master's degree was found to be different from the samples who received education to the level of a bachelor's degree with statistical significance at 0.001. The samples who received education to the level of a master's degree were found to have higher mean social quality of working life scores (3.67) than the samples who received education to the level of a bachelor's degree (3.26).

The mean social quality of working life scores of the samples with work experience of more than 20 years differed from the samples with work experience of 0 – 10 years and the samples with work experience of 11 – 20 years with statistical significance at 0.001. The samples with work experience of more than 20 years were found to have higher mean social quality of working life scores (3.60) than the samples with work experience of 0 – 10 years (3.27) and the samples with work experience of 11 – 20 years (3.29).

The mean social quality of working life scores of the samples with mean monthly income of 15,000 – 25,000 baht per month differed from samples with

monthly income at 25,001 – 35,000 baht, the samples with monthly income of 35,001 – 50,000 baht and the samples with monthly income of 50,001 – and up baht with statistical significance at 0.001. The samples with mean monthly income of 15,000 – 25,000 baht per month were found to have lower social quality of working life (2.86) than samples with monthly income at 25,001 – 35,000 baht (2.45), the samples with monthly income of 35,001 – 50,000 baht (3.51) and the samples with monthly income of 50,001 – and up baht (4.00). In addition, the samples with monthly income of 50,001 – and up baht were found to have higher mean social quality of working life scores (4.00) than the samples with monthly income of 25,001 – 35,000 baht (3.45) and the samples with monthly income of 35,001 – 50,000 baht (3.51).

The mean social quality of working life scores of the samples with high overall job satisfaction differed from the samples with medium overall job satisfaction with statistical significance at 0.001. The samples with high overall job satisfaction were found to have higher mean social quality of working life scores (3.46) than the samples with medium overall job satisfaction (3.11).

The mean social quality of working life scores of the samples with high overall employee engagement to the organization differed from the samples with medium overall employee engagement to the organization with statistical significance at 0.01. The samples with high overall employee engagement to the organization were found to have higher mean social quality of working life scores (3.39) than the samples with medium overall employee engagement to the organization (3.14).

Table 4.7 Comparison of Mean Social Quality of Working Life Scores

Social Quality of Working Life		N	Mean	S.D	P-Value	Multiple comparison
Gender	Male	13	3.26	0.59	0.617	
	Female	239	3.34	0.56		
Age (Years)	<30(1)	109	3.28	0.55	**0.023**	0.996(1 VS 2),
	30-35 (2)	42	3.23	0.58		0.934(1 VS 3),
	36-40 (3)	57	3.36	0.53		**0.034**(VS 4)***,
	>40 (4)	44	3.55	0.55		0.797(2 VS 3),
						0.039(3 VS 4),
						0.404(3 VS 4)***
Marital Status	Single(1)	195	3.33	0.55	0.870	
	Married(2)	51	3.37	0.60		
	Divorced/Separated/Widowed (3)	6	3.36	0.44		
Chronic Diseases:	No	202	3.39	0.51	**0.016**	
	Yes	50	3.13	0.70		
Level of Education	Bachelor's Degree	206	3.26	0.56	**<0.001**	
	Master's Degree	46	3.67	0.40		
Work Experience (Years)	0-10 (1)	142	3.27	0.56	**0.001**	0.996(1 VS 2),
	11-20 (2)	62	3.29	0.56		**0.001**(1 VS 3)***,
	> 20 (3)	48	3.60	0.48		**0.008**(2 VS 3)***
Monthly Income (Baht)	15,000 – 25,000 (1)	75	2.86	0.64	**<0.001**	**<0.001**(1 VS 2)***,
	25,001- 35,000 (2)	109	3.45	0.34		**<0.001**(1 VS 2)***,
	35,001- 50,000 (3)	43	3.51	0.32		**<0.001**(1 VS 4)***,
	≥ 50,001 (4)	25	4.00	0.22		0.951(2 VS 3)***,
						<0.001(2 VS 4)***,
						<0.001(3 VS 4)***
Supplemental Income:	Yes	165	3.37	0.51	0.179	
	No	87	3.27	0.64		
Overall Job Satisfaction	Medium	88	3.11	0.54	**<0.001**	
	High	164	3.46	0.53		
Overall Employee engagement to the Organization	Medium	56	3.14	0.52	**0.003**	
	High	196	3.39	0.56		

Remarks: * Statistical significance was 0.05. ** Statistical significance was 0.01. *** Statistical significance was 0.001.

4.3.4 Overall Quality of Working Life

Based on the comparison of mean overall quality of working life scores, the samples with chronic disease, level of education, monthly income (baht), overall job satisfaction and overall employee engagement to the organization were found to have different mean overall quality of working life scores with statistical significance (Table 4.8).

The mean scores for overall quality of working life of the samples without chronic diseases were found to be different from the samples with chronic diseases with statistical significance at 0.001. The samples without chronic diseases were found to have higher mean overall quality of working life scores (3.38) than the samples with chronic diseases (3.08).

Mean overall quality of working life scores of the samples who received education at the master's degree level were found to be different from the samples who received education at bachelor's degree level with statistical significance at 0.001. The samples who received education at the master's degree level were found to have higher mean overall quality of working life scores (3.52) than the samples who received education at the bachelor's degree level (3.27).

Mean overall quality of working life scores of the samples with mean monthly income of 15,000 – 25,000 baht per month differed from samples with monthly income at 25,001 – 35,000 baht, the samples with monthly income of 35,001 – 50,000 baht and the samples with monthly income of 50,001 – and up baht with statistical significance at 0.001. The samples with mean monthly income of 15,000 – 25,000 baht per month were found to have lower social quality of working life (3.06) than samples with monthly income at 25,001 – 35,000 baht (3.38), the samples with monthly income of 35,001 – 50,000 baht (3.36) and the samples with monthly income of 50,001 – and up baht (3.76). In addition, the samples with monthly income of 50,001 – and up baht were found to have higher mean overall quality of working life scores (3.76) than the samples with monthly income of 25,001 – 35,000 baht (3.38) and the samples with monthly income of 35,001 – 50,000 baht (3.36).

The mean scores for overall quality of working life of the samples with high overall job satisfaction differed from the samples with medium overall job satisfaction with statistical significance at 0.05. The samples with high overall job

satisfaction were found to have higher mean social quality of working life scores (3.34) than the samples with medium overall job satisfaction (3.11).

The mean scores for overall quality of working life of the samples with high overall employee engagement to the organization differed from the samples with medium overall employee engagement to the organization with statistical significance at 0.01. The samples with high overall employee engagement to the organization were found to have higher mean social quality of working life scores (3.29) than the samples with medium overall employee engagement to the organization (3.15).

Table 4.8 Comparison of Mean Overall Quality of Working Life Scores

Overall Quality of Working Life		**N**	**Mean**	**S.D**	**P-Value**	**Multiple comparison**
Gender	Male	13	3.29	0.39	0.780	
	Female	239	3.32	0.38		
Age (Years)	<30(1)	109	3.37	0.38	0.308	
	30-35 (2)	42	3.26	0.41		
	36-40 (3)	57	3.27	0.37		
	>40 (4)	44	3.30	0.38		
Marital Status	Single(1)	195	3.33	0.38	0.688	
	Married(2)	51	3.29	0.40		
	Divorced/Separated/Widowed (3)	6	3.24	0.29		
Chronic Diseases:	No	202	3.38	0.33	**<0.001**	
	Yes	50	3.08	0.49		
Level of Education	Bachelor's Degree	206	3.27	0.38	**<0.001**	
	Master's Degree	46	3.52	0.35		
Work Experience (Years)	0-10 (1)	142	3.34	0.39	0.065	
	11-20 (2)	62	3.22	0.40		
	> 20 (3)	48	3.37	0.34		

Table 4.8 Comparison of Mean Overall Quality of Working Life Scores (cont.)

Overall Quality of Working Life		N	Mean	S.D	P-Value	Multiple comparison
Monthly Income (baht)	15,000 – 25,000 (1)	75	3.06	0.46	**<0.001**	**<0.001**(1 VS 2)***, **<0.001**(1 VS 3)***, **<0.001**(1 VS 4)***, 0.942(2 VS 3)***, **<0.001**(2 VS 4)***, **<0.001**(3 VS 4)***
	25,001- 35,000 (2)	109	3.38	0.26		
	35,001- 50,000 (3)	43	3.36	0.22		
	≥ 50,001 (4)	25	3.76	0.24		
Supplemental Income	Yes	165	3.33	0.35	0.602	
	No	87	3.30	0.45		
Overall Job Satisfaction	Medium	88	3.17	0.38	**<0.001**	
	High	164	3.40	0.37		
Overall Employee engagement to the Organization	Medium	56	3.21	0.36	**0.018**	
	High	196	3.35	0.39		

Remarks: * Statistical significance was 0.05. ** Statistical significance was 0.01. *** Statistical significance was 0.001.

4.4 Part 4 –Findings from Analysis of Multiple Factors Influencing Quality of Working Life among Practicing Nurses at the Intensive Care Unit.

Therefore, this study analyzed correlation between independent variables and considered correlation coefficients as a study of levels or size of the linear relationships between two variables to determine correlations. The instrument used for the measurements was correlation coefficient, represented by r and measured in numbers with values in the range of -1 and 1. If r has a value close to 1, both variables were shown to be highly related in the same direction, meaning Y will have a high value if X has a high value. If r has a value close to -1, both variables were shown to be highly related as well but in different directions, meaning Y will have a low value if X has a high value or Y will have a high value if X has a low value. If X and Y were slightly related, r will be closer to 0. Coefficient correlation analysis in the study used

the criteria of Burns and Grove (1993) for the consideration, meaning that r must have a value of no more than 0.65 without giving consideration to relationship direction. The correlation coefficient analysis in this study found age to be highly related to work experience (year) and monthly income (baht). Therefore, only age was entered into the equation because age was a variable which can be easily answered with more accuracy than work experience (year) and month income (baht).Multiple linear regression was used to determine factors, levels and directions of independent variables influencing quality of working life among practicing nurses at the intensive care unit. Regression analysis has one important preliminary agreement in that independent variables must not be interrelated to prevent multicolinearity (Kalaya Wanitbancha, 2003).

In multiple linear regression analysis, the dependent variables consisted of quality of life scores in each area. Every area had the same independent variables consisting of gender (two groups), age (four groups), marital status (three groups), chronic diseases (two group), level of education (two groups), supplemental income (two groups), overall job satisfaction (two groups) and overall employee engagement to the organization (two groups) in order to be able to compare outcomes from each independent variable on quality of working life scores in various areas.

4.4.1 Outcome from Multiple Linear Regression Analysis of Physical Quality of Working Life Scores of Practicing Nurses: A Case Study of an Intensive Care Unit

According to Table 4.9, all eight independent variables were found to be correlated with physical quality of working life scores with the multiple correlation coefficient of 0.549. Fluctuations of physical quality of working life scores can be explained at 26.9 percent with the ability to co-predict with statistical significance at < 0.001 and standard deviation in prediction of $\pm$ 0.361.

When predictor regression coefficients were considered, the variables of age, chronic diseases and level of education were found to be able to predict physical quality of working life scores with statistical significance. Data analysis obtained the following equations predicting physical quality of working life: Physical quality of working life scores = 2.738 + 0.022, female + 0.521, under 30 years of age + 0.312, aged 30 – 35 years + 0.219, aged 36 – 40 years + 0.118, single + 0.043, married +

0.242, no chronic diseases + 0.227, level of education at a master's degree + 0.003, no supplemental income + 0.075, high overall job satisfaction – 0.025 and high overall employee engagement to the organization.

When other variables were specified to be constant, age was found to have influenced physical quality of working life scores with statistical significance at 0.01. The estimated equation meant practicing nurses at intensive care units aged 40 years and up had the physical quality of working life score of 2.738 while the samples under 30 years of age, the samples aged 30 – 35 years and the samples aged 36 – 40 years were found to have higher mean physical quality of working life scores than the samples aged 40 years and up at a mean of 0.521, 0.312 and 0.219, respectively. Therefore, physical quality of working life scores of samples under 30 years of age had a mean value of 3.259, physical quality of working life scores of samples aged 30 – 35 years had a mean value of 3.050 points and physical quality of working life scores of samples aged 36 – 40 years had a mean value of 2.957 points.

When other variables were specified to be constant, chronic diseases were found to have influenced physical quality of working life scores with statistical significance at < 0.001. The fact that practicing nurses at the intensive care unit had no chronic diseases increased physical quality of working life scores by 0.242 points.

When other variables were specified to be constant, level of education was found to have influenced physical quality of working life with statistical significance at < 0.001. Practicing nurses at the intensive care unit with education up to the level of a master's degree were found to have 0.227 points higher physical quality of working life scores.

The variables of gender, marital status, supplemental income, overall job satisfaction and overall employee engagement to the organization had no influence on physical quality of working life scores.

Table 4.9 Multiple Linear Regression Analysis of Physical Quality of Working Life Scores of Practicing nurses at the Intensive Care Unit

Variables	B	SE_b	β	t	p-value
Gender (Male)					
Female	0.022	0.106	0.012	0.208	0.835
Aged (40 Years &Up)					
Under 30 years of age	0.521	0.079	0.613	6.617	**<0.001*****
Aged 30 – 35 Years	0.312	0.085	0.276	3.661	**<0.001*****
Aged 36 – 40 Years	0.219	0.075	0.217	2.931	**0.004****
Marital Status (Divorced/Separated/Widowed)					
Single	-0.118	0.157	-0.117	-0.752	0.453
Married	0.043	0.159	0.041	0.272	0.786
Chronic Diseases (Yes)					
No Chronic Diseases	0.242	0.065	0.229	3.693	**<0.001*****
Level of Education (Bachelor's Degree)					
Master's Degree	0.227	0.064	0.208	3.531	**<0.001*****
Supplemental Income (Yes)					
No Supplemental Income	0.003	0.050	0.004	0.069	0.945
Overall Job Satisfaction (Medium)					
High	0.075	0.058	0.085	1.290	0.198
Overall Employee engagement to the Organization (Medium)					
High	-0.025	0.066	-0.025	-0.378	0.706

Constant: 2.738; SE_{est}= ± 0.361, R = 549; R^2 = 0.269; F = 9.398; p-value = <0.001.

Remarks: * Statistical significance was 0.05. ** Statistical significance was 0.01. *** Statistical significance was 0.00.

Outcomes from tests of assumption of regression analysis related deviation are visible on charts at the histogram (Figure 4.1) and Normal P-P Plot of Regression Standardized Residual (Figure 4.2), which were found to have a normal distribution. In addition, the scatter plot (Figure 4.3) plotted the graph of regression standardized residual values on the Y axis and regression standardized predicted values on the X

axis and found points to be scattered without a pattern, meaning variation of deviations were constant.

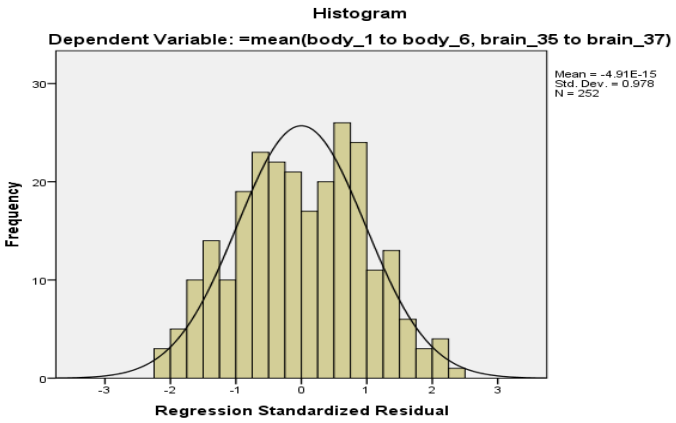

Figure 4.1 Physical Quality of Working Life Histogram

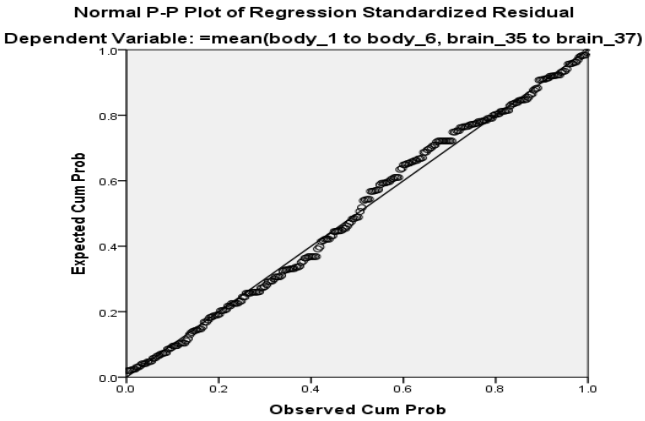

Figure 4.2 Physical Quality of Working Life Normal Probability Plots

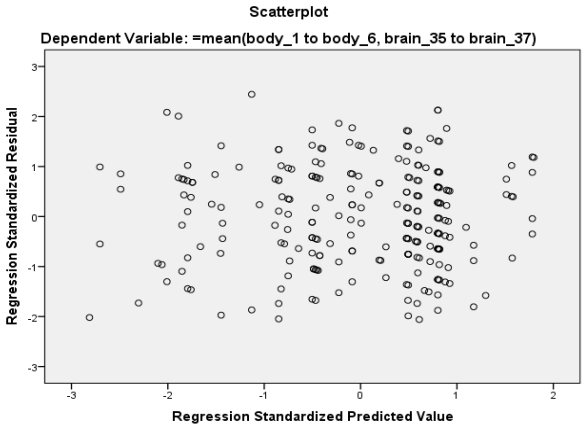

Figure 4.3 Physical Quality of Working Life Scatter Plot

4.4.2 Outcome from Multiple Linear Regression Analysis of Psychological and Emotional Quality of Working Life Scores of Practicing Nurses: A Case Study of an Intensive Care Unit

According to Table 4.10, all eight independent variables were found to be correlated with psychological and emotional quality of working life scores with a multiple correlation coefficient of 0.449. The fluctuations of psychological and emotional quality of working life scores can be explained at 16.5 percent with the ability to co-predict with statistical significance at < 0.001 and standard deviation in prediction of $\pm$ 0.382. When regression coefficients of predictors were considered, age was found to be able to predict psychological and emotional quality of working life scores with statistical significance.

The data analysis obtained the following equations predicting psychological and emotional quality of working life: Psychological and emotional quality of working life scores = 2.962 + 0.000, female + 0424, under 30 years of age + 0.217, aged 30 – 35 years + 0.072, aged 36 – 40 years + 0.049, single – 0.040, married + 0.077, no chronic diseases + 0.110, level of education at a master's degree + 0.012, no supplemental income + 0.084, high overall job satisfaction + 0.032 and high overall employee engagement to the organization.

When other variables were specified to be constant, age was found to have influenced psychological and emotional quality of working life scores with statistical significance at 0.05. The estimated equation meant practicing nurses at intensive care units aged 40 years and up had the psychological and emotional quality of working life score of 2.962 while the samples under 30 years of age and the samples aged 30 – 35 years were found to have higher mean psychological quality of working life scores than the samples aged 40 years and up at a mean of 0.424 and 0.217, respectively. Therefore, psychological and emotional quality of working life scores of samples under 30 years of age had a mean value of 3.386 and psychological and emotional quality of working life scores of samples aged 30 – 35 years had a mean value of 3.179 points.

The variables of gender, marital status, chronic diseases, level of education, supplemental income, overall job satisfaction and overall employee

engagement to the organization had no influence on psychological and emotional quality of working life scores.

Table 4.10 Multiple Linear Regression Analysis of Psychological and Emotional Quality of Working Life Scores of Practicing Nurses at the Intensive Care Unit

Variables	B	SE_b	β	t	p-value
Gender (Male)					
Female	0.000	0.112	0.000	0.004	0.997
Age (40 Years & Up)					
Under 30 years of age	0.424	0.083	0.504	5.092	**<0.001*** **
Aged 30 – 35 Years	0.217	0.090	0.194	2.408	**0.017***
Aged 36 – 40 Years	0.072	0.079	0.073	0.917	0.360
Marital Status (Divorced/Separated/Widowed)					
Single	-0.049	0.166	-0.049	-0.294	0.769
Married	-0.040	0.168	-0.039	-0.240	0.811
Chronic Diseases (Yes)					
No Chronic Diseases	0.077	0.069	0.074	1.120	0.264
Level of Education (Bachelor's Degree)					
Master's Degree	0.110	0.068	0.102	1.620	0.107
Supplemental income (Yes)					
No Supplemental Income	0.012	0.053	0.014	0.224	0.823
Overall Job Satisfaction (Medium)					
High	0.084	0.061	0.096	1.369	0.172
Overall Employee engagement to the Organization (Medium)					
High	0.032	0.070	0.032	0.463	0.644

Constant: 2.962; SE_{est}= ± 0.382, R = 0.449; R^2 =0.165; F = 5.522; p-value = <0.001

Remarks: * Statistical significance was 0.05. ** Statistical significance was 0.01. *** Statistical significance was 0.001.

Outcomes from tests of assumption of regression analysis related deviation are visible on charts in the histogram (Figure 4.4) and Normal P-P Plot of Regression Standardized Residual (Figure 4.5), which were found to have normal distribution. In addition, the scatter plot (Figure 4.6) plotted the graph of regression standardized residual values on the Y axis and regression standardized predicted

values on the X axis and found points to be scattered without a pattern, meaning variation of deviations were constant.

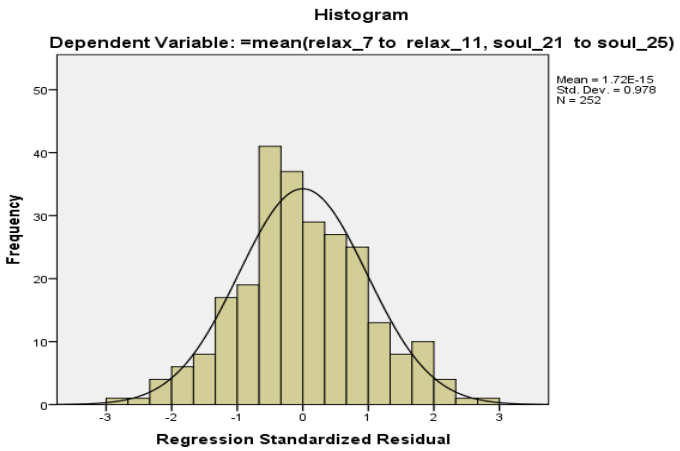

Figure 4.4 Psychological and Emotional Quality of Working Life Histogram

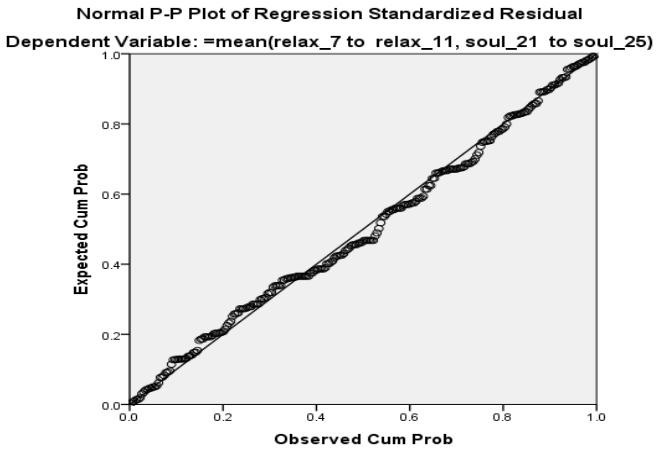

Figure 4.5 Psychological and Emotional Quality of Working Life Normal Probability Plots

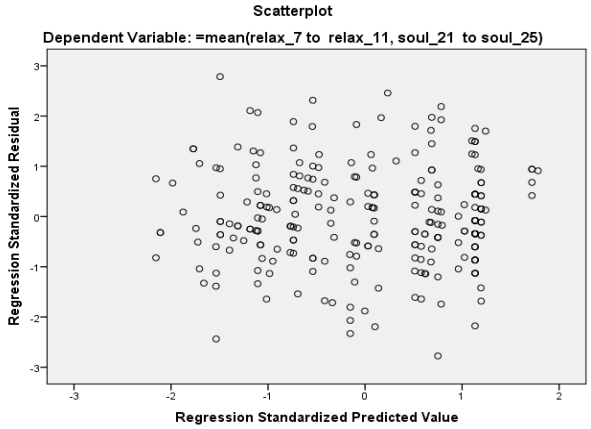

Figure 4.6 Psychological and Emotional Quality of Working Life Scatter Plot

4.4.3 Outcome from Multiple Linear Regression Analysis of Social Quality of Working Life Scores of Practicing Nurses: A Case Study of an Intensive Care Unit

According to Table 4.11, all eight independent variables were found to be correlated with social quality of working life scores with the multiple correlation coefficient of 0.473. Fluctuations of social quality of working life scores can be explained at 18.8 percent with the ability to co-predict with statistical significance at < 0.001 and standard deviation in prediction of $\pm$ 0.504.

When predictor regression coefficients were considered, the variables of age, chronic diseases, level of education and overall job satisfaction were found to be able to predict social quality of working life scores with statistical significance at < 0.001.

The data analysis obtained the following equations predicting social quality of working life: Social quality of working life scores = 3.039 + 0.102, female – 0.266, under 30 years of age – 0.393, aged 30 – 35 years – 0.229, aged 36 – 40 years – 0.099, single – 0.019, married + 0.314, no chronic diseases + 0.328, level of education at a master's degree – 0.002, no supplemental income + 0.267, high overall job satisfaction + 0.038 and high overall employee engagement to the organization.

When other variables were specified to be constant, age was found to have influenced social quality of working life scores with statistical significance at 0.05. The estimated equation meant practicing nurses at intensive care units aged 40 years and up had the social quality of working life score of 3.039 while the samples under 30 years of age, the samples aged 30 – 35 years and the samples aged 36 – 40 years were found to have higher mean social quality of working life scores than the samples aged 40 years and up at the mean of 0.266, 0.393 and 0.229, respectively.

Therefore, social quality of working life scores of samples under 30 years of age had the mean value of 2.773, social quality of working life scores of samples aged 30 – 35 years had the mean value of 2.646 points and physical quality of working life scores of samples aged 36 – 40 years had the mean value of 2.810 points.

When other variables were specified to be constant, chronic diseases were found to have influenced social quality of working life scores with statistical

significance at 0.001. The fact that practicing nurses in the intensive care unit had no chronic diseases increased social quality of working life scores by 0.314 points.

When other variables were specified to be constant, level of education was found to have influenced social quality of working life with statistical significance at < 0.001. Practicing nurses at the intensive care unit with education up to the master's degree level were found to have 0.328 points higher social quality of working life scores.

When other variables were specified to be constant, overall job satisfaction was found to have influenced social quality of working life with statistical significance at 0.001. Practicing nurses at the intensive care unit with high overall job satisfaction were found to have 0.267 points higher socialquality of working life scores.

The variables of gender, marital status, supplemental income and overall employee engagement to the organization had no influence on social quality of working life scores.

Table 4.11 Multiple Linear Regression Analysis of Social Quality of Working Life Scores of Practicing nurses at the Intensive Care Unit

Variables	B	SE_b	β	t	p-value
Gender (Male)					
Female	0.102	0.148	0.041	0.692	0.490
Age (40 Years & Up)					
Under 30 years of age	-0.266	0.110	-0.236	-2.419	0.016
Aged 30 – 35 Years	-0.393	0.119	-0.262	-3.307	**0.001*****
Aged 36 – 40 Years	-0.229	0.104	-0.172	-2.198	0.029
Marital Status (Divorced/Separated/Widowed)					
Single	-0.099	0.219	-0.074	-0.452	0.651
Married	-0.019	0.222	-0.014	-0.085	0.933
Chronic Diseases (Yes)					
No	0.314	0.091	0.225	3.440	**0.001*****
Level of Education (Bachelor's Degree)					
Master's Degree	0.328	0.090	0.227	3.652	**<0.001*****
Supplemental Income (Yes)					
No Supplemental income	-0.002	0.070	-0.002	-0.030	0.976
Overall Job Satisfaction (Medium)					
High	0.267	0.081	0.228	3.298	**0.001*****
Overall Employee engagement to the Organization (Medium)					
High	0.038	0.092	0.029	0.416	0.678

Constant: 3.039; SE_{est}= ± 0.504 , R = 0.473; R^2 = 0.188; F = 6.290; p-value = <0.001

Remarks: * Statistical significance was 0.05. ** Statistical significance was 0.01. *** Statistical significance was 0.001.

The outcomes from the tests of assumption of regression analysis related deviation are visible in the charts in the histogram (Figure 4.7) and Normal P-P Plot of Regression Standardized Residual (Figure 4.8), which were found to have normal distribution. In addition, the scatter plot (Figure 4.9) plotted the graph of regression standardized residual values on the Y axis and regression standardized predicted values on the X axis and found points to be scattered without a pattern, meaning variation of deviations were constant.

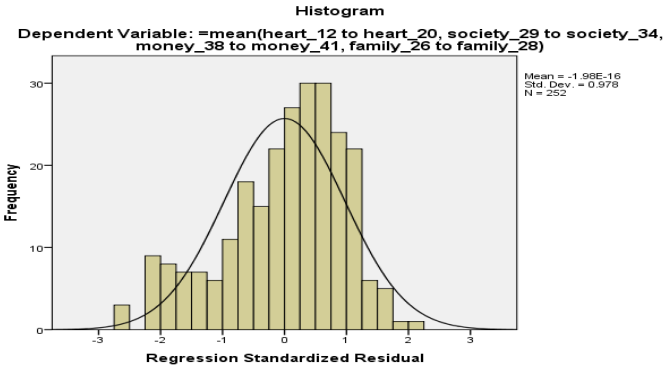

Figure 4.7 Social Quality of Working Life Histogram

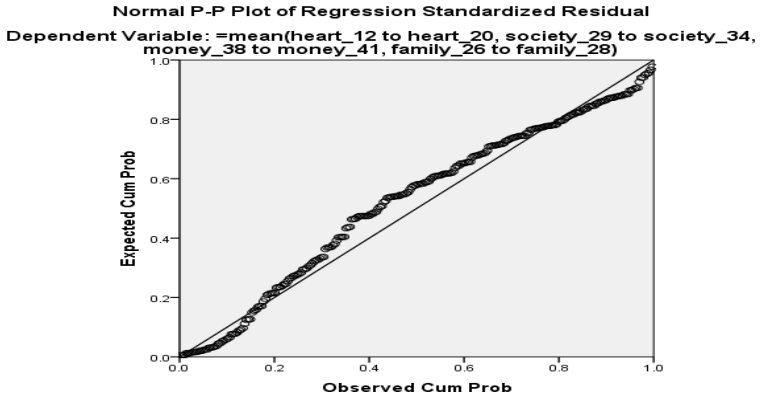

Figure 4.8 Social Quality of Working Life Normal Probability Plots

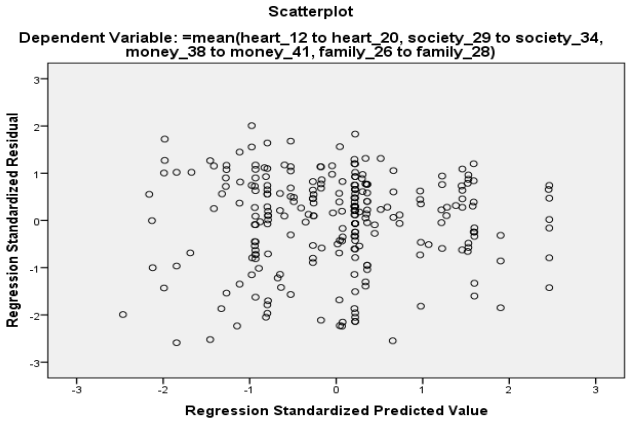

Figure 4.9 Social Quality of Working Life Scatter Plot

4.4.5 Outcome from Multiple Linear Regression Analysis of Overall Quality of Working Life Scores of Practicing Nurses: A Case Study of an Intensive Care Unit

According to Table 4.12, all eight independent variables were found to be correlated with overall quality of working life scores with the multiple correlation

coefficient of 0.473. Fluctuations of overall quality of working life scores can be explained at 18.8 percent with the ability to co-predict with statistical significance at < 0.001 and standard deviation in prediction of $\pm$ 0.346.

When predictor regression coefficients were considered, the variables of age, chronic diseases, level of education and overall job satisfaction were found to be able to predict overall quality of working life scores with statistical significance at < 0.001.

Data analysis obtained the following equations predicting overall quality of working life: Overall quality of working life scores = 2.954 + 0.060, female + 0.075, under 30 years of age – 0.090, aged 30 – 35 years – 0.057, aged 36 – 40 years – 0.091, single – 0.10, married + 0.241, no chronic diseases + 0.253, level of education at a master's degree + 0.003, no supplemental income + 0.180, high overall job satisfaction + 0.023 and high overall employee engagement to the organization.

When other variables were specified to be constant, chronic diseases were found to have influenced the overall quality of working life scores with statistical significance at <0.001. The fact that practicing nurses at the intensive care unit had no chronic diseases increased overall quality of working life scores by 0.241 points.

When other variables were specified to be constant, level of education was found to have influenced overall quality of working life with statistical significance at < 0.001. Practicing nurses at the intensive care unit with education up to the level of a master's degree were found to have 0.253 points higher overall quality of working life scores.

When other variables were specified to be constant, overall job satisfaction was found to have influenced overall quality of working life with statistical significance at 0.001. Practicing nurses at the intensive care unit with high overall job satisfaction were found to have 0.180 points higher overall quality of working life scores.

The variables of gender, marital status, supplemental income and overall employee engagement to the organization had no influence on overall quality of working life scores.

Table 4.12 Multiple Linear Regression Analysis of Overall Quality of Working Life Scores of Practicing Nurses at the Intensive Care Unit

Variables	B	SE_b	β	t	p-value
Gender (Male)					
Female	0.060	0.102	0.035	0.589	0.556
Age (40 Years & Up)					
Under 30 years of age	0.075	0.076	0.097	0.992	0.322
Aged 30 – 35 Years	-0.090	0.082	-0.087	-1.098	0.273
Aged 36 – 40 Years	-0.057	0.072	-0.062	-0.800	0.425
Marital Status (Divorced/Separated/Widowed)					
Single	-0.091	0.150	-0.099	-0.604	0.546
Married	-0.010	0.153	-0.011	-0.068	0.946
Chronic Diseases (Yes)					
No Chronic diseases	0.241	0.063	0.250	3.831	**<0.001*****
Level of Education (Bachelor's Degree)					
Master's Degree	0.253	0.062	0.254	4.094	**<0.001*****
Supplemental Income (Yes)					
No Supplemental income	0.003	0.048	0.003	0.052	0.958
Overall Job Satisfaction (Medium)					
High	0.180	0.056	0.224	3.238	**0.001*****
Overall Employee engagement to the Organization (Medium)					
High	0.023	0.063	0.025	0.363	0.717

Constant: 2.954; SE_{est}= ± 0.346 , R = 0.473; R^2 = 0.188; F = 6.272; p-value = <0.001

Remarks: * Statistical significance was 0.05. ** Statistical significance was 0.01. *** Statistical significance was 0.001.

Outcomes from tests of assumption of regression analysis related deviation are visible in the charts in the histogram (Figure 4.10) and Normal P-P Plot of Regression Standardized Residual (Figure 4.11), which were found to have normal distribution. In addition, the scatter plot (Figure 4.12) plotted the graph of regression standardized residual values on the Y axis and regression standardized predicted values on the X axis and found points to be scattered without a pattern, meaning variation of deviations were constant.

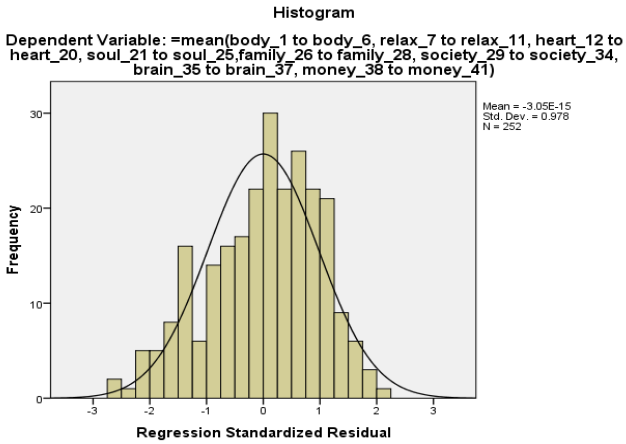

Figure 4.10 Overall Quality of Working Life Histogram

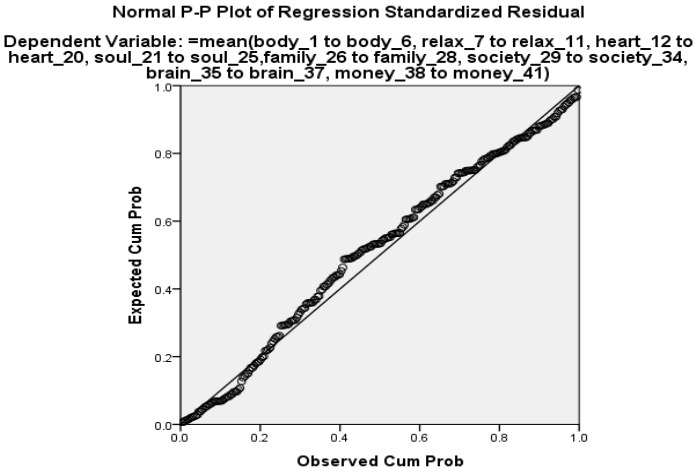

Figure 4.11 Overall Quality of Working Life Normal Probability Plots

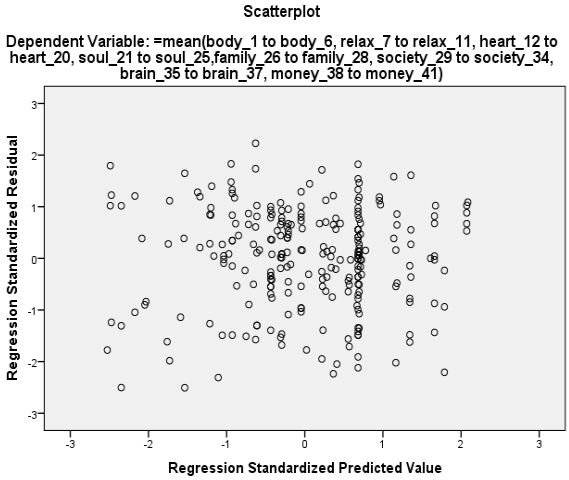

Figure 4.12 Overall Quality of Working Life Scatter Plot

CHAPTER V
DISCUSSION OF THE FINDINGS

This discussion of the findings is composed of the following four parts:

1. Quality of work-life, job satisfaction and employee engagement to the organization.

2. Correlations between personal factors, job satisfaction and employee engagement to the organization.

3. The correlation between personal factors, job satisfaction and employee engagement to the organization and quality of work-life in terms of individual aspects.

4. Examination of the factors influencing quality of work-life by using multiple linear regression.

5.1 Quality of work-life, Job Satisfaction and Employee engagement to the Organization

5.1.1 Quality of work-life

In terms of quality of work-life among nursing practitioners in intensive care units, the overall findings revealed most of the nursing practitioners to have good quality of work-life (84.1%), excellent quality of work-life (12.7%) and moderate quality of work-life (3.2%) while there were no nurses with poor quality of work-life. In other words, most of the nurses had good happiness at work. When physical, psychological and emotional and social quality of work-life were considered, most of the samples were found to have good quality of work-life, followed by excellent quality of work-life and moderate quality of work-life. When quality of work-life was considered individually, quality of work-life in the areas of happy body, happy brain, happy relaxation, happy society, happy money and happy family among nursing practitioners were found to be the same as overall quality of work-life with most of the nursing practitioners having good

quality of work-life except in the areas of happy soul and happy heart where most of the nurses were found to have excellent quality of work-life (53.6% and 51.6%), respectively. Therefore, the findings in this study supported the Happy Workplace Office, Thai Health Promotion Foundation (THPF), in that the concept of happiness measurement, the HAPPINOMETER and forms for measuring employee quality of life and happiness can be used to indicate happiness or quality in working life.

5.1.2 Job Satisfaction

Most of the nursing practitioners in intensive care units had high job satisfaction (65.1%), followed by moderate job satisfaction (34.9%). This concurred with the findings of Health Center 4, Ratchaburi (2007), which found the personnel to have satisfaction toward human resource management (80.0%) in every area in addition to concurring with Kanyaporn Srisook (1999) who found most of the employees to have high satisfaction in every motivating factor in working by placing high importance on working conditions, command, relationship with colleagues, company policy and management, relationship with supervisors, personal life, wages, job security, relations with people in other work positions, work success, opportunity to grow in duties, occupational progress, work responsibilities, job characteristics and acceptance from others. Furthermore, most of the employees were satisfied with nearly every motivating factor which maintained mental characteristics with high overall satisfaction in areas such as relationship with colleagues, job security, work position, relationship with supervisors, relationship with others, private live, command, work conditions and company policies and management.

The findings differed from the findings of Mantana Senatam (2002) who found employees to have moderate mean overall job satisfaction about motivating factors. When job satisfaction was considered individually, job satisfaction in the area of work behaviors, attitude toward the organization, motivation factors in the area of job characteristics, motivation factors in the area of duties and responsibilities, motivation factors in the area of acceptance, supporting security factors and supporting command factors had the same job satisfaction levels as in the overall view. Most of the samples had high job satisfaction, followed by moderate job satisfaction, respectively, except job satisfaction in the area of advancement motivation factors, welfare and income supporting

factors and management policy supporting factors, which found nursing practitioners to have moderate job satisfaction, followed by moderate and job satisfaction, respectively, which can be explained as follows:

5.1.2.1 Work Behaviors – Based on the findings, the overall job satisfaction of nursing practitioners in intensive care units in the area of work behaviors was found to be high. This can be explained by the fact that nursing work is correlated with studied knowledge and ability. Workers were able to use knowledge, capabilities or expertise in the nursing profession to perform work with increasing challenges and a variety of differences. This concurred with Vroom (1964) who stated that one component of job satisfaction was job content. Interesting job characteristics with challenges and a variety of responsibilities create job satisfaction. In addition, Spector (2006) stated that job satisfaction means an attitude variable reflecting personal feelings regarding the overall view of work and various angles or aspects of work by studying how people feel about working. Furthermore, another component of job satisfaction is challenge.

5.1.2.2 Attitude toward the Organization – According to the findings, most of the nursing practitioners in intensive care units had high job satisfaction in the area of attitude toward the organization. Attitude toward the organization is an overall perspective of what workers receive from the organization with value to workers such as work, performance evaluation fairness, fair regulations and policies for oneself in addition to management systems that facilitate convenient and effective work. This concurs with hygiene factors of Herzberg's Two-Factor Theory (1959). And these factors are physical factors. The need for security and employee engagement were the primary, secondary and tertiary social needs in Maslow's Needs Order Theory. This concurred with Spector's definition of job satisfaction (2006) that job satisfaction means attitude variables reflecting a person's feelings regarding the overall view of all work and various angles or aspects of work by studying how people feel about working.

5.1.2.3 Motivation Factors in the Area of Progress – According to the findings, most of the nursing practitioners in intensive care units had moderate motivation factors in the area of progress. This concurred with Vroom's (1964) job satisfaction component. Clause 4 specified promotional opportunity was a factor capable of building satisfaction in line with the study of Robbins (1993; cited in Jetsupa Lalitananpong, 2008) who found promotional opportunity and promotions to help persons

have more growth, responsibility and added social status. Thus, persons with promotional opportunities have more job satisfaction. This finding is consistent with Maslow's Hierarchy of Needs theory on human needs in Steps 4 and 5: Ego Needs. When social needs received a response, the person will proceed to the next step. Ego needs require acceptance and success. Furthermore, the organization can help create this satisfaction by praising workers, rewarding workers, increasing wages, reputation and many other topics. In addition, self-actualization responses for workers to confront create more challenges and lead to higher motivation. In the meantime, the findings concurred with hygiene factors preventing a person from having job dissatisfaction as a benefit which the person received from the organization. According to Herzberg's Two-Factor Theory (1959) including Alderfer's concept proposing the ERG Theory categorized by human needs from lowest to highest when need for survival and relationships have been met to develop against growth needs of life and work.

5.1.2.4 Job Characteristic Motivating Factor – According to the findings, most of the nursing practitioners in intensive care units had high job satisfaction in the area of job characteristics. This concurred with the motivating factors according to Herzberg (1959) who specified a person has satisfaction and motivation to work directly in the organization as a factor promoting job satisfaction, resulting in higher work efficiency. Based on the aforementioned reasons, because job characteristics of nursing practitioners in intensive care units who graduated with at least a bachelor degree in nursing. Job characteristics match knowledge and abilities. Furthermore, this job has high value for professional characteristics, especially in intensive care units where patients have life threatening risks or critical physical problems. Nurses want to provide care with close and continual observations. These factors are a response to workers' brains and mental skills. This concurs with the statement of Sujitra Limannuaisan (2008) that nurses have a rule and duty to provide care for patients to pass through crises in life. This role is considered a significant challenge to capabilities as a nurse with emphasis on treatment to provide physical and psychological care in line with physical and psychological responses in order for patients to survive and be able to adapt to normal conditions, which differs from nurses' job characteristics in the case of general patients.

5.1.2.5 Duty and Responsibility Motivating Factors – According to the findings, most of the nursing practitioners in intensive care units were found to have high job satisfaction in the area of duty and responsibility motivating factors because intensive care unit patients are a significant challenge to nursing practitioners' capabilities. Moreover, crises and emergencies are not only physical changes but also include psychological, psychological and emotional development processes. Care for critical and emergency patients is, therefore, complicated and requires individual care, including the ability to assess and determine whether or not patients are in life threatening conditions. All of the aforementioned care requires knowledge in many sciences in addition to personal skills and experience. Nurses also need to provide care for families and relatives of critical and emergency patients with anxiety, haste, inadequate understanding and many questions. This concurs with Robin (2001) who analyzed job satisfaction components and found challenge to mean work enabling a person to independently use a variety of skills to work with feedback data on how actions are assessed. Moreover, personality-job fit means a person with appropriate work capabilities will be able to succeed at work with potential for job satisfaction.

5.1.2.6 Acceptance Motivating Factors – According to the findings, most of the nursing practitioners in intensive care units were found to have high job satisfaction in the area of acceptance motivating factors. This concurs with Maslow's Hierarchy of Needs theory on human needs in Step 4: Ego Needs. When social needs receive a response, the person will proceed to the next step. Ego needs were the need for acceptance and success. Furthermore, the organization can help create this satisfaction by praising workers. Motivating factors according to Herzberg's Two-Factor Theory (1959) specify need for acceptance to be a factor causing a person to have satisfaction and motivation to work in the organization, including related needs, which are a need for relationships with others consisting of social relationships and environmental conditions surrounding the person based on Alderfer's ERG Theory (1969; cited in Surapong Jarernpan, 1994).

5.1.2.7 Welfare and Income Supporting Factors – According to the findings, most of the nursing practitioners in intensive care units were found to have moderate job satisfaction in the area of welfare and income supporting factors. This concurs with the existence needs of humans to survive which are correlated with physical

security, a basic need according to Alderfer (1969; cited in Surapong Jarernpan, 1994) including hygiene factors according to Herzberg's Two-Factor Theory (1959) which specified that work environments such as organization policy, command characteristics, relationships between colleagues, working conditions and wages influence job satisfaction among organization members and, more importantly, Maslow's Biological Needs.

5.1.2.8 Security Supporting Factors – According to the findings, most of the nursing practitioners in intensive care units were found to have high job satisfaction in the area of security supporting factors. Security supporting factors are correlated with acceptance and reliability from the organization and belief that the organization is able to carry out activities effectively. Normally, the nursing profession has high security as a profession with a personnel shortage. At the same time, intensive care unit work differs from general nursing work due to sensitivity requiring education and multiple skills. Therefore, the organization gives importance and makes efforts to retain personnel. Therefore, the findings on security supporting factors were concurrent with supporting factors according to Herzberg's Two-Factor Theory (1959) and Maslow's psychological and physical safety needs which, at the same time, was correlated with acceptance of social needs correlated with working with others, developing relationships with others and feeling as part of these organizations to build security for workers to be satisfied.

5.1.2.9 Command Supporting Factors – According to the findings, most of the nursing practitioners in intensive care units were found to have high job satisfaction in the area of command supporting factors. The findings demonstrated participation in expressing opinions, justice and equality. Non-discrimination by commanders in intensive care units was at levels satisfactory to workers. In the meantime, workers were able to work according to personal expertise and capacity. The findings were consistent with hygiene factors in Herzberg's Two-Factory Theory (1959), which was satisfaction regarding worker's environments. Furthermore, Alderfer's ERG Theory (1969; cited in Surapong Jarernpan, 1994) specified relatedness needs to be needs for relationships with other persons consisting of relationships in society and social environments surrounding the person and, in this place, the workers' commander.

5.1.2.10 Management Policy Supporting Factors – According to the findings, most of the nursing practitioners in intensive care units were found to have moderate job satisfaction in the area of management policy supporting factors. The findings demonstrate satisfaction with participation in designating goals of nursing practitioners in intensive care units and sufficient flexibility in working for compliance with the policies of medium-level organizations. The findings concurred with supporting factors or hygiene factors and were a benefit received by the person from the organization. Supporting factors are correlated with work environment such as organization policy and management systems according to Herzberg's Two-Factor Theory.

5.1.3 Employee engagement to the Organization

Based on the findings, most of the nursing practitioners in intensive care units were found to have high employee engagement to the organization in every area (77.8%). Nurses with moderate employee engagement to the organization were encountered at 22.2 percent while no nurses with low employee engagement to the organization were encountered. According to the findings, when employee engagement to the organization consists of acceptance of organization goals and values, willingness to work and desire to retain membership is considered in every aspect, every area was found to have the same employee engagement to the organization as in the overall view. Employee engagement to the organization can be explained in terms of individual values as follows:

5.1.3.1 Acceptance of the Organization's Goals and Values – According to the findings, nursing practitioners in intensive care units were found to have high employee engagement to the organization in the area of acceptance of the organization's goals and values. Nursing practitioners in intensive care units can be explained to have working goals consistent with the agency while having faith in the organization and prescribed obligations, pride in working in intensive care units from the opinion that the work was difficult, complex and honorable. This demonstrated ability and sacrifice with the ability to work consistently with the organization's goals. The findings of this study concur with Porter and colleagues (1974) who stated that one component of employee engagement to an organization is that workers have to accept the organization's goals and values or have a positive attitude toward the organization as part of its success. The findings concur with Steers and Porter (1979; cited in Jarern Wongprachanukoon,

2005) who specified that one significant concept in the area of attitude employee engagement is the fact that a person who feels as part of the organization with employee engagement and the same values and goals will dedicate to work for the organizations success. Allen and Meyer (1990) stated that affective employee engagement means employee engagement from employees' feelings as members of the organization, part of the organization with willingness to be dedicated to the organization.

5.1.3.2 Willingness to Work – According to the findings, nursing practitioners in intensive care units were found to have high employee engagement to the organization in willingness to work. Nursing practitioners in intensive care units can be explained to be eager to work willingly and at full capacity with responsibility and primary aim for the organization and work performance along with helping others, even though it is not the duty of nurses on some occasions. Willingness to work is consistent with Porter and colleagues (1974) who stated that a component of employee engagement to the organization is dedication to work at full capacity for the organization to successfully achieve goals and the findings also supported Steers and Porter (1979; cited in Jarern Wongprachanukoon, 2005) on behavioral employee engagement. Thus, high wages resulted in employee engagement to the organization without need to lose benefits from the organization.

5.1.3.3 Need to Maintain Membership – According to the findings, nursing practitioners in intensive care units were found to have high employee engagement to the organization in the area of need to maintain membership. Nursing practitioners in intensive care units can be explained to consider themselves as part of the organization and will work at this organization for as long as possible. In the meantime, when considering benefits from the organization, workers should have pride as part of the organization's progress and help the organization advance. This concurs with Porter and colleagues (1974) who stated a component of employee engagement to the organization to be the need to maintain membership of the organization without desire to resign from the organization to go to other places with the same job characteristics and higher wages. The findings also support Allen and Meyer (1990) who stated that they wanted to remain with the organization while employees with high employee engagement to the organization will stay with the organization.

5.2 Correlation between Personal Factors, Job Satisfaction, Employee engagement to the Organization and Overall Quality of work-life

5.2.1 Personal Factors

Based on the comparison of the mean overall quality of work-life scores, nursing practitioners in intensive care units with different chronic diseases, level of education, monthly income (baht), overall job satisfaction and overall employee engagement to the organization were found to have different mean overall quality of work-life scores with statistical significance. Personal factors not correlated with overall quality of work-life consisted of gender, age, marital status, work durations and additional work income.

5.2.1.1 Chronic Diseases or No Chronic Diseases – Based on the findings, the mean overall quality of work-life scores of nursing practitioners in intensive care units without chronic diseases were different from the samples with chronic diseases with statistical significance at 0.001. The samples without chronic diseases were found to have a higher overall quality of work-life score (3.38) than the samples with chronic diseases (3.08). The issue of correlations between chronic diseases or no chronic diseases and quality of work-life among nursing practitioners is a personal interest of the researcher. According to the literature review, the aforementioned factor was not found to have been used in testing to determine effects on the HAPPINOMETER. The findings of this study have created new knowledge revealing that nursing practitioners in intensive care units without chronic diseases have higher or better overall quality of work-life trends than the samples with chronic diseases.

5.2.1.2 Level of Education – According to the findings, mean overall quality of work-life scores of nursing practitioners in intensive care units with a master's degree were found to be different from the samples with bachelor's degrees with statistical significance at 0.001. The samples with master's degrees were found to have higher overall quality of work-life scores (3.52) than the samples with chronic diseases (3.27). The aforementioned findings conflicted and differed from the study of Kanitta Traipak (2005) who found personal factors consisting of level of education and work experience to have no correlation with the quality of work-life of nursing practitioners. Therefore, in terms of correlations between level of education and quality of work-life

based on the HAPPINOMETER concept, higher level of education was found to have trends for positive correlations with overall quality of work-life.

5.2.1.3 Income – According to the findings, mean overall quality of work-life scores of nursing practitioners in intensive care units with monthly incomes of 15,000 – 25,000 baht were found to be different from the samples with monthly incomes of 25,001 – 35,000 baht, the samples with monthly incomes of 35,001 – 50,000 and the samples with monthly incomes of 50,001 baht and up with statistical significance at 0.001. The samples with monthly incomes of 15,000 – 25,000 baht were found to have a lower mean overall quality of work-life score (3.06) than the samples with monthly incomes of 25,001 – 35,000 baht (3.38), the samples with monthly incomes of 35,001 – 50,000 baht (3.36) and the samples with monthly incomes of 50,001 baht and up (3.76). In addition, the samples with monthly incomes of 50,001 baht and up were found to have a higher mean overall quality of work-life score (3.76) than the samples with monthly incomes of 25,001 – 35,000 baht (3.38) and the samples with monthly incomes of 35,001 – 50,000 baht (3.36).

The aforementioned findings concur with studies stating that persons with higher income usually have higher quality of life trends or happiness in life scores with positive correlations. This was evident in that the samples with monthly incomes of 50,001 baht and up (3.76) were found to have the highest overall quality of work-life while the samples with the lowest incomes of 15,000 – 25,000 baht were found to have the mean overall quality of work-life score of 3.06. According to most of the literature review, happiness in work-life was positively correlated with wages (Traitip Leucha, 2009). Furthermore, the studies of Jarupan Kaewluan (2001), Narumon Rerng-osot (2004) and the Academic Network for Community Happiness (2008) found income to be correlated with job satisfaction with statistical significance at 0.05. Moreover, Jacobs & Gerson (2001) stated sufficient income will enable a person to respond to basic needs in life such as food,lodgings, safety, recreation and social status. High salaries and good income will help reduce perceived stress and increase happiness. However, the findings of this study showed conflict from the discovery that samples with higher income did not always have better overall quality of life, which was apparent from the fact that the samples with monthly incomes of 25,001 – 35,000 baht (3.38) were found to have better

overall quality of life than the samples with monthly incomes of 35,001 – 50,000 baht (3.36), etc.

The aforementioned findings had data which concurred and were different from previous studies. The researcher holds the opinion that this may originate from several other related factors, even though overall income of nursing practitioners in intensive care units was positively correlated with social quality of work-life based on the HAPPINOMETER concept. However, when the findings were analyzed in detail, the samples with overall quality of work-life from the highest to the lowest quality of work-life consisted of the following: 1) the samples with monthly incomes of 50,001 baht and up (3.76), 2) the samples with monthly incomes of 25,001 – 35,000 baht, 3) the samples with monthly incomes of 35,001 – 50,000 baht (3.36) and the samples with monthly incomes of 15,000 – 25,000 baht (3.06).

5.2.3 Overall Job Satisfaction – According to the findings, the mean overall quality of work-life scores of nursing practitioners in intensive care units with high overall job satisfaction was found to be different from the samples with moderate overall job satisfaction with statistical significance at 0.001. The samples with high overall job satisfaction were found to have higher overall quality of work-life scores (3.34) than the samples with moderate overall job satisfaction (3.11). The aforementioned findings concur with frequently encountered studies, such as the study of Kanyaporn Srisook (1999). Furthermore, the findings showed the overall job satisfaction of nursing practitioners in intensive care units to be clearly and positively correlated with social quality of work-life based on the HAPPINOMETER concept.

5.2.4 Overall Employee engagement to the Organization – According to the findings, the mean overall quality of work-life scores of nursing practitioners in intensive care units with high overall employee engagement to the organization were found to be different from the samples with moderate overall employee engagement to the organization with statistical significance at 0.05. The samples with high overall employee engagement to the organization were found to have a higher overall quality of work-life score (3.29) than the samples with moderate overall employee engagement to the organization (3.15).

The aforementioned findings concurred with numerous studies such as the study of Napat Jittirapap (2011) who found individual areas of work happiness such as generosity, good society, relaxation, learning, peaceful mind and no debt to be positively correlated with employee engagement to the organization. Furthermore, Somyot Nawikan (2001) stated an organization with good relationships and smooth operations successfully meet set goals. In addition, good and effective communication has the effect of causing the personnel to understand one another, cooperate in working and planning goals together. This provides opportunities for every person in the organization to share responsibilities. As a result, personnel are committed to work and creating good work quality (Boonjai Srisatitnarakoon, 2008). The organization has to create interpersonal relationships by offering support or attention. According to studies of employee engagement to the organization correlated with happiness in work-life, workplace relationships, social relationships or friendships, social relationships in a workplace were an important factor in creating happiness in work-life for organization personnel when each party paid attention to one another, thereby creating good feelings in working together (Supanee Saritwanit, 2006).

The findings of this study also concur with findings from overseas in a study by Chiumento, London, United Kingdom, on the Happiness at Work Index of 2007 among workers in the illumination business. Based on the findings, employees with a high degree of happiness in work-life to also have high employee engagement to the organization or have a positive relationship. According to the study, overall employee engagement to the organization of nursing practitioners in intensive care units was found to be positively correlated with social quality of work-life based on the HAPPINOMETER concept, which was an instrument for measuring quality of life and happiness which passed synthesis from concepts and theories correlated with quality of life and happiness development in addition to passing analysis from research processes directly correlated with quality of life and workers' happiness.

5.3 Correlations between Personal Factors, Job Satisfaction, Employee engagement to the Organization and Quality of work-life (By Dividing Quality of Work-life Based on Human Development Concepts and Theories by Using the HAPPINOMETER Concept as An Instrument for Measuring Physical, Psychological and Emotional and Social Quality of Life and Happiness)

5.3.1 Relationships between Personal Factors, Job Satisfaction, Employee engagement to the Organization and Physical Quality of Work-life

5.3.1.1 Personal Factors – Based on the comparison of mean physical quality of work-life scores and personal factors, nursing practitioners in intensive care units with different chronic diseases, level of education, work durations (year) and monthly income (baht) were found to have different physical quality of work-life scores with statistical significance. Personal factors in the area of gender, marital status, level of education and additional work income were found to have no statistical significance which identified the relationship with physical quality of work-life.

Age – According to the findings, differences in age influenced physical quality of work-life scores with statistical significance at 0.001. The samples aged under 30 were found to have a higher mean physical quality of work-life score (3.44) than the samples aged 30 – 35 years (3.29), the samples aged 36 – 40 years (3.18) and the samples aged 40 years and up (2.94). This concurred with the concept of early adulthood development in which physical strength was reflected via mature muscle growth with opportunity to increase until the age of 30 years (Penpilai Rutakananon, 2006) including mature cerebral development in persons aged 19 – 20 years. And in some cases, this finding may be encountered among persons aged 30 years (Wang & Busse, 1974; cited in Penpilai Rutakananon, 2006). The aforementioned findings differed from the study of Arunee Unhawarakorn (2006) and Chaweenan Peutsaka (2001). Age was found to be correlated with physical, psychological, emotional, intellectual and social development in addition to contributing to happiness in work-life. Age was found to be correlated with happiness in work-life. Thus, the findings of this study support the hypothesis that older workers will have tendencies for lower physical quality of work-life.

- Chronic Diseases or No Chronic Diseases – According to the findings, mean physical quality of work-life scores of nursing practitioners in intensive care units without chronic diseases differed from the samples with chronic diseases with statistical significance at 0.001. The samples without chronic diseases were found to have a higher mean physical quality of work-life score (3.35) than the samples with chronic diseases (2.94). For the aforementioned findings, the researcher designed questions without involvement from any study in making observations and using as a research topic. Therefore, the findings on the correlations between chronic disease and no chronic diseases directly affected physical quality of life or physical health, which were partly viewed by the researcher as correlated with one another because having a chronic disease while working impairs work capacity or satisfaction of workers, colleagues or commanders in addition to causing stress and physical health problems caused by work. Therefore, the findings in this study demonstrated that the samples with no chronic diseases were found to have better physical quality of work-life than the samples with chronic diseases.

- Work Experience – According to the findings, the mean physical quality of work-life of nursing practitioners in intensive care units with work experience of 1 – 10 years were found to be different from the samples with work experience of 11 – 20 years and the samples with work experience of more than 20 years with statistical significance at 0.001. The samples with work experience of 1 – 10 years were found to have a higher mean physical quality of work-life score (3.40) than the samples with work experience of 11 – 20 years (3.13) and the samples with work experience of more than 20 years (3.07). The findings from this study contradict the findings obtained from the literature review, which found higher work experience to have more positive effects on work happiness and job satisfaction such as Orawan Likitpornsawan and colleagues (2010), Preeyaporn Wonganutrot (2004) and Rungnapa Poonnart (1999). All of the aforementioned studies indicated the issue that more work durations were usually correlated with increased experience, capabilities, skills and expertise which reduces stress and builds more happiness. Furthermore, the study of Napatchon Rodtiang (2007) found work life to be positively correlated with happiness in work-life. In the present study, however, the samples with more work experience were found to have trends for lower physical quality of life. The researcher holds the opinion

that the aforementioned reasons were due to “stress and pressure” because every worker and party had trends of cooperating and competing with time in working in intensive care units for patients’ survival. At the same time, working conditions in which the nurses were faced with pressure from relatives, failure to treat or extend life and various infection risks with high significance on deterioration of worker’s mental health and morale. Therefore, confrontation with the aforementioned situation and high work burdens influenced the pre- and post-test physical and mental health of workers.

Furthermore, the aforementioned findings helped the researcher discover the relationship to have passed HAPPINOMETER measurements. The samples with extensive work experience in intensive care units were found to have lower physical happiness trends than the samples who had less work experience. This finding indicates that hospital administrators should design personnel management systems and measures to periodically rotate workers and promote various recreational activities to reduce work-related stress.

- Income – Based on the findings, the physical quality of work-life scores of nursing practitioners in intensive care units who had monthly incomes of 35,001 – 50,000 baht differed from the samples with monthly incomes of 25,001 – 35,000 baht and the samples with monthly incomes of 50,001 and up with statistical significance at 0.05. The samples with monthly incomes of 35,001 – 50,000 baht were found to have a lower mean physical quality of work-life score (3.10) than the samples with monthly incomes of 25,001 – 35,000 baht (3.30) and the samples with monthly incomes of 50,001 and up (3.41).

In this study, the samples with high incomes were found to have higher mean quality of work-life scores than the samples with moderate and low incomes. This concurred with numerous studies such as the study of Jacobs & Gerson (2001) who asserted that sufficient income will enable a person to respond to basic needs in life such as food, accommodations, safety, recreation and social status. High wages and good income will also help reduce perceived stress and increase happiness levels. Furthermore, Traitip Ruecha (2009) who studied workers in the Kam Phaeng Phet Provincial Social Development and Human Security Office found happiness in work-life to be correlated with wages. This was similar to Hamilton (2006) who found nurses’ income to be an important factor for job satisfaction. Jarupan Kaewluan (2001), Narumon Rerngosot

(2004) and the Academic Network for Community Happiness (2008) found income to be correlated with job satisfaction with statistical significance at 0.05. However, part of the findings specified that the samples with monthly incomes of 35,001 – 50,000 baht were found to have a lower mean physical quality of work-life score (3.10) than the samples with monthly incomes of 25,001 – 35,000 baht (3.30).

Furthermore, when the correlation between income and happiness levels from the HAPPINOMETER was considered, the findings showed the samples with high income working in intensive care units to have higher trends of physical happiness than the samples with lower income (25,001 – 35,000 baht/month) and the samples with moderate income (35,001 – 50,000 baht), respectively. The researcher assumed the cause to be workloads and responsibilities which workers had to carry in two conditions consisting of conditions as a commander who needed be thorough and solve problems for subordinates along with training new workers. At the same time, if problems occurred and subordinates cannot perform work which exceeded capacity, the aforementioned burden will directly fall on supervisors.

5.2.1.2 Overall Job Satisfaction – According to the findings, comparison of different mean job satisfaction did not reveal different mean physical quality of work-life scores with statistical significance. The aforementioned finding obtained the conclusion that different job satisfaction did not affect or have a significant correlation with physical quality of life based on the HAPPINOMETER concept.

5.2.1.3 Overall Employee engagement to the Organization – According to the findings, different overall employee engagement to the organization did not reveal different mean physical quality of work-life with statistical significance. Therefore, different overall employee engagement to the organization did not influence physical quality of happiness based on the HAPPINOMETER concept.

5.3.2 Correlations between Personal Factors, Job Satisfaction, Employee engagement to the Organization and Psychological and Emotional Quality of work-life

5.3.2.1 Personal Factors – According to comparison of mean psychological and emotional quality of work-life scores, nursing practitioners in intensive care units with different age, marital status and work durations (years) were found to have

different mean psychological and emotional quality of work-life scores with statistical significance. Personal factors without statistical significance indicating correlations with psychological and emotional quality of work-life consisted of gender, monthly income and additional work income.

- Age – According to the findings, the mean psychological and emotional quality of work-life scores of nursing practitioners in intensive care units aged under 30 years were found to be different from the samples aged 36 – 40 years and the samples aged 40 years and up with statistical significance. The samples aged under 30 were found to have a higher mean psychological and emotional quality of work-life score (3.50) than the samples aged 36 – 40 years (3.16) and the samples aged 40 years and up (3.08).

The aforementioned factors contradicted and differed from the findings of many other studies such as Panida Kacha (2008). Age was positively correlated with happiness in work-life among nurses. Arunee Unhawarakorn (2006) and Chawinan Peutsaka (2001) found age to be correlated with physical, psychological, emotional, intellectual and social development in addition to contributing to happiness in work-life. Furthermore, Jongjit Lertwiboonmongkon (2003) found the personal factor of age to be positively correlated with happiness in work-life of nurses at government university hospitals. Moreover, the findings contradicted the study of Nantaporn Butsarakamwadee and Yuwaman Sripanyawutisak (2008) who studied the factors influencing happiness in work-life of nurses at Nakhon Nayok Hospital ($r = .191$) with statistical significance at 0.05 and found age to be correlated with happiness in work-life on interesting issues consisting of the aforementioned negative or fluctuation in correlations between psychological and emotional quality of life and age in the same direction as physical quality of life, which found age to be negatively correlated with physical happiness.

Furthermore, if considered in line with the HAPPINOMETER concept used by the researcher to measure happiness in the issue of the age personal factor, the findings of this study showed younger samples or the samples aged under 30 years to have a higher mean psychological and emotional quality of work-life score (3.50) than the samples aged 36 – 40 years (3.16) and the samples aged 40 years and up (3.08).

In other words, the findings of this study indicated older workers to have gradually lower or fluctuating physical quality of life.

- Marital Status – According to the findings, mean psychological and emotional quality of work-life scores of nursing practitioners in intensive care units who were single differed from the samples who were married with statistical significance at 0.05. The samples who were single were found to have a higher psychological and emotional quality of work-life score (3.36) than the samples who were married (3.18).

The findings of this study differed from other studies such as the study of Kesinee Kaoyangyuen (2003) who studied social and mental factors and found certain characteristics to be correlated with nursing practice and job satisfaction among professional nurses working in intensive care units of a medical center, whereby married professional nurses were found to have higher job satisfaction than single professional nurses because married nurses received support from spouses and were able to vent frustrations from work in addition to helping one another in making decisions to solve problems. Furthermore, marital status was correlated with quality of work-life along with conflicting with the concept of Lucas et al., (2003) who studied concepts regarding forms of happiness from changes in marital status (2003) and found changes in marital status to be correlated with changes of satisfaction in later life and married persons were found to be happier than unmarried persons with influence on job satisfaction. In addition, Kim and McKenry's concept (2002) found married persons to be happier than other groups. If the aforementioned relationship was considered with the HAPPINOMETER concept, single marital status of nursing practitioners in intensive care units was found to have higher psychological and emotional quality of work-life than married persons.

- Chronic Diseases or No Chronic Diseases – Based on the findings, the mean psychological and emotional quality of work-life scores of nursing practitioners in intensive care units without chronic diseases differed from the samples with chronic diseases with statistical significance at 0.001. The samples without chronic diseases were found to have a higher mean psychological and emotional quality of work-life score (3.37) than the samples with chronic diseases (3.11). The aforementioned findings were discovered by the researcher who did not review researches correlated with the aforementioned topic. In addition, the findings of this study concurred with the correlation between the personal factor of chronic disease or no chronic diseases and

physical quality of life. Furthermore, this discovery can be used as a norm for future studies of relationships between psychological and emotional quality of work-life based on the HAPPINOMETER concept and chronic diseases or no chronic diseases.

- Work Experience – According to the findings, mean psychological and emotional quality of work-life of nursing practitioners in intensive care units with work experience of 1 – 10 years were found to be different from the samples with work experience of 11 – 20 years and the samples with work experience of more than 20 years with statistical significance at 0.001. The samples with work experience of 1 – 10 years were found to have a higher mean psychological and emotional quality of work-life score (3.46) than the samples with work experience of 11 – 20 years (3.16) and the samples with work experience of more than 20 years (3.12).

The findings from this study contradicted the findings obtained by several studies. According to Orawan Likitpornsawan and colleagues (2010), work experience is a personal factor contributing to job satisfaction and ability to work happily while clinical expertise resulted in more learning and experience including ability to understand problems, causing nurses to be confident in job decisions. Jiraporn Praetuan (2000) found different work experience among nurses to result in different job satisfaction. Job satisfaction was a dimension of happiness in work-life, etc. Therefore, if workers have shorter work life or less work experience, they will have better psychological and emotional quality. Therefore, age has a contrary correlation (fluctuated) with psychological and emotional quality of work-life based on the HAPPINOMETER concept.

5.3.2.2 Overall Job Satisfaction – According to the findings, different mean job satisfaction among nursing practitioners in intensive care units did not reveal different mean physical quality of work-life with statistical significance. The aforementioned findings showed different job satisfaction did not cause significantly different effects on psychological and emotional quality of work-life based on the HAPPINOMETER concept. In other words, the findings of this study showed differences in job satisfaction among nursing practitioners in intensive care units to not cause differences in psychological and emotional quality of work-life among nursing practitioners. In addition, the aforementioned findings also concurred with the correlation

between physical quality of work-life and overall job satisfaction, which revealed different job satisfaction to have no effect in causing physical quality of work-life to change.

5.3.2.3 Overall Employee engagement to the Organization – According to the findings, different mean employee engagement to the organization among nursing practitioners in intensive care units did not reveal different mean psychological and emotional quality of work-life with statistical significance. The aforementioned findings showed different employee engagement to the organization did not cause significantly different effects on psychological and emotional quality of work-life based on the HAPPINOMETER concept. Furthermore, the findings of this study concurred with the correlation between physical quality of work-life and overall employee engagement to the organization, which revealed different job satisfaction levels to not have effects causing physical quality of work-life to change.

5.3.3 Correlations between Personal Factors, Job Satisfaction, Employee engagement to the Organization and Social Quality of Life

5.1.3.1 Individual Personal Factors– Based on the comparison of the mean social quality of work-life scores of nursing practitioners in intensive care units, the samples with different age, chronic disease, level of education, work durations (years) and monthly income (baht) were found to have different mean social quality of work-life scores with statistical significance. Personal factors without statistical significance indicating correlations with psychological and emotional quality of work-life consisted of gender and additional work income.

- Age – According to the findings, mean social quality of work-life scores of nursing practitioners in intensive care units aged under 40 years and up were found to be different from the samples aged under 30 years and the samples aged 30 – 35 years with statistical significance at 0.05. The samples aged 40 years and up were found to have a higher mean social quality of work-life score (3.55) than the samples aged under 30 years (3.28) and the samples aged 30 – 35 years (3.23). The aforementioned factors concurred and differed from the findings of other studies. Concurrent studies found the samples aged 40 years and up to have higher mean social quality of work-life scores than the samples aged under 30 years and the samples aged 30 – 35 years, which were in line with concepts and most of the findings which revealed age to be positively correlated with

social quality of work-life such as Panida Kacha (2008), Arunee Unhawakorn (2006) and Chawinan Peutsaka (2001) who found age to be correlated with physical, psychological, emotional, intellectual and social development in addition to contributing to happiness in work-life, etc. However, the findings in this study differed from the aforementioned studies mentioned by the researchers because the samples aged under 30 years (3.28) were found to have a higher mean social quality of work-life score than the samples aged 30 – 35 years (3.23). The findings of this study encountered nursing practitioners in intensive care units with different social quality of work-life based on the HAPPINOMETER concept according to different age. The group with the highest social quality of work-life in descending order was composed of the samples aged 40 years and up, followed by the samples aged under 30 years and the samples aged 30 – 35 years, who had the least social quality of work-life.

- Chronic Diseases or No Chronic Diseases – According to the findings, the mean social quality of work-life scores of nursing practitioners in intensive care units without chronic diseases were found to differ from the samples with chronic diseases with statistical significance at 0.05. The samples without chronic diseases were found to have a higher mean social quality of work-life score (3.39) than the samples with chronic diseases (3.13). The findings of this study were discovered by the researcher who did not review researches correlated with the aforementioned topic. In addition, the findings of this study concurred with the correlation between the personal factor of chronic disease or no chronic diseases and physical, psychological and emotional quality of work-life. Furthermore, this discovery can be used as a norm for future studies of relationships between social and emotional quality of work-life based on the HAPPINOMETER concept and chronic diseases or no chronic diseases. Therefore, the findings of this study created new knowledge that nursing practitioners in intensive care units who did not have chronic diseases will have a positive effect on all three areas of quality of work-life (physical, psychological and emotional and social).

- Level of Education – According to the findings, mean social quality of work-life scores of nursing practitioners in intensive care units with a master's degree were found to be different from the samples with a bachelor's degree with statistical significance at 0.001. The samples with a master's degree were found to have a higher social quality of work-life score (3.67) than the samples with chronic diseases

(3.26). The aforementioned findings differed from the study of Kanitta Traipak (2005) who found personal factors consisting of level of education and work experience to have no correlation with quality of work-life of nursing practitioners. However, this study showed higher level of education to have trends of clearly and positively influencing social quality of work-life based on the HAPPINOMETER concept.

- Work Experience – According to the findings, different mean social quality of work-life scores of nursing practitioners in intensive care units influenced social quality of life with statistical significance at 0.001. The samples with work experience of more than 20 years were found to have a higher mean social quality of work-life score (3.60) than the samples with work experience of 1 – 10 years (3.27) and the samples with work experience of 11 – 20 years (3.29). The aforementioned findings concurred with many studies such as Napatchon Rodtiang (2007) who found work life to be positively correlated with happiness in work-life, Jantakrit Krittam (2010) who found employees with the work life of more than 11 years to have more happiness in work-life that employees with the work life of ten years or less including Chutimon Fapinyo (2009) who found personnel with the work life of more than five years and personnel with the work life of less than one year to have a higher mean happiness in work-life score than personnel with the work life of 1 – 3 years and personnel with the work life of 3 – 5 years. In addition, the findings from this study contradicted the findings of Napat Jittirapap (2011) who found different work life to cause no difference in happiness in work-life because hospital working conditions require coordination with various agencies. Persons with different ages also have different work lives and work requiring coordination with various agencies created good relationships and friendships among people in the workplace. Thus, different work lives did not cause employees to have differences in happiness.

The aforementioned findings indicated the age or work experience of nursing practitioners in intensive care units were found to be clearly and positively correlated with social quality of work-life according to the happiness indication concept based on the HAPPINOMETER concept. The researcher had the opinion that, because work in intensive care units requires coordination from a number of parties, including internal agencies, external agencies and patients' relatives. Coordination is a skill that requires work experience to know methods for managing problems in order to be

able to work effectively, which will lead to unofficial networks in working together with positive effects on the aforementioned social quality of work-life.

- Income – According to the findings, the social quality of work-life scores of nursing practitioners in intensive care units who had monthly incomes of 15,000 – 25,000 baht differed from the samples with monthly incomes of 25,001 – 35,000 baht, the samples with monthly incomes of 35,001 – 50,000 baht and the samples with monthly incomes of 50,001 baht and up with statistical significance at 0.001. The samples with monthly incomes of 15,000 – 25,000 baht were found to have a lower mean social quality of work-life score (2.86) than the samples with monthly incomes of 25,001 – 35,000 baht (3.45) and the samples with monthly incomes of 35,001 – 50,000 baht (3.51) and the samples with monthly incomes of 50,001 baht and up (4.00). In addition, the samples with monthly incomes of 50,001 baht and up were found to have a higher social quality of work-life score (4.00) than the samples with monthly incomes of 25,001 – 35,000 baht (3.45) and the samples with monthly incomes of 35,001 – 50,000 baht (3.51). The aforementioned findings concurred with most of the literature reviewed by the researcher, which found happiness in work-life was positively correlated with wages (Traitip Leucha, 2009). Furthermore, the studies of Jarupan Kaewluan (2001), Narumon Rerng-osot (2004) and the Academic Network for Community Happiness (2008) found income to be correlated with job satisfaction with statistical significance at 0.05. Moreover, Jacobs & Gerson (2001) stated sufficient income will enable a person to be able to respond to basic needs in life such as food, residence, safety, recreation and social status. High salaries and good income will help reduce perceived stress and increase happiness.

According to the findings, the income of nursing practitioners in intensive care units was found to be positively correlated with social quality of work-life based on the HAPPINOMETER concept. The researcher believes this to be due to natural human needs to live together and attempt to display a superior social status over others and resources or money had a definite and important part in expressing social status (viewed individually). However, sufficient and excess income beyond basic needs from daily and family spending can be used as resources to support happiness. As a social animal, the aforementioned human expression can be performed through socialization, meetings outside workplaces, shared activities, the purchase of presents or sharing meals.

All of the aforementioned activities needed money as a factor. At the same time, position and income were usually consistent. In other words, persons with high income usually had higher work positions, respect and acceptance from others, all of which are sources of social happiness.

5.3.3.2 Overall Job Satisfaction – According to the findings, different mean social quality of work-life scores among nursing practitioners in intensive care units with high overall job satisfaction were found to be different from the samples with moderate overall job satisfaction with statistical significance at 0.001. The samples with high overall job satisfaction were found to have a higher mean social quality of work-life score (3.46) than the samples with moderate overall job satisfaction (3.11). This concurred with various studies such as the study of Benjawan Seeho (1999) who found interpersonal relationships to be positively correlated with job satisfaction of nursing practitioners, etc.

When the findings were considered with measurement of happiness in work-life based on the HAPPINOMETER concept, the findings of the present study showed job satisfaction to be positively correlated with social quality of work-life. According to the aforementioned findings, when details on job satisfaction were considered, most of the issues were found to be correlated with quality of life in building social happiness such as occupational progress, relationship with organization members, relationship with commanders, workplaces (work environments) including factors reflected via pride and acceptance from colleagues consisting of wages, occupational progress and work success.

5.3.3.3 Overall Employee engagement to the Organization

According to the findings, different mean social quality of work-life scores among the samples with high overall employee engagement to the organization were found to be different from the samples with moderate overall job satisfaction with statistical significance at 0.01. The samples with high overall employee engagement to the organization were found to have a higher mean social quality of work-life score (3.39) than the samples with moderate overall job satisfaction (3.14). This concurred with various studies such as the study of Somyot Nawikarn (2001) who stated that organizations with personnel who have good relationships and work smoothly will successfully achieve goals and good effective communication results in the personnel

having understanding, cooperative work habits, joint goal planning and opportunities for every person in the organization to share responsibility. As a result, the personnel are committed to work with the end result of good work quality (Boonjai Srisatitnarakoon, 2008). The organization must build interpersonal relationships by supporting or showing interest. Workplace relationships are external personal factors with impact on job satisfaction according to Herzberg's concept (1968). Furthermore, the work of Napat Jittirapap (2011) found happiness in work-life in individual areas such as happy heart, happy society, happy relaxation, happy brain, calmness and no debt to be positively correlated with employee engagement to the organization. Therefore, when social quality of work-life is considered based on the HAPPINOMETER, employee engagement to the organization among nursing practitioners in intensive care units was shown to be positively correlated with social quality of work-life.

5.4 Testing Factors Influencing Quality of Work-life Using Multiple Linear Regression Statistics

5.4.1 Overall Quality of Work-life

According to the study, variables influencing overall quality of work-life with statistical significance are composed of three variables, namely, chronic diseases, level of education and satisfaction. The variables of gender, age, marital status, additional work income and overall employee engagement to the organization had no influence on overall quality of work-life.

5.4.1.1 Chronic Diseases and No Chronic Diseases – According to the findings, nursing practitioners in intensive care units with no chronic diseases had higher overall quality of work-life scores because persons with no chronic diseases or good psychological and physical health were able to work at full capacity, had good performance and more happiness in work-life than the samples with chronic diseases. This concurred with the World Health Organization (1993) who defined healthy workplace as a place where workers and supervisors worked by making continual improvements to protect and promote health, safety and living conditions of every worker

with sustainability using four dimension of components consisting of the physical, psychological, social and intellectual components.

5.4.1.2 Education – According to the findings, nursing practitioners in intensive care units who received education at the master's degree level were found to have higher overall quality of work-life scores. This differed from the findings of Kanitta Traipak (2005) who found personal factors such as level of education and work experience to not be correlated with quality of work-life among nursing practitioners. The aforementioned findings demonstrated that level of education can influence happiness in work-life because the samples who graduated at higher levels of education had more expertise, knowledge and skills. Thus, higher education can be more effectively implemented in problem-solving, planning and working. Furthermore, the samples with higher education received more wages giving them higher income.

The aforementioned findings concur with Chutimon Fapinyo (2009) who found the employees of Quality Ceramics Co., Ltd. in Lampang who received higher education than a bachelor's degree to have higher mean happiness in work-life than the personnel who received secondary and vocational educations with statistical significance at 0.05. Thus, the findings supported the hypothesis that higher education can influence quality of work-life.

5.4.1.3 Job Satisfaction – According to the findings, nursing practitioners in intensive care units with high overall job satisfaction were found to have higher overall quality of work-life scores. The aforementioned findings concurred with Spector (2006) who demonstrated effects of job satisfaction on organization employees as life satisfaction. Life satisfaction was considered as an indicator of overall health or emotional happiness. Furthermore, the findings supported concepts regarding the quality of work-life of many scholars such as Cascio (1992; cited in Sakchai Kusawad, 2005) who stated that quality of work-life means the feelings of every organization member who is happy when working together to successfully achieve goals with opportunities to participate in making work decisions, setting guidelines for modifying and improving work by considering work environments, procedures, good relationships among colleagues and opportunities for progress. In addition, quality of work-life is an expectation and need for each different worker. The findings also concur with quality of work-life component concepts of Walton (1974) and Bruse and Blackburn (1992; cited in

Sunet Namkotsri, 2010) who stated that quality of work-life is a component of fair and commensurate wages, safe work environment, opportunity and progress, social interaction and balance between work life and private life. Similarly, Huse and Cumming (1985) presented characteristics of quality of work-life such as sufficient wages, safe working conditions, development opportunity and occupational progress, social relationships, management and freedom from work (balance between work and private lives) and social engagement.

The findings concur with Kanyaporn Srisook (1999) who found most employees to have satisfaction toward every work motivation factor by placing high importance on factors such as working conditions, command, relationships with colleagues, company policy and management, relationship with supervisors, private life, wages, job security, interpersonal relationships in other work positions, occupational success, career advancement opportunities, career progress, responsibilities, job characteristics and acceptance from others. Employees were very satisfied toward almost every motivation factor such as job characteristics, career advancement opportunities, work success, responsibilities and acceptance from others. Most of the employees had low satisfaction in the area of career progress.

5.4.2 Quality of Work-life in Separate Areas

The HAPPINOMETER concept in each area was used to divide quality of work-life into physical, psychological and emotional and social quality of work-life (bio-psycho-social). The adulthood development in working age concept and theory was used as an instrument for measuring quality of life and happiness divided as follows:

5.4.2.1 Physical Quality of Work-life (Happy Body, Happy Brain) – When regression coefficient of predictors was considered, the variables of age, chronic diseases and level of education were able to predict physical quality of work-life scores with statistical significance. Gender, marital status, additional work income, overall job satisfaction and overall employee engagement to the organization had no influence on physical quality of work-life scores. When considered in detail, each variable which influenced physical quality of life was composed of the following:

- Age – According to the findings, age influenced physical quality of work-life with statistical significance at 0.01. The physical quality of work-life scores

of the samples aged under 30 years had a mean of 3.259 points, physical quality of work-life scores of the samples aged 30 – 35 years had a mean of 3.050 points, physical quality of work-life scores of the samples aged 36 – 40 years had a mean of 2.957 points and physical quality of work-life scores of the samples aged 40 years and up had a mean of 2.738 points. It can be said that nursing practitioners in intensive care units who were in early adulthood (aged under 30 years) had higher physical quality of work-life trends that both mid-adulthood age ranges (30 – 35 years and 36 – 40 years).

The findings concurred with Havinghurst (1972; cited in Suwat Wattanawong, 1995) who stated that development in early adulthood usually involves complete development in nearly every area with fewer health problems that will become work obstacles or limitations than older adults. The findings also concur with the HAPPINOMETER concept which states that older workers have gradually reduced physical quality of life trends. In the meantime, the findings of this study do not concur with Arunee Unhawarakorn (2006) and Chawinan Peutsaka (2001) who found age to be correlated with physical, psychological, emotional, intellectual and social development while also contributing to happiness in work-life.

- Chronic Diseases – Based on the findings, chronic diseases influence physical quality of work-life scores with statistical significance at < 0.001. Nursing practitioners in intensive care units with no chronic diseases had increased quality of work-life scores.

The findings concurred with Havighurst (1972; cited in Suwat Wattanawong, 1995) who stated that adulthood is a period of full physical development, especially in terms of muscles with opportunity for increased strength until the age of 30 years (Penpilai Rutakananon, 2009). The samples had the opinion that the fact that the samples had no chronic diseases was correlated with age under the aforementioned concept. Early adult workers usually have better health than workers in mid-adulthood, which influenced physical quality of work-life. If considered based on the HAPPINOMETER concept, the findings of this study demonstrate that samples with no chronic diseases have better physical happiness trends than the samples with chronic diseases. Related studies in Chapter 2 did not mention the factor of chronic disease. Thus, the aforementioned findings are a significant discovery and chronic diseases can be concluded to have influence on physical quality of work-life whereby the samples with no

chronic diseases were found to have better physical quality of life than the samples with chronic diseases.

- Level of Education – According to the findings, level of education influenced physical quality of work-life with statistical significance at < 0.001. Nursing practitioners in intensive care units who had graduated with a master's degree were found to have higher physical quality of work-life scores. This finding did not concur with the findings of Kanitta Traipak (2005) who stated that personal factors such as level of education and work experience were not correlated with quality of work-life among nursing practitioners. The researcher holds the opinion higher level of education influences higher quality of work-life because happy body and happy brain in level of education are able to influence higher behaviors, attitude and awareness of self-esteem such as by avoiding narcotic substances, taking care of health, exercising frequently and maintaining interest in seeking knowledge for occupational benefits and advancement in life while, at the same time, having more channels of learning that the samples who graduated at lower levels of education. These factors had effects causing nursing practitioners in intensive care units to have higher physical quality of work-life trends.

5.4.2.2 Psychological and Emotional Quality of work-life (Happy relaxation, Happy Soul) – When regression coefficient of predictors was considered, the variable of age was found to have influenced psychological and emotional quality of work-life with statistical significance. Gender, marital status, chronic diseases, level of education, additional work income, overall job satisfaction and overall employee engagement to the organization had no influence on psychological and emotional quality of work-life scores.

- Age – According to the findings, age influenced psychological and emotional quality of work-life scores with statistical significance at 0.05. The largest group of nursing practitioners in intensive care units, the samples aged under 30 years, had a mean of 3.386 points, followed by the samples aged 30 – 35 years with the mean of 3.179 points and the samples aged 40 years and up with had a mean of 2.962 points. In short, older nursing practitioners in intensive care units had lower psychological and emotional quality of work-life trends.

The aforementioned findings included considerable differences from Robert Peck's Adulthood Development Concept (1968; cited in Penpilai Rutakananon, 2006), which states that adults aged 40 – 50 years have significant adjustments with emphasis on social relationships and living together with understanding and care more than gender while having emotional flexibility with the ability to change emotion use from one person to another while being open-minded to new ideas.

The researcher holds the opinion that the fact that older samples had lower psychological and emotional happiness trends than younger samples was caused by work environment where the samples lost patients or perceived hopelessness in addition to having older age. The second reason or personal factor was compliant with Harvighurst's (1972; cited in Penpilai Rutakananon, 2006) statement that workers in mid-adulthood had more responsibility for family and society, including adolescent children and adjustment to parents entering old age. Furthermore, workers in mid-adulthood usually were confused about social and personal benefits, easily causing workers in mid-adulthood to experience stress and anxiety, depending on previous development (Ericson, 1963). At the same time, when entering their late forties and early fifties, humans undergo hormone changes influencing mental states such as emotional turmoil, weakness and anxiety. Symptoms among menopausal women such as flashing heat are also encountered by some men.

Furthermore, the researcher holds the opinion current social and economic conditions where people in society emphasize competition with time and pay attention to building economic status contribute to pressure causing stress and reduced time for relaxation or family members and friends to perform relaxing activities while also affecting opportunities to access mental and concentration training or consider various actions or environments. Moreover, under current social and economic conditions, people are far from compliance with Buddhist principles. If considered based on the HAPPINOMETER concept, age showed the samples aged less than or under 30 years to have a higher mean psychological and emotional quality of work-life score (3.50) than the samples aged 36 – 40 years (3.16) as well as the samples aged 40 years and up (3.08).

The findings of this study do not concur with other studies such as Panida Kaccha (2008) and Jongjit Lertwiboonmongkon (2003) who found age to be positively correlated with happiness in work-life among nursing practitioners, the findings

of Arunee Unhawarakorn (2006) and Chawinan Peutsaka (2001) who found age to be correlated with the mind, emotions, intellect and society in addition to contributing to happiness in work-life and the findings of Nantaporn Bussarakamwadee and Yuwamal Sripanyawutisak (2008) who studied factors influencing happiness in work-life among nurses at Nakhon Nayok Hospital, etc.

5.4.2.3 Social Quality of work-life (Happy Heart, Happy Society, Happy Money, Happy Family) – When regression coefficient of predictors were considered, age, level of education and overall job satisfaction were found to be able to predict overall quality of work-life with statistical significance at < 0.001. Gender, marital status, supplemental work income and overall employee engagement to the organization had no influence on social quality of work-life scores.

- Age – Based on the findings, age influences social quality of work-life scores of nursing practitioners in intensive care units at different levels. The samples with the highest mean social quality of work-life score were the samples aged 40 years and up with the social quality of work-life score of 3.039 points, followed by the samples aged 36 – 40 years with a mean score of 2.810 points and the samples aged under 30 years with a mean score of 2.773 points. The samples with the lowest mean score were the samples aged 30 – 35 years with a mean score of 2.646 points, respectively. The aforementioned findings concur with Robert Peck's Adulthood Development Concept (1968; cited in Penpilai Rutakananon, 2006), which states that adults aged 40 – 50 years will transition to emphasis on socializing vs. sexualizing in human relationships. The people in this age live with more understanding and care than concern with sex. They also attempt to build personal value in society, begin to be successful as good citizens or have social responsibilities, reputations or efforts to properly adjust to adult parental roles (Havighurst, 1972; cited in Suwat Wattanawong, 1995). Age is considered to be correlated with quality of work-life in the areas of happy heart, happy money, happy family and happy society based on the HAPPINOMETER concept.

Nevertheless, the findings include cases that both concur and differ from other studies. In concurrent studies, the samples aged 40 years and up were found to have a higher mean social quality of work-life score than the samples aged under 30 years and the samples aged 30 – 35 years. This concurs with concepts and research findings, most of which have found age to be positively correlated with social quality of

work-life. Some examples include the studies of Panida Kacha (2008), Arunee Unhawarakorn (2006) and Chawinan Peutsaka (2001) who found age to be correlated with physical, psychological, emotional, intellectual and social development in addition to contributing to happiness in work-life, etc. However, the findings of the present study differed from the findings previously mentioned by the researcher because the samples aged under 30 years were found to have a higher mean social quality of work-life score than the samples aged 30 – 35 years.

- Chronic Diseases – According to the findings, chronic diseases were found to have influenced social quality of work-life scores with statistical significance at 0.001. The fact that nursing practitioners in intensive care units had no chronic diseases increased social quality of work-life scores. When analyzed based on the HAPPINOMETER concept, the factor of no chronic diseases was found to be able to influence social happiness among nursing practitioners because nursing practitioners were able to perform activities which facilitate social happiness such as performing activities with family members and neighbors. Good mental health as the result of good physical health helped to encourage nursing practitioners to not feel depression in living and interacting with others. In the meantime, nursing practitioners are able to dedicate physical and mental energies to colleagues in teaching, transferring knowledge, exchanging experience and working effectively until nursing practitioners become accepted by the people around them.

- Level of Education – According to the findings, level of education influenced social quality of work-life with statistical significance at < 0.001. Nursing practitioners in intensive care units who received education at the master's degree level were found to have higher social quality of work-life scores. The findings concur with Kanitta Traipak (2005) who found personal factors such as level of education and work experience to have no correlation with quality of work-life of nursing practitioners. The researcher holds the opinion that the reason why higher level of education influences better social quality of working live is indirect due to Thai society's general acceptance and praise for persons with higher education. In the meantime, high education influences promotion and acceptance from colleagues for personal abilities. This leads to job satisfaction and happiness. Therefore, higher levels of education influence social quality of work-life based on the HAPPINOMETER concept to a higher degree.

- Overall Job Satisfaction – According to the findings, overall job satisfaction influenced social quality of work-life scores with statistical significance at 0.001. Nursing practitioners in intensive care units with high overall job satisfaction were found to have higher social quality of work-life scores. The findings concur with Diener and Seligman (2004) who found work relationships to be a significant component of good livelihood and happiness in the workplace and leading to good workplace relationships. Humans require support from the people around them, creative relationships and feelings of being a part of society. Workplace relationships are an external factor of persons influencing job satisfaction based on Herzberg's concept (1968). This was similar to the study of Kanyaporn Srisook (1999) who found most employees to have high satisfaction toward every motivating factor in work lives by placing high importance on working conditions, command, relationship with colleagues, company policy and management, relationships with supervisors, personal life, wages, job security, relations with people in other work positions, work success, opportunity to grow in duties, occupational progress, work responsibilities, job characteristics and acceptance from others. This concurred with Mantana Senatam (2002) who found the factors in which employees had high satisfaction to be composed of work success and respect. In addition, the findings concur with the findings of many other studies. When the HAPPINOMETER concept was considered, the findings showed job satisfaction to be positively correlated with social quality of work-life. All involvement with quality of life correlated with building social happiness consisted of occupational progress, relationship with other persons in the organization, relationship with commanders, the workplace (work environments) and factors reflected via pride and acceptance among colleagues such as wages, occupational progress and work success.

CHAPTER VI
CONCLUSION AND RECOMMENDATIONS

This study on the quality of working life of practicing nurses: A Case Study of An Intensive Care Unit was based on a quantitative research design. The conclusion of the findings in this presentation is an explanation of the research process, presentation of conclusions of the findings based on objectives and presentation of recommendations from the study, including recommendations for future studies as follows:

6.1 Objectives

1. To study the quality of working life of practicing nurses in the intensive care unit.

2. To study factors with correlations between personal factors, job satisfaction, employee engagement to the organization and quality of working life of practicing nurses in the intensive care unit.

3. To study and compare differences in personal factors, job satisfaction and employee engagement to the organization influencing quality of working life of practicing nurses in the intensive care unit.

4. To implement the findings as guidelines and recommendations for the development and improvement quality of working life for practicing nurses in the intensive care unit.

6.2 Hypotheses

1. Differences in personal factors of practicing nurses will result in different quality of working life.

2. Differences in job satisfaction of practicing nurses will result in different quality of working life.

3. Differences in employee engagement to the organization of practicing nurses will result in different quality of working life.

4. The aforementioned factors will influence the work of practicing nurses in the intensive care unit.

6.3 Methodology

1. The population of this study was composed of 487 practicing nurses with at least one year of experience working in 17 intensive care unit departments at a public hospital in Bangkok (not including the heads of wards in each department). The samples were selected by stratified random sampling based on proportions before being sampled by simple random sampling according to sample size in each patient ward by calculating percentage of a population of 264 practicing nurses in the intensive care unit. Thus, the population in this study was composed of 264 samples and questionnaires were returned by 252 samples.

2. Instrumentation was composed of questionnaires with choice answers covering four parts of content consisting of: Part 1 – The Personal Factor Questionnaire, Part 2 – The Quality of Working Life Measuring Form, Part 3 – The Job Satisfaction Measuring Form and Part 4 – The Employee engagement to the Organization Measuring Form. Instrument quality was tested twice. The first instrument testing was carried out in ten persons similar to the sample group and presented to the thesis supervisory committee to test questionnaire accuracy. During the second instrument quality testing, instruments were trial tested in no less than 30 persons similar to the sample group and questionnaire reliability was determined using Cronbach’s Alpha Coefficient).

3. In data collection, the researcher contacted a public hospital in Bangkok to request data and support for data collection by preparing a letter to request cooperation in data collection. Data were collected by sending questionnaires to the samples in the study and making appointments to receive questionnaires in two weeks.

4. In data analysis, the researcher analyzed the data using the Statistical Package for the Social Sciences (SPSS for Window). Data analysis with descriptive statistics was composed of: Part 1 – Personal data were analyzed by determining frequency and percentage, Part 2 – Quality of working life, job satisfaction and employee engagement to the organization were analyzed by determining mean and standard deviation. Hypothesis testing used correlation analysis statistics, one-way ANOVA, t-test statistics and multiple regression analysis.

6.4 Conclusion of the Findings

6.4.1 Findings from Analyzing Demographic Data of Practicing Nurses, Intensive Care Unit

According to the demographic data of practicing nurses in the intensive care unit who were the samples in this study found most of the samples to be females (94.8%) and males (5.2%). Most of the samples were aged under 30 years (43.3%), followed by samples aged 36 – 40 years (22.6%). When marital status was considered, most of the samples were found to be single (77.4%), followed by married (20.2%). Most of the samples were found to have no chronic diseases. In terms of level of education, most of the samples were found to have graduated with a bachelor's degree (81.7%), followed by a master's degree (18.3%) as shown in Table 4.1.

Over half of the samples had work experience of 1 – 10 years (56.3%), followed by work experience of 11 – 20 years (24.6%) and work experience of more than 20 years (19.1%). With regard to monthly income, most of the samples were found to have a monthly income of 25,001 – 35,000 baht (43.3%), followed by a monthly income of 15,000 – 25,000 baht (29.8%) and a monthly income of 50,001 baht and up (9.8%). When asked about additional work income, over half of the samples were found to have additional work income (65.5%) and no additional work income (34.5%).

6.4.2 Findings from Analysis of Quality of Working Life, Job Satisfaction and Employee engagement to the Organization

In the area of quality of working life, most of the samples were found to have good quality of working life (84.1%), excellent quality of working life (12.7%) and moderate quality of working life (3.2%) while none of the samples had poor quality of working life.

When physical, psychological and emotional and social quality of working life were considered, most of the samples were found to have good quality of working life in all three areas, followed by excellent quality of working life and moderate quality of working life. When each area of quality of working life was considered, quality of working life in the area of happy health, happy brain, happy relaxation, happy society, happy money and happy family had the same happiness in working as in the overall view with the highest ratio of samples having good quality of working life, except for the areas of happy soul and happy heart, which was revealed to have the highest ratio of samples with excellent quality of working life at 53.6 percent and 51.6 percent, respectively.

Regarding job satisfaction among the samples, most of the samples had high overall job satisfaction (65.1%), followed by moderate job satisfaction (34.9%). When job satisfaction in each area was considered, job satisfaction in the area of work behaviors, attitude toward the organization, job characteristic motivation factors, responsibility motivation factors, acceptance motivation factors, security supporting factors and command supporting factors were found to have the same job satisfaction in the overall view. Most of the samples had high job satisfaction, followed by moderate job satisfaction, respectively, except in the areas of job satisfaction related to advancement motivation factors, welfare and benefit supporting factors and management policy supporting factors, which were found to have moderate job satisfaction, followed by moderate and low job satisfaction, respectively.

The findings were consistent with concepts and theories related to job satisfaction by many academics. Vroom (1964) summarized job satisfaction in six components consisting of command, colleagues, characteristics, wages, career opportunities and working hours. This concurred with Robin’s (2001) job satisfaction components which were able to influence job satisfaction levels such as job challenge,

fair results or returns, work support conditions, especially in the area of convenient and comfortable work environments for the person and work, support from colleagues, job suitability for the person and personal characteristics. In the meantime, the findings confirmed several concept and theories related to job satisfaction such as the Hierarchy of Needs, which stated human needs begin with physical needs, safety, social interactions, acceptance and personal success. This concept was in line with Alderfer's ERG Theory (1969; cited in Surapong Jarernpan, 1994), which stated regarding human needs for survival, safety in life, interaction with others and need for progress. Furthermore, the findings supported Herzberg's Two-Factor Theory (1959). Herzberg proposed a person has two needs consisting of motivation factors and supporting factors. All of the factors mentioned in all of the aforementioned concepts influenced job satisfaction in workers.

Concerning employee engagement to the organization among the sample group, the overall findings revealed most of the samples to have high employee engagement to the organization in every area (77.8%) while samples with moderate employee engagement to the organization were encountered at 22.2 percent. No samples with low employee engagement to the organization were encountered. When consideration was given to individual areas of employee engagement to the organization consisting of acceptance, organization goals and values, willingness to work and need to maintain membership, every area was found to be attached to the organization as in the overall view with most of the samples having high employee engagement to the organization, followed by moderate and low employee engagement to the organization, respectively.

The findings supported Buchanun's Employee engagement to the Organization Concept (1974). Buchanan stated components of employee engagement to the organization consisted of identification, involvement or willingness to work, loyalty to the organization and feelings of employee engagement to the organization. This concurred with Porter and colleagues (1974) who stated that the components of employee engagement to an organization consisted of the fact that a person has a positive attitude toward the organization and feels part of the organization with dedication of physical and mental energies to work and maintain membership in the organization, regardless of high or low wages. Furthermore, the findings confirmed

Allen and Meyer's (1990) concept on the characteristics of employee engagement to the organization in that employee engagement occurred from feelings of employees as members of the organization, identification with the organization and willingness to dedicate to the organization, feelings from conscientiousness as a member of the organization with need for employee engagement and loyalty to the organization in return for what employees received from the organization. However, this study did not confirm continual employee engagement in exchange with remaining with the organization in individual people. In this study, calculations were made concerning the cost of employees leaving the organization, existing options and returns employees received from the organization because the researcher did not test the aforementioned issue.

6.4.3 Analysis of Relationships between Personal Factors, Job Satisfaction, Employee engagement to the Organization and Quality of Working Life among Practicing Nurses in the Intensive Care Unit

6.4.3.1 Quality of Working Life in the Area of Happy Body

– Samples with different age, chronic diseases, work experience (years) and monthly income were found to have different mean quality of working life scores for happy body with statistical significance (all of which had significance at 0.01).

When considered individually, the samples aged under 30 years were found to have higher mean quality of working life scores for happy body (3.44) than the samples aged 36 – 40 years (3.14) and the samples aged 40 years and up (3.02). The samples without chronic diseases were found to have higher mean quality of working life scores for happy body (3.02) than the samples with chronic diseases (3.03). The samples with work experience of 0 – 10 years were found to have higher mean quality of working life scores (3.40) than the samples with work experience of 11 – 20 years (3.08) and the samples with work experience of 20 years (3.13).

6.4.3.2 Quality of Working Life in the Area of Happy Brain

– Samples with different ages, chronic diseases, work experience (years), additional income and overall job satisfaction were found to have different mean quality of

working life scores for happy brain with statistical significance (significance at 0.001, 0.001, 0.001, 0.05 and 0.001, respectively).

When considered individually, the samples aged 40 years and up were found to have higher mean quality of working life scores for happy brain (2.79) than the samples aged under 30 years (3.43), the samples aged 30 – 35 years (3.37) and the samples aged 36 – 40 years (3.25). The samples without chronic diseases were found to have higher mean quality of working life scores for happy brain (3.39) than the samples with chronic diseases (2.76) and the samples with work experience of more than 20 years were found to have lower mean quality of working life scores for happy brain (2.96) than the samples with work experience of 0 – 10 years (3.39) and the samples with work experience of 11 – 20 years (3.24). The samples without additional work income were found to have higher mean quality of working life in the area of happy brain scores (3.38) than the samples with additional work income (3.21).

Furthermore, the samples with high overall job satisfaction were found to have higher mean quality of working life in the area of happy brain scores (3.56) than the samples with moderate overall job satisfaction (3.11).

6.4.3.3 Quality of Working Life in the Area of Happy Relaxation – Samples with different age, chronic diseases and work experience (years) were found to have different mean quality of working life scores for happy relaxation with statistical significance (significance at 0.001, 0.01, 0.001 and 0.05, respectively).

When considered individually, the samples aged under 30 years were found to have higher mean quality of working life scores for happy brain (3.14) than the samples aged 36 – 40 years (2.78) and the samples aged 40 years and up (2.72). The samples without chronic diseases were found to have higher mean quality of working life scores for happy relaxation (3.00) than the samples with chronic diseases (2.76) and the samples with work experience of 0 – 10 years were found to have higher mean quality of working life scores for happy relaxation (3.10) than the samples with work experience of 11 – 20 years (2.77) and the samples with work experience of more than 20 years (2.74).

Furthermore, the samples with moderate overall employee engagement to the organization were found to have higher mean quality of working life scores for happy relaxation (3.09) than the samples with high employee engagement to the organization (2.91).

6.4.3.4 Quality of Working Life in the Area of Happy Soul – Samples with different age, chronic diseases, work experience (years), overall job satisfaction and overall employee engagement to the organization were found to have different mean quality of working life scores for happy soul with statistical significance (significance at 0.001, 0.01, 0.001, 0.001 and 0.01, respectively).

When considered individually, the samples aged under 30 years were found to have higher mean quality of working life scores for happy soul (3.85) than the samples aged 36 – 40 years (3.54) and the samples aged 40 years and up (3.45). The samples without chronic diseases were found to have higher mean quality of working life scores for happy soul (3.74) than the samples with chronic diseases (3.45) and the samples with work experience of 0 – 10 years were found to have higher mean quality of working life scores for happy soul (3.82) than the samples with work experience of 11 – 20 years (3.53) and the samples with work experience of more than 20 years (3.50).

The samples with high overall job satisfaction were found to have higher mean quality of working life scores for happy soul (3.78) than the samples with moderate overall job satisfaction (3.53).

Furthermore, the samples with high overall employee engagement to the organization were found to have higher mean quality of working life scores for happy soul (3.74) than the samples with moderate employee engagement to the organization (3.50).

6.4.3.5 Quality of Working Life in the Area of Happy Heart – Samples with different chronic diseases, work experience (years), monthly income (baht), overall job satisfaction and overall employee engagement to the organization were found to have different mean quality of working life scores for happy heart with statistical significance (significance at 0.05, 0.01, 0.01, 0.001 and 0.01, respectively).

When considered individually, the samples without chronic diseases were found to have higher mean quality of working life scores for happy heart

(3.74) than the samples with chronic diseases (3.56) and the samples with work experience of 11 – 20 years were found to have lower mean quality of working life scores for happy heart (3.54) than the samples with work experience of 1 – 10 years (3.74) and the samples with work experience of more than 20 years (3.82). In addition, the samples with monthly income of 15,000 – 25,000 baht were found to have lower mean quality of working life scores for happy heart (3.60) than the samples with monthly income of 50,001 and up (3.96). The samples with high overall job satisfaction were found to have higher mean quality of working life scores for happy heart (3.80) than the samples with moderate overall job satisfaction (3.53).

Furthermore, the samples with high overall employee engagement to the organization were found to have higher mean quality of working life scores for happy soul (3.76) than the samples with moderate employee engagement to the organization (3.53).

6.4.3.6 Quality of Working Life in the Area of Happy Society – Samples with different age, chronic diseases, work experience (years), monthly income (baht), overall job satisfaction and overall employee engagement to the organization were found to have different mean quality of working life scores for happy society with statistical significance (significance at 0.05, 0.01, 0.01, 0.001, 0.001 and 0.01, respectively).

When considered individually, the samples aged under 30 years were found to have lower mean quality of working life scores for happy society (3.02) than the samples aged 40 years and up (3.43). The samples who received education at the master's degree level were found to have higher mean quality of working life scores for happy society (3.44) than the samples who received education at the bachelor's degree level (3.07) and the samples with work experience of 0 – 10 years were found to have higher mean quality of working life scores for happy society (3.03) than the samples with work experience of more than 20 years (3.47).

In addition, the samples with monthly income of 15,000 – 25,000 baht were found to have lower mean quality of working life scores for happy society (2.47) than the samples with monthly income of 25,001 – 35,000 baht (3.34) and the samples with monthly income of 35,001 – 50,000 baht (3.36). Moreover the samples with monthly income of 50,001 baht and up were found to have higher mean

quality of working life scores for good society (3.85) than the samples with monthly income of 25,001 – 35,000 baht (3.34) and the samples with monthly income of 35,001 – 50,000 baht (3.36).

Furthermore, the samples with high overall job satisfaction were found to have higher mean quality of working life scores for happy society (3.30) than the samples with moderate overall job satisfaction (2.84) and the samples with high overall employee engagement to the organization were found to have higher mean quality of working life scores for happy society (3.22) than the samples with moderate employee engagement to the organization (2.86).

6.4.3.7 Quality of Working Life in the Area of Happy Money – Samples with chronic diseases, level of education, work experience (years), monthly income (baht), and overall job satisfaction were found to have different mean quality of working life scores for happy money with statistical significance (significance at 0.05, 0.001, 0.01, 0.001 and 0.01, respectively).

When considered individually, the samples with no chronic diseases were found to have higher mean quality of working life scores for happy money (3.31) than the samples with chronic diseases (2.89). The samples who received education at the master's degree level were found to have higher mean quality of working life scores for happy money (3.71) than the samples who received education at the bachelor's degree level (3.12) and the samples with work experience of 0 – 10 years were found to have lower mean quality of working life scores for happy money (3.10) than the samples with work experience of more than 20 years (3.58).

In addition, the samples with monthly incomes of 15,000 – 25,000 baht were found to have lower mean quality of working life scores for happy money (2.40) than the samples with monthly income of 25,001 – 35,000 baht (3.42) and the samples with monthly income of 35,001 – 50,000 baht (3.58). Moreover, the samples with monthly incomes of 50,001 baht and up were found to have different mean quality of working life scores for good money (4.32) from the samples with monthly income of 25,001 – 35,000 baht (3.34) and the samples with monthly income of 35,001 – 50,000 baht (3.36). The samples with monthly income of 50,001 baht and up were found to have higher mean quality of working life scores for happy money

(4.32) than the samples with monthly income of 25,001 – 35,000 baht (3.42) and the samples with monthly income of 35,001 – 50,000 baht (3.58).

Furthermore, the samples with high overall job satisfaction were found to have higher mean quality of working life scores for happy money (3.35) than the samples with moderate overall job satisfaction (3.00).

6.4.3.8 Quality of Working Life in the Area of Happy Family – Samples with different ages, levels of education, work experience (years), monthly income (baht) and overall job satisfaction were found to have different mean quality of working life scores for happy family with statistical significance (significance at 0.01, 0.01, 0.01, 0.01 and 0.05, respectively).

When considered individually, the samples aged under 30 years were found to have lower mean quality of working life scores for happy family (2.53) than the samples aged 40 years and up (3.23). The samples who received education at the master's degree level were found to have higher mean quality of working life scores for happy family (3.89) than the samples who received education at the bachelor's degree level (2.53) and the samples with work experience of 0 – 10 years were found to have lower mean quality of working life scores for happy family (2.57) than the samples with work experience of more than 20 years (3.25).

In addition, the samples with monthly income of 15,000 – 25,000 baht were found to have lower mean quality of working life scores for happy family (2.03) than the samples with monthly income of 25,001 – 35,000 baht (2.79), the samples with monthly income of 35,001 – 50,000 baht (3.34) and the samples with monthly income of 50,001 baht and up. Moreover the samples with monthly income of 25,001 – 35,000 baht were found to have lower mean quality of working life scores for good family (2.79) than the samples with monthly income of 35,001 – 50,000 baht (3.34) and the samples with monthly income of 50,001 baht and up (4.01). In addition, the samples with monthly income of 35,001 – 50,000 baht per month were found to have lower mean quality of working life scores for happy family (3.34) than the samples with monthly income of 50,001 baht and up (4.01).

Furthermore, the samples with high overall job satisfaction were found to have higher mean quality of working life scores for happy family (2.90) than the samples with moderate overall job satisfaction (2.57).

6.4.3.9 Physical Quality of Working Life – Samples with different ages, chronic diseases, work experience (years) and monthly income (baht) were found to have different mean physical quality of working life scores with statistical significance (significance at 0.001, 0.001, 0.001 and 0.05, respectively).

When considered individually, the samples aged under 30 years were found to have higher mean physical quality of working life scores (3.44) than the samples aged 36 – 40 years (3.18) and the samples aged 40 years and up. Furthermore, the samples aged 40 years and up were found to have lower mean physical quality of working life scores (2.94) than the samples aged 30 – 35 years (3.29) and the samples aged 36 – 40 years (3.18). The samples with no chronic diseases were found to have higher mean physical quality of working life scores (3.35) than the samples with chronic diseases (2.94). The samples with work experience of 1 – 10 years were found to have higher mean physical quality of working life scores (3.40) than the samples with work experience of 11 – 20 years (3.13) and the samples with work experience of more than 20 years (3.07). Furthermore, the samples with monthly income of 35,001 – 50,000 baht were found to have lower mean physical quality of working life scores (3.10) than the samples with monthly income of 25,001 – 35,000 baht (3.30) and the samples with monthly income of 50,001 baht and up (3.41).

6.4.3.10 Psychological and Emotional Quality of Working Life – Samples with different age, marital status, chronic diseases and work experience (years) were found to have different mean psychological and emotional quality of working life scores with statistical significance (significance at 0.05, 0.01, 0.05 and 0.05, respectively).

When considered individually, the samples aged under 30 years were found to have higher mean psychological and emotional quality of working life scores (3.50) than the samples aged 36 – 40 years (3.16) and the samples aged 40 years and up (3.08). The samples who were single were found to have higher mean psychological and emotional quality of working life (3.36) than the samples who were married (3.18). The samples with no chronic diseases were found to have higher mean psychological and emotional quality of working life scores (3.37) than the samples with chronic diseases (3.11).

In addition, the samples with work experience of 1 – 10 years were found to have higher mean psychological and emotional quality of working life scores (3.46) than the samples with work experience of 11 – 20 years (3.16) and the samples with work experience of more than 20 years (3.12).

6.4.3.11 Social Quality of Working Life – Samples with different ages, chronic diseases, levels of education, work experience (years), monthly income (baht), overall job satisfaction and overall employee engagement to the organization were found to have different mean social quality of working life scores with statistical significance (significance at 0.05, 0.05, 0.001, 0.001, 0.001, 0.001 and 0.01, respectively).

When considered individually, the samples aged 40 years and up were found to have higher mean social quality of working life scores (3.55) than the samples aged under 30 years (3.28) and the samples aged 30 – 35 years and up (3.23). The samples with no chronic diseases were found to have higher mean social quality of working life scores (3.39) than the samples with chronic diseases (3.13). The samples who received education at the master's degree level were found to have higher mean social quality of working life scores (3.67) than the samples who received education at the bachelor's degree level (3.26).The samples with work experience of more than 20 years were found to have higher mean social quality of working life scores (3.60) than the samples with work experience of 1 – 10 years (3.16) and the samples with the work experience 11 – 20 years (3.29).

In addition, the samples with monthly income of 15,000 – 25,000 baht were found to have lower mean social quality of working life scores (2.86) than the samples with monthly income of 25,001 – 35,000 baht (3.45), the samples with monthly income of 35,001 – 50,000 baht (3.51) and the samples with monthly income of 50,001 and up (4.00). Moreover the samples with monthly income of 50,001 baht and up were found to have higher mean social quality of working life scores (4.00) than the samples with monthly income of 25,001 – 35,000 baht (3.45) and the samples with monthly income of 35,001 – 50,000 baht (3.51).

Furthermore, the samples with high overall job satisfaction were found to have higher mean social quality of working life scores (3.46) than the samples with moderate overall job satisfaction (3.11) and the samples with high

overall employee engagement to the organization were found to have higher mean social quality of working life scores (3.39) than the samples with moderate employee engagement to the organization (3.14).

6.4.3.12 Overall Quality of Working Life – Samples with different chronic diseases, levels of education, monthly income (baht), overall job satisfaction and overall employee engagement to the organization were found to have different mean overall quality of working life scores with statistical significance (significance at 0.001, 0.001, 0.001, 0.001 and 0.05, respectively).

When considered individually, the samples with no chronic diseases were found to have higher mean overall quality of working life scores (3.38) than the samples with chronic diseases (3.08). The samples who received education at the master's degree level were found to have higher mean overall quality of working life scores (3.52) than the samples who received education at the bachelor's degree level (3.27).In addition, the samples with monthly income of 15,000 – 25,000 baht were found to have lower mean overall quality of working life scores (3.06) than the samples with monthly income of 25,001 – 35,000 baht (3.38), the samples with monthly income of 35,001 – 50,000 baht (3.36) and the samples with monthly income of 50,001 and up (3.76). Moreover the samples with monthly income of 50,001 baht and up were found to have higher mean overall quality of working life scores (3.76) than the samples with monthly income of 25,001 – 35,000 baht (3.38) and the samples with monthly income of 35,001 – 50,000 baht (3.36).

Furthermore, the samples with high overall job satisfaction were found to have higher mean overall quality of working life scores (3.34) than the samples with moderate overall job satisfaction (3.11) and the samples with high overall employee engagement to the organization were found to have higher mean overall quality of working life scores (3.29) than the samples with moderate employee engagement to the organization (3.15).

6.4.5 Findings from Analysis of Multiple Factors Influencing Quality of Working Life among Practicing Nurses in the intensive care unit

6.4.5.1 Quality of Working Life in the Area of Happy Body : Factors with influence on quality of working life in the area of happy body among practicing nurses in the intensive care unit consisted of age and level of education. When considered individually, practicing nurses in the intensive care unit aged 40 years and up had a quality of working life score in the area of happy body at 2.819. Quality of working life scores for happy body among the samples aged under 30 years and the samples aged 30 – 35 years were higher than physical quality of working life scores of the samples aged 40 years and up at a mean of 0.510 and 0.246, respectively. Practicing nurses in the intensive care unit who received education up at the master's degree level were found to have a quality of working life score in the area of happy body increased by 0.240 points.

6.4.5.2 Quality of Working Life in the Area of Happy Brain : Factors with influence on quality of working life in the area of happy body among practicing nurses in the intensive care unit consisted of age, chronic diseases, level of education and overall job satisfaction. When considered individually, practicing nurses in the intensive care unit aged 40 years and up had a quality of working life score in the area of happy brain at 2.573. Quality of working life scores for happy brain among the samples aged under 30 years, the samples aged 30 – 35 years and the samples aged 36 – 40 years were higher than quality of working life scores for happy brain of the samples aged 40 years and up at a mean of 0.543, 0.444 and 0.417, respectively. The fact that practicing nurses in the intensive care unit had no chronic diseases increased the quality of working life score in the area of happy brain by 0.437 points. Practicing nurses in the intensive care unit who received education up at the master's degree level were found to have a quality of working life score in the area of happy body increased by 0.200 points. Furthermore, practicing nurses in the intensive care unit with high overall job satisfaction were found to have an increase of 0.215 points to the quality of working life score in the area of happy brain.

6.4.5.3 Quality of Working Life in the Area of Happy Relax : Factors with influence on quality of working life in the area of happy relaxation among practicing nurses in the intensive care unit consisted of age and level of

education. When considered individually, practicing nurses in the intensive care unit aged 40 years and up had a quality of working life score in the area of happy relaxation at 2.558. Quality of working life scores for happy relaxation among the samples aged under 30 years were higher than quality of working life scores for happy relaxation of the samples aged 40 years and up at a mean of 0.451. Practicing nurses in the intensive care unit who received education up at the master's degree level were found to have a quality of working life score in the area of happy relaxation increased by 0.214 points.

6.4.5.4 Quality of Working Life in the Area of Happy Soul

: Factors with influence on quality of working life in the area of happy body among practicing nurses in the intensive care unit consisted of age and overall job satisfaction. When considered individually, practicing nurses who were single were found to have a 42-percent lower chance of having good quality of working life than practicing nurses who were divorced/separated/widowed ($p < 0.001$). Regarding level of education, the practicing nurses in the intensive care unit aged 40 years and up had the quality of working life score in the area of happy soul at 3.365. Quality of working life scores for happy soul among the samples aged under 30 years were higher than quality of working life scores for happy soul of the samples aged 40 years and up at a mean of 0.397. Practicing nurses in the intensive care unit with high overall job satisfaction were found to have an increase of 0.242 points to the quality of working life score in the area of happy soul.

6.4.5.5 Quality of Working Life in the Area of HappyHeart : Factors with influence on quality of working life in the area of happy heart among practicing nurses in the intensive care unit consisted of age, chronic diseases and overall job satisfaction. When considered individually, practicing nurses in the intensive care unit aged 40 years and up had the quality of working life score in the area of happy heart at 3.467. Quality of working life scores for happy heart among the samples aged 36 – 40 years were lower than quality of working life scores for happy heart of the samples aged 40 years and up at a mean of 0.126. The fact that practicing nurses in the intensive care unit had no chronic diseases increased the quality of working life score in the area of happy heart by 0.191 points. Furthermore, practicing nurses in the intensive care unit with high overall job satisfaction were

found to have an increase of 0.197 points to the quality of working life score in the area of happy heart.

6.4.5.6 Quality of Working Life in the Area of HappySociety: Factors with influence on quality of working life in the area of happy society among practicing nurses in the intensive care unit consisted of age, chronic diseases and overall job satisfaction. When considered individually, practicing nurses in the intensive care unit aged 40 years and up had the quality of working life score in the area of happy heart at 2.564. Quality of working life scores for happy heart among the samples aged under 30 years and the samples aged 30 – 35 years were lower than quality of working life scores for happy society of the samples aged 40 years and up at a mean of 0.491 and 0.508, respectively. The fact that practicing nurses in the intensive care unit had no chronic diseases increased the quality of working life score in the area of happy society by 0.334 points. Furthermore, practicing nurses in the intensive care unit with high overall job satisfaction were found to have an increase of 0.353 points in the quality of working life score for happy society.

6.4.5.7 Quality of Working Life in the Area of HappyMoney: Factors with influence on quality of working life in the area of happy money among practicing nurses in the intensive care unit consisted of age, chronic diseases, level of education and overall job satisfaction. When considered individually, practicing nurses in the intensive care unit aged 40 years and up had the quality of working life score in the area of happy money at 2.981. Quality of working life scores for happy money among the samples aged under 30 years and the samples aged 30 – 35 years were lower than quality of working life scores for happy money of the samples aged 40 years and up at a mean of 0.513 and 0.446, respectively. The fact that practicing nurses in the intensive care unit had no chronic diseases increased the quality of working life score in the area of happy money by 0.451 points. Practicing nurses in the intensive care unit who received education up at the master's degree level were found to have a quality of working life score in the area of happy money increased by 0.382 points. Furthermore, practicing nurses in the intensive care unit with high overall job satisfaction were found to have an increase of 0.315 points to the quality of working life score in the area of happy money.

6.4.5.8 Quality of Working Life in the Area of HappyFamily: Factors with influence on quality of working life in the area of happy family among practicing nurses in the intensive care unit consisted of age, chronic diseases and level of education. When considered individually, practicing nurses in the intensive care unit aged 40 years and up had the quality of working life score in the area of happy family at 2.783. Quality of working life scores for happy family among the samples aged under 30 years and the samples aged 30 – 35 years were lower than quality of working life scores for happy family of the samples aged 40 years and up at a mean of 0.486 and 0.542, respectively. The fact that practicing nurses in the intensive care unit had no chronic diseases increased the quality of working life score in the area of happy family by 0.465 points. Practicing nurses in the intensive care unit who received education up at the master's degree level were found to have a quality of working life score in the area of happy family increased by 1.247 points.

6.4.5.9 Physical Quality of Working Life : The factors with influence on physical quality of working life among practicing nurses in the intensive care unit consisted of age, chronic diseases and level of education. When considered individually, practicing nurses in the intensive care unit aged 40 years and up had a physical quality of working life score of 2.783. The physical quality of working life scores among the samples aged under 30 years, the samples aged 30 – 35 years and the samples aged 36 – 40 years were lower than physical quality of working life scoresof the samples aged 40 years and up at a mean of 0.521, 0.312 and 0.219, respectively. The fact that practicing nurses in the intensive care unit had no chronic diseases increased the physical quality of working life score by 0.242 points. Practicing nurses in the intensive care unit who received education up at the master's degree level were found to have a physical quality of working life score increased by 0.227 points.

6.4.5.10 Psychological and Emotional Quality of Working Life : Factors with influence on psychological and emotional quality of working life among practicing nurses in the intensive care unit consisted of age. Practicing nurses in the intensive care unit aged 40 years and up had the psychological and emotional quality of working life score of 2.962. The psychological and emotional quality of working life scores among the samples aged under 30 years and the samples aged 30 –

35 years were lower than psychological and emotional quality of working life scoresof the samples aged 40 years and up at a mean of 0.424 and 0.217, respectively.

6.4.5.11 Social Quality of Working Life : Factors with influence on social quality of working life among practicing nurses in the intensive care unit consisted of age, chronic diseases, level of education and overall job satisfaction. When considered individually, the fact that practicing nurses in the intensive care unit had no chronic diseases increased their social quality of working life scores by 0.314 points. The practicing nurses in the intensive care unit who received education up at the master's degree level were found to have a social quality of working life score increased by 0.218 points. Furthermore, practicing nurses in the intensive care unit with high overall job satisfaction were found to have an increase of 0.267 points to the social quality of working life score.

6.4.5.12 Overall Quality of Working Life : Factors with influence on overall quality of working life among practicing nurses in the intensive care unit consisted of age, chronic diseases, level of education and overall job satisfaction. When considered individually, the fact that practicing nurses in the intensive care unit had no chronic diseases increased the overall quality of working life score by 0.241 points. Practicing nurses in the intensive care unit who received education up at the master's degree level were found to have an overall quality of working life score increased by 0.253 points. Furthermore, the practicing nurses in the intensive care unit with high overall job satisfaction were found to have an increase of 0.180 points in their overall quality of working life score.

6.5. Hypothesis Test Results

1. Differences in personal factors of practicing nurses will result in different quality of working life. This hypothesis was in accordance with Hypothesis 1

2. Differences in job satisfaction of practicing nurses will result in different quality of working life. This hypothesis was in accordance with Hypothesis 2

3. Differences in employee engagement to the organization of practicing nurses will result in different quality of working life. This hypothesis was in accordance with Hypothesis 3.

4. According to results from testing factors influencing the work of practicing nurses in the intensive care unit using multiple linear regression analysis, factors influencing quality of working life were found to consist of chronic diseases, level of education and overall job satisfaction.

6.6 Recommendations for Implementation of the Findings

According to hypothesis testing, factors influencing quality of working life among practicing nurses in the intensive care unit were analyzed by using multiple linear regression analysis and factors influencing quality of working life were found to consist of 1) chronic diseases or no chronic diseases whereby practicing nurses in the intensive care unit with no chronic diseases were found to have higher overall quality of working life scores; 2) higher education whereby practicing nurses in the intensive care unit who received education at the master's degree level were found to have higher overall quality of working life scores and 3) job satisfaction whereby practicing nurses in the intensive care unit with high overall job satisfaction were found to have higher overall job satisfaction scores.

Therefore, the researcher holds the opinion that the agency where nurses were practicing in the intensive care unit should always give importance to physical, psychological and emotional promotion activities for workers to enable workers to work effectively with pride and happiness in working. In the meantime, workers should have opportunities to continue education at the master's level to encourage workers in addition to paying higher wages according to increased knowledge and abilities as deemed fitting.

Furthermore, the findings specified higher job satisfaction to have a positive effect on overall worker happiness. When details were considered, satisfaction in all ten areas included eight areas in which practicing nurses in the intensive care unit had high satisfaction consisting of work behaviors, attitude toward the organization, job characteristics, duties and responsibilities, acceptance, job security and command. Therefore, the agency of origin should improve the aforementioned areas. Areas in which practicing nurses had moderate satisfaction with need for improvement to increase worker happiness consisted of the motivation factor in the area of welfare and income advances and more perception and participation in management policies.

When age was considered based on the concept of human development in adulthood in each area, the findings were as follows:

1) Age was found to be a personal factor related to physical quality of working life. The samples aged under 30 years were found to have the highest mean physical quality of working life score, followed by the samples aged 30 – 35 years who were found to have a higher score than the samples aged 36 – 40 years and the samples aged 40 years and up were the samples who worked least. This was explained by the fact that nurses in early adulthood had more complete physical and psychological conditions than older nurses. In addition, nurses in adulthood did not have heavy duties and responsibilities to themselves, the organization and society and were in the period of building a family and settling down (Havighurst, 1972; cited in SuwatWattanawong, 1995). The samples aged more than 40 years were found to have deteriorating physical conditions and women were found to have hormonal changes such as turbulent emotions, weakness and anxiety. Symptoms of menopausal women can also be encountered among men such as men who feel flashing heat similar to women. In the area of memory, although middle-aged persons have deteriorated short-term memory, this did not occur with every person while long-term memory improved, enabling middle-aged persons to remember details of events which occurred more than ten years previously better than events which occurred ten minutes previously (Penpilai Ritakananon, 2006). Therefore, persons aged more than 40 years should receive more special physical care than younger persons in order to work effectively, exchange learning and transfer work knowledge to future generations.

2) Age was found to be a personal factor related to psychological and emotional quality of working life. The samples aged under 30 years were found to have a higher mean psychological and emotional quality of working life score than the samples aged 36 – 40 years and the samples aged 40 years and up, or in the overall view, the samples with higher age were found to have lower psychological and emotional quality of working life trends in the same direction as physical happiness. The findings concurred with Allport (1961; cited in Penpilai Ritakananon, 2006) who described early adulthood as a period when humans have possession of skills and competencies or the maturity to demonstrate personal efficiency and pride in work along with the readiness to learn to manage homes and responsibilities. Early adulthood is the period when a person

attempts to fully utilize the person's capacity in addition to learning new things and creating pride in success as personal happiness. In the meantime, adults aged 30 – 60 years matched Erikson's personality development in Stage 7 or the Generativity VS Self-Absorption) and are in an age with readiness to fully benefit society if development in each previous step was successfully accomplished with care and responsibility to ensure happiness in children and teach children to be good people in the future. On the contrary, unsuccessful people will feel discouraged, bored and self-absorbed with no social responsibility (Children's Teacher, 2013). Therefore, agencies of original affiliation should encourage nurses by creating life value promotion activities, discussions and meetings outside of working hours, activities with family and religious activities, mental and concentration training and off-site travel rewards, etc.

3) Age was found to be a personal factor related to social quality of working life. The samples aged 40 years and up were found to have the highest mean social quality of working life scores in comparison to the samples aged under 30 years and the samples aged 30 – 35 years. Havighurst's Adult Human Development Concept (1972; cited in Suwat Wattanawong, 1995) specified mid-adulthood (35 – 60 years) is an age shown to have higher family burdens and work responsibilities from having to transfer experience, knowledge and command new colleagues while seeing success as reputation and acceptance in society along with maintaining economic status, good standards of living appropriate for status, etc. This concurred with Robert Peck's human development concept (1968; cited in Penpilai Rutakananon, 2006) which specified the age of 40 – 50 years to have four stages consisting of valuing intelligence more than exercise, emphasizing social relationships more than sexual emphasis, the ability to have emotional flexibility and having an open mind for new ideas. This is an age with higher family burdens and more work responsibilities. Therefore, anxiety regarding family, work, security in life and health was able to reduce happiness among adults aged more than 30 years more than adults aged under 30 years. Therefore, agences of original affiliation should build confidence in work for persons aged 30 years and up. In the meantime, happiness should be built by increasing social interaction activities, especially among workers aged over 40 years who should be valued, in addition to regular wages such as activities to transfer knowledge from generation to generation to

build acceptance from colleagues. At the same time, meeting activities, field trips, interagency observations in other provinces and rewards for workers to have the opportunity to perform activities with family members should be increased. Furthermore, the aforementioned people should be appointed as agency advisors because people of the aforementioned age placed more importance on intelligence than working by exercising, etc.

6.7 Recommendations for Future Studies

1. Quality of life should be studied in comparison with samples differing from the original samples such as nurses in special examination rooms (Cath Labs, Scope Rooms), emergency (ER) nurses, general patient ward nurses and special patient nurses.

2. Studies should be conducted among the same sample group at different hospitals such as among practicing nurses at intensive care units in public hospitals, private hospitals and hospitals in Bangkok.

3. Studies should be carried out to compare with other professionals working in shifts with requirements to be on duty such as police officers, hotel employees and reception employees on airplanes.

4. Studies should be conducted among samples with work risks such as teachers, medical personnel, soldiers and police officers working in the three southernmost border provinces.

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APPENDIX

แบบสอบถามเรื่อง คุณภาพชีวิตการทำงานของพยาบาลระดับปฏิบัติการ: กรณีศึกษาหออภิบาลผู้ป่วยระยะวิกฤต

<u>คำชี้แจง</u>

1. ขอความร่วมมือจากท่านในการให้ข้อมูลต่องานวิจัยนี้ โดยแบบสอบถามชุดนี้ เป็นส่วนหนึ่งของหลักสูตรการศึกษาขั้นปริญญามหาบัณฑิต สาขาวิชาพัฒนาการมนุษย์ สถาบันแห่งชาติเพื่อการพัฒนาเด็กและครอบครัว มหาวิทยาลัยมหิดลโดยมีวัตถุประสงค์เพื่อ ศึกษาคุณภาพชีวิตการทำงานของพยาบาลระดับปฏิบัติการ: กรณีศึกษาหออภิบาลผู้ป่วยระยะวิกฤต ผลการวิจัยครั้งนี้คาดว่าจะเป็นประโยชน์ต่อองค์กร หน่วยงานราชการและผู้ที่ให้ความสนใจโดยทั่วไปโดยข้อมูลและคำตอบทั้งหมดที่ได้มาจะแสดงผลในภาพรวมไม่ระบุเป็นรายบุคคลหรือชื่อหน่วยงานท่านมีสิทธิ์ที่จะไม่ให้ข้อมูลข้อใดข้อหนึ่งหากท่านไม่สบายใจหรืออึดอัดที่จะให้ข้อมูลนั้นหรือไม่ให้ข้อมูลทั้งหมดเลยก็ได้โดยไม่ต้องแจ้งเหตุผลแต่หากท่านพิจารณาแล้วเห็นว่าการให้ข้อมูลของท่านจะเป็นประโยชน์ทางวิชาการและร่วมเป็นส่วนหนึ่งของการได้มาซึ่งการศึกษา คุณภาพชีวิตการทำงานของพยาบาลระดับปฏิบัติการ: กรณีศึกษาหออภิบาลผู้ป่วยระยะวิกฤต สามารถนำไปใช้ในการเป็นแนวทางในการพัฒนา ส่งเสริม ตลอดจนเป็นประโยชน์ในการกำหนดนโยบายและวางแผนการทำงานอย่างมีความสุขของพยาบาลระดับปฏิบัติการ ในหออภิบาลผู้ป่วยระยะวิกฤต ได้ชัดเจนมากยิ่งขึ้นคำตอบของท่านจะเป็นประโยชน์อย่างยิ่งต่องานวิจัย ผู้ศึกษาจะเก็บข้อมูลที่ได้จากท่านไว้เป็นความลับ โดยจะนำไปใช้เพื่อสรุปผลการวิจัยเป็นภาพรวมเท่านั้น และจะไม่มีผลกระทบต่อผู้ตอบแบบสอบถามไม่ว่ากรณีใดๆ ข้อมูลที่ตรงกับความเป็นจริงและสมบูรณ์จะช่วยให้การวิจัยดำเนินไปด้วยความถูกต้อง ผู้ศึกษาจึงใคร่ขอความอนุเคราะห์จากท่าน โปรดตอบแบบสอบถามตามความคิดเห็นของท่านอย่างรอบคอบและครบทุกข้อ

2. เมื่อท่านให้ข้อมูลในแบบสอบถามแล้วกรุณาส่งกลับแก่ฝ่ายทรัพยากรบุคคลหรือผู้ที่รับผิดชอบในการแจกแบบสอบถาม

3. *คุณภาพชีวิตในการทำงาน* หมายถึง ความสุขในการทำงาน ตามแนวคิดของสำนักงานกองทุนสนับสนุนการสร้างเสริมสุขภาพ (สสส, 2552) อันประกอบด้วย

Happy Body:	ส่งเสริมสุขภาพของพนักงานให้แข็งแกร่งทั้งกายและจิตใจ
Happy Heart:	กระตุ้นให้เกิดความเอื้ออาทรต่อกันและกัน
Happy Society:	สนับสนุนให้เอื้อเฟื้อต่อชุมชนในสถานที่ทำงานและที่พักอาศัย
Happy Relax:	ให้พนักงานได้ผ่อนคลายจากความเครียดในงานด้วยกิจกรรมบันเทิง
Happy Brain:	ส่งเสริมให้หาความรู้พัฒนาตนเองตลอดเวลา
Happy Soul:	ส่งเสริมกิจกรรมทางศาสนาให้มีศีลธรรมในการดำเนินชีวิต

Happy Money: สนับสนุนให้บริหารการใช้จ่ายของตนเองและมีการออม

Happy Family: ส่งเสริมให้พนักงานสร้างครอบครัวที่เข้มแข็งและอบอุ่น

4. แบบสอบถามชุดนี้มี 5 ส่วน คือ

ส่วนที่ 1 ข้อมูลลักษณะส่วนบุคคลของพยาบาลระดับปฏิบัติการในหออภิบาลผู้ป่วยระยะวิกฤต 8 ข้อ

ส่วนที่ 2 แบบวัดคุณภาพชีวิตการทำงาน จำนวน 41 ข้อ

ส่วนที่ 3 แบบวัดความผูกพันต่อองค์กร จำนวน 30 ข้อ

ส่วนที่ 4 แบบวัดความพึงพอใจในการปฏิบัติงาน จำนวน 44 ข้อ

ในส่วนที่ 1- 2 โปรดทำเครื่องหมาย √ ลงใน □ หรือเติมข้อความที่ตรงตามความเป็นจริง

ในส่วนที่ 3 - 4 กรุณาใส่เครื่องหมาย √ ลงใน □ ที่ตรงกับความคิดเห็นของท่านมากที่สุด

ข้อความในแต่ละข้อโดยแต่ละระดับมีความหมายและเกณฑ์การให้คะแนนดังนี้

5 หมายถึง เห็นด้วยอย่างยิ่ง

4 หมายถึง เห็นด้วย

3 หมายถึง ไม่แน่ใจ

2 หมายถึง ไม่เห็นด้วย

1 หมายถึง ไม่เห็นด้วยอย่างยิ่ง

ขอขอบพระคุณอย่างสูงมา ณ โอกาสนี้ที่ท่านกรุณาสละเวลาในการตอบแบบสอบถาม

นางสาวจุฑากาญจน์ บุญนุชอภิรักษ์

นักศึกษาระดับปริญญามหาบัณฑิต สาขาวิชาพัฒนาการมนุษย์

สถาบันแห่งชาติเพื่อการพัฒนาเด็กและครอบครัว มหาวิทยาลัยมหิดล

แบบสอบถาม: คุณภาพชีวิตการทำงานของพยาบาลระดับปฏิบัติการ: กรณีศึกษาหออภิบาลผู้ป่วยระยะวิกฤต แบบสอบถามชุดนี้มี 4 ส่วน คือ

ส่วนที่ 1 ข้อมูลลักษณะส่วนบุคคลของพยาบาลระดับปฏิบัติการในหออภิบาลผู้ป่วยระยะวิกฤต 8 ข้อ

<u>คำชี้แจง</u> โปรดทำเครื่องหมาย √ ลงใน☐ หน้าข้อความที่ตรงกับสภาพความเป็นจริงมากที่สุด

1. เพศ ☐ 1. ชาย ☐ 2. หญิง

2. อายุ ☐ 1. ต่ำกว่า 30 ปี ☐ 2. 30-35 ปี ☐3. 36-40 ปี ☐4. 41 ปีขึ้นไป

3.สถานภาพสมรส ☐1. โสด ☐2. สมรส ☐3. หย่า ☐ 4. แยกกันอยู่ ☐ 5. หม้าย

4. โรคประจำตัว ☐ ไม่มี ☐ มี โปรดระบุ ……..……..

5. ระดับการศึกษา ☐ 1. ปริญญาตรี ☐ 2. ปริญญาโท ☐ 3. สูงกว่าปริญญาโท

6. ระยะเวลาที่ปฏิบัติงาน (ประสบการณ์ทำงาน)

☐ 1. น้อยกว่า 1 ปี ☐ 2. 1-3 ปี ☐ 3. 3-5 ปี ☐4. 5-7 ปี
☐ 4. 7-10ปี ☐5.10-15 ปี ☐6. 15-20 ปี ☐7. 20 ปีขึ้นไป

7. รายได้ต่อเดือน

☐ 1. 15,000 – 20,000 บาท ☐ 2. 20,001 – 25,000 บาท
☐ 3. 25,001- 30,000 บาท ☐ 4. 30,001- 35,000 บาท
☐ 5. 35,001- 40,000 บาท ☐ 6. 40,001- 50,000 บาท
☐ 7. 50,001 บาทขึ้นไป

8. รายได้เสริม จากการทำงานพิเศษ ☐ มี ☐ ไม่มี

ส่วนที่ 2 แบบวัดคุณภาพชีวิตการทำงาน

Happy Body/สุขภาพดี

1. ปัจจุบันท่านมีน้ำหนัก.....กิโลกรัมเส้น รอบเอว .....เซนติเมตร ส่วนสูง..... เซนติเมตร

สูตร คำนวณรอบเอว .... นิ้ว x 2.54 = ….. เซนติเมตร

ภาวะอ้วนลง พุงชายรอบเอว > 90 ซม. หญิงรอบเอว > 80 ซม.

BMI(กก.เมตร^2)	**น้ำหนัก**	**ภาวะเสี่ยงต่อโรค**
< 18.5	น้ำหนักน้อย	ต่ำ
18.5-22.9	น้ำหนักปกติ	เท่าคนปกติ
23-24.9	น้ำหนักเกิน	เพิ่มขึ้น
25-29.9	โรคอ้วน	เพิ่มมากขึ้น
> 30	อ้วนมาก	อยู่ในช่วงอันตราย

2. โดยปกติท่านกินอาหารเช้าโดยเฉลี่ยสัปดาห์ละกี่วัน

☐ 1. ไม่กิน ☐ 2. กินแต่ไม่บ่อย (1-2 วัน) ☐ 3. กินเป็นบางครั้ง (3-4 วัน)

☐ 4. กินเป็นประจำ (5-6 วัน) ☐ 5. กินทุกวัน

3. ปัจจุบันท่านออกกาลังกายโดยเฉลี่ยสัปดาห์ละกี่วัน

☐ 1. ไม่ได้ออกกำลังกาย ☐ 2. น้อยกว่า 3 วันต่อสัปดาห์

☐ 3. จำนวน 3 วันต่อสัปดาห์ ☐ 4. มากกว่า 3 วันต่อสัปดาห์ ☐ 5. ทุกวัน

4. ปัจจุบันท่านสูบบุหรี่/ ใบจาก / ยาเส้นหรือไม่

☐ 1. สูบเป็นประจำ ☐ 2. สูบบ่อยครั้ง ☐ 3. สูบนานๆครั้ง

☐ 4. ไม่สูบแต่เคยสูบ ☐ 5.ไม่เคยสูบเลย

5. ปัจจุบันท่านดื่มเครื่องดื่มที่มีแอลกอฮอล์เช่นเหล้า เบียร์ ไวน์ สาโท หรือ สุราพื้นบ้านหรือไม่

☐ 1. ดื่มเกือบทุกวัน/เกือบทุกสัปดาห์ ☐ 2.ดื่มเกือบทุกเดือน ☐ 3.ดื่มปีละ 1-2 ครั้ง

☐ 4.ไม่ดื่มแต่เคยดื่ม ☐ 5. ไม่เคยดื่มเลย

6. โดยรวมแล้วท่านพึงพอใจกับสุขภาพกายของท่านหรือไม่

☐ 1. ไม่พอใจเลย/พอใจน้อยที่สุด ☐ 2. พอใจน้อย ☐ 3. พอใจปานกลาง

☐ 4. พอใจมาก ☐ 5. พอใจมากที่สุด

Happy Relax/ผ่อนคลายดี

7. โดยรวมแล้วท่านรู้สึกว่าได้รับการพักผ่อนเพียงพอหรือไม่

☐ 1. ไม่พอ ☐ 2. น้อย ☐ 3. ปานกลาง
☐ 4. มาก ☐ 5. มากที่สุด

8. โดยรวมแล้วใน 1 สัปดาห์ท่านทำกิจกรรมเพื่อเป็นการพักผ่อนหย่อนใจ (อ่านหนังสือ ดูหนัง ฟังเพลง ช็อปปิ้ง เล่นเกมส์ ปลูกต้นไม้ ฯลฯ) หรือไม่

☐ 1. ไม่ได้ทำ ☐ 2. ทำ 1 – 2 วัน/สัปดาห์ ☐ 3.ทำ 3 – 4 วัน/สัปดาห์
☐ 4. ทำ 5 - 6 วัน/สัปดาห์ ☐ 5. ทำทุกวัน

9. โดยรวมแล้วท่านมีความเครียด (เครียดจากการทางาน/เรื่องครอบครัว/ เรื่องอื่นๆ) บ้างหรือไม่

☐ 1. เครียดมากที่สุด ☐ 2. เครียดมาก ☐ 3. เครียดปานกลาง
☐ 4. เครียดน้อย ☐ 5. ไม่เครียดเลย

10. โดยรวมแล้วท่านคิดว่าชีวิตของท่านเป็นไปตามที่ท่านคาดหวังหรือไม่

☐ 1. ไม่เป็นไปตามที่คาดหวังเลย ☐ 2. เป็นไปตามที่คาดหวังเล็กน้อย
☐ 3. เป็นไปตามที่คาดหวังปานกลาง ☐ 4. เป็นไปตามที่คาดหวังมาก
☐ 5. เป็นไปตามที่คาดหวังมากที่สุด

11. เมื่อประสบปัญหาในชีวิตโดยทั่วไปท่านสามารถจัดการกับปัญหาได้หรือไม่

☐ 1. ไม่สามารถจัดการได้เลย ☐ 2.จัดการได้น้อยมาก
☐ 3. จัดการได้ปานกลาง ☐4.จัดการได้มาก
☐ 5. จัดการได้มากที่สุด

Happy Heart/น้ำใจดี

12. โดยรวมแล้วท่านรู้สึกเอื้ออาทร/ห่วงใยต่อคนรอบข้างหรือไม่

☐ 1. ไม่รู้สึกเลย/น้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง
☐ 4. มาก ☐ 5. มากที่สุด

13. โดยรวมแล้วท่านให้การช่วยเหลือแก่คนรอบข้างหรือไม่

☐ 1. ไม่เคย/แทบจะไม่เคยช่วย ☐ 2. นานๆ ครั้ง
☐ 3. ช่วยบ้างบางครั้ง ☐4. ช่วยแทบทุกครั้ง ☐ 5. ช่วยทุกครั้ง

14. โดยรวมแล้วท่านให้ความสำคัญกับการทำงานเป็นทีมหรือไม่

☐ 1. ไม่ให้/ให้น้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง
☐ 4. มาก ☐ 5. มากที่สุด

15. โดยรวมแล้วความสัมพันธ์ในที่ทำงานของท่านเหมือนพี่เหมือนน้องหรือไม่

☐ 1. ไม่เหมือน/ เหมือนน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

16. โดยรวมแล้วท่านสื่อสารพูดคุยกับเพื่อนร่วมงานในองค์การหรือไม่

☐ 1. ไม่สื่อสารเลย/ สื่อสารน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

17.โดยรวมแล้วในองค์การของท่านมีการถ่ายทอดแลกเปลี่ยนแบบอย่างการทำงานระหว่างกันหรือไม่

☐ 1. ไม่มี/ มีน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

18. โดยรวมแล้วท่านเต็มใจและยินดีในการทำประโยชน์เพื่อส่วนรวมหรือไม่

☐ 1. ไม่เต็มใจ/ เต็มใจน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

19.โดยรวมแล้วท่านเข้าร่วมกิจกรรมที่เป็นประโยชน์ต่อสังคม เช่น การปลูกป่า การบริจาคสิ่งของหรือไม่

☐ 1. ไม่เข้าร่วม/ เข้าร่วมน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

20. โดยรวมแล้วท่านได้ทำกิจกรรมที่สามารถทำได้ด้วยตนเองและมีประโยชน์ต่อสังคม เช่น การคัดแยกขยะ การลดใช้ถุงพลาสติก เป็นต้น

☐ 1. ทำ/ ทำน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

Happy Soul/จิตวิญญาณดี

21. โดยรวมแล้วท่านทำนุบำรุงศิลปวัฒนธรรม/ ศาสนา/ การให้ทานหรือไม่

☐ 1. ไม่ทำ/ ทำน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

22. โดยรวมแล้วท่านปฏิบัติกิจตามศาสนาเพื่อให้จิตใจสงบหรือไม่

☐ 1. ไม่ปฏิบัติ/ปฏิบัติน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

23. โดยรวมแล้วท่านยกโทษและให้อภัยอย่างจริงใจต่อผู้ที่สำนึกผิด

☐ 1. ไม่ยกโทษ/ ให้อภัยน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

24. โดยรวมแล้วท่านยอมรับและขอโทษในความผิดที่ทำหรือมีส่วนรับผิดชอบ

☐ 1. ไม่ยอมรับ/ ขอโทษน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

25. โดยรวมแล้วท่านตอบแทนผู้มีพระคุณหรือช่วยเหลือท่าน

☐ 1. ไม่ตอบแทน/ ตอบแทนน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

Happy Family/ครอบครัวดี

26. ท่านมีเวลาอยู่กับครอบครัวเพียงพอหรือไม่

☐ 1. ไม่เพียงพอ ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5.มากที่สุด

27. ท่านทำกิจกรรม (ออกกำลังกายทำบุญซื้อของออกกำลังกายในสวนสาธารณะไปทำบุญซื้อของปลูกต้นไม้ฯ) ร่วมกันกับคนในครอบครัว

☐ 1. ไม่ทำ/ ทำน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

28. โดยรวมแล้วท่านมีความสุขกับครอบครัวของท่านหรือไม่

☐ 1. ไม่มี/ มีน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

Happy Society/สังคมดี

29. โดยรวมแล้วเพื่อนบ้านมีความสัมพันธ์ที่ดีต่อท่านหรือไม่

☐ 1. ไม่มี/ มีน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

30. โดยรวมแล้วท่านปฏิบัติตามกฎระเบียบ/ ข้อบังคับของสังคมหรือไม่

☐ 1. ไม่ปฏิบัติ/ ปฏิบัติน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

31. โดยรวมแล้วท่านรู้สึกปลอดภัยในชีวิตและทรัพย์สินหรือไม่

☐ 1. ไม่รู้สึก/ รู้สึกน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

32. โดยรวมแล้วเมื่อท่านมีปัญหาท่านสามารถขอความช่วยเหลือจากคนในชุมชนหรือไม่

☐ 1. ไม่ได้/ ได้น้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

33. โดยรวมแล้วท่านรู้สึกว่าสังคมไทยทุกวันนี้มีความสงบสุขหรือไม่

☐ 1. ไม่มี/ มีน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

34. โดยรวมแล้วทุกวันนี้ท่านใช้ชีวิตในสังคมอย่างมีความสุขหรือไม่

☐ 1. ไม่มี/ มีน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

Happy Brain/ใฝ่รู้ดี

35. โดยรวมแล้วท่านสนใจในการแสวงหาความรู้ใหม่ๆเพิ่มเติมจากแหล่งความรู้ต่างๆหรือไม่

☐ 1. ไม่สนใจ/ สนใจน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

36. โดยรวมแล้วท่านสนใจที่จะพัฒนาตนเองเพื่อความก้าวหน้าในชีวิตหรือไม่

☐ 1. ไม่สนใจ/ สนใจน้อยที่สุด ☐ 2. น้อย ☐ 3. ปานกลาง

☐ 4. มาก ☐ 5. มากที่สุด

37. ท่านมีโอกาสที่จะได้รับการอบรม/ศึกษาต่อ/ดูงานเพื่อพัฒนาทักษะและความสามารถของตนเองหรือไม่

☐ 1. ไม่มีโอกาส/ มีโอกาสน้อยที่สุด ☐ 2. มีโอกาสน้อย

☐ 3. มีโอกาสปานกลาง ☐ 4. มีโอกาสมาก ☐ 5. มีโอกาสมากที่สุด

Happy Money/สุขภาพเงินดี

38. ท่านรู้สึกว่าการผ่อนชำระหนี้สินต่างๆโดยรวมของท่านในปัจจุบันเป็นภาระหรือไม่

☐ 1. เป็นภาระหนักที่สุด ☐ 2. เป็นภาระหนักมาก ☐ 3. เป็นภาระปานกลาง

☐ 4. เป็นภาระน้อย ☐ 5. ไม่เป็นภาระ/ ไม่ได้ผ่อนชาระ / ไม่มีหนี้สิน

39. ท่านผ่อนชาระหนี้ตามกำหนดเวลาทุกครั้งหรือไม่

☐ 1. ไม่ตรงเวลาทุกครั้ง ☐ 2. ไม่ตรงเวลาบ่อยครั้ง ☐ 3. ตรงเวลาบ้างบางครั้ง

☐ 4.ตรงเวลาเกือบทุกครั้ง ☐ 5. ตรงเวลาทุกครั้ง/ ไม่ได้ผ่อนชาระ / ไม่มีหนี้สิน

40. โดยรวมแล้วท่านมีเงินเก็บออมในแต่ละเดือนหรือไม่

☐ 1. ไม่มี / มีน้อยที่สุด ☐ 2. มี/ เก็บออมเพียงเล็กน้อย

☐ 3. มี/ เก็บออมปานกลาง ☐ 4. มี / เก็บออมมาก ☐ 5. มี/ เก็บออมมากที่สุด

41. โดยรวมแล้วค่าตอบแทนที่ท่านได้รับทั้งหมดในแต่ละเดือนเป็นอย่างไรเมื่อเปรียบเทียบกับรายจ่ายทั้งหมดในแต่ละเดือน

☐ 1. รายจ่ายเกินกว่ารายได้มาก ☐ 2. รายจ่ายเกินกว่าเล็กน้อย

☐ 3. รายได้พอๆกับรายจ่าย ☐ 4. รายจ่ายน้อยกว่ารายได้

☐ 5. รายจ่ายน้อยกว่ารายได้มาก

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ส่วนที่ 3 แบบวัดความผูกพันต่อองค์กร

ระดับความหมายและเกณฑ์การให้คะแนน ดังนี้

5 หมายถึง เห็นด้วยอย่างยิ่ง

4 หมายถึง เห็นด้วย

3 หมายถึง ไม่แน่ใจ

2 หมายถึง ไม่เห็นด้วย

1 หมายถึง ไม่เห็นด้วยอย่างยิ่ง

ข้อ	ข้อความ	ระดับความคิดเห็น				
		5	4	3	2	1
การยอมรับเป้าหมายและค่านิยม						
1	เป้าหมายในการทำงานของท่านสอดคล้องกับเป้าหมายขององค์การนี้					
2	ท่านมีความเชื่อมั่นและศรัทธาในเป้าหมายและค่านิยมขององค์การนี้เสมอ					
3	การปฏิบัติหน้าที่ของท่านให้ดีที่สุดจะทำให้องค์การประสบความสำเร็จ					
4	องค์การได้วางกฎระเบียบที่ดีและเหมาะสมแล้ว					
5	ท่านยินดีทำงานนอกเหนือจากงานในหน้าที่รับผิดชอบให้กับองค์การโดยไม่คำนึงถึงผลตอบแทนที่จะได้รับ					
6	ถ้าองค์การประสบความสำเร็จตัวท่านจะมีความก้าวหน้าด้วย					
7	ท่านภาคภูมิใจที่ได้สร้างผลงานที่มีชื่อเสียงให้กับองค์การนี้					
8	ท่านมั่นใจในอนาคตการทำงานขององค์การนี้เสมอ					
9	ท่านภูมิใจเสมอที่ได้ทำงานในองค์การนี้					
10	ท่านยินดีและเต็มใจเข้าร่วมกิจกรรมต่างๆ ขององค์การ					
ความเต็มใจปฏิบัติงาน						
11	ท่านทำงานอย่างเต็มเวลา					
12	ท่านทำงานด้วยความเต็มใจ					
13	ท่านทำงานอย่างเต็มกำลังความสามารถ					

ข้อ	ข้อความ	ระดับความคิดเห็น				
		5	4	3	2	1
14	ท่านทำงานที่ได้รับมอบหมายด้วยความพยายามอย่างทุ่มเททุกครั้ง					
15	โดยปกติท่านมาทำงานก่อนเวลาและกลับบ้านหลังเวลางานเสมอ					
16	ท่านพอใจที่ได้ทำงานในองค์การนี้อย่างยิ่ง					
17	ท่านจะต้องทำงานที่รับผิดชอบให้สำเร็จถึงแม้ว่าจะมีอุปสรรคก็ตาม					
18	ท่านมีความสัมพันธ์กับเพื่อนร่วมงานเป็นไปอย่างสนิทสนมและมีมิตรไมตรี					
19	ท่านเต็มใจอย่างยิ่งในการทำงานแม้งานนั้นจะนอกเหนือจากงานในหน้าที่รับผิดชอบ					
20	งานที่ทำตรงกับความรู้ความสามารถของท่าน					
ความต้องการที่จะรักษาความเป็นสมาชิก						
21	ถึงแม้ว่าหน่วยงานอื่นเสนอเงินเดือนที่สูงกว่าท่านก็ยังสมัครใจทำงานอยู่ที่องค์การนี้เหมือนเดิม					
22	ท่านพูดถึงความดีขององค์การด้วยความเลื่อมใสและศรัทธาอยู่เสมอ					
23	เมื่อใครว่ากล่าวองค์การอย่างเสียหายท่านจะชี้แจงอธิบายในทันที					
24	ท่านมีความภูมิใจที่มีส่วนทำให้องค์การมีความก้าวหน้า					
25	ผู้คนในองค์การนี้ทุกคนยอมรับในผลงานของท่าน					
26	องค์การนี้เป็นสถานศึกษาที่น่าทำงานด้วยเป็นอย่างยิ่ง					
27	ท่านยินดีทำทุกอย่างเพื่อช่วยให้องค์การมีความก้าวหน้ายิ่งขึ้น					
28	ท่านรู้สึกว่าตนเองเป็นส่วนหนึ่งขององค์การนี้แล้ว					
29	ท่านคิดว่าจะทำงานอยู่ที่องค์การแห่งนี้นานเท่าที่จะเป็นไปได้					
30	การที่ท่านทำงานมานานในองค์การนี้จึงช่วยสรรสร้างองค์การนี้ให้ก้าวหน้าได้					

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ส่วนที่ 4 แบบวัดความพึงพอใจในงาน

ระดับความหมายและเกณฑ์การให้คะแนนดังนี้

5 หมายถึง เห็นด้วยอย่างยิ่ง

4 หมายถึง เห็นด้วย

3 หมายถึง ไม่แน่ใจ

2 หมายถึง ไม่เห็นด้วย

1 หมายถึง ไม่เห็นด้วยอย่างยิ่ง

ข้อ	ข้อความ	ระดับความคิดเห็น				
		5	4	3	2	1
พฤติกรรมในการปฏิบัติงาน						
1	ท่านใช้ความสามารถเต็มที่ในการปฏิบัติงานเพื่อให้งานบรรลุผล					
2	ท่านต้องการให้ผลงานที่ปฏิบัติออกมาดีและน่าพอใจ					
3	ถ้าไม่มีธุระจำเป็นจริงๆท่านจะไม่ลาหยุดงาน					
4	ท่านมีความกระตือรือร้นในการปฏิบัติงานอย่างสม่ำเสมอ					
5	ท่านใฝ่หาความรู้เพิ่มเติมและปรับปรุงการทำงานให้ดีขึ้นอยู่เสมอ					
6	ท่านแก้ปัญหาต่างๆที่เกิดขึ้นในการปฏิบัติงานอย่างสร้างสรรค์					
เจตคติต่อองค์กร						
7	ท่านรู้สึกว่างานที่ทำนี้เป็นงานที่มีคุณค่า					
8	ท่านมีความสุขที่ได้ปฏิบัติงานในองค์การแห่งนี้					
9	การประเมินผลการปฏิบัติงานในองค์การนี้มีความยุติธรรม					
10	ท่านยินดีที่จะปฏิบัติหน้าที่แม้ว่าจะเป็นงานที่เหน็ดเหนื่อย					
11	กฎระเบียบที่ตั้งขึ้นในการปฏิบัติงานขององค์การมีความเหมาะสมและเป็นธรรม					
12	งานที่ท่านปฏิบัติมีระบบและการจัดการที่ดี					
ปัจจัยกระตุ้นในเรื่องความก้าวหน้า						
13	องค์การเปิดโอกาสให้ท่านเข้าฝึกอบรมศึกษาดูงานตามความสนใจ					
14	ท่านมีโอกาสในการลาศึกษาต่อในระดับที่สูงขึ้น					

ข้อ	ข้อความ	ระดับความคิดเห็น				
		5	4	3	2	1
15	งานที่ท่านทำอยู่มีโอกาสก้าวหน้าและเลื่อนตำแหน่งในระดับที่สูงขึ้น					
16	การพิจารณาขั้นเงินเดือนมีความเหมาะสมกับผลการปฏิบัติงาน					
ปัจจัยกระตุ้นในเรื่องลักษณะงาน						
17	งานที่ท่านทำมีความท้าทาย					
18	การปฏิบัติหน้าที่ของท่านเป็นงานที่ทำให้รู้สึกว่าชีวิตนี้มีคุณค่า					
19	ท่านมีความรักและศรัทธาในอาชีพที่ทำ					
20	ลักษณะงานที่ทำอยู่ตรงกับความรู้และความสามารถของท่าน					
ปัจจัยกระตุ้นในเรื่องหน้าที่ความรับผิดชอบ						
21	ท่านไม่รู้สึกหนักใจกับภาระงานภายในองค์การ					
22	อาชีพที่ท่านทำเป็นอาชีพที่จำเป็นต้องเสียสละอดทนและขยันหมั่นเพียร					
23	ภาระงานอื่นที่เพิ่มขึ้นจากงานประจำไม่ทำให้ท่านปฏิบัติงานยากลำบาก					
24	การได้ทำงานร่วมกับองค์การอื่นๆภายนอกองค์การถือว่าเป็นภาระงานอย่างหนึ่ง					
ปัจจัยกระตุ้นในเรื่องการได้รับการยอมรับ						
25	ท่านรู้สึกว่าเพื่อนร่วมงานมีความยินดีเมื่อได้ร่วมงานกับท่าน					
26	ผู้บังคับบัญชารับฟังความคิดและข้อเสนอแนะของท่านอย่างเอาใจใส่					
27	ท่านได้รับความไว้วางใจจากผู้ร่วมงานในการปฏิบัติงานต่างๆ					
28	ท่านมักจะได้รับมอบหมายให้ร่วมปฏิบัติงานที่สำคัญๆอยู่เสมอ					
ปัจจัยค้ำจุนในเรื่องสวัสดิการและรายได้						
29	รายได้แต่ละเดือนที่ท่านได้รับเพียงพอที่จะใช้จ่ายภายในครอบครัว					
30	สวัสดิการที่องค์การจัดให้มีส่วนช่วยให้ท่านมีคุณภาพชีวิตที่ดีขึ้น					
31	องค์การให้รางวัลตอบแทนสำหรับผู้ที่ปฏิบัติงานดีเด่น					
32	สิ่งอำนวยความสะดวกในการทำงานมีความเหมาะสม					

ข้อ	ข้อความ	ระดับความคิดเห็น				
		5	4	3	2	1
ปัจจัยค้ำจุนในเรื่องความมั่นคง						
33	สังคมและชุมชนให้การยอมรับและเชื่อถือองค์การของท่าน					
34	คนในครอบครัวไว้วางใจในการให้ท่านมาทำงานที่องค์การนี้					
35	ท่านเชื่อว่าองค์การสามารถดำเนินกิจการต่อไปได้อย่างมีเสถียรภาพ					
36	ท่านมีความเชื่อมั่นในระบบการบริหารงานขององค์การ					
ปัจจัยค้ำจุนในเรื่องการบังคับบัญชา						
37	ผู้บริหารให้ความสำคัญกับพนักงานทุกคนอย่างเท่าเทียมกัน					
38	ผู้บริหารและบุคลากรมีความสัมพันธ์อันดีต่อกัน					
39	ผู้บริหารเปิดโอกาสให้ท่านมีเสรีภาพในการเลือกทำงานตามความถนัด					
40	องค์การเปิดโอกาสให้ท่านมีส่วนร่วมในการตัดสินใจเกี่ยวกับงานที่ทำ					
ปัจจัยค้ำจุนในเรื่องนโยบายการบริหาร						
41	ท่านได้มีส่วนร่วมในการกำหนดนโยบายและเป้าหมายขององค์การ					
42	ท่านเข้าใจนโยบายและเป้าหมายหลักขององค์การ					
43	นโยบายที่องค์การกำหนดมีความเหมาะสมและยืดหยุ่น					
44	ท่านได้มีส่วนร่วมในการประเมินผลปรับปรุงและพัฒนานโยบายและเป้าหมายขององค์การ					

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BIOGRAPHY

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