Factors associated with retirement preparation among formal workers in near retirement age: A cross-sectional study

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ปัจจัยที่ส่งผลต่อการเตรียมความพร้อมก่อนเกษียณอายุของคนงาน ในระบบช่วงวัยใกล้เกษียณ: การศึกษาภาคตัดขวาง

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ณัฏฐพัชร กุลบุตร : ปัจจัยที่ส่งผลต่อการเตรียมความพร้อมก่อนเกษียณอายุของคนงานในระบบช่วงวัยใกล้เกษียณ: การศึกษาภาคตัดขวาง. (Factors associated with retirement preparation among formalworkers in near retirement age: A cross-sectional study) อ.ที่ปรึกษาหลัก : ดร.อัญชลี ประสารสุขลาภ

การเตรียมความพร้อมสำหรับการเกษียณอายุที่เพียงพอนั้น จะส่งผลในด้านดีต่อทั้งสุขภาพร่างกายและจิตใจของผู้เกษียณอายุ การศึกษานี้มีวัตถุประสงค์เพื่อหาระดับการเตรียมการเกษียณอายุของคนงานในระบบที่อยู่ในวัยใกล้เกษียณขององค์กรภาครัฐ รวมถึงศึกษาปัจจัยที่ส่งผลต่อระดับการเตรียมความพร้อมนั้นด้วย ได้แก่ ปัจจัยทางประชากรศาสตร์ ปัจจัยด้านสุขภาพ ปัจจัยด้านการทำงาน ปัจจัยด้านการสนับสนุนทางสังคม และปัจจัยด้านการรับรู้การเตรียมความพร้อมก่อนเกษียณ มีผู้เข้าร่วมวิจัยทั้งสิ้น 226 คน อายุระหว่าง 55-59 ปี โดยผู้เข้าร่วมวิจัยตอบแบบสอบถามด้วยตนเอง ทำการวิเคราะห์ข้อมูลทั้งหมดโดยใช้สถิติพรรณนา ได้แก่ ความถี่ ร้อยละ ค่าเฉลี่ย และส่วนเบี่ยงเบนมาตรฐาน และใช้ตัวแบบการถดถอยโลจิสติกเชิงอันดับ (ordered logistic regression) เพื่อวิเคราะห์ความสัมพันธ์ของปัจจัยต่างๆ ผลการวิจัยพบว่าผู้ร่วมวิจัยใกล้เกษียณอายุในภาครัฐ เป็นเพศหญิงร้อยละ 40.3 และเพศชายร้อยละ 59.7 ส่วนใหญ่จบระดับมัธยมศึกษาตอนปลาย สถานภาพสมรส และอาศัยอยู่กับบุตรหลาน รายได้ต่อเดือนของผู้เข้าร่วมอยู่ระหว่าง 15,001 ถึง 25,000 บาท และมากกว่าร้อยละ 90.3 ได้รับสวัสดิการพนักงานจากภาครัฐ สำหรับการเตรียมตัวในการเกษียณอายุพบว่าร้อยละ 23.5 เตรียมตัวอย่างดี ร้อยละ 47.3 เตรียมตัวในระดับปานกลาง ขณะที่ร้อยละ 29.2 มีการเตรียมตัวในระดับที่ต่ำ โดยพบว่าปัจจัยที่มีความสำคัญในการเตรียมความพร้อมสำหรับการเกษียณ ได้แก่ คุณภาพชีวิตและการรับรู้ความพึงพอใจในงาน ผลการศึกษานี้จะเป็นข้อมูลที่มีประโยชน์ต่อภาครัฐในการทบทวนและวางแผนพฤติกรรมการเตรียมเกษียณอายุสำหรับลูกจ้างในระบบก่อนเกษียณ

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สาขาวิชา สาธารณสุขศาสตร์ ลายมือชื่อนิสิต .....

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In the past few decades, the fast-growing life expectancy has raised concern over retirement issues worldwide, including in Thailand. While insufficient preparation for retirement has been known to link with negative impacts on both physical and mental health of retirees, there is still little research done on retirement preparation and planning among the Thai older person. Thus, the present study aims to determine the level of retirement preparation among formal workers at near retirement age in a public sector. This study was conducted in May-June 2021 via a 45-minute self-administered questionnaire with 226 participants aged 55-59 years old; participants were selected using systematic random sampling. A self-administered questionnaire was distributed to assess the information of sociodemographic characteristics, health status and retirement preparation. All data were analyzed by descriptive statistics such as frequency, percentage, mean and standard deviation. First, the results showed that the formal workers near retirement age in a public sector are divided into 40.3 percent female and 59.7 percent male. Most participants had a senior high school education and a couple's marital status. Many of them lived with the children, in their own accommodation together with 3-4 family members. The monthly income of participants is between 15,001 to 25,000 baht, and more than 90.3 percent of them received employee welfare benefits. Overall, participants were not preparing for retirement very well. Less than half (47.3 percent) having the preparation for retirement at a moderate level. Although 23.5 percent of participants reported that they have a high level, more than a quarter (29.2 percent) fall far short of retirement preparation. Second, quality of life and perceptions of job satisfaction were found to have a major influence on the level of retirement preparation among formal workers in near retirement age. The result of this study was expected to be useful for public sector to review and planning of retirement preparation behavior for formal workers before retirement.

Field of Study:	Public Health	Student's Signature .....
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CHAPTER I

INTRODUCTION

1.1 BACKGROUND AND RATIONALE

The growth in the number of older people is a global phenomenon. The trend in both developed and developing countries is changing dramatically due to the continued decline in fertility and mortality rates and improvements in health and longevity. This change affects the overall structure of the population and leads to changes in the age structure that occurs in all areas of the world (United Nations (UN), 2017). The most obvious example of this change is the rapid growth of the old age population in the last three or four decades. According to the World Health Organization (WHO), by the last estimate, people aged 60 years and older are predicted to be around 2 billion people in 2050 compared to 900 million people in 2015. These days about 125 million people are aged 80 years or older. By 2050, the vast majority of older people about 434 million people in this age group will be living worldwide while about 120 million will be living in China alone. By 2050, 80% of all older people will be living in low- and middle-income countries (World Health Organization (WHO), 2018). Particularly in Asia, the older population was forecasted to increase significantly. Recently, this growth has been faster than most developed countries and Thailand is the second fastest in South-East Asia, next to Singapore (Fujioka & Thangphet, 2009) .

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Currently, the number of people aged 60 and older in Thailand now stands at about 11.6 million, representing 17.5 percent with total population of 66.4 million divided into ages 60 - 79 years, 10.3 million people, representing 15.5% and 1.3 million ages 80 years and over, accounting for 2 percent of all population. It is expected that the number of the elderly in Thailand will continue to increase. By 2050, Thailand's aging population will be rising to 20 million, accounting for 35.8% of the population. This means that out of every three Thais, one will be a senior citizen (Institute for Population and Social Research, 2019). In the near future, this

transition into aging society will affect economic growth, aging workforce and retirement (Chand & Tung, 2014), the way that families function, the ability of governments and communities to provide adequate resources for older adults (Holroyd-Leduc et al., 2016), and the prevalence of chronic disease and disability (Ward, Parikh, & Workman, 2011)

Furthermore, these facts highlighted growing concerns about the proportion of the labour market. According to the Ministry of Labour of Thailand, employment of workers aged 60 or over tends to increase steadily. In 2011, the number of workers over 60 years old stood at 3.1 million and is likely to increase around 4.51 percent each year. This shows that the population ratio between the number of persons aged 60 and over and the number of the working age (15-60 years old) has been declining continuously. To clarify, in 2020, there were 3.6 persons of working age per one older person, dropping to 1.8 persons of working age per one older person. In other words, the age dependency ratio is increasing from 27.7 in 2020 to 56.2 per 100 workers age in 2040 (National Statistical Office (NGO), 2020). When considering the experiences elsewhere in the region, in countries where a similar demographic transition has already occurred (i.e. Japan, Republic of Korea and Singapore), it is likely that Thailand will also confront with socio-economic development and need political implications (Fujioka & Thangphet, 2009) including labour market consequences, pattern of working ,and retirement (Chand & Tung, 2014), (McNair, 2006).

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One of the causes that led to the growth of the aging population is longer life expectancy. Over the last few decades, life expectancy has increased by more than 6 years between 2000 and 2019 globally – from 66.8 years in 2000 to 73.4 years in 2019 (WHO, 2018). Similarly, Thailand' average life expectancy is 75 years. Given the constantly improving health technology, people born in 2016 are expected to live until 80-98 years on an average if technology progress is taken into consideration (Thailand Development Research Institute (TDRI), 2020). These figures can be projected that Thai people will face a longer life expectancy. For the Thai older workers without extending the retirement age, an average Thai older worker will have longer time to spend their life after retirement. In addition, the growing of life

expectancy among Thai people has raised concern about after retirement issues (Prasartkul, Thaweesit, & Chuanwan, 2019). On the other hand, it may put significant pressure on the financing of the state's social security system in the coming years. Pensions and retirement income will be in need to cover a longer period of life and health care costs will increase (The United States (U.S.) Department of State and the National Institute on Aging (NIA), 2007). Pension systems also need reformation to counterbalance the overall increase in pension income, including increasing the statutory retirement age and/or reducing replacement rates (Kuhn, Wuellrich, & Zweimüller, 2010). Therefore, a plan to deal with this change is needed in order to cope with such situations.

In Thailand, there are many workers who are currently working in the public sectors and private sectors and will soon transition into retirement (Bhisalbutra, 2019). According to data from Office of the Civil Service Commission (OCSC) of Thailand, during the past 10 years from 2008-2017 in Thailand, there were approximately 391,040 retired government employees (39,104 average yearly) and the number tended to increase over the past few years. In the years 2015-2017, there were 45,678, 43,597 and 40,022 retirees respectively (Office of the Civil Service Commission (OCSC), 2018). Together, these trends of aging population and transition into retirement present a view of challenges for retirement preparation. In this study, the researcher focuses on workers who are working in the public sector because in Thailand the official retirement age applies only to the formal worker in the public sector while the private sector has no mandatory retirement age (Kanchanachitra, 2012).

Preparation for retirement is a multidimensional construct that can be defined as “the thoughts and behaviors aimed at goals that promote good health and provide financial security, adapt lifestyles, and ensure gratifying rewards in retirement” (Noone, Stephens, & Alpass, 2010). The impact of retirement is something that comes with retirement and it is something everyone should be aware of and prepared for. The multidimensional nature of the transition to retirement involves major changes as follows: physical, mental health (Dave, Kelly, & Spasojevic, 2008), financial and

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emotional. It can also cause social isolation, loneliness (National Institutes of Health (NIH), 2019), as well as lifestyle modifications after unemployment (Johnson, 2019). The obvious difference between working and retirement is that they no longer get up and go to work. Retirees have to fill their own time and structure their own life. They may feel disconnected like they have no purpose in life and no focus (Sightings, 2017). Some of retirees seem to not increase the number of contacts with children, parents, or friends (Bogaard, Henkens, & Kalmijn, 2012). About one third of retirees have difficulty adjusting to certain aspects of retirement such as reduced income, altered social role, and entitlements. This can affect physical and mental health which can be differed from person to person depending on attitude toward retiring (Kaplan & Berkman, 2019).

Furthermore, retirement may also influence mortality. One of the empirical studies that estimated the causal effect of retirement on mortality in Austria found that retirement causes an increase in the probability of dying before the age of 67 among blue-collar men but not among blue-collar women. The excess mortality in males was concentrated among heart disease, a disease associated with excessive alcohol consumption and vehicle trauma (Kuhn et al., 2010). In turn, a previous study from Canada reported that retirement improves the psychological well-being of both males and females in the age group of 55 and over (Latif, 2011). In Switzerland, the research found that retirement provides relief from people with at-risk jobs. Obviously, retirement can be both positive and negative for retirees (Ryser & Wernli, 2017). People who have prepared for retired life well will makes transitioning easier (Hunter, 2013) and leave them with a substantial fund to fulfill their retirement life (Kagan, 2020c). In addition, retirement preparation is positively related to the level of retirement satisfaction among retirees after retirement as well (Elder & Rudolph, 1999). Thus, having retirement preparation is extremely important to be healthy aging and achieve happiness in retirees after retirement.

While preparing for retirement is crucial, it is found that most people in many countries still lack retirement preparation and also have limited financial resources. For example, according to report from U.S. Government Accountability Office on

retirement security (2019), in 2016, about 48 percent of U.S. citizens households headed by someone aged 55 and over that had no retirement savings or a defined benefit plan to draw on in retirement (The U.S. Government Accountability Office (GAO), 2015). In addition, although Singaporean's pension system is quite robust compared to other Asian markets, the results of the survey of Singaporeans aged 30 and over from "Spotlight on Retirement: Singapore" found that a massive 80 percent of the respondents across Singapore anticipate a gap in retirement funds when they turn age 60, and only 20 percent expect to have enough funds that they need to lead a comfortable retired life (LL Global, Inc. and Society of Actuaries, 2018). In Thailand, based on evidence from a survey in retirement planning by Dhanaporn Chittinandana (2017) found that there was 41 percent of Thais workers not planned on or started saving for retirement (Chittinandana, Kulnartsiri, Pinthong, & Sawaengsuksant, 2017). Retirement life without planning requires continuous employment or working that remains the same as young age even though that individual reaches retirement age. Lack of retirement planning preparation will generally bring some disappointment during retirement, yet preparation for retirement planning is not an easy task (Lee & Law, 2004), and it also depends on many factors.

There are some research studies on retirement preparation done in Thailand, for example, the study on economic preparation for retirement of population aged 50 – 59 years old (Supachet, 2013) and Health Preparation for Retirement among Community Hospitals Registered Nurses in Khon Kaen Province, Thailand (Wilaiwan & Piyathida, 2011). However, the result of those study is scarce and focus only one domain that can affect retirement preparation, so it is important to find other domains or factors that can be used to reliably identify the successful retirement preparation of these populations and healthy aging in the future. Thus, while insufficient preparing for retirement has been known to link with negative impacts on both physical and mental health of retirees, the researcher aims to investigate how formal worker in near retirement age preparing their retirement life as well as to identifying the factors that might associate with their retirement preparation. This study examines significant variables – sociodemographic characteristic, health status, work-related factors, social

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support, and retirement perception. The results of this study are expected to be useful in guiding both for public sector and policymakers to review and plan the retirement preparation in the case of formal workers before retirement.

1.2 RESEARCH QUESTION

- What is the level of retirement preparation among formal workers in near-retirement age?
- Do the sociodemographic characteristics associate with retirement preparation among formal workers in near-retirement age?
- Do the health status associate with retirement preparation among formal workers in near-retirement age?
- Do the work-related factors associate with retirement preparation among formal workers in near-retirement age?
- Do the social supports associate with retirement preparation among formal workers in near-retirement age?
- Does the retirement perception associate with retirement preparation among formal workers in near-retirement age?

1.3 RESEARCH OBJECTIVE

The general objective:

- To examine the factors associated with retirement preparation among formal workers in near-retirement age.

The specific objectives:

- To determine the level of retirement preparation among formal workers in near-retirement age.
- To identify the association between sociodemographic characteristics and the level of retirement preparation.
- To identify the association between health status and the level of retirement preparation.
- To identify the association between work-related and the level of retirement preparation.

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- To identify the association between social supports and the level of retirement preparation.
- To identify the association between retirement perception and the level of retirement preparation.

1.4 STUDY HYPOTHESIS

There is at least one of the study factors associated with the level of retirement preparation among formal workers in near-retirement age.

1.5 SCOPE OF STUDY

This study was conducted among formal workers (civil servant, government employee and temporary employee) in near-retirement age (55 – 59 years old) who currently working at the public sector in Central Region, Thailand. The period of data collection was from May 2021 to June 2021.

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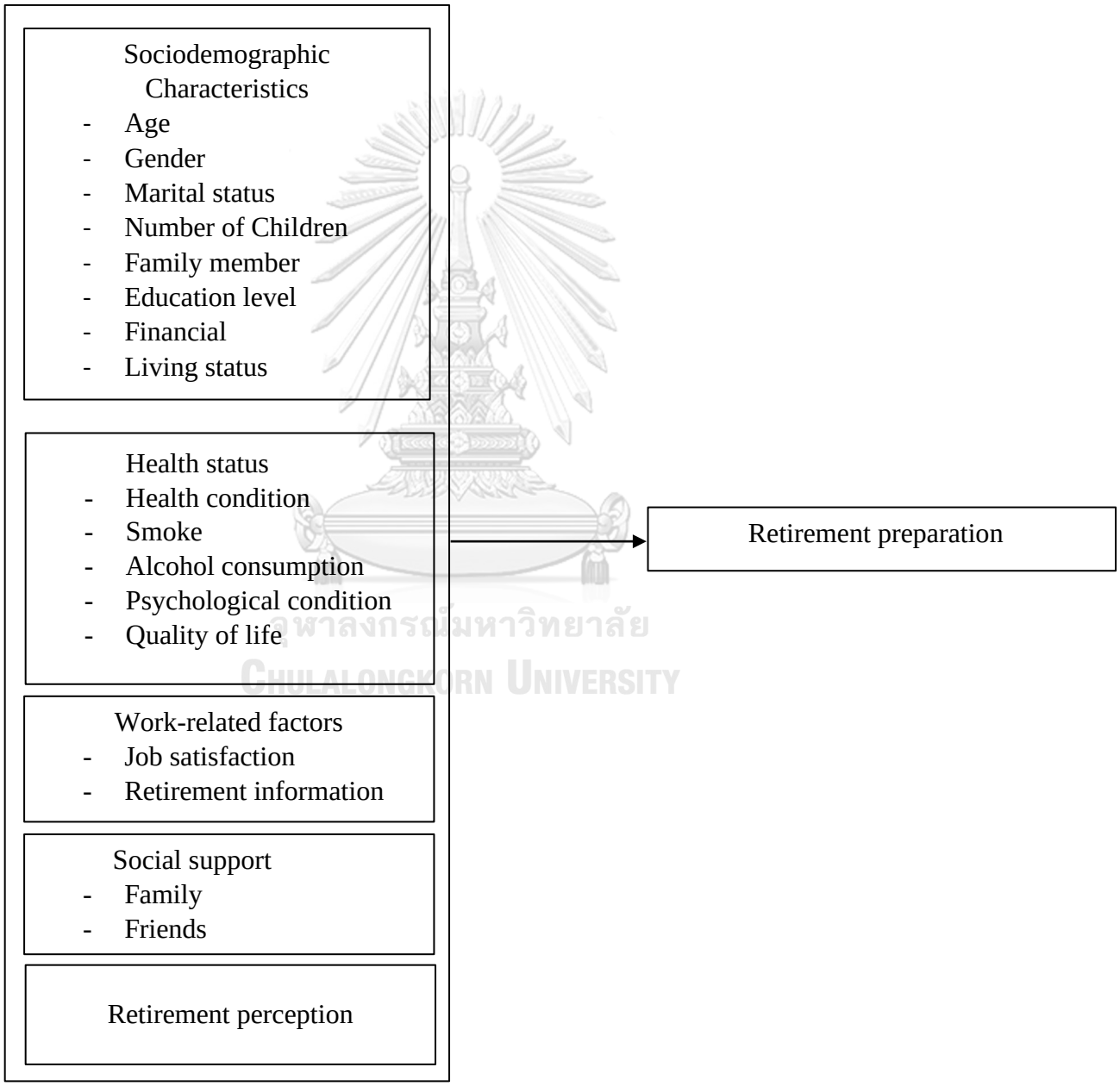
1.6 CONCEPTUAL FRAMEWORK

This study is a cross-sectional research design to determine factors associated with the level of retirement preparation among formal workers in near-retirement age at the public sector in Central Region, Thailand. The conceptual framework of this study is shown in Figure 1.



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1.7 OPERATIONAL DEFINITION

In this study, there are both independent and dependent variables are defined as followed.

Near retirement age refers to all workers aged 55 – 59 years.

Formal workers refer to worker who currently working at the public sector, including civil servant, government employee and temporary employee.

1.7.1 Independent Variables

Age refers to how old the participant is at the time of the research.

Gender refers sex of the participant.

Marital status refers to the current marital status of the participant. It is classified into single, a married couple living together, married but separated, widowed, and divorced.

Number of Children refers to the number of children who are in the participant's responsibility.

Family members refer to number of family member who are in the participant's responsibility, also includes the family householder and all other people in the living quarters who are related to the householder by birth, marriage, or adoption.

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Educational level refers to the level of education participants were at during at the time of the survey (primary school/elementary school, Junior high school, senior high school, bachelor’s degrees, and higher degree).

Financial refers to the management of money of participants including monthly income, perception of income, employee welfare benefits.

Living status refers to that participant is living alone, living with married partners and their offspring (participant, married partners, children), living with extended family including married partners, their offspring, grandparents, married offspring, and grandchildren) or living with someone other than family (live-in partners, and close friends).

Health conditions refer to the condition of the participant's body during the past year (12 months). There are three main types of health conditions in this study: (1) healthy (without illness history), (2) minor disability (participants had the presence of short-term illness such as muscle pain, insomnia, etc.), and (3) major disability (participants presence of chronic diseases such as high blood pressure, diabetes, heart disease asthma, etc.) and require ongoing medical attention or limit activities of daily living or both.

Smoke refers to frequency of smoking consumed per week during the past year

Alcohol consumption refers to frequency of drinking alcohol consumed per week during the past year

Psychological condition refers to a mental condition of participants assessed by using the GHQ-28 to indicate psychological well-being and detect possible cases of psychiatric disorders.

Quality of life refers to an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns. This study using Thai version of WHOQOL-BREF 26 to indicate an individual's perception of their lives and it can be divided into 4 domains including physical health, psychological state, social relationships and environment.

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Job satisfactions refer to the extent to which a worker feels self-motivated, content and satisfied with his/her job.

Retirement information refer to the perception of the basics of retirement preparation and employee welfare benefits, such as social security, pension benefits, retiring from working place.

Social support refers to the network of social resources that an individual perceives. This social network is rooted in the concepts of mutual assistance, guidance, and validation about life experiences and decisions. In this study, this social support including friends, and family support.

Retirement perceptions refer to as a positive or negative feeling specifically related to the retirement preparation experience itself.

1.7.2 Dependent Variable

Retirement preparation defined as people's behavior towards their retirement planning.

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CHAPTER II

LITERATURE REVIEW

With the objectives to find factors affecting retirement preparedness among formal workers at the public sector in Central Region, Thailand. it is important to understand the trends and situations of population aging in Thailand and also situations of older workers. Then, the sources of retirement preparation. Thus, the review of literature in this study focuses on topics as follow.

2.1 POPULATION AGING

2.1.1 Aging

Aging refers to the process of becoming older and is in association with changes of dynamic biological, physiological, psychological, behavioral, environmental, and social process (National Institutes of Health (NIH), 2020). It is remarkably complicated to elaborate the cause and process of aging, so a number of factors or causes as well as countless aging theories have been suggested. The programmed theory believes that our genetics have predetermined our aging process both how and when (Mitteldorf, 2010). Some of the damaged-based theories suggest that aging is a consequence of DNA damage, and the accumulated damage to deoxyribonucleic acid contributes to the beginning of biological aging (Hung, 2010). However, there are 4 characteristics of aging criteria established by the gerontologists as follows (Chalise, 2019):

1) Chronological Aging: This depends only on the expected lifespan of a person age by the number of days, months, or years that they have lived.

2) Biological Aging: This is distinguished by deterioration of body changes over the years, such as skin wrinkles, hair loss, thinning hair, paleness, hyperopia, slow movement, etc.

3) Psychological Aging: This is in response to psychological changes such as intellectual capacity, memory, learning ability or other symptoms including anxiety, irritability, etc.

4) Sociological Aging: This implies to changes of relationships and social roles. It can be diminishing or growing relationship with family, friends, and other roles.

It is shown that, apart from the biological losses, there are key transitions that coincide with age including changes in social roles, social status, and psychological adjustments following the loss of their beloved persons. Therefore, it is essential for the public health department to successfully address the problem of aging by not only concentrating to the recovery of physical states from biological losses, but also to the adaptation and mental health.

2.1.2 Aging Health and Age-Related Changes

1. Physiological changes

- Aging cells

As cells age, their function gets worse. Finally, as a normal part of body function, old cells die.

- Aging organs

The way organ's function is related to how well the cells in the organs work. The older cells do not work well as others. In addition, in some organs, the number of cells is reduced because they die and there is no replacement. As the body ages, the significant reduction of cells in the ovaries, testes, liver, and kidneys can be seen; thus, an organ cannot function properly if the number of cells gets too low. Therefore, as we age, the function of most organs will get worse and worse. However, some organs might not lose a huge number of cells including the brain. Elderly people with good health do not lose a lot of brain cells. Major losses occur mostly in people who have suffered a stroke or a disease that brings about nerve cells' progressive loss (neurodegenerative disorders) such as Alzheimer's disease or Parkinson's disease.

- Bones and Joints

One of the reasons why bones become less dense is that they are low in calcium (which provides strength to bones). The decrease in the amount of

calcium is the result of the body absorbing less calcium from diets as vitamin D levels, which help the body absorb calcium, is reduced slightly. Additionally, some bones are more brittle than others. The most affected areas include the spine bones (vertebrae), the bones of the forearm (radius and ulna), and the end of the thighbone (femur) at the hip.

- Muscles and Body Fat

Starting around the age of 30 and going on throughout a lifetime, human muscle mass and strength are likely to decrease. Moreover, losing more fast-twitch (fast-contracting) muscle fibers than slow-twitch (slow-contracting) muscle fibers also results in muscles unable to contract quickly as before.

- Ears

As people get older, it becomes more difficult to hear high-pitched tones. This change is seen as age-related hearing loss (presbycusis). The consequence of presbycusis can be frustrating because it gets harder to understand the words. For instance, although some people are speaking in their natural tone or even louder, older people may still hear them mumbling and could not really understand what they are saying.

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- Eyes

When aging, the following things happen: the lens hardens and becomes denser, the pupils react more, the lens turns yellow, and the fluid production decreases. Eyesight or vision change is generally the first inevitable sign of aging.

- Mouth and Nose

In general, the taste and smell abilities begin to decline gradually when people reach their 50s. This change has a greater impact on sweet and salty tastes than on bitter and sour. The reduced ability to smell is due to the thinner and drier lining of the nasal cavity and deterioration of the nerve endings in the nose.

- Skin

Part of the reason for skin changes is that collagen (a fibrous, supportive protein that gives the skin strength) and elastin (which helps the skin return to their original place after stretching or contracting) undergo chemical changes and become less flexible. Also, as the body ages, the production of collagen and elastin decreases. As a result, the skin is easy to tear.

- Brain and Nervous System

In connection with sending messages from the brain, levels of the chemicals tend to decrease, but some of them increase. Nerve cells may lose some of their receptors for these chemical messages. The flow of blood to the brain also diminishes. Due to these age-associated changes, the brain function may rather less efficient. Elderly people may react and perform tasks a little slower such as vocabulary, short-term memory, the ability to learn new material, and the ability to recall words.

- Heart and Blood Vessels

The heart and blood vessels become stiffer. The blood fills the heart more slowly. The stiffer arteries become, the less they are able to expand with more blood pumping through them. Therefore, blood pressure is inclined to rise.

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- Lungs and the Muscles of Breathing

The muscles used in breathing, the diaphragm and muscles between the ribs, tend to weaken. The number of air sacs (alveoli) and capillaries in the lungs decreases. Thus, slightly less oxygen is absorbed from air that is breathed in. The lungs become less elastic.

- Endocrine System

The levels and activities of some hormones, produced by endocrine glands, get lower such as growth hormone level, aldosterone level and insulin level. For example, insulin which helps control the sugar level in blood, is less effective, and less insulin may be produced. Insulin enables sugar to move

from the blood into cells, where it can be converted to energy. The changes in insulin mean that the sugar level increases more after a large meal and takes longer to return to normal.

- Blood Production

The amount of active bone marrow, where blood cells are produced, decreases.

- Immune System

The cells of the immune system act more slowly. These cells identify and destroy foreign substances such as bacteria, other infecting microbes, and probably cancer cells. This immune slowdown may partly explain several findings associated with aging such as cancer, and some infections and vaccines tend to be less protective in older people.

2.Psychological changes

- **Affective function** refers to the mood, and emotions (such as happiness, sadness, fear, pain, anger, and confusion). For example, Self-esteem: it is essential to the adaptation process at all stages of life but especially in older adults. A positive view of self-esteem will enable that person to cope better with the changes and challenges of growing older. It is also associated to the quality of adjustment, well-being, life satisfaction and health. Self-esteem is not related to chronological age. Rather, it is the quality of social integration and the ability of people to cope with life events, including physical and cognitive decline (Alaphilippe, 2008). According to the research of the effect of self-esteem in elderly, it is suggested that an effect of self-esteem on cognitive decline with aging (Pruessner, Lord, Meaney, & Lupien, 2004). Behavior and Personality Changes: it often changes due to dementia. People with dementia tend to manifest themselves in very different ways than their "old self", and these changes can be difficult for family and friends to cope with. Behavior changes for several reasons. In dementia, it is often because the person is losing nerve cells in certain parts of the brain. The

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changes of behavior often depend on which part of your brain is losing cells. Anxiety and depression: based on estimation of mental health problems of the World Health Organization (WHO), it is found that over 20 percent of adults aged 60 and over suffer from a mental or neurological disorder. The most common mental and neurological disorders in this age group are dementia and depression, which affect approximately 5 percent and 7 percent of the world's older population, respectively. Anxiety disorders affect 3.8 percent of the older population. Additionally, in the developing counties, approximately 340 million of elderly suffer from stress and depression. The causes of depression in older adults include health issues, loneliness and isolation, reduced sense of purpose, fears, and recent bereavements.

- Cognitive function refers to memory, learning, and intelligence. The effect of normal aging on memory may result from the subtly changing environment within the brain. The brain's volume peaks at the early 20s and it declines gradually for the rest of the life. In the 40s, the cortex starts to shrink and people start noticing the subtle changes in their ability to remember or to do more than one task at a time. Other key areas like neurons shrink or undergo atrophy and a large reduction in the extensiveness of connections among neurons (dendritic loss) is also noticed (Cabeza & Moscovitch, 2013). During normal aging, blood flow in the brain decreases and gets less efficient at recruiting different areas into operations. The whole group of aging changes taking place in the brain decreases the efficiency of cell-to-cell communication, which reduces the ability to retrieve and learn (Besdine & Wu, 2008). It also has an effect on the intelligence, especially fluid intelligence (problem-solving with novel material requiring complex relations). It declines rapidly after adolescence. Perceptual motor skills (timed tasks) also decline with age (Greve, Bianchini, Mathias, Houston, & Crouch, 2003).

3. Social Changes

Most elderly people seem to be most vulnerable to psychological dysfunction when they experience change. The social changes come with a change in lifestyle, loss of other family members, neighbors, and friends. The main social problems, which elderly persons experience, are finance, social isolation, loneliness, rejection, loss of life purpose, deterioration in housing standards, and poor nutritional levels.

- Retirement

A change in work role comes with retirement. It changes the way time is managed and daily activities are carried out. Retirement alters identity, status, financial problem, lack of self-satisfaction and self-esteem and sometimes friendships.

- Widowhood

A common event that alters family life for the aged is the death of a spouse. The spousal role composed of many sub roles, such as companion, sexual partner, confidante, cook, housekeeping, and care provider. Loss of spouse is a highly stressful experience. Death of a spouse affects more women than men because most older men will marry again.

- Loneliness

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Loneliness is the feeling of emotional isolation, being locked inside oneself and unable to obtain the warmth and comfort from others. Any loss that creates a deficit in intimacy and inner personal relationships can lead to loneliness.

- Role change (Role reversal)

Various role changes occur with the aging process, but the transitions expected by most elders are related to the work role and the role of spouse or partner.

2.1.3 Definition of population aging

The United Nations gave the definition of aging population: “The process by which older individuals become a proportionally larger share of the total population”.

Thus, aging is determined not only by the pace of growth of the older population, but also by how that pace is doing compares to the growth rates of the other age groups (UN, 2002).

According to the report on the 2019 survey on the Foundation of Thai Gerontology Research and Development Institute (TRGI) of the older person, the following demographic definitions are used:

"Aged society:" A population in which the proportion of those age 60 years or older exceeds 10% of the total (or a population in which 7% are aged 65 years or older).

"Complete-aged society:" A population in which the proportion of those age 60 years or older exceeds 20% (or a population in which 14% are aged 65 years or older).

"Super-aged society:" A population in which the proportion of those age 60 years or older exceeds 28% (or a population in which 20% are aged 65 years or older).

"Aging society" refers to a population that is getting older as indicated by the proportion of elderly of the total population that is steadily increasing.

"Proportion of the elderly" refers to the percentage of elderly to the total population.

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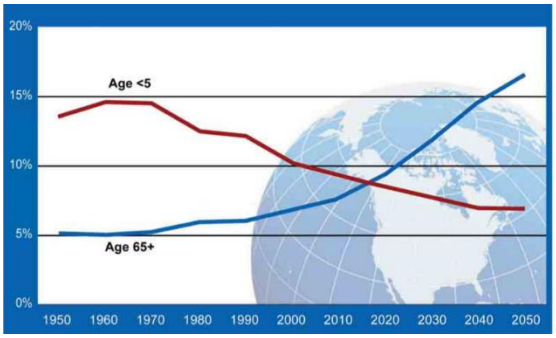
2.1.4 Trend of population aging on worldwide

The aging trend of the world's population is the dominant demographic phenomenon in the 21st century. Declining by falling fertility rates and increasing life expectancy cause a dramatic change in the population age distribution. Now the number of people older than 65 years old surpassed the number of children under 5 years old (Figure 1).

Figure 1 Children and Older people as a Percentage of global population 1950 - 2050



Source: United Nations. World Populations Prospects: The 2010 Revision

For many countries, as we see in (Figure 2) the number of older persons is expected to grow fastest in Africa, where the population aged 60 or over is projected to increase more than threefold between 2017 and 2050, from 69 to 226 million. Followed by Latin America and the Caribbean, the older population is projected to increase more than twofold between 2017 and 2050, from 76 to 198 million. Asia also is expected to experience a twofold increase in the number of older persons, with the population aged 60 or over projected to increase from 549 million in 2017 to nearly 1.3 billion in 2050. Of the six major geographic regions, the older population is expected to grow most slowly in Europe, with a projected increase of 35 percent between 2017 and 2050.

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Figure 2 Number and distribution of persons aged 60 years or over by region, in 2017 and 2050

	Number of persons aged 60 years or older in 2017 (millions)	*Number of persons aged 60 years or over in 2050 (millions)*	*Percentage change between 2017 and 2050*	*Distribution of older persons in 2017 (percentage)*	*Distribution of older persons in 2050 (percentage)*
World	962.3	2080.5	116.2	100.0	100.0
Africa	68.7	225.8	228.5	7.1	10.9
Asia	549.2	1273.2	131.8	57.1	61.2
Europe	183.0	247.2	35.1	19.0	11.9
Northern America	78.4	122.8	56.7	8.1	5.9
Latin America and the Caribbean	76.0	198.2	160.7	7.9	9.5
Oceania	6.9	13.3	92.6	0.7	0.6

Source: United Nations (2017). World Populations Prospects: The 2017 Revision

In 1980, each of the world's ten most aged populations were located in Europe and the share of the population aged 60 years or over had not yet reached 25 per cent in any country or area (Figure 3). In 2017, the share of older persons exceeded 25 per cent in all ten of the most aged countries and, in 2050, older persons will comprise more than 39 per cent of the population in each of the ten most aged countries or areas. Japan was the world's most aged population in 2017 (33 per cent aged 60 or over) and it is projected to remain so through 2050 (42 per cent aged 60 or over). Europe is expected to account for 5 of the 10 most aged countries or areas in 2050.

Figure 3 Ten countries with the largest share of persons aged 60 years or over*, in 1980, 2017 and 2050

	1980		2017		2050	
Rank	Country or area	Percentage aged 60 years or over	Country or area	Percentage aged 60 years or over	Country or area	Percentage aged 60 years or over
1	Sweden	22.0	Japan	33.4	Japan	42.4
2	Norway	20.2	Italy	29.4	Spain	41.9
3	Channel Islands	20.1	Germany	28.0	Portugal	41.7
4	United Kingdom	20.0	Portugal	27.9	Greece	41.6
5	Denmark	19.5	Finland	27.8	Republic of Korea	41.6
6	Germany	19.3	Bulgaria	27.7	China, Taiwan Province of China	41.3
7	Austria	19.0	Croatia	26.8	China, Hong Kong SAR	40.6
8	Belgium	18.4	Greece	26.5	Italy	40.3
9	Switzerland	18.2	Slovenia	26.3	Singapore	40.1
10	Luxembourg	17.8	Latvia	26.2	Poland	39.5

Source: United Nations (2017). World Populations Prospects: The 2017 Revision

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2.1.5 Trend of population aging in Thailand

Thailand is now dominating the second highest old age population in South-East Asia region just below Singapore. According to the report on the 2019 survey on the Foundation of Thai Gerontology Research and Development Institute (TRGI) of the older person, it is reported that Thailand has the number of elderly aged 60 or over stands at about 11.6 million of the total population, representing 17.5 percent of the population. It is expected that the number of Thai older will continue to increase. There will be about 20 million elderly persons over the next 20 years. Those surveys

also show that, in recent years, the number of Thai elderly people is more than the population aged under 15 years (Institute for Population and Social Research, 2019; The Foundation of Thai Gerontology Research and Development Institute, 2019). These facts highlight the raising concern and awareness of the impact on an aging society. Therefore, a future phenomenon associated with an aging population, either in the government sector or the private sector should be taken into consideration for urgent action on strategies and preparedness to cope with the potential challenges that may arise.

2.2 OLDER WORKER

There is inconsistency in terms of what age constitutes the entry threshold to the category of older worker. ‘Older worker’ spans a wide range of ages. Some research considers ‘older’ workers as someone as young as 40 (Ng & Feldman, 2008) while other research considers older workers to be as old as 65 (Australian Bureau of Statistics, 2010) . In the 2005 Yearbook Australia, older workers are defined as employed people aged 45-64 years. The Australian Bureau of Statistics (ABS) uses 65 as the threshold for old age across the general population. In America, three pieces of legislation on behalf of older Americans (the Older Americans Act, 1965; the Job Training Partnership Act, 1982; and the Workforce Investment Act, 2000) all used 55 and older as the delimiter (Hedge, Borman, & Lammlein, 2006). Savickas (2012) has suggested that those aged between 25 and 49 are in prime working age and older workers are those aged 50 and above (Savickas, 2012).

Most importantly, Taylor (2006) suggested there are consistently observed sharp declines in labour force participation rates after this age. Thus, many researchers define older workers as workers aged 50 years and over (Stamov-Roßnagel & Hertel, 2010). In addition, Australia provides incentives (e.g. a government wage subsidy) to encourage businesses to employ older workers who are defined as those aged 50 or older. Although Sterns and Doverspike (1989) argue that chronological age is only one way of defining age and there are other approaches to defining older workers, such as functional age, psychosocial age, organizational age,

or lifespan age, chronological age is highly associated with all of these age concepts (Sterns & Doverspike, 1989). For all these reasons, this study uses chronological age and defines older workers as those who are 55 and older and are retiring in the next 5 years.

While the population in Thailand is increasing in people aged 60 or over, it also causes the higher proportion of seniors in the working-age population at the same time. Considering that the older workers are workers aged 60 years and over, Thailand currently has 3.9 million older workers. Counting at age 55 and over, there will be 7.3 million older workers while there are already 16.6 million workers at the age of 45 years and over (National Statistical Office (NGO), 2020).

2.3 RETIREMENT

2.3.1 The definition of retirement

Retirement is generally used to describe the act of leaving from a position or occupation or from active working life (Anspach, 2020). In the labour force, the term retirement is a reference of the complete withdrawal from the labor force while others remain partially or even fully involved in the labor market (Bowlby, 2007) . In particular, according to Atchley (1982), the meaning of retirement is divided into two basic meanings. For the individual, this means withdrawing from his or her business or career either to enjoy more leisure or freedom or to cope with health issues. For the employer, retirement is defined as the dismissal or withdrawal from a position of employment of someone eligible for retirement (R. C. Atchley, 1982). In addition, retirement and the term “financial independence” can often be used interchangeably. Both are achieved when retiree have enough savings, investment income and/or pension income to cover their living expenses (Anspach, 2020). The official age of retirement is different in each country. However, the age of retirement in each country is typically between 55-65 years. For instance, In France, the official age of retirement is 62 while in Canada and Mexico men and women officially retire at 65 years old. However, in some country such as South Africa, the government does not set an

official age. Therefore, employees are allowed to contact and liaise with employers to find the 'agreed' retirement age (Kagan, 2020a).

2.3.2 Type of retirement

According to Asuquo and Maliki (2007), there are three types of retirement: voluntary, compulsory and mandatory retirement. First, the voluntary or self-retirement refers to an individual worker who wants to leave employment for his or her own reasons regardless of age, experience, length of service or retirement policy. The second type of retirement is compulsory or forced retirement, which is a situation beyond the expectations of the individual and it will happen when he or she is poorly prepared for it. The third type of mandatory retirement is common. This occurs when the person concerned reaches the legal age of retirement as specified in the institution's terms of service. (Asuquo & Maliki, 2007).

In Thailand, based on Thailand’s Office of The Civil Service Commission, there are types of retirement of a worker which are divided into 4 characteristics as follows.

1) Voluntary Retirement refers to retirement that requires a worker to terminate his or her work voluntarily.

2) Deferred Retirement refers to the employee who is assumed to have attained the statutory mandatory age of retirement as written in the constitution or condition of service of the country.

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3) Early Retirement refers to retirement that requires a worker to stop working or voluntarily stop working due to reorganization or the dissolution of the position.

4) Disability Retirement refers to retirement that requires a worker to end his or her work due to poor performance in work, sick or disability, etc.

2.3.3 Phases of Retirement

Atchley (2000) has developed six stages of retirement process outline. This outline describes the retirement transition that most people have to go through when they leave the workplace permanently. These steps do not necessarily happen to

everyone. Rather, it is a model for predicting what might be found in the future (R. Atchley, 2000). The process of retirement has six stages, in general:

1) Pre-Retirement - This is the phase when people begin to think seriously about the life that they want for themselves in retirement and whether they are financially on track to achieve it. Pre-retirement has two phases: remote and near. The remote phase is the recognition of retirement as part of one's occupational career. During this phase retirement is viewed at a reasonable distance in the future. The near phase is the time close to retirement when the individual becomes aware of its realities.

2) Retirement event - The big moment comes, and the retiree makes the transition from full-time work to the retirement they have planned for themselves. Work, possibly part-time, may still be a factor in the future if they enjoy working or need to supplement their retirement income, but now they are officially retirees.

3) Honeymoon - This is the stage that immediately follows retirement. It can last for a few months or even a year. This is a time when many retirees feel relaxed and carefree.

4) Disenchantment - For some retirees, the honeymoon stage is followed by a period of disenchantment (i.e., disappointment) as retirement does not meet their expectations. Feelings of disenchantment can be particularly strong for a person who hasn't planned for the unavoidable psychological adjustment that retirement requires and hasn't developed plans for keeping active and mentally challenged during retirement.

5) Reorientation - After the honeymoon period and sometimes a period of disenchantment, it is common for many retirees to ask themselves "what do I want to do? How do I want to spend the rest of my life?" This often happens in the second year. This is particularly true of a retiree who hasn't planned their retirement. Plans can be made now, but it would be better to make some of these plans in advance of retirement rather than waiting until years into the process.

6) Retirement routine - At this phase is where you settle into a comfortable and rewarding retirement routine. Some individuals may do this soon after they leave

full-time employment whereas others take longer. This phase can last for many years and many mid-course adjustments can be made along the way as new interests emerge or new opportunities and challenges present themselves. This stage is called ‘routine’ but it doesn’t mean that the remaining years or decades of retirement are without surprise and unexpected pleasures.

2.3.4 Retirement preparation

Preparation for retirement is a multidimensional structure which can be defined as “the thoughts and behaviors aimed at promoting good health and providing financial security, adapting to lifestyles, and ensuring satisfactory rewards in retirement” (Noone et al., 2010). Retirement preparation is a key for an individual life since it will give a sense of security for human needs after their retirement period. Individual conscious decision before retirement is a must to prepare in order to gain security upon retirement (Shanmugam & Zainal Abidin, 2013). A great number of literatures on retirement planning have found that those who have been well-prepared for retirement life will experience smooth transition (Hunter, 2013) and fulfill their post-retirement period with substantial enough fund (Kagan, 2020c). However, it is solely a personal option for retirement preparation.

There are many factors to consider about the optimal age for retirement. The review of Taylor and Shore (1995) on predictors of planned retirement age in individuals found that the role of chronological age, personal, psychological, and job and organizational factors are one of the predictors of estimated retirement age (Taylor & Shore, 1995). Although many governments or companies want employees to work until retirement, the actual average retirement age of people is often below the estimated age and not everyone is ready for retirement planning. According to the U.S. Government Accountability Office, nearly half of households headed by someone aged 55 or older had no retirement savings in 2016 (The U.S. Government Accountability Office (GAO), 2015). In Malaysia, an independent survey shows that a “majority of Malaysians are not only ill-prepared for retirement but are also unconcerned about financial security in their lifetime”. Sixty percent of the

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respondents interviewed were found to be ignorant of how much they would need to save for their retirement (AFFIN Life Insurance retirement Scope Report, 2010; AXA Retirement Scope, 2008; Prudential Assurance Malaysia Bhd., 2007).

2.4 FACTOR AFFECTION RETIREMENT PREPARATION

There are several factors associated with a worker's ability for retirement preparation. In this study researcher focused on Sociodemographic, health status, work-related factors, social support, and perception of retirement towards retirement preparation.

2.4.1 Sociodemographic factors

Several studies have been conducted to look at the association between Sociodemographic factors and retirement preparation, as can be cited below.

Age

The life cycle theory has suggested that age has an impact on retirement planning management, especially on savings. According to Joo and Grable (2005) in their early research, they stated that the age population, the uncertainty of investment, the baby boomer and the different of policies retirement have all heightened the significance of retirement preparation. The younger is thinking that they were too young or still in the early stage for them to start thinking about retirement. They always thinking that the time for them to start saving is not yet arrived without realized that whenever they start to think about it, it might be too late for them. Whereas the older think that they cannot save more their retirement is due to the commitment to the family and also other commitment (Joo & Grable, 2005). Additional, A study by Arnone (2004) has suggested that older employees are directly linked to being knowledgeable on pension finance matters more than younger employees because most retirement planning programs are limited to those who are about to retire where the goal of the pre-retirement planning program is to help participants identify their basic retirement decisions and start preparing for retirement

(Arnone, 2005). Thus, it has been shown that with increasing age they will have a better understanding of their cost of living and retirement expenses requirements. This will enable and provide them to have a better understanding of their retirement planning management.

Gender

With the result of the previous study by Lusardi and Mitchelli (2007), believe that there is a relationship between gender with the retirement preparation in retirement saving choice, based on results of studies that being male has a relation to greater financial planning than female (Lusardi & Mitchelli, 2007). A study by Richardson (1990), examined among 3,064 retirees from a major state retirement system shows that gender differences in the amount of retirement financial planning. Significant were found in amount of personal financial planning and perceived adequacy of planning with women planning less than men (Richardson, 1990).

Marital status

Marital characteristics influence retirement decisions in several ways, according to the study of Szinovac (2013) expected that retirement decisions seem to reflect considerations about postretirement marital quality and husband's status in the marriage. Married women's inclination not to work in retirement and to retire at earlier ages than unmarried women or men could partially reflect their reliance on husbands' retirement incomes as well as on couples' intention to retire together. Because husbands are usually older than their wives, this may lead wives to plan on earlier retirement (Szinovacz, 2013)

Number of Children and family

A previous study, based on 40 – 65 years old of the 2,760 employees from the land grant universities in Idaho, Nevada, Oregon, Washington, and Wyoming report that the association between the number of children and retirement planning was significant. Respondents with more dependent children were expected to have more

negative attitudes toward retirement and to have planned less in all four retirement planning areas (financial, home equity, employment, and locational) (Turner, Bailey, & Scott, 1994). And another report shows that the most important influence of retirees for retirement preparation came from their partners and children (Franca, 2015b). The finding supports Joo and Grable (2005), household size was statistically significantly related to whether or not someone had a retirement savings program. Specifically, those who had a larger household size with many number of family were less likely to have a savings program for retirement (Joo & Grable, 2005).

Educational level

Generally, there are also extensive studies on retirement comprising education level. Individuals with higher attained to education (i.e., college graduate and higher) were found to be positively associated with having a retirement savings program for retirement than those who had lower educational attainment levels (Joo & Grable, 2005). From a previous study, based on study of the 110 employees in Malaysian Health Sectors report that associated between a high level of education and retirement planning was significantly, employers with higher education are more likely to prepare for retirement. (Mansor, Chor, Abu, & Shaari, 2015). The results of that research are consistent with the study of Devaney (1995) mentioned that the effect of education level can be serving as a motivator or guidance for individuals to start the retirement planning preparation. Individuals tend to be more motivated to concern about retirement planning preparation as well as take action for their retirement when an increase in the age and the education level (DeVaney, Gorham, Bechman, & Haldeman, 1995).

Financial Status

The relationship between income level and retirement preparation is positively related. This is due to the study that has been done by Hira, Rock and Loibl (2009), which reveals that income level was positively related to retirement saving. This is more than likely because of the fact that a higher income often relates to higher

disposable income, which means that an individual with a higher income will have the more available income to invest (Hira, Rock, & Loibl, 2009). According to Joo and Grable (2005), the research found that respondents who had higher incomes were also more likely to have a retirement savings program than those who had lower levels of income (Joo & Grable, 2005). Moreover, Xiao (1995) found that having sufficient income to minimize some problems during retirement. Income level is an important factor determinant for retirement wealth growth. Different types of preparation before retirement will lead to wealth accumulation and different retirement lifestyles. The different perceptions on income adequacy also affect the preparation for a household's pre-retirement income (Xiao, 1995). This is consistent with the research of Zappala and Depolo (2008) was concluded that the perception of income adequacy had an effect between expected and preferred retirement as well as attitude towards retirement. (Zappala, Depolo, Fracaroli, Guglielmi, & Sarchielli, 2008).

A pension plan is a retirement plan that requires an employer to pay contributions to a fund set aside for the future benefit of the worker. Mutual funds are invested on behalf of the employees and the investment income generates income for the employees upon retirement (Kagan, 2020b). Thailand's pension system was completely restructured in the late 1990s. It now includes the old age pension, the pay-as-you-pay state pension scheme for private workers, and the Government Pension Fund, a defined contribution pension system exclusively for civil servants (Ratanabanchuen, 2019). In additional, contributing to superannuation savings/investment schemes may significantly reduce the risk of not being able to secure a stable income after retirement. The results suggest that those who have contributed to superannuation will retire earlier than others (S. Delpachitra & Beal, 2010).

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Living status

There were studies examine the effect of living status on retirement shown that living status to be related to retirement preparation decisions (The Faculty of Business Innovation and Accounting, 2016).

2.4.3 Health Status

Health Condition

Previvor literature review has suggested that one of the most well-known factors influencing an individual's retirement preparation is health. In order to save appropriately for retirement, individuals must consider their health status. (Zeka, Rootman, & Krüger, 2017). According to Li Ranzi, d'Errico and Costa (2013), mentioned that people with poorer health are more likely to retire earlier. The risk of retirement is increased due to the increasing number of reported diseases. Those who were at high risk of illness-related retirement were found to be the highest compared to lower social classes (Li Ranzi, d'Errico, & Costa, 2013). In addition, a poor health status increases the probability of early retirement (Siddiqui, 1997). Which is consistent with the research results of interaction between health and gender, with women and men who had poor health being at the highest risk of losing their jobs or early retirement then usual (Schuring, Burdorf, Kunst, & Mackenbach, 2007). On the other hand, research also shows that retired individuals who report improved health are more likely to report a positive attitude towards retirement (Wong & Earl, 2009). As some authors explain(Shacklock & Brunetto, 2011) (Henkens & Leenders, 2010), Healthy people tend to retire later; thus, their retirement savings could be better planned and more substantial. From these discussions, it becomes clear why so much research is devoted to the relationship between health status and retirement preparation. Therefore, the health of an individual can ultimately affect how they plan for retirement.

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Alcohol consumption and smoking

Alcohol consumption and smoking are well-known to be significantly associated with health status. Alcohol consumption and smoking are found strongly associated with chronic diseases (Hoang et al., 2008). Smoking is seen as a main cause of a wide range of fatal diseases, such as lung diseases and various types of

cancer. However, the association between alcohol consumption and health status is found to vary by different contexts. For example, alcohol consumption is significantly associated with poor health perception in people with low income. However, other studies show a positive effect of drinking on SRH among men. In particular, those who consume small to moderate amounts of alcohol are seen to perceive their health status as being better as compared to heavy drinkers or abstainers (Demirchyan, Petrosyan, & Thompson, 2012), thus regular drinking alcohol is found to contribute to better health status (Perlman & Bobak, 2008).

In terms of smoking, tobacco use has a substantial negative effect on health status and is responsible for millions of deaths each year in the world Tobacco use is the world's leading cause of death, as one of the leading causes of chronic diseases such as heart disease and stroke one of the commonest ways by which tobacco kills people, tobacco use poses a great burden on society and the healthcare system due to the cost of treatment. Previous studies indicate that smoking is seen to have a strong association with Sexual and Reproductive health. People who have ever smoked are 2.4 times more likely to perceive their health status as being poor as compared to people who have never smoked (Demirchyan et al., 2012). In addition, different genders react differently towards smoking and alcohol drinking behaviors, especially in rural areas where the prevalence of smoking and drinking is very high (Hoang et al., 2008). For example, those who consume tobacco and alcohol are found to have an increased probability of having at least one chronic disease. However, this has been found to be significant only in men.

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Psychological condition

While health concerns are an important part of any retirement decision, there are other issues that also influence retirement decisions that are unrelated to an individual's health status, such as judgment and decision thinking. (Knoll, 2011). A psychological condition or mental condition is a condition that affects a person's thinking, feeling, behavior or mood. These conditions have a profound impact on everyday life and can affect your ability to relate to others. Especially, the

psychological effects of stress, depression, and anxiety, which are often referred to as "negative emotions," have put many people in a difficult path. In addition, the level of negative emotions can be a strongly and routinely shapes decision making. For instance, people who are concerned about the potential outcomes of a risky choice may choose safer alternatives than unnecessarily more profitable options. People who are grateful to the schools they attend may decide to donate sums of money (Lerner, Li, Valdesolo, & Kassam, 2015). According to Foster (2008) have found relationship between psychological variables and life circumstances during retirement, anxiety and depression have been found to be related to retirement and wellness. It was suggested that higher score on anxiety and depression, the lower scored on wellness with people in near-retirement age (Foster, 2008).

Psychological assessments

At present, there are many components to psychological assessment. Psychological measurement tools are being developed for use in many areas such as mental health, schools, hospitals and the private sector. In the other word, Psychological condition could be measured by several tools, such as General Health Questionnaire 28 (GHQ-28), Depression, Anxiety and Stress Scale - 21 Items, Thai-version PHQ-9.

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General Health Questionnaire 28 (GHQ-28), as a model screening for mental health problems developed from Goldberg's GHQ (1972) with a total of 28 questions. The scores are divided into 4 groups as follows: Somatic Symptoms (1-7), Anxiety and Insomnia (8-14), Social dysfunction (15-21), Severe depression (22-28). The GHQ Goldberg rating recommends the use of GHQ score (0–0–1–1). Interpretation of Thai GHQ – 28 using intersections a score of 5/6 with a score of 6 or higher is considered abnormal psychological.

Depression, Anxiety and Stress Scale - 21 Items (DASS-21) is a set of three self-report scales designed to measure the emotional states of depression, anxiety and stress. Each of the three DASS-21 scales contains 7 items, divided into subscales with

similar content. The depression scale assessed dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest / involvement, anhedonia and inertia.

Thai-version PHQ-9 has been used as a reliable depression screening tool in primary care, with a demonstrated good sensitivity and specificity for depressive disorder. With only 9 items, the PHQ-9 is substantially shorter than most other depression screening measures.

The Psychological measurement tools scale differs in whether it is appropriate for longitudinal clinical trials versus cross-sectional research. Regarding reliability and validity for this study and research's population, General Health Questionnaire 28 (GHQ-28) was used in this research.

Quality of life

The concept of quality of life is an important concept in the field of well-being. It can be defined in many different definitions and it can be varying in priority among people in different age groups. The term of quality of life does not affect to only the individual perception, but also comprise the balance of societal, objective and individual, subjective terms. It includes income, employment, housing, education, other living and environmental circumstances. For example, it can be defined as a subjective experience with the conditions in which physically and mentally. The influence on how well-being is constructed by different environments.

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Quality of life defined by the World Health Organization as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.

In conclusion, quality of life refers to the level of good living, happiness and satisfaction in life, both physically, mentally, socially, emotionally and in the lifestyle of the present. According to Lusardi and Mitchell (2014) has a suggested that well-being in retirement is directly linked to planning during working life (Lusardi & Mitchell, 2014). Although this study does not deal with the effects of government policy, an important part of this study focuses on the topic of the individual's quality of life and its implication on retirement preparation.

Based on previous study quality of life is widely accepted as a useful indicator of adjustment (Budowski, Schief, & Sieber, 2016), according to study by Hurtado an Topa (2019), finding show quality of life and health are affecting in the face of adjustment to retirement, including physical, cognitive, motivational, financial, social, and emotional resources also linked to the adjustment of retirement (Hurtado & Topa, 2019). It can be seen that people's preparatory actions before retirement will depend on many factors. However, adaptation to retirement requires considering care comprehensively in the physical, mental, social areas and quality of life. So, it is essential to pay special attention to all these variables for an individual can achieve a great retirement preparation.

Quality of life assessments

The quality of life measurement tools will vary in specificity, such that some drill down to assessing QOL in different domains, while others will serve as a more summarizing or global evaluation. In the other word, quality of life could be measured by several tools, such as the Quality of Life Scale (QOLS), Quality of Life Questionnaire (MQOL), Health-related quality of life (HRQOL), WHOQOL-BREF such as WHOQOL-100 and WHOQOL-BREF, Hyland and Sodergren's Global QOL scale.

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Quality of Life Scale (QOLS), is one of the most widely used QOL assessments, applied predominantly in the healthcare sector. For each item, respondents indicate their satisfaction across each of the 16 domains on 7-point scales, where 1 equal 'terrible' and 7 equals 'delighted'.

Quality of Life Questionnaire (MQOL) was designed to assess the QOL of patients facing life-threatening illnesses.

The Health-related quality of life (HRQOL) Questionnaire combines three separate modules to assess perceptions of HRQOL. It is widely used by health professionals and was designed to bridge the gap between disciplines, such as sociology, psychology, and economics, about the drivers of QOL.

The WHOQOL-BREF is widely used for comparing indices of QOL across cultures. It is for this reason that the scale is available in over 40 languages. The instrument assesses QOL in the context of six domains: Physical health, Psychological health, Level of Independence, Social relationships, Environment, Spirituality/Religion/Personal beliefs. The instrument also contains several items assessing general health. The response anchors for the subscales vary by item but are always on a 5-point scale ranging from 1 to 5. The WHOQOL-100 was a reliable and valid instrument that could be used in a diverse range of cultures but it was lengthy. Last but not least, WHO developed WHOQOL-BREF, a brief version of WHOQOL-100 that was reliable, valid and applicable to any health research

Hyland and Sodergren's Global QOL scale. Hyland and Sodergren (1996) argued that respondents can mentally apply their own weighting system when assessing the various facets of their life. They were indicating a number on a scale ranging from 100-0, where 100 is labeled 'Perfect quality of life,' and 0 is labeled 'Might as well be dead'.

The QOL scale differs in whether it is appropriate for longitudinal clinical trials versus cross-sectional research. Regarding reliability and validity for this study and research's population, Thai – version WHOQOL-BREF 26 was used in this research.

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The Strength and Weakness of The Quality of life assessments

Questionnaire	Strength	Weakness
Quality of Life Scale (QOLS)	valid and reliable	It is applied predominantly in the healthcare sector.
Quality of Life Questionnaire (MQOL)	valid and reliable Suitable for patients	It is suitable for patients facing life-threatening illnesses
The Health-related quality of life (HRQOL)	valid and reliable	It is widely used by health professionals
WHOQOL-100	valid and reliable	Lengthy
The WHOQOL-BREF	valid and reliable	

Hyland and Sodergren's Global QOL scale	valid and reliable	Non-categorical in each domain

2.4.4 Work-related factors

The work-related factors in this study include perception of retirement information and perception of job satisfaction. Researchers in Australia have investigated the determinants of a planned retirement. The result found that suitable employment, working environment and job satisfaction was as driving forces in their planning for retirement (S. a. B. Delpachitra, Diana, 2002). Other research was found that those who are more satisfied in their current job were more likely to have negative attitudes towards retirement. (Franca, 2015a). When workers nearing retirement age are still satisfied with their job, it reflects on their desire to continue working (Kaewsai & Tawata, 2021). Moreover, based on the study of "What influences retirement decisions?" by Judith Davey (2008) found that Job-related such as policy for the workers or relationships between workers and their employers can influences the retirement decision. The Employer's policy towards older workers" were cited as a major influence on retirement decisions by 41% of respondents (Davey, 2008a).

Ponpun Vorasiha (2018) has also highlighted the perception of retirement information from the workplace affects well preparation of retirement. Organizing activities related to preparing for retirement, such as providing information on welfare benefits, savings, pension, health care, and providing information about careers for the older workers after retirement will help workers plan a good preparation before their retirement age (Vorasiha, 2018).

Thus, the researcher chose to use the perception of participants toward work-related factors questionnaire that was modified from previous studies by Pol.L Nisarat Kulkatchaporn (2010) and Pimpapai Supomrat (2007). The questionnaire was appropriate and comprehensive for the perception of participants toward work-related

factors, which had specific questions giving details about perception of retirement information and perception of job satisfaction.

2.4.5 Social support factors

According to Barrera, Sandler and Ramsay (1981), conceptualize social support as the assistance given to individuals by family, friends and anybody that you can turn to in times of need (Barrera Jr, Sandler, & Ramsay, 1981). Social support is the support that individuals receive from their social relationships with other people, groups, and the larger communities (Ozbay et al., 2007). In some epidemiological studies, social support is refers to the amount of social contact a person has or the extensiveness of a social network (Cobb, 1976). Additionally, workplace social support can refer to the availability or actual receipt of assistance provided to an employee by one or more individuals.

Some researchers have suggested that social support or social interactions influence individual decision making (Black, Devereux, & Salvanes, 2013). There is a link between social support and retirement preparation behavior. Lusardi and Mitchell (2014) view social support plays a key role in retirement decisions, Individuals receive advice from family, friends, and colleagues taking into account the advice of their retirement plans (Lusardi & Mitchell, 2014). Consistent with the research of Franca (2015), the results indicated that the positive attitudes towards retirement are increased by the positive influence of the family and friends (Franca, 2015b). It has been shown that the level of social support correlate directly with factors affecting retirement preparation behavior. But it may differ from countries that present differences in culture, socio-economic and environmental aspects. In this study, researcher focus specifically on how social support affect the decision-making toward retirement preparation behavior among formal worker in near-retirement age at the public sector in Central Region, Thailand?

Thus, the researcher chose to use the social support measure survey that was modified from previous studies by Pol.L Nisarat Kulkatchaporn (2010), (Kulkatchaporn, 2010). The questionnaire was appropriate and comprehensive for a

social support measure, which had specific questions giving details about family and friend support. The measurement also used to measure the samples directly related to retirement preparation was consistent with this study

2.4.6 Perception of retirement

Robert Efron (1969) defines perception as man's primary form of cognitive contact with the world around them (Efron, 1969). In the other word, perception is whatever we perceive or gain some knowledge and lead to the method of organizing, interpreting, and consciously experienced (Mularsih & Maudy, 2020). Perception of retirement preparation is a capability of self-perceiving to manage the plan of retirement including physical health, mental health, economics, and society according to the Social Cognitive theory and Self-Efficacy theory of Bandura. It is stated that when a person has self-confidence to be able to perform that task, he or she will begin doing the task (Bandura, 2002).

According to Jinnarat Waraboonnakphirom (2015), conceptualize perception of retirement as awareness of physical health, mental health, economic, self-esteem, and welfare knowledge to prepare for life after retirement (Waraboonnakphirom, 2015).

Perception of one’s physical health refers to the perception of how one’s actual physical fitness is doing at the time.

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Perception of one’s mental health refers to the perception of one’s mental fitness and to what extend it is able to deal with the situation.

Perception of one’s economics refers to knowing of one’s actual financial status at the time in order to properly plan and adapt the behaviors for the financial preparation.

Perception of one’s ability to adapt after retirement refers to knowing one’s adjustment ability in order to deal with situations once being retired.

Perception of one’s self-esteem refers to knowing one’s true feelings about self-worth that he or she remains important and useful to others including family, community, and society.

Perception about welfare knowledge refers to knowing and understanding one's rights about welfare benefits provided by workplace, public sectors, or others.

Some researchers have suggested that most of the younger generations of worker have difficult perceptions about retirement, for many of them the word retirement gives a negative connotation, and only a few consider it positive and enthusiastic preparing for retirement. According to Santrock (1995), it is proposed that an individual's preparation is based on his/her perception of their retirement adjustment. For this reason, those who have positive perceptions toward retirement as a fresh start and continuity will achieve their goals in retirement life (Santrock, 1995). Thus, it is necessary to evaluate individual perceptions for retirement planning (Thakur, Jain, & Soni, 2017). In this study, researcher focus specifically on perception of retirement toward retirement preparation behavior among formal worker in near-retirement age at the public sector in Central Region, Thailand?

The researcher chose to use the perception of retirement support measure survey that was modified from previous studies by Jinnarat Waraboonnakphirom (2015), (Waraboonnakphirom, 2015).. The questionnaire was appropriate and comprehensive for a perception of retirement measure, which had specific questions giving details about 6 domains: psychological, physical, economic, post-retirement adaptation, self-esteem and welfare knowledge. The measurement also used to measure the samples directly related to retirement preparation was consistent with this study.

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2.5 OTHER RELATED STUDY

No.	Author	Population	Finding
1	(Trilerklith, Rungsayatorn, & Hirunwong, 2014)	Worker, an average age of 52.69 years old	The results of the study found that the quality of life and retirement preparation were positively association and statistically significant at the .01 level. The

			stepwise multiple regression indicated that physical and psychological preparation for retirement were two aspects positively related to and influenced by the quality of life of schoolteachers, statistically significant at the .01 level.
2	(Petkoska & Earl, 2009)	Worker age from 50 to 66 years, with a mean age of 54 years	The results of the study revealed that Age ($\beta = .13$, $p < .05$), Gender ($\beta = .29$, $p < .001$), income ($\beta = .17$, $p < .05$), and education ($\beta = .13$, $p < .05$) were the variable to emerge as a significant predictor of financial/general planning for retirement
3	(Greller & Richtermeyer, 2006)	Ages of 22 and 70	Family support for professional development and personal growth are both associated with greater expectation for development ($b = .21$, $p < .01$ and $b = .21$, $p < .01$ respectively). Family plays an important role in the development decisions and affected to retirement preparation.
4	(Davey, 2008b)	Older Workers age ≥ 55 years old	The results show that the most important influences retirement decisions were health status and

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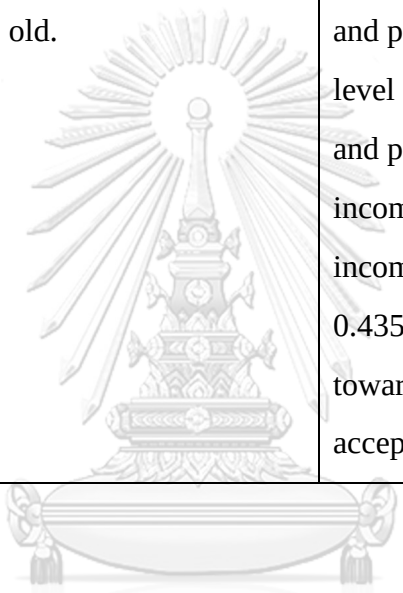
			gender.
5	(Thakur et al., 2017)	Aage groups want to get retire in next 20 years.	There is impact of source of information on investment towards retirement goals (P < .0001). Thus, the source of information is a key for prudent retirement planning.
6	(Mansor et al., 2015)	Worker ages range from 21 to 60 years old.	The results of the study revealed that age (Chi-Square value is13.991 and p-value is 0.301); education level (Chi-Square value is 26.379 and p-value is 0.049) and household income (Chi-Square value for income is 12.128 and p-value is 0.435) have a significant impact towards retirement planning is accepted.



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Chapter III
Methodology

This chapter describes the research methods used in this research project. Each research principle consists of a main objective, the research technique, and the research process. It started with the research design and justified the selection of the research methodology, which designed to cover all contents and achieve the objective of this research study.

3.1 RESEARCH DESIGN

A cross-sectional study is designed to investigate the level of retirement preparation and determine what factors that associated with retirement preparation among formal workers in near-retirement age at the public sector in Central Region, Thailand.

3.2 STUDY AREA

This study area was in Central Region, Thailand. A public sector in this research was the central government level, which is covering 7 provinces including Lopburi, Ayutthaya, Saraburi, Chainat, Singburi, NakhonSawan and Phetchabun.

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3.3 STUDY PERIOD

The cross-sectional study design will be conduct in May - June 2021.

3.4 STUDY POPULATION

Participants were formal workers (civil servant, government employee and temporary employee) at the public sector, in Central Region, Thailand. Eligible criteria for selecting samples to participate in this research project can be detailed as follows:

Respondent inclusion criteria:

1. Formal worker who current working at the public sector.
2. Near retirement age: 55 - 59 years old
3. Respondents who willing to participate in the research.

Respondent exclusion criteria:

1. Respondents who currently going through severe conditions/diseases such as end-stage renal failure, cancer stage 2^{nd} - 4^{th}. Including those who experience very long hospitalizations have complex illnesses, with substantial risk for mortality.
2. Respondents who have worked at public sector less than 2 years.

3.5 SAMPLE & SAMPLE SIZE

The population in the research was covered on formal workers aged 55 - 59 years old, both men and women who currently working in the public sector in Central Region, Thailand. According to the data from a sector which the researchers collected the data, there were 426 formal workers at near retirement age. The researchers used this number to determine the sample size for this study, based on Yamane formula, (Yamane, 1967).

$$n = \frac{N}{1 + N * (e)^2}$$

n = Sample size

N = The population size

e = The acceptable sampling error

* 95% confidence level

The number of sample size, which allows for errors at 5 percent.

$$n = \frac{426}{1 + 426 * (0.05)^2}$$

$$= \frac{426}{2.065}$$

$$= 206.29$$

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* 426 = Number of all formal workers aged 55-59 years old, who works in the public sector in Central Region, Thailand.

The result of 206 participants is used to predict the number of persons who refuse to participate in this research. Thus, the sample was increased by 10% of 206 participants (20 people) and the total sample size of participants is 226 people.

3.6 SAMPLING TECHNIQUE

This research, based on sampling method, covered the following process as follows:

Step 1: Criterion sampling involves the identification of a particular criterion of importance: This study selects the Central Region of Thailand and not including Bangkok to undertake because, based on the 2020 National Statistical Office's Labor Survey, the central region is the top 3 regions with a large number of formal workers aged 55-59 (National Statistical Office (NGO), 2020).

Step 2: The researcher uses a convenience sampling method to select one public sector in Central Region, Thailand. Then, each participant who fits the criteria will be select by using systematic random sampling, the researcher using a list of all populations age 55-59 years old to measure the population at random intervals, which in this case will be 1 in 2 individuals until obtaining a total of 226 participants. The interval should be 2, which is the result of the division of 426 (N= size of the population) and 226 (n=size of the sample).

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3.7 MEASUREMENT TOOLS

The questionnaire was designed to take approximately 45 minutes to finish. In this study the questionnaire has 176 items, consisted of six parts (Appendix), including general information, work-related factors, retirement perception and preparation, social support, Thai GHQ-28 and WHOQOL-BREF 26. The details are as follows:

Part 1 General information (17 questions)

In this part, there were 2 open-ended and 15 closed-ended questions, which designed to collect the descriptive demographic and socioeconomic characteristics of participants includes, i.e., age, gender, educational level, marital status, number of children, family members, income, source of income, living status, financial, health status.

Part 2 Work-related factors (19 questions)

In this section, the questionnaire was designed to measure the perception of participants toward work-related factors, that affecting their individual retirement preparation. The questionnaire consists of 2 subsections, as retirement information before retiring from their working place and job satisfaction.

1) Perception of retirement information before retiring were using the Scale of perceived retirement information form pervious study, that develops by Pol. L Nisarat Kulkotchaporn (Kulkatchaporn, 2010). This questionnaire is designed to measure perceptions of retirement information from their working place. The questionnaire type is Checklist questions: Agree / Not Agree questions. There are 9 questions in total: 6 positive meaning questions (1, 2, 4, 5, 6, 9) and 3 negative meaning questions (3, 7, 8). The participants will be asked about the perceptions of retirement information from their workplace.

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The scoring of positive meaning questions is as follow:

1 point	Agree
0 point	Not Agree

The scoring of negative meaning questions is as follow:

0 point	Agree
1 point	Not Agree

2) Perception of job satisfaction, this question is adept from the previous study by Pimprapai Supomrat (2007), This survey's questionnaire used to measure the perception of job satisfaction. Each question uses a five-point Likert scale and ask the participants to identify their level of the perceptions from very strongly satisfied , strongly satisfied, moderate satisfied/neutral, mild Satisfied, not Satisfied. There were 10 questions in total with all positive meaning questions (Supomrat, 2007).

The scoring of all questions is as follow:

5 points	Very Strongly satisfied
4 points	Strongly satisfied
3 points	Moderate Satisfied/ Neutral
2 points	Mild Satisfied
1 point	Not Satisfied

Each of work-related factors questionnaire was classified into three retirement preparation levels by using the interquartile range (IQR). For the perception of retirement information. An overall with checklist questions ranging from positive meaning questions (1 point = Agree, 0 point = Not Agree) and negative meaning questions lowest (0 point = Agree, 1 point = Not Agree). The range of total score in this study is between 0 – 9 points. The median score was 6 (IQR = 2.0). The researcher divided the perception of retirement information level into 3 level by used quartile to categorize the score. The score above quartiles 3 (> 7.0) as high level of perception, the score between quartiles 3 to quartiles 1 as moderate level of perception and the rest (≤ 5) as low level. For the perception of job satisfaction, the range of total score in this study is between 10 – 50 points scoring from the highest 5 points (Very Strongly satisfied) and the lowest 1 point (Not Satisfied). The median score was 35 (IQR = 10.0). The researcher divided the perception of job satisfaction level into 3 level by used quartile to categorize the score. The score above quartiles 3 (≥ 40.0) as high level of job satisfaction, the score between quartiles 3 to quartiles 1 as moderate level of job satisfaction and the rest (≤ 30) as low level.

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Part 3 Retirement perceptions and preparation (63 questions)

The questions in third part are regarding the perceptions of retirement and preparation. The questionnaire consists of 2 subsections and designed to measure the retirement perceptions and preparation as follow.

1) The questions for section 1 are perception toward retirement preparation questionnaire. The questionnaire from previous studies, which was developed by Jinnarat Waraboonnakphirom (2015), (Waraboonnakphirom, 2015). The question is an estimation of the Likert Scale with five answers to choose from: very strongly disagree, strongly disagree, moderate agree/neutral, strongly agree, very strongly agree. There are 33 questions in total, divided into 6 domains: psychological 7 questions, physical 6 questions, economic 6 questions, post-retirement adaptation 5 questions, self-esteem 5 questions and welfare knowledge 4 questions.

The scoring of all questions is as follow:

5 points	Very Strongly agree
4 points	Strongly agree
3 points	Moderate agree/Neutral
2 points	Strongly disagree
1 point	Very Strongly disagree

The retirement perception questionnaire was classified into three levels by using the interquartile range (IQR). An overall retirement perception was measured with Likert Scale, ranging from lowest (1-point) to highest (5-point) as measured by how much the participants thought about their retirement perception. The range of total score is 33 – 165 points. The median score was 123 (IQR = 31.0). The researcher divided the retirement perception level into 3 level by used quartile to categorize the score. The score above quartiles 3 (>141.0) as high retirement preparation, the score between quartiles 3 to quartiles 1 as moderate retirement preparation and the rest (≤ 110) as low retirement preparation.

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2) The questions for section 2 were toward retirement preparation, using the Scale of retirement preparation from previous study by Chatjongkon Tunlayanisaka (2009), (Tunlayanisaka, 2009) as measured by how much the participants thought about their retirement preparation. The revised version has 30 questions in total, divided into 5 domains: physiological and psychology 10 questions, economic 5 questions, lifestyle 5 questions, household 5 questions, participation in society 5 questions. Each question is an estimation of the rating scale with three answers to choose from: very strongly disagree, moderate agree/neutral, very strongly agree.

3 points	Very strongly agree
2 points	Moderate agree/neutral
1 point	Very strongly disagree

The retirement preparation questionnaire was classified into three retirement preparation levels by using the interquartile range (IQR). An overall retirement preparation was measured with a 3 rating scale, ranging from lowest (1-point) to highest (3-point) as measured by how much the participants thought about their retirement preparation. The range of total score is 34 – 90 points. The median score was 60 (IQR = 12.0). The researcher divided the retirement preparation level into 3 level by used quartile to categorize the score. The score above quartiles 3 (>67.0) as high retirement preparation, the score between quartiles 3 to quartiles 1 as moderate retirement preparation and the rest (≤ 55) as low retirement preparation. For physiology and psychology, the range of total score is 12 – 30 point than divided the score above quartiles 3 (>24.0) as high preparation, the score between quartiles 3 to quartiles 1 as moderate and the rest (≤ 19) as low preparation. According to economic, the range of total score is 5 – 15 point than divided the score above quartiles 3 (>12.0) as high preparation, the score between quartiles 3 to quartiles 1 as moderate and the rest (≤ 9) as low preparation. For households, the researcher has divided the score above quartiles 3 (>13.0) as high preparation, the score between quartiles 3 to quartiles 1 as moderate and the rest (≤ 10) as low preparation. For lifestyle and society, the range of total score is 5 – 15 point than divided the score

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above quartiles 3(>10.0) as high preparation, the score between quartiles 3 to quartiles 1 as moderate and the rest (≤ 7) as low preparation.

Part 4 Social support (23 questions)

The questions in fourth part are regarding the social support, which designed to measure the descriptive information about relationship between participants and family and friend support. The questionnaire consists of 2 subsections and it was modified from Scale of Perceived family and friend questionnaire that developed by Pol.L Nisarat Kulkotchaporn (2011) (Kulkatchaporn, 2010). This part also uses a five-point Likert scale from: very strongly disagree, strongly disagree, moderate agree/neutral, strongly agree, very strongly agree, to ask the participants to indicate their level of given factors which are important to their social support.

1) Part 1 was a question about the participant's family support. The questionnaire consisted of 11 items totally in which there were 9 questions with positive meaning and 2 negative meaningful questions. The scoring criteria negative questions are article: 5 and 8. The scoring criteria positive questions are article: 1, 2, 3, 4, 6, 7, 9, 10 and 11.

2) Part 2 was a question about the participant's friend support about the relationship with the respondent's friend support. The questionnaire consisted of 12 items totally in which there were 10 questions with positive meaning and 2 negative meaningful questions. The scoring criteria positive questions are article: 1, 2, 3, 4, 5, 6, 7, 9, 10 and 12. The scoring criteria negative questions are article: 8 and 11.

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The scoring for both part of all negative questions is as follows:

5 points	Very Strongly disagree
4 points	Strongly disagree
3 points	Moderate agree/Neutral
2 points	Strongly agree
1 point	Very Strongly agree

The scoring for both part of all positive questions is as follows:

5 points	Very Strongly agree
4 points	Strongly agree
3 points	Moderate true
2 points	Strongly disagree
1 point	Very Strongly disagree

The Social support questionnaire in each subsection (friend support and family support) was classified into three levels by using the interquartile range (IQR). An overall social support was measured with Likert Scale, ranging from lowest (1-point) to highest (5-point) scoring for both part of negative and positive as above. For friend support, the range of total score in this study is 19 – 55 points. The median score was 35 (IQR = 10.0). The score above quartiles 3 (>51.0) as high level of friend support, the score between quartiles 3 to quartiles 1 as moderate level of friend support and the rest (≤ 41) as low level of friend support. For family support, the range of total score in this study is 42 – 50 points. The median score was 46.5 (IQR = 8.0). The researcher divided the retirement perception level into 3 level by used quartile to categorize the score. The score above quartiles 3 (>50.0) as high retirement preparation, the score between quartiles 3 to quartiles 1 as moderate retirement preparation and the rest (≤ 42) as low retirement preparation.

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Part 5 General Health Questionnaire 28 (GHQ-28) (28 questions)

The GHQ-28 items for mental health screening test developed from Goldberg's original GHQ transcript is one of the most widely recognized questionnaires and has been translated into more than 36 languages. Though this GHQ Thai version, through its' effectiveness, can clearly identify the psychological disturbance, it cannot diagnose as to the type of mental illness. The GHQ-28 has been divided into four subscales, for instance, somatic symptoms (items 1–7); anxiety/insomnia (items 8–14); social dysfunction (items 15–21), and severe depression (items 22–28) respectively. Each and every item covers four answers and has to be filled out by the respondent according to their mental health over the last

two weeks. This research questionnaire has scored 0, 0, 1, 1, according to the increased severity of the symptom. If the questionnaire scored >6 is identified as having psychological disturbances.

Part 6 WHOQOL-BREF Thai 26 (26 questions)

QOL over the past two weeks is assessed by the World Health Organization Quality of Life Scale (WHOQOL-BREF-Thai). The WHOQOL project was initiated in 1991 with the aim of developing an international cross-culturally comparable QOL assessment instrument. Cronbach's α coefficient of WHOQOL-BREF-Thai for this study was found to be 0.88. More specifically, the WHOQOL-BREF-Thai consisted of 4 domains: Physical domain (7 items- items 2,3,4,10,11,12,24) is the perception of the physical condition which affected daily activities; Psychological domain (6 items-items 5,6,7,8,9,23) is the mental self-perception; Social relationships domain (3 items-13,14,25) is the perception of their relationships with others; Environment domain (8 items-15,16,17,18,19,20,21,22) is the perception effect of the environment.

This 26-question, five-level scale is easy to understand and takes minimal time to complete. The overall scores for the QOL range from 26 to 130 points. Overall scores can be compared with the following criteria which has already been validated among Thai people: scores between 26-60 indicate poor QOL; scores between 61-95 indicate moderate QOL; scores between 96-130 indicate good QOL.

3.8 VALIDITY AND RELIABILITY ASSESSMENT

3.8.1 Validity

In this process, a self-administered questionnaire in this study was reviewed and checked appropriateness by three Thai experts, in the field of public health sciences.

3.8.2 Reliability

The reliability of the data collection tool was pre-test with 30 samples that similar characteristics of the study population before doing the actual data collection, and those who take part in the pilot will be excluded from the participant in the research. Then, internal consistency of the rating scales was done by Cronbach's alpha coefficient to measure the reliability.

Variables	Number of items	Cronbach's alpha	Internal consistency
Part 2-1 Perceptions of retirement information	9	0.728	Acceptable
Part 2-2 Perception of job satisfaction	10	0.962	Excellent
Part 3-1 Retirement perception	33	0.985	Excellent
Part 3-2 Retirement preparation	30	0.939	Excellent
Part 4-1 Family support	11	0.918	Excellent
Part 4-2 Friend support	12	0.882	Good

Part 5 General Health Questionnaire 28 (GHQ-28): This is standard questionnaire and Thai GHQ had good reliability and validity, with the range of Cronbach's alpha coefficients from 0.86 to 0.95, and the range of sensitivity and specificity from 78.1 % to 85.3 % and 84.4 % to 89.7 % respectively.

Part 6 WHOQOL-BREF Thai 26: This is standard questionnaire and Cronbach's α coefficient of WHOQOL-BREF-Thai for was found to be 0.88.

3.9 DATA COLLECTION

The researcher was collected primary data via survey with can be described as follows:

1. Contacted the director of the public sector via permission request letter to explain the research and requisition for permission to collect data.

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2. The data was collected by the researcher and assistants. The assistants in this research were those who were working in the public sector in each province. All researcher assistant was training to help researcher collect the data such as help researcher screening formal workers for inclusion and exclusion criteria, asking permission from the participants before providing the questionnaire, explaining questionnaires, collection of questionnaires and checking the completeness of the answers and explain the research objective.
3. After received authorization and a list of all populations age 55 - 59 years old from the public sector. The researcher selected each participant by using systematic random sampling first, then the researcher and assistant screened formal workers for inclusion and exclusion criteria before contacted each participant to ask permission and collect research data. If the participant refused to answer, the researcher and research assistant went to next chosen formal workers.
4. The researcher or assistants was explained in detail about research objectives and questionnaire completion for participants, also explain to the participants about the freedom to participate, right to withdraw, confidentiality, and access to the final report and certainly not use for another study.
5. Each participant was spent an approximately 45 minutes completing the questionnaires method by themselves. Then, the researcher or assistants will be collecting the questionnaire after participants completed all the answers and check the completeness for each question before leaving. The actual data collection for the thesis was conducted by a research assistant and one researcher on a total of 226 target respondents in the public sector. Consistently collecting data every day until receiving calculated sample size.

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3.10 ANALYSIS

The analyses will accomplish by using statistical software: SPSS ver.22, the researcher has focused on the following areas:

To describe the general information, descriptive statistical analysis will be used as follows:

- Descriptive Statistic, i.e., frequency, percent will use to present each independent variable: age, gender, religion, educational level, marital status, number of children, family members, income, source of income, living status, financial, health status, etc.
- To describe and measure the level of each questionnaire. There is no available cut-off point for the questionnaire of perceptions of retirement information, job satisfaction, retirement perception and preparation, family support, friend support, and non-normal distribution of our data, the authors decided to use interquartile range (IQR) to categorize the levels of retirement preparation in this study (Supasaek & Nutta, 2020), (Alsunni & Latif, 2021). The researchers classified it into three levels by using the interquartile range (IQR). The score less than or equal to Q1 was categorized as a low level, the score between quartiles 3 to quartiles 1 as a moderate level and the score greater than Q3 will be categorized as a high level.

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To explore all the factors influencing the level of retirement preparation among formal workers in public sector in Central Region, Thailand. The following inferential statistics will be used as follows:

- Chi-square analysis will use to compare the proportion for two or more groups between independent variables and dependent variable. It also uses to calculate p-value level < 0.05, which are statistically significant.
- Multivariate analysis was used to describe association between related factors and level of retirement preparation. All significant different

variables associated with retirement preparation in chi-square test analysis with a p-value of less than 0.05 were considered in a multivariable logistic regression. The researcher had done ordered logistic Regression among independent variables with dependent variables.

3.11 ETHICAL CONSIDERATION

The Ethical was approved from The Research Ethics Review Committee for Research Involving Human Research Participants, Health Sciences Group, Chulalongkorn University (108/2564)

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CHAPTER IV

RESULTS

This study aimed to describe independent variables, namely, sociodemographic characteristics, health status factor, work-related, social support and retirement perceptions. Dependent variables, namely, retirement preparation to analyze the relationships between each of these independent variables and each of dependent variables among formal workers at near retirement age. The study population consisted of 226 formal workers at a government sector in the central region, Thailand.

The researcher used chi-squared, univariate, and multivariate logistic regression analyses to determine the level of retirement preparation and its associations with independent factors for the entire participants. This result contained descriptive statistical results of these independent variables and dependent variables which mentioned above among formal workers at near retirement age at a government sector in the central region, Thailand. In the bivariate analysis, all variables with a p-value of less than 0.05 were considered for inclusion in a multivariable logistic regression model. The researcher had done ordered logistic regression among independent variables with dependent variables.

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Sociodemographic characteristics

The information generated from section 1 of the questionnaire described several important sociodemographic characteristics of formal workers. Frequencies, percentages were analyzed from the obtained results. The information related to formal worker's backgrounds such as gender, age, marital status, educational level, and personal income.

Table 1 Frequency and percentage of participants by sociodemographic characteristics (n = 226)

Characteristics		Frequency	Percent
Gender	Male	135	59.7
	Female	91	40.3
Age	55	27	11.9
	56	46	20.4
	57	46	20.4
	58	47	20.8
	59	60	26.5
Marital status	Single	24	10.6
	Couple	163	72.1
	Separated	11	4.9
	Widowed	14	6.2
	Divorced	14	6.2
Number of Children	None	31	13.7
	1-2	183	81
	3 or more	12	5.3
Family member	1-2	35	15.5
	3-4	146	64.6
	5-6	43	19.0
	7 or more	2	0.9
Educational level	Primary /elementary school	40	17.7
	Junior high school	27	11.9
	Senior high school	92	40.7
	Bachelor's degrees and Higher	67	29.6

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Characteristics		Frequency	Percent
Personal income	Less than 10,000 THB	11	4.9
	10,001 THB - 15,000 THB	32	14.2
	15,001 THB -25,000 THB	114	50.4
	25,001 THB -35,000 THB	59	26.1
	More than 35,000 THB	10	4.4
Perception of income	Income more than expenses	19	8.4
	Balanced expenses with income	120	53.1
	Expenses more than income	87	38.5
House ownership	Yes	168	74.3
	No	58	25.7
Employee retirement benefits	Yes	204	90.3
	No	22	9.7

Table 1 above depicts descriptive characteristics of the sample showed that the total participants taken part in the study were 226 formal workers at near retirement age in a government sector are divided into 40.3 percent female and 59.7 percent male. The participants group was between 55-59 years old. Field information shows that most participants were 59 years old (26.5 percent), followed by 58 years old (20.8 percent), 56 and 57 years old (20.4 percent) and 55 years old (11.9 percent). According to the statistic, the average age was 57.3 years old (SD =1.368). All participants were Buddhism (100 percent). The participant's education level, as many as 40.7 percent of participants are senior high school and 29.6 percent are bachelor's degrees and higher while followed by primary/elementary school and Junior high school 17.7 percent and 11.9 percent, respectively. Majority of the participants was a couple's marital status (72.1 percent), single was 10.6 percent, widowed and divorced was 6.2 percent and separated was taken part in the study 4.9 percent. For the number of children, 81 percent of participants had 1-2 children followed by no children was 13.7 percent and 5.3 percent had 3 or more children. Their family member results were group into four parts 1-2 member, 3-4 member, 5-6 member and 7 or more

member. The statistic shows that only 0.9 percent of participants who had 7 or more member in their family. A large amount of them 64.6 percent had 3-4 family member, followed by 5-6 member (19 percent) and 1-2 member (15.5 percent). Many of them were living in their own accommodation (74.3 percent). For the financial status, the most personal income of participants was ranged from 15,001 to 25,000 baht (50.1 percent) followed by 25,001 to 35,000 (26.1 percent) and 10,001 to 15,000 (14.2 percent). In term of perception of income, an approximately half of participants having a balanced expense with their income while 38.5 percent of participants had more expenses than their current income, and more than 90.3 percent of them received employee retirement benefits supporting their post-retirement life.

Health status

The health status questionnaire in this study provided an overall summary of the participants' health as follows.

Table 2 Frequency and percentage of participants by health status (n = 226)

Characteristics		Frequency	Percent
Health condition (during the past year)	Good (without illness history)	67	29.6
	Fair (presence of short-term illness)	60	26.5
	Poor (presence of chronic diseases)	99	43.8
Presence of Chronic diseases	None	127	56.2
	1 disease	65	28.8
	2 diseases	25	11.1
	3 or more	9	4.0
Smoking	Non-Smoke	195	86.3
	< 3 times / week	18	8.0
	> 3 times / week	13	5.8
Alcohol consumption	No	185	81.9
	< 3 times / week	32	14.2
	> 3 times / week	9	4.0

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Characteristics		Frequency	Percent
GHQ-28	Poor	24	10.6
	Good	202	89.4
Quality of life	Poor	2	0.9
	Moderate	149	65.9
	Good	75	33.2

Health condition (during the past year)

According to the table 2 found that 43.8 percent of participants had major disability (participants presence of chronic diseases such as hypertension, diabetes, asthma, etc.), participants who healthy (without illness history) were 29.6 percent and minor disability (participants had presence of short-term illness such as muscle pain, insomnia, etc.) were 26.5 percent. To clarify the number of presences of chronic diseases, 28.8 percent of participants had 1 disease and 11.1 percent had 2 diseases and only 4 percent had 3 or more disease. For smoking status during the past year, most of participants (86.3 percent) were non-smoker, smoking < 3 times / week and smoking > 3 times / week were 8.0 percent and 5.8 percent respectively. In terms of alcohol consumption in the past 12 months, most of participants (81.9 percent) were not drinking alcohol; drank less than 3 times per week and drank more than 3 times per week were 14.2 percent and 4 percent respectively.

General Health Questionnaire 28 (GHQ-28)

For the percentage of General Health Questionnaire 28 (GHQ-28), most of participants (89.4 percent) without psychological disturbances (GHQ-28 scored < 6) and the participants with psychological disturbances were with 10.6 percent (GHQ-28 scored > 6) according to the GHQ-28 Method.

Quality of life

For the percentage of Quality of life, most of participants (65.9 percent) were indicated moderate QOL (QOL-Thai 26 scores between 61 - 95) followed by the

participants with good QOL were with 33.2 percent (QOL-Thai26 scores between 96 - 130) and the participants with poor QOL were with 0.9 percent (QOL-Thai26 scores between 26 - 60) according to criteria which has already been validated among Thai people by Department of mental health. The mean of depression was 91.81, standard deviation was 14.527 and the rage was 47-124.

Work-related factor

Table 3 showed the work-related factors among formal workers at near retirement age. Each of these sources of work-related was classified into three levels of perceived work-related factors that affecting retirement preparation. For perceptions of retirement information, this questionnaire is designed to measure perceptions of retirement information from their working place, a large amount of the participants (49.6 percent) had moderate perceptions of retirement information and low perceptions of retirement information were with 30.1 percent. According to the perception of job satisfaction, most of the participants (45.1 percent) had moderate perception of job satisfaction and the low perception of job satisfaction and high perception of job satisfaction were with 30.5 percent and 24.3 percent, respectively.

Table 3 Frequency and percentage of participants by work-related (n = 226)

Work-related factors	Frequency	percentage
Perceptions of retirement information		
Low	68	30.1
Moderate	112	49.6
High	46	20.4
Perception of job satisfaction		
Low	69	30.5
Moderate	102	45.1
High	55	24.3

Social support

Table 4 showed the sources of social support from family and friends. Each of these sources of social support was classified into three levels of perceived social support. For family support, most of the participants (50.9 percent) had moderate perceived social support and the low perceived social support were with 27 percent. According to the friend support, most of the participants (52.2 percent) had moderate perceived social support and the low perceived social support were with 25.7 percent

Table 4 Frequency and percentage of participants by family support and friend support (n = 226)

Social support	Frequency	percentage
Family support		
Low	61	27.0
Moderate	115	50.9
High	50	22.1
Friend support		
Low	58	25.7
Moderate	118	52.2
High	50	22.1

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Retirement perceptions

Table 5 showed the level of retirement perceptions in six domain and compared an overall. Their retirement perceptions results were into three levels such as low, moderate and high, respectively. According to the result an overall of retirement perceptions, most participants (50.9 percent) had moderate level of retirement perceptions, followed by low level of retirement perceptions 24.8 percent and high level of retirement perceptions 24.3 percent. The statistic shows that a large amount of psychology and physiological had moderate level of retirement perception (51.8 percent and 51.8 percent). For economic, adaptation and self-esteem, an approximately half (46.9 percent, 54.0 percent, and 51.8 percent, respectively) of the

participants had moderate level of retirement perceptions. For welfare awareness domain only 24.8 percent of population had high level of retirement perceptions and a large number of participants (39.8 percent) had low level of retirement perceptions.

Table 5 Distribution of the Level of Retirement perceptions among formal workers in near retirement age (n = 226)

Retirement perceptions domains	Level of retirement perceptions					
	Low		Moderate		High	
	n	%	n	%	n	%
Psychology	65	28.8	117	51.8	44	19.5
Physiological	59	26.1	117	51.8	50	22.1
Economic	59	26.1	106	46.9	61	27.0
Adaptation	61	27.0	122	54.0	43	19.0
Self-esteem	57	25.2	117	51.8	52	23.0
welfare awareness	90	39.8	80	35.4	56	24.8
Overall	56	24.8	105	50.9	55	24.3

Retirement preparation

Table 6 showed the level of retirement preparation in five domain and compared an overall. The level of retirement preparation in each domain was classified into three levels. According to the result, an overall of retirement preparation, participants were not preparing for retirement very well. Less than half (47.3 percent) having the preparation for retirement at a moderate level. Although 23.5 percent of 226 participants reported that they have a high level of retirement preparation, more than a quarter (29.2 percent) of participants fall far short of retirement preparation. To sum up for each domain, physiological-psychology and economic, an approximately half of the participants had moderate level of preparation (50.0 percent and 53.5 percent) and the low level of preparation were 29.2 percent and 31.4 percent, respectively. According to the Lifestyle, most of the participants (44.7 percent) had moderate level of preparation and the low level of preparation were 40.7

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percent. For Household, most than half of the participants (52.7 percent) had low level of preparation and moderate level of preparation were 24.3 percent. For society, most of the participants (46.9 percent) had moderate of preparation and the low of preparation were 31 percent.

Table 6 Distribution of the Level of Retirement preparation among formal workers in near retirement age (n = 226)

Retirement preparation domains	Level of retirement preparation					
	Low		Moderate		High	
	n	%	n	%	n	%
Physiological and psychology	66	29.2	113	50	47	20.8
Economic	71	31.4	121	53.5	34	15.0
Lifestyle	92	40.7	101	44.7	33	14.6
Household	119	52.7	55	24.3	52	23.0
Society	70	31.0	106	46.9	50	22.1
Overall	66	29.2	107	47.3	53	23.5

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Bivariate analysis

The research had done the chi-square test in different characteristics to examine the association between dependent variables and independent variables. In the bivariate analysis, all variables with a p-value of less than 0.05 in a bivariate logistic regression analysis were considered for inclusion in a multivariable logistic regression model.

Table 7 Showed association between independent variables and level of retirement preparation this was categorize to the three level

Characteristics	Total	Low	Medium	High	p
		N (%)	N (%)	N (%)	
Gender					0.062
Male	135	36 (26.67)	60 (44.44)	39 (28.89)	
Female	91	30 (32.97)	47 (51.65)	14 (15.38)	
Age					0.605
55	27	8 (29.63)	16 (59.26)	3 (11.11)	
56	46	14 (30.43)	19 (41.30)	13 (28.26)	
57	46	17 (36.96)	18 (39.13)	11 (23.91)	
58	47	11 (23.40)	23 (48.94)	13 (27.66)	
59	60	16 (26.67)	31 (51.67)	13 (21.67)	
Marital Status					0.145
Single (include separated, widowed, divorced)	63	24 (38.10)	28 (44.44)	11 (17.46)	
Couple	163	42 (25.77)	79 (48.47)	42 (25.77)	
Number of Children					0.250[b]
None	31	11 (16.67)	10 (15.15)	10 (15.15)	
1 - 2 Children	183	50 (46.73)	93 (86.92)	40 (37.38)	
3 or more	12	5 (9.43)	4 (7.55)	3 (5.66)	
Family Number					0.049[a]
1 - 2 member	35	16 (45.71)	10 (28.57)	9 (25.71)	
3 - 4 member	146	39 (26.71)	70 (47.95)	37 (25.34)	
5 and more	45	11 (24.44)	27 (60.00)	7 (15.56)	

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Characteristics	Total	Low	Medium	High	p
		N (%)	N (%)	N (%)	
Education level					0.053
Elementary /Junior high school	67	12 (17.91)	32 (47.76)	23 (34.33)	
Senior high school	92	33 (35.87)	42 (45.65)	17 (18.48)	
Bachelor's degrees and Higher	67	21 (31.34)	33 (49.25)	13 (19.40)	
Personal income					0.491[b]
Less than 10,000 THB	11	5 (45.45)	3 (27.27)	3 (27.27)	
10,001 THB - 15,000 THB	32	7 (21.88)	16 (50.00)	9 (28.13)	
15,001 THB -25,000 THB	114	34 (29.82)	56 (49.12)	24 (21.05)	
25,001 THB -35,000 THB	59	15 (25.42)	30 (50.85)	14 (23.73)	
35,000 THB or more	10	5 (50.00)	2 (20.00)	3 (30.00)	
Perception of income					0.111
Income more than expenses	19	7 (36.84)	6 (31.58)	6 (31.58)	
Balanced expenses with income	120	28 (23.33)	59 (49.17)	33 (27.50)	
Expenses more than income	87	31 (35.63)	42 (48.28)	14 (16.09)	
House ownership					0.051
Yes	168	45 (26.79)	77 (45.83)	46 (27.38)	
No	58	21 (36.21)	30 (51.72)	7 (12.07)	
Employee welfare benefits					0.516
Yes	204	59 (28.92)	95 (46.57)	50 (24.51)	
No	22	7 (31.82)	12 (54.55)	3 (13.64)	
Health condition					0.361
Good (no illness)	127	41 (32.28)	60 (47.24)	26 (20.47)	
Poor (presence of chronic diseases)	99	25 (25.25)	47 (47.47)	27 (27.27)	
Presence of Chronic diseases					0.227[b]
None	127	41 (32.28)	60 (47.24)	26 (20.47)	
1 disease	65	14 (21.54)	35 (53.85)	16 (24.62)	
2 diseases	25	7 (28.00)	8 (32.00)	10 (40.00)	
3 or more	9	4 (44.44)	4 (44.44)	1 (11.11)	

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Characteristics	Total	Low	Medium	High	p
		N (%)	N (%)	N (%)	
Smoking					0.338[b]
Non-Smoke	195	59 (30.26)	89 (45.64)	47(24.10)	
< 3 time / week	18	5 (27.78)	8 (44.44)	5 (27.78)	
> 3 times / week	13	2 (15.38)	10 (76.92)	1 (7.69)	
Alcohol consumption					0.747[b]
No	185	55 (29.73)	86 (46.49)	44(23.78)	
< 3 time / week	32	10 (31.25)	16 (50.00)	6 (18.75)	
> 3 times / week	9	1 (11.11)	5 (55.56)	3 (33.33)	
GHQ-28					0.130
Poor	24	10 (41.67)	12 (50.0)	2 (8.33)	
Good	202	56 (27.72)	95 (47.03)	51(25.25)	
Quality of life					<0.001[a], [b]
Poor	2	1 (50.00)	0 (0)	1 (50.00)	
Moderate	149	54 (36.24)	81 (54.36)	14 (9.40)	
Good	75	11 (14.67)	26 (34.67)	38 (50.67)	
Perceptions of retirement information					0.018[a]
Low	68	25 (36.76)	28 (41.18)	15 (22.06)	
Moderate	112	34 (30.36)	58 (51.79)	20 (17.86)	
High	46	7 (15.22)	21 (45.65)	18 (39.13)	
Perception of job satisfaction					<0.001[a]
Low	69	23 (33.33)	39 (56.52)	7 (10.14)	
Moderate	102	36 (35.29)	52 (50.98)	14 (13.73)	
High	55	7 (12.73)	16 (29.09)	32 (58.18)	
Family support					<0.001[a]
Low	61	22 (36.07)	28 (45.90)	11 (18.03)	
Moderate	115	37 (32.17)	59 (51.30)	19 (16.52)	
High	50	7 (14.00)	20 (40.00)	23 (46.00)	

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Characteristics	Total	Low	Medium	High	p
		N (%)	N (%)	N (%)	
Friend support					<0.001[a]
Low	58	16 (27.59)	32 (55.17)	10 (17.24)	
Moderate	118	43 (36.44)	59 (50.00)	16 (13.56)	
High	50	7 (14.00)	16(32.00)	27 (54.00)	
Retirement perceptions					<0.001[a]
Low	56	23 (41.07)	26 (46.43)	7 (12.50)	
Moderate	115	33 (28.70)	67 (58.26)	15 (13.04)	
High	55	10 (18.18)	14 (25.45)	31 (56.36)	

($p < 0.05$)[a] ,Fisher's Exact Test [b]

Table 7 showed a chi-square test of independence was performed to examine the association between sociodemographic characteristics factors and level of retirement preparation. For the analysis for family number and the level of retirement preparation fount the association between these variables were significant (p-value < 0.049), the participant who had more family member seen likely to had low level of retirement preparation. However, the proportion of level of retirement preparation did not differ by another independent variables in sociodemographic characteristics factors (p-value > 0.05).

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The association between level of retirement preparations and health status factors. There was significant association between participants with the quality of life and level of retirement preparations (p-value < 0.001). When compared to those participants with the quality of life, participants who had good or high quality of life had higher level of retirement preparations than those who had poor quality of life. However, the proportion of level of retirement preparation did not differ by another independent variables in health status factors such as health status, smoking and alcohol consumption (p-value > 0.05).

The association between level of retirement preparations and work-related factors. Their work-related were divided into two parts: perceptions of retirement information and perception of job satisfaction. The statistic shows a significant

between level of retirement preparations and work-related factors as perceptions of retirement information (p-value = 0.018) and perception of job satisfaction (p-value < 0.001), respectively.

There was a significant association between the two variables, level of retirement preparations and social support. Their social support was divided into two parts: family support and friend support. There was significant association between participants with the social support and level of retirement preparations (p-value < 0.000).

The association between level of retirement preparations and retirement perceptions. There was significant association between retirement perceptions and level of retirement preparations (p-value < 0.001).

To sum up from the analysis, we can see that family number, quality of life, perceptions of retirement information, perception of job satisfaction, family support, friend support and retirement perceptions are associated to level of retirement preparation among formal workers in near retirement age (p-value < 0.05) but other characteristics such as age, gender, personal income, health status and GHQ-28 are not associated. However, some of characteristics such as gender, marital status, education level and perception of income had p-value of less than 0.05 in a chi-square test. Thus, all variables with a p-value of less than 0.05 were considered for inclusion in a multivariable logistic regression model.

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Multivariate analysis

Multivariate analysis was used to describe association between related factors and level of retirement preparation. To avoid an excessive number of variables and unstable estimates, only variables with p-value less than 0.05 were kept in multivariate logistic analysis. The researcher had done ordered logistic regression among independent variables with dependent variables. They were family number, quality of life, perceptions of retirement information, perception of job satisfaction, family support, friend support and retirement perceptions remained statistically significant.

Table 8 Summarized the statistics, coefficients (β) estimated odds ratio and 95% confidence interval from ordered logistic regression

Characteristics	(β)	Wald	p	OR	95% CI	
					Lower	Upper
Threshold						
[Retirement preparation = 1.00]	-4.256	51.325	.000	.014	.004	.045
[Retirement preparation = 2.00]	-1.598	9.092	.003	.202	.072	.572
Family Number						
1-2 member	-.516	1.273	.259	.597	.243	1.463
3-4 member	-.067	.040	.841	.935	.484	1.807
5 and more			Ref			
Quality of life						
Fair*	-1.092	8.497	.004[c]	.336	.161	.699
Good			Ref			
Perceptions of retirement information						
Low	-.608	2.226	.136	.545	.245	1.210
Moderate	-.415	1.272	.259	.660	.321	1.358
High			Ref			
Perception of job satisfaction						
Low	-.717	2.244	.134	.488	.191	1.248
Moderate	-.996	5.449	.020[c]	.369	.160	.852
High			Ref			
Family support						
Low	-.710	.652	.419	.678	.264	1.742
Moderate	-.543	1.282	.257	.645	.301	1.378
High			Ref			
Friends support						
Low	-.389	.002	.962	1.025	.369	2.845
Moderate	-.439	2.878	.090	.493	.218	1.116
High			Ref			

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Retirement perceptions						
Low	.025	2.143	.143	.492	.190	1.272
Moderate	-.707	1.842	.175	.581	.266	1.272
High			Ref			

($p < 0.05$)[c] (*Fair QOL = low QOL and Moderate QOL)

Table 8 showed summarized the statistics, coefficients (β) estimated odds ratio and 95% confidence interval from ordered logistic regression

According to the ordered logistic regression, a significant association was found in fair quality of life (low QoL and Moderate QoL) [OR 0.336, 95%CI (0.161 – 0.699), $p < 0.05$]. That is, at 95% confidence, there is 66.4 percent decrease in the odds of having higher level of retirement preparation in the formal worker who had fair level of QoL compared to those who had high level of QoL.

There was significant association between moderate level of perception of job satisfaction participants and level of retirement preparation compared to those who had high level of perception of job satisfaction [OR=0.369, 95%CI (0.160-0.852), $p < 0.05$]. That is, at 95% confidence, there is 63.1 percent decrease in the odds of having higher level of retirement preparation in the formal worker who had moderate level of perception of job satisfaction compared to those who had high level of perception of job satisfaction

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To sum up, from logistic regression model, 2 variables which were found to be significantly associated with level of retirement preparation were quality of life, perception of job satisfaction.

CHAPTER V

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 DISCUSSION

The growth in the number of older people has become significant and Thailand is the second fastest in South-East Asia. There are several researchers have studied the impact of this change. One of the primary consequences is the changing of aging workforce in the recent days resulted from the decline of working-age population and longer life expectancy. For this reason, the public sectors need to come up with the solution to effectively manage these issues. And it is not only about a problem-solving for aging workforce, but also for those who are about to retire. Retirement preparation is very important to people who are near retirement age. The main objective of this research is to find out the factors which influence retirement preparation among formal workers at a public sector in the central region, Thailand. This study analyzed various sociodemographic characteristics, health status, work-related, social support and retirement perceptions. The study was carried out in 226 formal workers in meeting the inclusion criteria. The ordered logistic regression was applied to assess retirements preparation of formal workers and associated independent variables in this study. The results show that the associated between quality of life and perception of job satisfaction were significantly positively associated with the retirements preparation.

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The study results have been categorized into following parts:

1.Demographic characteristics of the study population

In this study, 226 formal workers aged 55 - 59 years old were collected. The average age was 57.3 years old. The number of male respondents was higher than female. There were 40.3 percent female and 59.7 percent male. All participants were Buddhism. The maximum number of participants falls into the category of a couple marital status. Many of them were living with the children, in their own

accommodation together with 3-4 family members. In terms of educational level, this study illustrates that majority of the population have had senior high school education. For the financial status, the most personal income of participants was between 15,001 to 25,000 baht. In term of perception of income, an approximately half of participants having a balanced expense with their income while 38.5 percent of participants had more expenses than their current income, and more than 90.3 percent of them received employee retirement benefits supporting their post-retirement life.

2.Level of retirement preparation

Overall, participants were not preparing for retirement very well. Less than half (47.3 percent) having the preparation for retirement at a moderate level. Although 23.5 percent of participants reported that they have a high level, more than a quarter (29.2 percent) fall far short of retirement preparation. Thus, implying that their preparation for retirement were more likely to have a negative than positive. Other studies have shown the findings are different. In the study of Nipaporn Kerdmalai (2017) among 359 Teachers who are still formal workers in Ayutthaya province, Thailand was in high level of retirement preparation. However, there is a consistent in terms population were gave importance to economic and physiological and psychology (Kerdmalai, 2017). The difference in level of retirement preparation measured in our study may be due to the data, the characteristics of the participants such as age, job position or monthly income, perception of income and the difference of individual perception or access to a retirement plan from public sector. However, for the household domain in retirement preparation, an approximately 53 percent of participant had low level of retirement preparation. Contrary to previous studies of Chanjira Vibluecher (2019) found that among 120 staffs in private-run hospital in the Nonthaburi Province, age above 45 years old, the level of the household retirement preparation was in high level (Vibluecher, 2019). This may be due to the insufficient monthly income of participants or a lack of understanding of the household preparation before retirement such as how to make a home for older person friendly or

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still do not see the importance of housing preparation after retirement. Therefore, the household preparation was in a low level.

3.Discussion on factors that influence retirements preparation

The researchers assessed what factors influenced the level of retirement preparation among formal workers at a public sector in the central region, Thailand. This question is answered by using the result of the survey questionnaire and has been separated in to five different parts.

First is sociodemographic characteristics. The result from hypothesis test by bivariate analysis indicates that, family numbers had significant positive effects with level of retirement preparations. Conversely, the finding does not support the assumption that the probability of retirements preparation behavior increases with other sociodemographic characteristics such as age, education, and personal income. In contrary to the findings of Determinants of Employees Attitude towards Retirement in the Energy Sector in Kenya, they found economic factors such as pension schemes and higher income were found to have major influence on employee's retirement (Wata, Kamau, & Bett, 2015). Regarding age, the findings may be due to the fact that the age of this study was not different. However, after adjusting for other predictors in the ordered logistic regression it lost its significance with level of retirement preparation.

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A second factor is the influence from quality of life. Regarding to the hypothesis test both from bivariate analysis in table 7 and the ordered logistic regression in table 8, there are statistically significant association between quality of life and level of retirement preparation. Some consistency was found with previous literature. For example, quality of life significantly related to the behavior of retirement preparation (Hurtado & Topa, 2019). Other research suggested that people with higher quality of life tend to care more on retirement planning (Hong & Lim, 2014).

The third factor is worked-related factor. In bivariate analysis, both perceptions of retirement information, and perception of job satisfaction were

statistically significant association with level of retirement preparation. For the perception of job satisfaction, the result of this study was contrary to the previous study among middle-aged workers on retirement preparation, it found that retirement preparations have not been affected by work (Hong & Lim, 2014). For perceptions of retirement information, these findings are congruent with previous study results of a similar population sample in Kenya, they found level of financial education from the workplace greatly affected employees retirement (Wata, Kamau, & Bett, 2015), also collaborates with the study by Groth-Marnat (1999) who argued that financial education on behavioral change, retirement investment, and retirement confidence (Groth-Marnat, 1999). So, the researchers recommended that workplace should prepare worker to about retirement information in their careers by offering education on retirement planning. However, after adjusting for other predictors in the ordered logistic regression only perception of job satisfaction still significance with level of retirement preparation.

The fourth factor is the social support. As the result from hypothesis test both family support and friend support were significant association with level of retirement preparation in bivariate analysis. The findings of this research are consistent with previous studies conducted in Ondo State, Nigeria among participants in the near pre-retirement phase having just between one to nine (1-9) years left in service before retiring, the result found the positive attitude towards family involvement and actual involvement of their family in pre-retirement planning (Olatomide, Shobola, & Omoyemiju, 2012). A study on the impact of self-identity and social support on the quality of adjustment to retirement suggests that perceived this continued social support to positively influence the overall quality of transition (Willard & Lavallee, 2016), which corresponds to the research paper “Friendship and Social Support: The Importance of Role Identity to Aging Adults” was found that friendship role was emerged as the strongest predictor—stronger than income or marital status—when predicting role identity to aging adults (Siebert, Mutran, & Reitzes, 1999). However, after adjusting for other predictors in the ordered logistic regression it lost its significance with level of retirement preparation.

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The last factor is retirement perceptions. According to the result of study, an overall of retirement perceptions, most participants (50.9 percent) had moderate level of retirement perceptions, followed by low level of retirement perceptions 24.8 percent and high level of retirement perceptions 24.3 percent. There was significant correlation between retirement perceptions and level of retirement preparations (p-value < 0.000). This result indicated that the perceptions of retirement preparation have been an important concept that affect to level of retirement preparation. Similarly, to the results from "Perceptions of Retirement Adequacy", this study highlights the role that behavioral factors play in perceptions of retirement income adequacy in an African developing market context. In particular, financial risk tolerance, future time perspective, good financial behavior, and self-assessed financial knowledge are all found to be positively related to respondents' retirement confidence (Reyers, 2018). However, after adjusting for other predictors in the ordered logistic regression it lost its significance with level of retirement preparation. This may be due to the researcher was an analysis of overall retirement perceptions and it might have different results if separated on each domain of retirement perceptions.

To sum up, the ordered logistic regression was applied to assess level of retirement preparation and associated independent variable in this study. Quality of life and perceptions of job satisfaction were found to have major influence on level of retirement preparation among formal workers in near retirement age. It can infer that when quality of life of the participants increases leads to increase in level of retirement preparation and regarding perceptions of job satisfaction, the findings indicate that this independent had significant positive effects in level of retirement preparations. Therefore, participants who have a higher level of job satisfaction are more likely to be higher overall retirements preparation.

5.2 CONCLUSION

In recent years, older people are the most valuable in our society. They have enough contribution to run society and workforce as well. However, many of them will retire and will face a longer life expectancy. Lack of retirement planning

preparation will generally bring some disappointment during retirement (Lee & Law, 2004) , in the other hand without adequate planning and preparing for retirement, older people or older worker could end up ill equipped for their old age, which would affect not only their lifestyle and comfort in the future, but potentially family and public sector as well.

The researcher was found associated between factors and retirements preparation in this study. For bivariate analysis that researcher had done by chi-square test. The results revealed that the factors that associated with the level of retirements preparation of 226 formal workers at public sector in near retirement age was sociodemographic factors as family member, quality of life, work-related, friend support, family support and retirement perceptions were significantly positively associated with the level of retirements preparation. Ordered logistic regression analysis was adjustment for those factors that associated with retirement preparation in chi-square test analysis with a p-value of less than 0.05. According to the result, the associated between retirement perceptions, quality of life and perceptions of job satisfaction were significantly positively associated with the level of retirements preparation.

We need to improve the quality of life for formal worker aged 55 – 59 years old for increase the level of retirement preparation, other factors that influencing the retirement preparation of this population should be notice as well and public sector should promoting knowledge in retirement preparation until retires. Furthermore, this research will help the government sector, policymakers and other organization to take the proper step to run the program for retirement preparation so that workers in near retirement age including other older people can have a higher level of preparation before retiring and support them to live with a healthy life in the future.

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5.3 LIMITATION

The sample size only conducts by near retirement age. The population does not include every age group who are working in the government organization and it is a limitation in the factor that will affect retirement preparation.

The study does not contain the private organization, which may have different association factors that relate to the retirement preparation. This will need to be further discussed and described in the discussion session of this research.

The sample size is drawn from the population of one public sector at Central Region and did not cover another region in Thailand. Therefore, a bigger sample size comprising different regions of Thailand would be more convincing and comprehensive for prediction for the whole Kingdom of Thailand.

The questionnaire of health status such as smoking and alcohol consumption in this study can be viewed as limited because it did not include information on quantity and current or ex-smoking and alcohol consumption. There was also a lack of information about the health status of participants with poor health conditions regarding the frequency of hospitalizations or expenses from treatment.

5.4 RECOMMENDATION

According to the results, an approximately half of participants had moderate level of the retirement preparation and only 23.5 percent of 226 participants reported that they have a high level of retirement preparation. Therefore, to reduce the burden of care that may occur in the future for both the individuals and the public sector. Preparation before retirement should be given priority along with finding additional relevant factors based on existing needs of those near retirement age. Supporting the retirement preparation and perceptions among formal workers at a public sector should be seen as a strategic investment which creates many long-term benefits for individuals, societies and health system. From our finding, an approximately 10 percent were not received employee retirement benefits supporting their post-retirement life. Therefore, to achieve the goals, access to information of retirement preparation services such as providing information on welfare benefits, savings, and pension that can help formal workers prepare and support them through the retirement process should be promoted by public sector.

The statistical results show that the preparation for household in this research result was in the low level of retirement. Therefore, further studies should be

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conducted on the reasons why this factor in this research participants are in the low level. The public sector should encourage the development of motivational resources through retirement service and promote more preparation before retirement in this area.

As a recommendation for further study, a more comprehensive study about social support factors that influence the behavioral intention is needed to point out the determinants of retirement preparation. Especially with the studies in the aging population because this population need dependence more than other ages population. Which may be create further research about the efficacy of social support interventions, between a formal worker with social support and formal worker without social support.

Further studies should focus on those factors in each domain in the preparation before retirement and it should be a qualitative research study on retirement preparation, to gain insight into reasons for complications and obstacles in preparation for retirement among formal workers in order to be useful to another public sector. Other socio-economic factors, such as individual assets, financial education could be significant factors in retirement confidence.

Moreover, for further research is needed to determine with various psychological variables is recommended to test possible differences in psychological process between group age in retirement issues. The current survey does include psychological factors that were measure by using GHQ-28 for mental health screening test to identify the psychological disturbance but this measurement tools cannot diagnose as to the type of mental illness. Therefore, future research with broad psychological factors such as emotional stability and conscientiousness, which could be beneficial in explaining the mental illness differences in retirement. Finally, more research on the linkage between retirement preparation and retirement confidence is recommended.

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5.5 EXPECTED BENEFITS & APPLICATIONS

This research might create ideas for further research in this field also. It will be increased our understanding of reason behind retirement preparation and use the information obtained for further research studies in the future.

This research result presented the level of retirement preparation as well as five domains for retirement preparation including physiological and psychology, economic, lifestyle, household, society. From the result the researcher found that more than 50 percent of formal workers in this public sector had low level of household preparation and only 14.6 percent and 15 percent of participants had high level of lifestyle preparation and economic preparation, respectively. The findings suggest that formal workers in this population need support for their retirement preparation in terms of household, lifestyle and economy. Thus, the researcher expected that public sector can apply this information and used for the benefit of caring for the formal worker in their sector. For example,

Finally, the researcher expected that this information will use to improve practices and develop policies to promote retirement preparation among formal workers, also not just for this public sector in this research but another public sector in Thailand as well.

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APPENDIX

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APPENDIX A Content validity

indexes of item-Objective congruence: IOC

In this process, all the questionnaires were checked by three Thai experts, in a field of public health sciences. The Item-Objective Congruence (IOC) was used to evaluate the items of the questionnaire based on the score range from -1 to +1.

Congruent = + 1

Questionable = 0

Incongruent = -1

IOC value from the formula

$$IOC = \frac{\Sigma R}{N}$$

ΣR = The sum of the points from the expert's consideration

N = Number of the experts

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The items that had scores lower than 0.5 were revised. On the other hand, the items that had scores higher than or equal to 0.5 were reserved.

NO.	1st Expert	2nd Expert	3rs Expert	IOC	Result
Part 1					
1	1	1	1	1	Agree
2	1	1	1	1	Agree
3	1	1	0	0.7	Agree
4	1	1	1	1	Agree
5	1	1	1	1	Agree
6	1	1	1	1	Agree
7	1	1	1	1	Agree
8	1	1	1	1	Agree
9	1	0	1	0.7	Agree
10	1	1	1	1	Agree
11	1	1	1	1	Agree
12	1	1	1	1	Agree
13	1	1	1	1	Agree
14	1	1	1	1	Agree
15	1	1	0	0.7	Agree
16	1	1	0	0.7	Agree
17	1	1	1	1	Agree
Part 2-1					
1	1	1	1	1	Agree
2	1	1	1	1	Agree
3	1	1	1	1	Agree
4	1	1	1	1	Agree
5	1	1	1	1	Agree
6	1	1	1	1	Agree
7	1	1	1	1	Agree
8	1	1	1	1	Agree

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NO.	1st Expert	2nd Expert	3rs Expert	IOC	Result
9	1	1	1	1	Agree
Part 2-2					
1	1	1	1	1	Agree
2	1	1	1	1	Agree
3	1	1	1	1	Agree
4	1	1	1	1	Agree
5	1	1	1	1	Agree
6	1	1	1	1	Agree
7	1	1	1	1	Agree
8	1	1	1	1	Agree
9	1	1	1	1	Agree
10	1	1	1	1	Agree
Part 3-1					
3-1-1					
1	1	1	1	1	Agree
2	1	1	1	1	Agree
3	1	0	1	0.7	Agree
4	1	1	1	1	Agree
5	1	1	1	1	Agree
6	1	1	1	1	Agree
7	1	0	1	0.7	Agree
3-1-2					
1	1	1	1	1	Agree
2	1	0	1	0.7	Agree
3	1	1	1	1	Agree
4	1	1	1	1	Agree
5	1	1	1	1	Agree

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NO.	1st Expert	2nd Expert	3rs Expert	IOC	Result
6	1	0	1	0.7	Agree
3-1-3					
1	1	1	1	1	Agree
2	1	1	1	1	Agree
3	1	1	1	1	Agree
4	1	1	1	1	Agree
5	1	1	1	1	Agree
6	1	1	1	1	Agree
3-1-4					
1	1	1	1	1	Agree
2	1	1	1	1	Agree
3	1	0	1	0.7	Agree
4	1	0	1	0.7	Agree
5	1	1	1	1	Agree
3-1-5					
1	1	1	1	1	Agree
2	1	1	1	1	Agree
3	1	1	1	1	Agree
4	1	0	1	0.7	Agree
5	1	0	1	0.7	Agree
3-1-6					
1	1	0	1	0.7	Agree
2	1	0	1	0.7	Agree
3	1	1	1	1	Agree
4	1	1	1	1	Agree
Part 3-2					
3-2-1					

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NO.	1st Expert	2nd Expert	3rs Expert	IOC	Result
1	1	0	1	0.7	Agree
2	1	0	1	0.7	Agree
3	1	0	1	0.7	Agree
4	1	1	1	1	Agree
5	1	1	1	1	Agree
6	1	0	1	0.7	Agree
7	1	1	1	1	Agree
8	1	0	1	0.7	Agree
9	1	1	1	1	Agree
10	1	1	1	1	Agree
3-2-2					
1	1	0	1	0.7	Agree
2	1	1	1	1	Agree
3	1	1	1	1	Agree
4	1	1	1	1	Agree
5	1	1	1	1	Agree
3-2-3					
1	1	1	1	1	Agree
2	1	1	1	1	Agree
3	1	1	1	1	Agree
4	1	1	1	1	Agree
5	1	1	1	1	Agree
3-2-4					
1	1	1	1	1	Agree
2	1	1	1	1	Agree
3	1	1	1	1	Agree
4	1	1	1	1	Agree

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NO.	1st Expert	2nd Expert	3rs Expert	IOC	Result
5	1	1	1	1	Agree
3-2-5					
1	1	1	1	1	Agree
2	1	1	1	1	Agree
3	1	1	1	1	Agree
4	1	1	1	1	Agree
5	1	1	1	1	Agree
Part 4-1					
1	1	1	1	1	Agree
2	1	1	1	1	Agree
3	1	1	1	1	Agree
4	1	1	1	1	Agree
5	1	1	1	1	Agree
6	1	1	1	1	Agree
7	1	1	1	1	Agree
8	1	1	1	1	Agree
9	1	1	1	1	Agree
10	1	1	1	1	Agree
11	1	1	1	1	Agree
Part 4-2					
1	1	1	1	1	Agree
2	1	1	1	1	Agree
3	1	1	1	1	Agree
4	1	1	1	1	Agree
5	1	1	1	1	Agree
6	1	1	1	1	Agree
7	1	1	1	1	Agree

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NO.	1st Expert	2nd Expert	3rs Expert	IOC	Result
8	1	1	1	1	Agree
9	1	1	1	1	Agree
10	1	1	1	1	Agree
11	1	1	1	1	Agree
12	1	1	1	1	Agree

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APPENDIX B Participant Information Sheet

เอกสารข้อมูลสำหรับผู้มีส่วนร่วมในการวิจัยและหนังสือแสดงยินยอมเข้าร่วมการวิจัย

ชื่อโครงการวิจัย ปัจจัยที่ส่งผลต่อการเตรียมความพร้อมก่อนเกษียณอายุของคนงานในระบบช่วงวัยใกล้เกษียณ: การศึกษาภาคตัดขวาง

ชื่อผู้วิจัย นางสาวณัฏฐพัชร กุลบุตร

ตำแหน่ง นิสิตระดับปริญญาโท วิทยาลัยวิทยาศาสตร์สาธารณสุข จุฬาลงกรณ์มหาวิทยาลัย

สถานที่ติดต่อผู้วิจัย (ที่บ้าน) 80 หมู่ 6 ตำบล ห้วยโป่ง อำเภอ โคกสำโรง จังหวัด ลพบุรี 15120

โทรศัพท์มือถือ 086-0115693 E-mail : nuttapatkulabut@gmail.com

1. ขอเรียนเชิญท่านเข้าร่วมในการวิจัย ก่อนที่ท่านจะตัดสินใจเข้าร่วมในการวิจัย มีความจำเป็นที่ท่านควรทำความเข้าใจว่า งานวิจัยนี้จัดทำขึ้นเพื่อตรวจสอบปัจจัยที่เกี่ยวข้องกับการเตรียมความพร้อมก่อนเกษียณอายุของคนงานในระบบช่วงวัยใกล้เกษียณ งานวิจัยนี้ “คนงานในระบบ” หมายถึง แรงงานในหน่วยงานของรัฐอันได้แก่ ข้าราชการ พนักงานราชการ และลูกจ้างประจำ ทั้งนี้ในงานวิจัยไม่ได้รวมถึงลูกจ้างชั่วคราวภายใต้หน่วยงานของรัฐ กรุณาใช้เวลาในการอ่านข้อมูลต่อไปนี้อย่างละเอียดรอบคอบ และหากมีข้อความใดไม่ชัดเจนหรือมีข้อสงสัย ท่านสามารถสอบถามหรือข้อมูลเพิ่มเติมจากผู้ดำเนินการวิจัยได้ตลอดเวลา

2. โครงการวิจัยนี้จัดทำขึ้นโดยมีวัตถุประสงค์เพื่อประเมินระดับการเตรียมความพร้อมก่อนเกษียณอายุของคนงานในระบบช่วงวัยใกล้เกษียณ และวิเคราะห์ปัจจัยที่เกี่ยวข้องกับการเตรียมความพร้อมนั้น โดยแบบสอบถามจะแบ่งออกเป็นทั้งหมด 6 ส่วนตามจุดประสงค์ของการวิจัย ดังนี้

ส่วนที่ 1 แบบสอบถามข้อมูลส่วนบุคคล

ส่วนที่ 2-1 แบบสอบถามการรับรู้ข้อมูลเกี่ยวกับการเกษียณอายุจากหน่วยงาน

ส่วนที่ 2-2 แบบสอบถามความพึงพอใจในงานของพนักงาน

ส่วนที่ 3-1 แบบสอบถามการรับรู้การเตรียมความพร้อมการเกษียณอายุ

ส่วนที่ 3-2 แบบสอบถามการเตรียมตัวก่อนเกษียณอายุ

ส่วนที่ 4-1 แบบสอบถามสัมพันธภาพในครอบครัว

ส่วนที่ 4-2 แบบสอบถามสัมพันธภาพกับเพื่อนร่วมงาน

ส่วนที่ 5 แบบคัดกรองปัญหาสุขภาพจิต

ส่วนที่ 6 แบบสอบถามคัดกรองคุณภาพชีวิต

3. ท่านได้รับเชิญให้เข้าร่วมการวิจัยนี้เนื่องจาก ท่านเป็นคนงานในระบบช่วงวัยใกล้เกษียณที่มีอายุ 55-59 ปี และกำลังทำงานภายใต้หน่วยงานโครงการชลประทาน สำนักงานชลประทานที่ 10 ในเขตภาคกลางของประเทศไทย เป็นผู้ที่มีความสามารถในการสื่อสาร อ่าน และเขียนภาษาไทยได้เป็นอย่างดี ไม่อยู่ในภาวะเสี่ยงหรือมีโรคร้ายแรง เช่น ภาวะไตวายระยะสุดท้าย โรคมะเร็งระยะที่ 2-4 รวมทั้งไม่เป็นผู้ที่ต้องเข้ารับการรักษาในโรงพยาบาลเป็นเวลานานจากความเจ็บป่วยที่ซับซ้อนและมีความเสี่ยงสูงต่อการเสียชีวิต โดยโครงการวิจัยนี้จะมีจำนวนผู้เข้าร่วมในการวิจัยทั้งสิ้น 226 คน

4. ผู้ดำเนินการวิจัย คือ นางสาวณัฏฐพัชร กุลบุตร และคณะนักวิจัย จะขอความยินยอมจากท่านในการเข้าร่วมการวิจัย โดยเข้าไปแนะนำตัวและอธิบายให้ท่านฟังเพื่อรับทราบถึงข้อมูลและรายละเอียดของโครงการวิจัย

5. หากท่านตัดสินใจเข้าร่วมการวิจัยแล้ว ผู้ดำเนินการวิจัย คือ นางสาวณัฏฐพัชร กุลบุตร และคณะนักวิจัย จะขอให้ท่านลงนามในเอกสารใบยินยอมเข้าร่วมโครงการ และตอบแบบสอบถามทั้ง 6 ส่วน โดยจะใช้เวลาประมาณ 45 นาที และสถานที่เก็บแบบสอบถาม คือ โครงการชลประทาน สำนักงานชลประทานที่ 10 ในภาคกลาง ประเทศไทย

6. การเข้าร่วมวิจัยครั้งนี้ ข้อมูลที่ได้รับจากการตอบแบบสอบถามของท่านจะถูกเก็บรักษาไว้เป็นความลับ ไม่เปิดเผยต่อสาธารณะเป็นรายบุคคล แต่จะนำเสนอผลงานวิจัยในภาพรวมโดยไม่มีการระบุชื่อ-นามสกุล หรือข้อมูลที่จะระบุความเป็นตัวตนของท่าน อย่างไรก็ตาม ท่านอาจรู้สึกไม่สบายใจหรือรู้สึกอึดอัดใจอยู่บ้างในการตอบข้อคำถามบางข้อ ซึ่งหากเกิดกรณีดังกล่าวขึ้น ท่านมีสิทธิ์ที่จะไม่ตอบข้อคำถามเหล่านั้นหรือขอยุติการตอบแบบสอบถามได้ โดยไม่มีผลกระทบต่อท่านแต่อย่างใด

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7. ท่านจะไม่ได้รับประโยชน์โดยตรงใดๆ จากการเข้าร่วมในการวิจัยครั้งนี้ แต่ผลการศึกษาที่ได้จะเป็นประโยชน์ต่อสังคม หน่วยงานของท่าน และหน่วยงานอื่นที่เกี่ยวข้อง ในการวางแผนพัฒนา ปรับปรุง หรือกำหนดนโยบายเกี่ยวกับการเตรียมความพร้อมก่อนเกษียณอายุของคนงานในระบบต่อไป

8. การเข้าร่วมในการวิจัยของท่านเป็นโด**ยสมัครใจ** และสามารถ**ปฏิเสธ**ที่จะเข้าร่วมหรือ**ถอนตัว**จากการวิจัยได้ทุกขณะ โดยไม่ต้องให้เหตุผล ซึ่งการปฏิเสธการเข้าร่วมวิจัยในครั้งนี้จะไม่มีผลกระทบต่อการดำเนินชีวิตและการประกอบอาชีพของท่านแต่อย่างใด

9. การวิจัยครั้งนี้ได้ผ่านการพิจารณาด้านจริยธรรมในมนุษย์จากคณะกรรมการพิจารณาจริยธรรมการวิจัยในคน กลุ่มสหสถาบัน ของจุฬาลงกรณ์มหาวิทยาลัยแล้ว

10. หากท่านไม่ได้รับการปฏิบัติตามข้อมูลดังกล่าวสามารถร้องเรียนได้ที่ คณะกรรมการพิจารณาจริยธรรมการวิจัยในคน กลุ่มสหสถาบัน ชุดที่ 1 จุฬาลงกรณ์มหาวิทยาลัย 254 อาคารจามจุรี 1 ชั้น 2 ถนนพญาไท เขตปทุมวัน กรุงเทพฯ 10330 โทรศัพท์/โทรสาร 0-2218-3202 E-mail: eccu@chula.ac.th

ข้าพเจ้าได้รับการอธิบายจากผู้วิจัย **และเข้าใจข้อมูลดังกล่าวข้างต้นทุกประการแล้ว จึงลงนามเข้าร่วมการวิจัยนี้ด้วยความสมัครใจ** และได้รับเอกสารไว้ 1 ชุดแล้ว

ลงชื่อ.....	ลงชื่อ.....
(.....)	(.....)
ผู้วิจัยหลัก	ผู้เข้าร่วมการวิจัย
วันที่...../...../.....	วันที่...../...../.....

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APPENDIX C Questionnaire in Thai

เลขที่แบบสอบถาม.....

แบบสอบถาม

เรื่อง ปัจจัยที่ส่งผลต่อการเตรียมความพร้อมก่อนเกษียณอายุขอคนงานในระบบช่วงวัยใกล้เกษียณ: การศึกษาภาคตัดขวาง

<u>คำชี้แจง</u> แบบสอบถามฉบับนี้เป็นแบบสอบถามเกี่ยวกับปัจจัยที่ส่งผลต่อการเตรียมความพร้อมก่อนเกษียณอายุของคนงานในระบบช่วงวัยใกล้เกษียณ โดยในการตอบแบบสอบถามนี้ใช้เวลาประมาณ 45 นาที มีวัตถุประสงค์เพื่อศึกษา เพื่อตรวจสอบปัจจัยที่เกี่ยวข้องกับการเตรียมความพร้อมก่อนเกษียณอายุของคนงานในระบบช่วงวัยใกล้เกษียณ โดยแบ่งออกเป็นส่วนต่างๆตามแบบสอบถามการวิจัยดังนี้

ส่วนที่ 1 แบบสอบถามข้อมูลส่วนบุคคล

ส่วนที่ 2-1 แบบสอบถามการรับรู้ข้อมูลเกี่ยวกับการเกษียณอายุจากหน่วยงาน

ส่วนที่ 2-2 แบบสอบถามความพึงพอใจในงานของพนักงาน

ส่วนที่ 3-1 แบบสอบถามการรับรู้การเตรียมความพร้อมการเกษียณอายุ

ส่วนที่ 3-2 แบบสอบถามการเตรียมตัวก่อนเกษียณอายุ

ส่วนที่ 4-1 แบบสอบถามสัมพันธภาพในครอบครัว

ส่วนที่ 4-2 แบบสอบถามสัมพันธภาพกับเพื่อนร่วมงาน

ส่วนที่ 5 แบบสอบถามสุขภาพทั่วไป

ส่วนที่ 6 แบบสอบถามเกี่ยวกับคุณภาพชีวิต

ข้อมูลที่ได้จากงานวิจัยนี้จะเป็นประโยชน์อย่างยิ่งต่อการศึกษาปัจจัยที่ส่งผลต่อการเตรียมความพร้อมก่อนเกษียณอายุของคนงานในระบบช่วงวัยใกล้เกษียณ เพื่อเป็นการส่งเสริมความเข้าใจในการเตรียมความพร้อมก่อนเกษียณให้กับสังคมและหน่วยงานที่เกี่ยวข้องต่อไป หากท่านมีข้อสงสัยประการใดเกี่ยวข้องกับปัญหาด้านจริยธรรม ท่านสามารถติดต่อสอบถามได้ที่ คณะกรรมการจริยธรรมวิจัย จุฬาลงกรณ์มหาวิทยาลัย และหากท่านมีข้อสงสัยใดๆเกี่ยวกับแบบสอบถาม โปรดติดต่อ นางสาวณัฏฐพัชร กุลบุตร ได้ที่วิทยาลัยวิทยาศาสตร์สาธารณสุข จุฬาลงกรณ์มหาวิทยาลัย หมายเลขโทรศัพท์ 086-0115693

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ขอขอบคุณที่ให้ความร่วมมือมา ณ โอกาสนี้

นางสาวณัฏฐพัชร กุลบุตร

นักศึกษาปริญญาโท วิทยาลัยวิทยาศาสตร์สาธารณสุข จุฬาลงกรณ์มหาวิทยาลัย

ส่วนที่ 1 แบบสอบถามข้อมูลส่วนบุคคล

คำชี้แจง แบบสอบถามในส่วนนี้แต่ละข้อเกี่ยวกับข้อมูลส่วนบุคคลกรุณาทำเครื่องหมาย (✓) ลงใน ☐ หรือเติมคำลงในช่องว่างตามความเป็นจริง

1. เพศ

☐ ชาย ☐ หญิง

2. อายุ.....ปี

3. ระดับการศึกษาสูงสุด

☐ ประถมศึกษา ☐ ระดับชั้นมัธยมตอนต้น
☐ ระดับชั้นมัธยมตอนปลาย ☐ ปริญญาตรีหรือเทียบเท่า
☐ สูงกว่าปริญญาตรี

4. นับถือศาสนา

☐ พุทธ ☐ คริสต์
☐ อิสลาม ☐ ศาสนาอื่น (ระบุ).....

5. สถานภาพสมรส

☐ โสด ☐ สมรสและอยู่ด้วยกัน
☐ สมรสและแยกกันอยู่ ☐ หม้าย
☐ หย่า

6. จำนวนบุตรในอุปการะ (รวมบุตรที่ผู้ตอบแบบสอบถามให้กำเนิดเอง บุตรเลี้ยงและบุตรบุญธรรม)

☐ ไม่มี ☐ 1 คน ☐ 2 คน
☐ 3 คน ☐ มากกว่า 3 คนขึ้นไป

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7. จำนวนสมาชิกในครัวเรือน..... คน (บุคคลที่อยู่ร่วมกับผู้ตอบแบบสอบถาม รวมถึงตัวท่านเอง)

8. ลักษณะครอบครัวที่ท่านอาศัยอยู่ในปัจจุบัน

☐ ครอบครัวเดี่ยว (ประกอบด้วยตัวท่าน, คู่สมรส, บุตร)

☐ ครอบครัวขยาย (ประกอบด้วยตัวท่าน คู่สมรสบุตรและครอบครัวของบุตร หรือญาติพี่น้อง)

☐ อยู่กับผู้อื่นที่ไม่ใช่ครอบครัวหรือญาติ

☐ อยู่คนเดียว

9. สถานภาพในครัวเรือนของท่าน

☐ เป็นหัวหน้าครอบครัว

☐ เป็นสมาชิกในครอบครัว

☐ เป็นญาติเจ้าของบ้าน (ที่ไม่ใช่สมาชิกในครอบครัว)

☐ เป็นผู้อาศัย (ที่ไม่ใช่สมาชิกครอบครัว หรือ ญาติ)

10. ที่พักในปัจจุบันของท่าน (เฉพาะที่พักอาศัย ไม่รวมถึงที่ดินที่สามารถมีเจ้าของที่แตกต่างกันได้)

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☐ เป็นบ้านของตนเอง ☐ เป็นบ้านของบุตรหลาน/ญาติพี่น้อง

☐ เป็นบ้านของคู่สมรส ☐ เป็นบ้านเช่า

☐ อื่นๆ (ระบุ).....

11. รายได้ปัจจุบันต่อเดือนของท่าน (รวมทุกแหล่งรายได้)

☐ น้อยกว่า 10,000 บาท/เดือน

☐ 10,001-15,000 บาท/ เดือน

☐ 15,001-25,000 บาท/ เดือน

☐ 25,001-35,000 บาท/เดือน

☐ 35,000 บาทขึ้นไป

12. ท่านมีรายได้มาจากแหล่งใด (ตอบได้มากกว่า 1 ข้อ)

☐ การทำงาน (เงินเดือนหรือค่าจ้างที่ได้รับจากหน่วยงาน)

☐ บุตร หลาน

☐ ญาติพี่น้อง

☐ กิจการ/ธุรกิจส่วนตัว

☐ ค่าเช่า ดอกเบี้ย

☐ อื่นๆ (ระบุ).....

13. ปัจจุบันสถานภาพทางเศรษฐกิจของท่านเป็นอย่างไร

☐ มีเหลือเก็บ (รายได้มากกว่ารายจ่าย)

☐ มีพอใช้จ่าย (รายจ่ายสมดุลกับรายรับ)

☐ ไม่พอใช้และไม่เหลือเก็บ (รายจ่ายมากกว่ารายรับ)

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14. ท่านมีหลักประกันรายได้เพื่อวัยเกษียณจากหน่วยงานที่ท่านทำงานอยู่ในข้อต่อไปนี้ (ตอบได้มากกว่า 1 ข้อ)

☐ ไม่มีหลักประกันรายได้เพื่อวัยเกษียณจากหน่วยงาน

☐ ระบบบำเหน็จบำนาญข้าราชการ

☐ กองทุนบำเหน็จบำนาญข้าราชการ (กบข.)

☐ กองทุนสำรองเลี้ยงชีพลูกจ้างประจำ (กสจ.)

☐ สหกรณ์ออมทรัพย์

☐ อื่นๆ (ระบุ).....

15. ท่านมีหลักประกันรายได้เพื่อวัยเกษียณในข้อต่อไปนี้ (ตอบได้มากกว่า 1 ข้อ)

☐ ไม่มีหลักประกันรายได้เพื่อวัยเกษียณ

☐ ประกันชีวิตแบบสะสมทรัพย์

☐ กองทุนสวัสดิการชุมชน

☐ การออมกับสถาบันการเงิน (เฉพาะส่วนที่กันไว้เป็นเงินออมเพื่อวัยเกษียณอายุ)

☐ การออมในรูปของทรัพย์สินอื่นๆ ได้แก่

☐ หลักทรัพย์เพื่อการลงทุน (เช่นพันธบัตรรัฐบาลหุ้นหุ้นกู้สลากออมสิน)

☐ อสังหาริมทรัพย์ (เช่นบ้านอาคารที่ดิน)

☐ ทรัพย์สิน เช่น อัญมณี ทองคำ

☐ อื่นๆ (ระบุ).....

16. ประวัติสุขภาพทางกายของท่านในช่วง 1 ปีที่ผ่านมาเป็นอย่างไร

☐ สมบูรณ์ปราศจากโรคภัย

☐ เจ็บป่วยบ้างเล็กๆน้อยๆ เช่น เวียนศีรษะบ่อย นอนไม่หลับ หูตึง ฯลฯ

☐ มีโรคประจำตัวเรื้อรัง เช่น (ตอบได้มากกว่า 1 ข้อ)

☐ โรคเบาหวาน ☐ โรคความดัน ☐ โรคหัวใจ

☐ อื่น ๆ (ระบุอาการ/ชื่อโรค) .....

กรณีที่ท่านมีโรคประจำตัว ท่านไปพบแพทย์เพื่อรักษาอาการเจ็บป่วยด้วยโรคดังกล่าวที่โรงพยาบาลหรือไม่ (*หากมีมากกว่าหนึ่งโรคขึ้นไป ให้ระบุทุกโรค*)

☐ ไม่ไป (ระบุชื่อโรค.....)

☐ ไป .....ครั้ง/ปี (ระบุชื่อโรค.....)

ไป .....ครั้ง/ปี (ระบุชื่อโรค.....)

17. ประวัติการใช้สารเสพติดในปัจจุบัน (ปริมาณและความถี่ในการใช้โปรดระบุ)

<u>แอลกอฮอล์ (เบียร์, ไวน์, เหล้า ฯลฯ)</u>

☐ ไม่ดื่มแอลกอฮอล์

☐ ดื่มแอลกอฮอล์ ระบุ.....วัน/สัปดาห์

ปริมาณที่ดื่ม.....แก้วมาตรฐานต่อวัน

แก้วมาตรฐานต่อวัน (แสดงภาพประกอบ) หนึ่งแก้วมาตรฐานคือ

- เบียร์โดยทั่วไป 1 แก้ว (285 ม.ล.)
- ไวน์โดยทั่วไป 1 แก้วเล็ก (100 ม.ล.)
- เหล้า เช่น แม่โขง แสงโสม หงส์ทอง รีเจนซี่ ซีวาส รีกัล จอห์นนี่ วอล์กเกอร์ 100 ไพเพอร์ 1 แก้ว (30 ม.ล.)

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<u>บุหรี่</u>

☐ ไม่เคยสูบบุหรี่

☐ สูบบุหรี่ ระบุ.....วัน/สัปดาห์

ปริมาณที่ใช้.....มวนต่อวัน

ส่วนที่ 2-1 แบบสอบถามเกี่ยวกับการรับรู้ข้อมูลเกี่ยวกับการเกษียณอายุจากหน่วยงาน

คำชี้แจง ให้ท่านทำเครื่องหมาย (✓) ลงในช่องท้ายข้อความที่ท่านเห็นว่าใกล้เคียงหรือตรงกับกับความคิดเห็นของท่านในปัจจุบันมากที่สุด โดยพิจารณาระดับตามเกณฑ์ดังนี้

การรับรู้ข้อมูลเกี่ยวกับการเกษียณอายุจากหน่วยงาน		ความคิดเห็น	
		เห็นด้วย	ไม่เห็นด้วย
1	ท่านได้รับข้อมูลข่าวสารเกี่ยวกับผู้สูงอายุจากหน่วยงาน เช่น ข้อมูลเกี่ยวกับการดูแลรักษาสุขภาพในวัยสูงอายุ		
2	หน่วยงานต้นสังกัดของท่าน ให้การสนับสนุนด้านข้อมูลข่าวสารเกี่ยวกับการเตรียมตัวเพื่อเกษียณอายุด้วยสื่อประเภทต่างๆ เช่น เอกสาร แผ่นผับต่างๆ ฯลฯ		
3	ท่านไม่เคยได้รับการอบรมหรือสัมมนาเกี่ยวกับผู้สูงอายุหรือการเตรียมตัวก่อนเกษียณอายุเลย		
4	ท่านได้รับการสนับสนุนในด้านการทำกิจกรรมนันทนาการและการพบปะสังสรรค์กันทั้งภายในและภายนอกหน่วยงานเสมอ		
5	ท่านได้มีโอกาสเข้าร่วมกิจกรรมต่าง ๆ ที่จัดขึ้นในหน่วยงาน เช่น การออกกำลังกายเพื่อสุขภาพ ฯลฯ		
6	หน่วยงานได้เปิดโอกาสให้ผู้เกษียณมาเยี่ยมเยียนหน่วยงานเดิม ในลักษณะเป็นที่ปรึกษาหรือวิทยากร		
7	ท่านไม่เคยได้รับข้อมูลเกี่ยวกับชมรมหรือสมาคมเกี่ยวกับการเกษียณอายุจากหน่วยงานต้นสังกัดเลย		
8	หน่วยงานต้นสังกัดท่านไม่เคย ให้ข้อมูลเกี่ยวกับแหล่งประกอบอาชีพหลังเกษียณเลย		
9	หน่วยงานได้อำนวยความสะดวกและคำแนะนำเกี่ยวกับสิทธิประโยชน์ต่างๆเพื่อการเตรียมพร้อมเกษียณ เช่น เงินบำเหน็จบำนาญ		

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ส่วนที่ 2-2 แบบสอบถามความพึงพอใจในงานของพนักงาน

คำชี้แจง ให้ท่านทำเครื่องหมาย (✓) ลงในช่องท้ายข้อความที่ท่านเห็นว่าใกล้เคียงหรือตรงกับกับความคิดเห็นของท่านในปัจจุบันมากที่สุด โดยพิจารณาระดับตามเกณฑ์ดังนี้

ระดับความคิดเห็น 1 หมายถึง ท่านไม่รู้สึกพึงพอใจเลย
ระดับความคิดเห็น 2 หมายถึง ท่านรู้สึกพึงพอใจน้อย
ระดับความคิดเห็น 3 หมายถึง ท่านรู้สึกพึงพอใจปานกลาง
ระดับความคิดเห็น 4 หมายถึง ท่านรู้สึกพึงพอใจมาก
ระดับความคิดเห็น 5 หมายถึง ท่านรู้สึกพึงพอใจมากที่สุด

ความพึงพอใจในงานของพนักงาน		ระดับความเห็น				
		1	2	3	4	5
1	ความรู้สึกพึงพอใจของท่านต่อระบบการทำงานในองค์กร					
2	ความพึงพอใจของท่านต่อโอกาสที่จะได้เลื่อนตำแหน่งในอนาคต					
3	ความพึงพอใจของท่านต่อกระบวนการสื่อสารภายในองค์กร					
4	ความพึงพอใจต่อผลงานที่ทำออกมาได้สำเร็จ					
5	ท่านพอใจในลักษณะงานที่ท่านทำอยู่ในระดับใด					
6	ความเหมาะสมของทรัพยากรและปัจจัยต่าง ๆ ที่องค์กรจัดสรรให้เป็นเครื่องมือในการปฏิบัติงานของท่าน					
7	องค์กรทำให้ท่านมีความพึงพอใจในความก้าวหน้าในอาชีพของท่านเพียงใด					
8	ความพึงพอใจต่อขั้นตอนการจ้างงานต่าง ๆ ขององค์กร เช่น การรับสมัครคัดเลือก ตลอดจนการพิจารณาให้เงินเดือน					
9	ความยุติธรรมโดยรวมที่องค์กรใช้ในการประเมินผลงาน					
10	ความสัมพันธ์ระหว่างท่านกับเพื่อนร่วมงานคนอื่น ๆ					

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ส่วนที่ 3-1 แบบสอบถามเกี่ยวกับการรับรู้การเตรียมความพร้อมการเกษียณอายุ

คำชี้แจง ให้ท่านทำเครื่องหมาย (✓) ลงในช่องท้ายข้อความที่ท่านเห็นว่าใกล้เคียงหรือตรงกับความคิดเห็นของท่านในปัจจุบันมากที่สุด โดยพิจารณาระดับตามเกณฑ์ดังนี้

ระดับความคิดเห็น 1 หมายถึง น้อยที่สุด
ระดับความคิดเห็น 2 หมายถึง น้อย
ระดับความคิดเห็น 3 หมายถึง ปานกลาง
ระดับความคิดเห็น 4 หมายถึง มาก
ระดับความคิดเห็น 5 หมายถึง มากที่สุด

การรับรู้การเตรียมความพร้อมการเกษียณอายุคือ การรับรู้ความสามารถของตนเองในการจัดการวางแผนรับมือกับการเกษียณอายุ

ด้านจิตใจ คือ การรับรู้ถึงสมรรถภาพทางจิตใจของตนเองว่ามีความสามารถพร้อมรับสถานการณ์ต่าง ๆ ได้

ด้านร่างกาย คือ การรับรู้ถึงสมรรถภาพทางร่างกายของตนเองตามความเป็นจริงในปัจจุบันเพื่อเสริมสร้างสุขภาพให้แข็งแรง รองรับเมื่ออายุมากขึ้น

ด้านเศรษฐกิจ คือ การรับรู้ถึงสถานะทางการเงินของตนเองตามความเป็นจริงใน ปัจจุบันเพื่อจะได้วางแผนและปรับพฤติกรรมในการเตรียมความพร้อมด้านการเงิน

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ด้านความสามารถของตนในการปรับตัวภายหลังการเกษียณอายุ หมายถึง ความคิดของบุคคลที่เชื่อมั่นในความสามารถของตนเองว่า ตนเองมีศักยภาพที่สามารถจัดการสถานการณ์ต่าง ๆ ให้ประสบความสำเร็จได้ตามที่ตั้งเป้าหมายที่คาดหวัง คือสามารถปรับตัวใช้ชีวิตภายหลังการเกษียณอายุได้

ด้านการเห็นคุณค่าในตัวเอง คือ การประเมินตนเองตามความรู้สึกของตนว่าตนเองเป็นคนมีคุณค่า มีความสามารถ

ด้านการรับรู้สวัสดิการต่าง ๆ คือ การรับรู้เกี่ยวกับสวัสดิการที่ภาครัฐ หน่วยงาน หรือองค์กรต่าง ๆ ให้สิทธิ จัดสำหรับผู้ที่เกษียณอายุ

การรับรู้การเตรียมความพร้อมการเกษียณอายุ		ระดับความเห็น				
		1	2	3	4	5
ด้านจิตใจ						
1	เมื่อท่านเกษียณอายุสามารถทำใจยอมรับการเกษียณอายุได้					
2	การทำกิจกรรมในยามว่างเป็นประโยชน์ต่อท่านเมื่อเกษียณอายุ					
3	เมื่อท่านเกษียณอายุท่านสามารถปรับตัวให้เข้ากับสภาพชีวิตที่เปลี่ยนแปลงไปได้					
4	ท่านคิดว่าการปล่อยวางทำให้ท่านมีความสุขเมื่อเกษียณอายุ					
5	เมื่อท่านเกษียณอายุ ทำให้ท่านมีเวลาพักผ่อนและทำกิจกรรมต่าง ๆ มากขึ้น					
6	การฝึกสมาธิเป็นประโยชน์ต่อจิตใจของท่านเมื่อเกษียณอายุ					
7	ท่านคาดว่าตัวท่านสามารถควบคุมอารมณ์ของท่านได้ดีแม้ช่วงเกษียณอายุจะไม่ได้มีสังคมเหมือนตอนทำงาน					
ด้านร่างกาย						
1	การเสื่อมถอยทางร่างกายเป็นเรื่องปกติเมื่อมีอายุมากขึ้น					
2	ปัจจุบันท่านศึกษาความรู้ทางโภชนาการเพื่อสุขภาพที่แข็งแรงหลังเกษียณอายุ					
3	ท่านออกกำลังกายเป็นประจำทุกวันเพื่อหลังเกษียณอายุจะมีร่างกายแข็งแรง					
4	ท่านได้ศึกษาองค์ความรู้เรื่องโรคภัยที่มักเกิดกับผู้สูงอายุ					

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5	ท่านเชื่อว่าการรักษาสุขภาพร่างกายให้แข็งแรงสมบูรณ์ก่อนการเกษียณอายุเป็นสิ่งจำเป็น					
6	ท่านได้ศึกษาข่าวสารเกี่ยวกับสุขภาพร่างกายของบุคคลเมื่อสูงอายุ					
ด้านเศรษฐกิจ						
1	ท่านศึกษาว่าหลังเกษียณอายุควรมีรายได้เท่าไหร่จึงจะเพียงพอต่อการดำรงชีวิตหลังเกษียณ					
2	การเก็บออมเป็นประโยชน์ต่อการเกษียณอายุ					
3	การศึกษาหาความรู้เกี่ยวกับอาชีพเสริมเพื่อเพิ่มรายได้ที่เหมาะกับผู้สูงวัยเป็นประโยชน์ต่อชีวิตหลังเกษียณ					
4	ท่านควรมีความรู้และแนวทางเกี่ยวกับการวางแผนการใช้จ่ายเงินหลังการเกษียณอายุ					
5	ท่านควรมีเงินสำรองสำหรับการซ่อมแซมที่พักอาศัยในยามเกษียณอายุ					
6	ท่านควรมีเงินสำรองสำหรับค่ารักษาพยาบาลในยามเกษียณอายุ					
ด้านความสามารถของตนในการปรับตัวภายหลังการเกษียณอายุ						
1	ท่านคิดว่าท่านมีความสามารถปรับตัวให้เข้ากับสภาพชีวิตหลังเกษียณอายุได้					
2	ท่านเชื่อว่าท่านสามารถยอมรับการพ้นจากตำแหน่งหน้าที่การงานต่างๆ เมื่อเกษียณอายุ					
3	ท่านมั่นใจว่าท่านสามารถเรียนรู้และทำกิจกรรมต่าง ๆได้ดีเมื่อเกษียณอายุ เช่น เข้าร่วมชมรมสูงอายุ ออกกำลังกาย เพาะต้นไม้					
4	เมื่อท่านเกษียณอายุไปแล้วก็สามารถที่จะประสบความสำเร็จในชีวิตได้เช่นกัน					
5	ท่านเชื่อว่าท่านสามารถทำงานที่ท้าทาย					

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	ความสามารถได้แม้เมื่อท่านเกษียณอายุไปแล้ว					
ด้านการเห็นคุณค่าในตัวเอง						
1	เมื่อท่านเกษียณอายุแล้วท่านยังสามารถทำประโยชน์ให้กับสังคมได้					
2	เมื่อยามท่านเกษียณอายุท่านยังคงเป็นคนที่มีคุณค่าต่อคนในครอบครัว					
3	หลังจากท่านเกษียณอายุท่านมีสังคมและกิจกรรมต่าง ๆ เพื่อพบปะสังสรรค์กับผู้คนมากมาย					
4	หลังจากท่านเกษียณอายุท่านสามารถเป็นวิทยากรถ่ายทอดความรู้ ประสบการณ์แก่ผู้อื่น					
5	ท่านมีมนุษย์สัมพันธ์ที่ดี เข้ากับผู้อื่นได้ง่าย					
ด้านการรับรู้สวัสดิการต่าง ๆ						
1	ท่านทราบถึงสวัสดิการของหน่วยงานกรณีเกษียณอายุ					
2	ท่านทราบถึงสวัสดิการของภาครัฐเกี่ยวข้องกับผู้เกษียณอายุ เช่น พ.ร.บ.กองทุนบำเหน็จบำนาญฯประกันสังคม กองทุนการออมแห่งชาติ					
3	ท่านทราบถึงผลประโยชน์ในกองทุนฯ หรือประกันที่ตนซื้อในกรณีเกษียณอายุ					
4	ท่านติดตามข่าวสาร สิทธิประโยชน์เกี่ยวกับผู้เกษียณอายุ					

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ส่วนที่ 3-2 แบบสอบถามเกี่ยวกับการเตรียมตัวก่อนเกษียณอายุ

คำชี้แจง ให้ท่านทำเครื่องหมาย (✓) ลงในช่องท้ายข้อความที่ท่านเห็นว่าใกล้เคียงหรือตรงกับการกระทำของท่านเพียงช่องเดียวในแต่ละข้อ โดยคำถามแต่ละข้อจะมีอยู่ 3 คำตอบ

มาก หมายถึง ข้อความนั้นเป็นจริงสำหรับท่านเป็นส่วนมาก

ปานกลาง หมายถึง ข้อความนั้นเป็นจริงสำหรับท่านเป็นบางส่วน

น้อย หมายถึง ข้อความนั้นเป็นจริงสำหรับท่านน้อย

ข้อ	การเตรียมตัวก่อนเกษียณอายุ	มาก	ปานกลาง	น้อย
1.	<u>1.การเตรียมตัวด้านร่างกายและจิตใจ</u> การเตรียมตัวด้านร่างกาย ท่านได้ศึกษาหาความรู้เรื่องการดูแลรักษาสุขภาพและการปฏิบัติตนเมื่อเข้าสู่วัยสูงอายุ			
2.	ท่านได้ศึกษาหาความรู้เกี่ยวกับการรับประทานอาหารที่เหมาะสมกับวัยสูงอายุและถูกต้องตามหลักโภชนาการ			
3.	ท่านได้ศึกษาหาความรู้เกี่ยวกับการออกกำลังกายเพื่อสุขภาพ			
4.	ท่านได้พักผ่อนร่างกายตามความเหมาะสมของสภาพร่างกายและวัยสูงอายุ			
5.	ก่อนเกษียณท่านเข้ารับการตรวจสุขภาพร่างกายที่คลินิกหรือโรงพยาบาลทุกปี			
1.	การเตรียมตัวด้านจิตใจ ท่านได้ศึกษาหาความรู้เกี่ยวกับการเปลี่ยนแปลงด้านจิตใจและอารมณ์เมื่อเข้าสู่วัยสูงอายุ			
2.	ท่านได้เตรียมใจล่วงหน้าเกี่ยวกับสิ่งที่ต้องเผชิญหลังเกษียณอายุ เช่น การยอมรับนับถือจากผู้อื่นจะลดน้อยลงภายหลังท่านเกษียณอายุไปแล้ว			

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ข้อ	การเตรียมตัวก่อนเกษียณอายุ	มาก	ปานกลาง	น้อย
3.	ท่านได้เตรียมใจที่จะต้องพบกับการเปลี่ยนแปลงภายหลังเกษียณ เช่น การสูญเสียอำนาจหน้าที่การงาน			
4.	ท่านได้เตรียมวางแผนการใช้เวลาว่างสำหรับการพักผ่อนหย่อนใจ เช่น การเที่ยวสวนสาธารณะ การทัศนาจร เป็นต้น			
5.	ท่านไปวัดฝึกสมาธิหรือปฏิบัติธรรมเป็นประจำเพื่อให้จิตใจสงบและเป็นที่ยึดเหนี่ยวจิตใจ			
1.	2.<u>การเตรียมตัวด้านรายได้และรายจ่าย</u> ท่านได้ศึกษาหาความรู้ถึงสิทธิประโยชน์ของการรับบำเหน็จบำนาญรวมทั้งข้อดีข้อเสีย			
2.	ท่านได้เตรียมใช้จ่ายเงินให้เพียงพอกับรายได้ในแต่ละเดือนภายหลังเกษียณอายุ			
3.	ท่านได้เตรียมสะสมเงินไว้ใช้จ่ายภายหลังเกษียณอายุไว้ล่วงหน้าอย่างเพียงพอ			
4.	ท่านได้เตรียมสะสมทรัพย์ในรูปแบบการฝากสะสมไว้บ้างแล้ว เช่น การซื้อพันธบัตร การทำประกันชีวิตการประกันอุบัติเหตุ เป็นต้น			
5.	ท่านได้เตรียมหางานทำเพื่อให้มีรายได้หลังเกษียณอายุ เช่น การทำธุรกิจเล็กๆน้อยๆ หรือ ทำงานพิเศษตามที่ท่านมีความถนัดและมีความสามารถ			
1.	3. <u>การเตรียมตัวด้านงานอดิเรก</u> ท่านได้ศึกษาหาความรู้เกี่ยวกับกิจกรรมและงานอดิเรกที่ตรงกับความสนใจของตนเอง			
2.	ท่านได้ศึกษาหาความรู้เกี่ยวกับงานสะสม เช่น การสะสมรูปภาพ นาฬิกา หนังสือของเก่าเป็นต้น			
3.	ท่านได้ศึกษาหาความรู้เกี่ยวกับงานประดิษฐ์งานฝีมือ เช่น ประดิษฐ์ดอกไม้ เย็บปักร้อย เป็นต้น			

ข้อ	การเตรียมตัวก่อนเกษียณอายุ	มาก	ปานกลาง	น้อย
4.	ท่านได้ศึกษาหาความรู้เกี่ยวกับงานศิลปะ เช่น การวาดภาพการร้องเพลงการเขียนบทความบทกวีการแสดงเป็นต้น			
5.	ท่านได้ศึกษาหาความรู้เกี่ยวกับเกมส์กีฬานันทนาการเพื่อการพักผ่อนหย่อนใจ			
1.	<u>4. การเตรียมตัวด้านที่อยู่อาศัย</u> ท่านได้เตรียมวางแผนเกี่ยวกับที่อยู่อาศัยหลังเกษียณอายุไว้ล่วงหน้าว่าจะอยู่ตามลำพังหรือออยู่อาศัยกับบุตรหลานหรือญาติพี่น้อง			
2.	ท่านได้เตรียมวางแผนเกี่ยวกับที่อยู่อาศัยหลังเกษียณไว้ล่วงหน้าเช่นว่าจะอยู่บ้านเดิมหรือย้ายบ้านใหม่หลังเกษียณอายุ			
3.	ท่านได้เตรียมวางแผนเรื่องที่อยู่อาศัยให้มีความสะดวกสบายในการเดินทางไปสถานที่ต่างๆเช่น โรงพยาบาลหรือสถานบริการด้านสุขภาพ			
4.	ท่านได้จัดเตรียมที่อยู่อาศัยให้เหมาะสมกับสุขภาพของวัยสูงอายุ			
5.	ท่านได้เตรียมจัดสภาพภายในบ้านให้ปลอดภัยจากอุบัติเหตุต่างๆ เช่น ห้องนอนอยู่ชั้นล่างวัสดุปูพื้นไม่ลื่นมีราวบันไดแข็งแรงมีแสงสว่างภายในบ้านเพียงพอ เป็นต้น			
1.	<u>5.การเตรียมตัวด้านการมีส่วนร่วมในสังคม</u> ท่านได้ศึกษาหาความรู้เกี่ยวกับกิจกรรมทางสังคมที่ท่านสนใจจะเข้าร่วมหลังเกษียณอายุ			
2.	ท่านได้ศึกษาเกี่ยวกับกฎระเบียบหลักเกณฑ์ของสมาคมหรือชมรมต่างๆที่ท่านจะเข้าร่วมหลังเกษียณอายุ			

ข้อ	การเตรียมตัวก่อนเกษียณอายุ	มาก	ปานกลาง	น้อย
3.	ท่านได้เตรียมเข้าร่วมกิจกรรมต่างๆ เช่น งานรื่นเริง สังสรรค์ งานอาสาสมัคร งานสาธารณกุศลฯลฯ			
4.	ท่านเตรียมวางแผนที่จะสมัครเป็นสมาชิกสมาคมหรือชมรมต่างๆภายหลังเกษียณอายุไว้ล่วงหน้า			
5.	ท่านได้สำรวจและเตรียมค่าใช้จ่ายในการเข้าร่วมกิจกรรมทางสังคมที่ท่านสนใจ			

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ส่วนที่ 4-1 แบบสอบถามสัมพันธภาพในครอบครัว

คำชี้แจง ให้ท่านทำเครื่องหมาย (✓) ลงในช่องท้ายข้อความที่ท่านเห็นว่าใกล้เคียงหรือตรงกับความคิดเห็นของท่านในปัจจุบันมากที่สุด โดยพิจารณาระดับตามเกณฑ์ดังนี้

ระดับความคิดเห็น 1 หมายถึง ไม่จริงเลย
ระดับความคิดเห็น 2 หมายถึง ไม่จริง
ระดับความคิดเห็น 3 หมายถึง ไม่แน่ใจ
ระดับความคิดเห็น 4 หมายถึง จริง
ระดับความคิดเห็น 5 หมายถึง จริงที่สุด

สัมพันธภาพในครอบครัว		ระดับความเห็น				
		1	2	3	4	5
1	สมาชิกครอบครัวของท่านรักใคร่และผูกพันธ์กันดี					
2	ท่านได้รับความช่วยเหลือดูแลจากสมาชิกในครอบครัวเสมอ เมื่อท่านมีปัญหาหรือเจ็บป่วยไม่สบาย					
3	ท่านมีโอกาสได้ปรึกษาหารือและแลกเปลี่ยนประสบการณ์ กับสมาชิกในครอบครัวเป็นประจำ					
4	สมาชิกในครอบครัวได้ให้ความเคารพท่านเสมอ					
5	วันหนึ่ง ๆ ท่านแทบไม่ได้พูดคุยกับสมาชิกในครอบครัวเลย					
6	เมื่อสมาชิกในครอบครัวมีปัญหาใด ๆ มักมาปรึกษาและขอความช่วยเหลือจากท่าน					
7	สมาชิกในครอบครัวให้ความสำคัญกับท่านในวันสำคัญ เช่น วันสงกรานต์ หรือวันปีใหม่ ฯลฯ					
8	สมาชิกครอบครัวมักมีความคิดขัดแย้งกับท่านเสมอ					
9	ท่านใช้เวลาว่างในการประกอบกิจกรรมร่วมกันครอบครัว เช่น ดูทีวี ปลูกต้นไม้ ฯลฯ					
10	ท่านกับญาติพี่น้องมีความสามัคคีปรองดองกัน					
11	ท่านกับสมาชิกครอบครัวและญาติพี่น้องมีกิจกรรมร่วมกันเสมอ เช่น การเที่ยว พักผ่อน การพบปะสังสรรค์ ฯลฯ					

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ส่วนที่ 4-2 แบบสอบถามสัมพันธภาพกับเพื่อน

คำชี้แจง ให้ท่านทำเครื่องหมาย (✓) ลงในช่องท้ายข้อความที่ท่านเห็นว่าใกล้เคียงหรือตรงกับความคิดเห็นของท่านในปัจจุบันมากที่สุด โดยพิจารณาระดับตามเกณฑ์ดังนี้

ระดับความคิดเห็น 1 หมายถึง ไม่จริงเลย
ระดับความคิดเห็น 2 หมายถึง ไม่จริง
ระดับความคิดเห็น 3 หมายถึง ไม่แน่ใจ
ระดับความคิดเห็น 4 หมายถึง จริง
ระดับความคิดเห็น 5 หมายถึง จริงที่สุด

สัมพันธภาพกับเพื่อน		ระดับความเห็น				
		1	2	3	4	5
1	ท่านมีเพื่อนสนิทที่ไว้วางใจได้และสามารถปรับทุกข์ด้วยได้					
2	ท่านมีเพื่อนที่ยังคงติดต่อและไปมาหาสู่กันเป็นประจำ					
3	ท่านไม่รู้สึกเหงาหรือว้าเหว่เพราะมีเพื่อน					
4	ท่านมีเพื่อนสนิทอย่างน้อย 1 คน					
5	ท่านมีเพื่อนร่วมทำกิจกรรมในสังคมด้วยเสมอ เช่น งานบุญ งานสังสรรค์ หรือทัศนาจร ฯลฯ					
6	ท่านได้มีโอกาสได้พบปะแลกเปลี่ยนความคิดเห็นและประสบการณ์กับเพื่อนขณะทำกิจกรรมต่างๆในสังคม					
7	เพื่อนช่วยเหลือท่านได้เมื่อท่านมีเรื่องเดือดร้อน					
8	ท่านรู้สึกถูกทอดทิ้งจากเพื่อนร่วมงาน					
9	ผู้บังคับบัญชา เพื่อนร่วมงาน และผู้ใต้บังคับบัญชายังให้ความสำคัญกับท่าน					
10	ท่านสามารถขอความช่วยเหลือจากเพื่อนบ้านได้เมื่อมีความจำเป็น					
11	ท่านไม่รู้จักเพื่อนบ้านเลย					
12	ท่านให้ความช่วยเหลือ เผื่อแผ่ กับเพื่อนบ้านหรือคนในหมู่บ้านเป็นประจำ					

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ส่วนที่ 5 แบบสอบถามสุขภาพทั่วไป

คำชี้แจง แบบสอบถามนี้มีวัตถุประสงค์เพื่อต้องการทราบถึงสภาวะสุขภาพของท่านในระยะสองถึงสามสัปดาห์ผ่านมาว่าเป็นอย่างไรกรุณาตอบคำถามต่อไปนี้โดยขีดเครื่องหมายวงกลมรอบคำตอบที่ใกล้เคียงกับสภาพของท่านในปัจจุบันหรือในช่วงสองถึงสามสัปดาห์ที่ผ่านมามากที่สุดโดยไม่รวมถึงปัญหาที่ท่านเคยมีในอดีตและกรุณาตอบคำถามทุกข้อ

<u>ในระยะสองถึงสามสัปดาห์ที่ผ่านมานี้ท่าน</u>

1) รู้สึกสบายและมีสุขภาพดี

ก. ดีกว่าปกติข. เหมือนปกติ ค. แย่กว่าปกติ ง. แย่กว่าปกติมาก

2) รู้สึกต้องการยาบำรุงให้มีกำลังวังชา

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

3) รู้สึกทรุดโทรมและสุขภาพไม่ดี

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

4) รู้สึกไม่สบาย

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

5) เจ็บหรือปวดบริเวณศีรษะ

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

6) รู้สึกตึงหรือคล้ายมีแรงกดที่ศีรษะ

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

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7) มีอาการวูบร้อนหรือหนาว

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

8) นอนไม่หลับเพราะกังวลใจ

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

9) ไม่สามารถหลับได้สนิทหลังจากหลับแล้ว

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

10) รู้สึกตึงเครียดอยู่ตลอดเวลา

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

11) รู้สึกหงุดหงิดอารมณ์ไม่ดี

ก. ไม่เลย ข.ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

12) รู้สึกกลัวหรือตกใจโดยไม่มีเหตุผลสมควร

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

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13) รู้สึกเรื่องต่างๆทับถมจนรับไม่ไหว

ก. ไม่เลย ข.ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

14) รู้สึกกังวลกระวนกระวายและเครียดอยู่ตลอดเวลา

ก. ไม่เลย ข.ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

15) หาอะไรทำให้ตัวเองไม่มีเวลาว่างได้

ก. มากกว่าปกติ ข. เหมือนปกติ ค. ค่อนข้างน้อยกว่าปกติ ง. น้อยกว่าปกติมาก

16) ทำอะไรช้ากว่าปกติ

ก. เร็วกว่าปกติ ข. เหมือนปกติ ค. ช้ากว่าปกติ ง. ช้ากว่าปกติมาก

17) รู้สึกว่าโดยทั่วไปแล้วทำอะไรๆได้ดี

ก. ดีกว่าปกติ ข. เหมือนปกติ ค. ดีน้อยกว่าปกติ ง. ดีน้อยกว่าปกติมาก

18) พอใจกับการที่ทำงานลุล่วงไป

ก. มากกว่าปกติ ข. พอๆกับตามปกติ ค. น้อยกว่าปกติ ง. น้อยกว่าปกติมาก

19) รู้สึกว่าได้ทำตัวให้เป็นประโยชน์ในเรื่องต่างๆ

ก. มากกว่าปกติ ข. เหมือนปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

20) รู้สึกว่าสามารถตัดสินใจในเรื่องต่างๆได้

ก. มากกว่าปกติ ข. เหมือนปกติ ค. น้อยกว่าปกติ ง. น้อยกว่าปกติมาก

21) สามารถมีความสุขกับกิจกรรมในชีวิตประจำวันตามปกติได้

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ก. มากกว่าปกติ ข. เหมือนปกติ ค. น้อยกว่าปกติ ง. น้อยกว่าปกติมาก

22) คิดว่าตัวเองเป็นคนไร้ค่า

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

23) รู้สึกว่าชีวิตนี้หมดหวังโดยสิ้นเชิง

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

24) รู้สึกไม่คุ้มค่าที่จะมีชีวิตอยู่ต่อไป

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

25) คิดว่ามีความเป็นไปได้ที่จะอยากจบชีวิตตัวเอง

ก. ไม่อย่างแน่นอน ข. ไม่คิดว่าเป็นอย่างนั้น ค. มีอยู่บ้างเหมือนกัน ง. มีแน่ๆ

26) รู้สึกว่าบางครั้งทำอะไรไม่ได้เลยเพราะประสาทตึงเครียดมาก

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

27) พบว่าตัวเองรู้สึกอยากตายไปให้พ้นๆ

ก. ไม่เลย ข. ไม่มากกว่าปกติ ค. ค่อนข้างมากกว่าปกติ ง. มากกว่าปกติมาก

28) พบว่ามีความรู้สึกที่อยากจะทำลายชีวิตตัวเองเข้ามาอยู่ในความคิดเสมอๆ

ก. ไม่อย่างแน่นอน ข. ไม่คิดว่าเป็นอย่างนั้น ค. มีอยู่บ้างเหมือนกัน ง. มีแน่ๆ

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ส่วนที่ 6 แบบสอบถามเกี่ยวกับเกี่ยวกับคุณภาพชีวิต

คำชี้แจง ให้ท่านทำเครื่องหมาย (✓) ลงในช่องท้ายข้อความที่ท่านเห็นว่าใกล้เคียงหรือตรงกับการกระทำของท่านเพียงช่องเดียวในแต่ละข้อ โดยคำถามแต่ละข้อจะมีอยู่ 5 คำตอบ

มากที่สุด หมายถึง ข้อความนั้นเป็นจริงสำหรับท่านมากที่สุด

มาก หมายถึง ข้อความนั้นเป็นจริงสำหรับท่านเป็นส่วนมาก

ปานกลาง หมายถึง ข้อความนั้นเป็นจริงสำหรับท่านปานกลาง

เล็กน้อย หมายถึง ข้อความนั้นเป็นจริงสำหรับท่านเป็นส่วนน้อย

ไม่เลย หมายถึง ข้อความนั้นไม่เป็นจริงสำหรับเลย

ข้อ	ในช่วง 2 สัปดาห์ที่ผ่านมา	ไม่เลย	เล็กน้อย	ปานกลาง	มาก	มากที่สุด
1	ท่านให้คะแนนคุณภาพชีวิตของท่านอย่างไร					
2	ท่านพอใจเกี่ยวกับสุขภาพของคุณเพียงใด					
3	การเจ็บปวดตามร่างกาย เช่น ปวดหัว ปวดท้อง ปวดตามตัว ทำให้ท่านไม่สามารถทำในสิ่งที่ต้องการมากน้อยเพียงใด					
4	ท่านจำเป็นต้องไปรับการรักษาพยาบาลมากน้อยเพียงใด เพื่อให้สามารถปฏิบัติภารกิจประจำวันได้					
5	ท่านมีความสุขในการดดำเนินชีวิตมากน้อย แค่ไหน					
6	ท่านรู้สึกว่าชีวิตของท่านมีความหมาย มากน้อยแค่ไหน					
7	ท่านมีสมาธิในการทำงานต่าง ๆ ดีเพียงใด					
8	ท่านรู้สึกว่าชีวิตประจำวันของท่านปลอดภัย มากน้อยแค่ไหน					
9	ท่านรู้สึกว่าสภาพแวดล้อมของท่านมีสุขอนามัยมากน้อยเพียงใด					

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ข้อ	ในช่วง 2 สัปดาห์ที่ผ่านมา	ไม่เลย	เล็กน้อย	ปานกลาง	มาก	มากที่สุด
10	ท่านมีพลังงานเพียงพอในการดำเนินชีวิตประจำวันหรือไม่					
11	ท่านสามารถที่จะยอมรับรูปร่างหน้าตาของท่านเองหรือไม่					
12	ท่านมีเงินพอใช้จ่ายตามความจำเป็นของท่านเองได้หรือไม่					
13	ท่านได้รู้เรื่องราวข่าวสารที่จำเป็นในชีวิตแต่ละวันมากน้อยเพียงใด					
14	ท่านมีโอกาสที่จะทำกิจกรรมยามว่างมากน้อยแค่ไหน					
15	ท่านสามารถที่จะไปไหนมาไหนได้ดี เพียงใด					
16	ท่านพอใจกับการนอนหลับของท่านมากน้อยเพียงใด					
17	ท่านพอใจกับความสามารถของท่านในการดำเนินกิจกรรมในชีวิตประจำวันอย่างไร					
18	ท่านพอใจกับความสามารถในการทำงานได้อย่างที่เคยทำมา มากน้อยเพียงใด					
19	ท่านรู้สึกพอใจกับตัวของท่านเองมากน้อยแค่ไหน					
20	ท่านพอใจกับความสัมพันธ์ส่วนตัวของท่านอย่างไร					
21	ท่านพอใจกับชีวิตทางเพศของท่านอย่างไร					
22	ท่านพอใจกับการช่วยเหลือที่เคยได้รับจากเพื่อน ๆ แค่ไหน					
23	ท่านพอใจเกี่ยวกับสภาพที่อยู่อาศัยของท่านมากน้อยเพียงใด					
24	ท่านพอใจเกี่ยวกับการที่ท่านสามารถเข้าถึงการบริการด้านสุขภาพอย่างไร					

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ข้อ	ในช่วง 2 สัปดาห์ที่ผ่านมา	ไม่เลย	เล็กน้อย	ปานกลาง	มาก	มากที่สุด
25	ท่านพอใจกับการเดินทางไปไหนมาไหนของท่าน (หมายถึงการคมนาคม) มากน้อยเพียงใด					
26	ท่านมีความรู้สึกในด้านลบ เช่นความรู้สึกเศร้า ผิดหวัง วิตกกังวล หดหู่ใจบ่อยครั้งแค่ไหน					

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APPENDIX D Questionnaire in English

Part 1 General information

1.Sex □Male □Female

2.Age …….

3.Education level
□Primary /elementary school
□Junior high school
□Senior high school
□Bachelor's degrees
□Higher degrees

4.Religion
□Buddhist
□Christian
□Islam
□Other

5.Marital status □Single □Married and living together
□Married and separated □ Widowed
□Divorced

6. Number of children (including children born by the respondents, stepchildren and adopted children)
□None □1
□2 □3
□more than 3

7. Number of household members..... people (persons who live with the respondents including yourself)

8. What type of family do you live in?
□living alone
□living with married partners and their offspring (participant, married partners, children)
□living with extended family including married partners, their offspring, grandparents, married offspring, and grandchildren)
□ living with someone other than family (live-in partners, and close friends).

9. Household status □a head of the family
□a family member
□a relative of the homeowner (non-family members)
□a resident (not a family member or relative)

10. Your current accommodation (only for accommodation does not include land that can have different owners)
□ owner
□ home of children/relatives
□ married couple's house
□ rental house

11. Your current monthly income (including all sources of income)

□Less than 10,000 baht/month

□10,001-15,000 baht/month

□15,001-25,000 baht/month

□25,001-35,000 baht/month

□Greater than 35,000 baht

12. Where do you get your income from? (more than 1 answer)

□Work (salary or wages received from the agency)

□son, grandson

□relatives

□Business/personal business

□rent

□Other (specify).....

13. What is your current economic situation?

□income more than expenses

□balanced expenses with income

□Expenses are more than income

14. Do you have insurance for retirement from the public sector where you work? (can answer more than 1 answer)

□None

□Pension

□Government Pension Fund (GPF)

□Permanent Employee Provident Fund

□Savings cooperative

□Other (specify)…….

15. Do you have insurance for retirement? (can answer more than 1 answer)

□None

□Accumulated life insurance

□Community Welfare Fund

□Savings with financial institutions (Only the part that you want to set aside for retirement savings)

□Savings in the form of other assets such as gold, land

□Other (specify)…….

16. What was your physical health history during the past 1 year?

□Good (without illness history)

□Fair (presence of short-term illness)

□Poor (presence of chronic diseases)

(Which any chronic diseases? - can answer more than 1)

a. Diabetes, b. hypertension, c. heart disease

d. Other (specify symptoms/disease name) .....

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17. Current history of substance abuse (Please specify quantity and frequency of use)

Alcohol (beer, wine, liquor, etc.)

- ☐do not drink alcohol
- ☐drink alcohol Specify.....day per week
- ☐amount of drinking..... standard glass per day

Standard glass per day (Shown in illustration) One standard glass is
- Generally, 1 glass (285 ml.) of beer
- Generally, 1 small glass (100 ml.) of wine
- Liquor such as Mekong, Sangsom, Hongthong, Regency, Seavas, Regal, Johnnie Walker 100, 1 glass of piper (30 ml.)

Cigarette

- ☐do not smoke
- ☐Smoking Specify .....day per week
- ☐Amount used ..... rolls per day

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Part 2 Work-related factors

Part 2-1 Retirement Information from the workplace

Please respond to the following questions by placing a check mark (√) in the answer box that corresponds to your response.

	Recognition of Retirement Information from the workplace	Opinion	
		Agree	**Not agree**
1	You receive information about the older people from the public sector, such as information about health care for the aging.		
2	Your public sector was providing support for information about retirement preparation through various media such as papers, pubs, etc.		
3	You have never received any training or seminar on seniors or retirement preparation.		
4	You are always encouraged to engage in recreational activities and socializing both within and outside the public sector.		
5	You have the opportunity to participate in various activities organized in the public sector such as exercise for health, etc.		
6	The public sector has given the opportunity for retirees to visit the same agency. as a consultant or lecturer		
7	You have never received information about retirement clubs or associations from your agency.		
8	Your public sector has never provided information on sources of employment after retirement.		
9	The public sector has facilitated and advised on various benefits for preparing for retirement, such as pensions.		

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Part 2-2 Perception of job satisfaction

Please respond to the following questions by placing a check mark (√) in the answer box that corresponds to your response.

5 points	Very Strongly satisfied
4 points	Strongly satisfied
3 points	Moderate Satisfied/ Neutral
2 points	Mild Satisfied
1 point	Not Satisfied

Perception of job satisfaction		**Opinion**				
		1	**2**	**3**	**4**	**5**
1	Your satisfaction with the work system in the public sector.					
2	Your satisfaction with future promotion opportunities.					
3	Your satisfaction with the internal communication process.					
4	Satisfaction with the work done successfully.					
5	To what degree are you satisfied with the work you do?					
6	The suitability of the resources and factors that the public sector allocates as tools for your performance.					
7	How satisfied is your public sector with your career progression?					
8	Satisfaction with the public sector 's various hiring procedures, such as recruitment as well as considering the salary.					
9	The overall fairness that public sector use to pay for their contributions.					
10	Satisfaction for your relationship with other colleagues.					

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Part 3 Retirement perceptions and preparation

Part 3-1 Retirement perceptions

Please respond to the following questions by placing a check mark (√) in the answer box that corresponds to your response.

5 points Very Strongly agree

4 points Strongly agree

3 points Moderate agree/Neutral

2 points Strongly disagree

1 point Very Strongly disagree

Retirement perceptions		**Opinion**				
		1	**2**	**3**	**4**	**5**
Psychological						
1	When you retire, you can accept retirement.					
2	Doing leisure activities will benefit you when you retire.					
3	When you retire, you can adjust to changing life conditions?					
4	Do you think letting go makes you happy in retirement?					
5	When you retire make you have time to relax and doing more activities					
6	Meditation is beneficial to your mind in retirement.					
7	You expect yourself to be able to control your emotions well. Even during retirement, there is no social life like when working.					
Physiological						
1	Physical deterioration is common with age.					
2	You are currently studying nutrition knowledge for good health after retirement.					
3	You exercise daily so that after retirement you will have a strong body.					
4	You studied the body of knowledge about diseases that often occur with the elderly					
5	You believed that maintaining good physical health before retirement was essential.					
6	You have studied the information about the physical health of people when they are old.					
Economic						
1	You studied how much income after retirement should be enough to sustain life after retirement.					
2	Savings are beneficial for retirement.					
3	Education about additional careers to increase income at suitable for the elderly, beneficial to life after retirement.					
4	You should have knowledge and guidelines on retirement spending					

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	planning.					
5	You should have knowledge and guidelines on retirement spending planning.					
6	You should have a reserve for housing repairs					
post-retirement adaptation						
1	Do you think you have the ability to adapt to life after retirement?					
2	You believe that you can accept the termination of any job duties when retired					
3	You are confident that you can learn and do different activities. good when retired, such as joining the elderly club, exercising, planting trees					
4	Once you retire, you can be successful in life as well.					
5	You believe that he can perform challenging tasks even when you retire.					
self-esteem						
1	When you retire, you can still make a contribution to society.					
2	When you retired, you remained a valuable person for your family					
3	After you retire you have social and activities with many people					
4	After you retire you can become a lecturer to transfer knowledge. experience to others.					
5	You have good human relations. easy to get along with other					
welfare knowledge						
1	You know about the welfare knowledge.					
2	You know the welfare of the public sector such as the pension fund, social security fund.					
3	You know the benefits in the Fund in case of retirement					
4	You follow the news about retirement benefits					

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Part 3-2 Retirement preparation

Please respond to the following questions by placing a check mark (√) in the answer box that corresponds to your response.

3 points Very strongly agree

2 points Moderate agree/neutral

1 point Very strongly disagree

No	Retirement preparation	3	2	1
1.	**1.Physiological and Psychological** **Physiological** You studied about health care and behavior when entering old age.			
2.	You studied for knowledge about eating suitable for the elderly and according to nutrition principles.			
3.	You have studied for knowledge about exercise for health.			
4.	You can rest your body according to your physical condition and old age			
5.	Before retirement, you have a physical examination at a clinic or hospital every year.			
1.	**Psychological** You studied to know about the mental and emotional changes in old age.			
2.	You have been prepared in advance about the things you will face after retirement, for example your respect for others will decrease after you retire.			
3.	You were mentally prepared to face changes after retirement, such as the loss of work authority.			
4.	You have prepared a plan to use your free time for recreation, such as visiting the park, sightseeing, etc.			
5.	You regularly goes to temples to practice meditation or meditation to keep his mind calm and anchored.			
1.	**2.Economic** You studied the benefits of receiving the pension as well as the pros and cons.			
2.	You are prepared to spend enough money on your income each month after retirement.			
3.	You have prepared enough money for retirement after retirement in advance.			
4.	You have prepared to accumulate some assets in the form of deposits, such as buying bonds. Making life			

	insurance, accident insurance, etc.			
5.	You are prepared to find work to earn after retirement, such as running a small business or working part-time according to your specialties and abilities.			
1.	**3. Hobby** You learned about activities and hobbies that matched your interests.			
2.	You studied for knowledge about collecting works such as collecting pictures, watches, books, antiques, etc.			
3.	You have studied and learned about crafts			
4.	You studied art such as painting, singing, writing essays, poetry, acting, etc.			
5.	You have learned about recreational sports games for recreation.			
1.	**4. Household** You have prepared in advance your retirement housing plans, whether alone or with children or relatives.			
2.	You have prepared in advance your retirement housing plans, such as whether to stay in your old home or move to a new home after retirement.			
3.	You have prepared a housing plan that allows you to travel to places such as hospitals or health care facilities.			
4.	You have provided housing suitable for the health of the elderly			
5.	You have prepared to arrange the conditions inside the house to be safe from accidents			
1.	**5.Social** You have learned about the social activities you are interested in participating in after retirement.			
2.	You have studied the rules and regulations of the various associations or clubs you will join after retirement.			
3.	You were prepared to participate in various activities such as social gatherings, volunteering events, public charity events, etc.			
4.	You make plans to apply for membership in associations or clubs in advance of retirement.			
5.	You have surveyed and prepared the costs of participating in social activities that interest you.			

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Part 4 Social support

Part 4-1 Family support

Please respond to the following questions by placing a check mark (√) in the answer box that corresponds to your response.

The scoring for part of all negative questions is as follows:

5 points Very Strongly disagree

4 points Strongly disagree

3 points Moderate agree/Neutral

2 points Strongly agree

1 point Very Strongly agree

The scoring for part of all positive questions is as follows:

5 points Very Strongly agree

4 points Strongly agree

3 points Moderate true

2 points Strongly disagree

1 point Very Strongly disagree

	Family support	**opinion**				
		1	**2**	**3**	**4**	**5**
1	Your family members love and bond well.					
2	You are always supported by family members when you have a problem or have illness.					
3	You have the opportunity to discuss and exchange experiences with family members regularly					
4	Family members have always respected him.					
5	You rarely talk to your family members.					
6	When family members have any problems, they often come to you for advice and help.					
7	Family members value you on important days such as Songkran Day or New Year's Day, etc.					
8	Family members always have conflicting opinions with you.					
9	You spend your free time doing family activities such as watching TV, planting trees, etc.					
10	You and your relatives are in harmony with each other.					
11	You and your family members and relatives always have activities together, such as traveling, relaxing, socializing, etc.					

Part 4-2 Friend support

Please respond to the following questions by placing a check mark (√) in the answer box that corresponds to your response.

The scoring for part of all negative questions is as follows:

5 points Very Strongly disagree

4 points Strongly disagree

3 points Moderate agree/Neutral

2 points Strongly agree

1 point Very Strongly agree

The scoring for part of all positive questions is as follows:

5 points Very Strongly agree

4 points Strongly agree

3 points Moderate true

2 points Strongly disagree

1 point Very Strongly disagree

Friend support		**opinion**				
		1	**2**	**3**	**4**	**5**
1	You have close friends who you can trust and who can reconcile.					
2	You have friends who keep in touch and come and see each other regularly.					
3	You don't feel lonely or lonely because you have friends.					
4	You have at least 1 close friend.					
5	You always have friends to do social activities.					
6	You had the opportunity to meet and exchange ideas and experiences with your friends while doing social activities.					
7	Friends can help you when you are in trouble.					
8	You feel abandoned by your coworkers.					
9	Your supervisor, colleague and subordinates still give attention to you					
10	You can ask your neighbors for help when needed.					
11	You don't know your neighbors at all.					
12	You regularly give generous assistance to your neighbors.					

Part 5 GHQ-28

Please respond to the following questions by placing a circle in the answer box that corresponds to your response.

No	in the last two weeks	A	B	C	D
1	Been feeling perfectly well and good health?	Better than usual	Same as usual	Worse than usual	Much worse than usual
2	Been feeling in need of a good tonic?	Not at all	No more than usual	Rather more than usual	Much more than usual
3	Been feeling run down and out of sorts?	Not at all	No more than usual	Rather more than usual	Much more than usual
4	Felt that you were ill?	Not at all	No more than usual	Rather more than usual	Much more than usual
5	Been getting any pains in your head?	Not at all	No more than usual	Rather more than usual	Much more than usual
6	Been getting a feeling of tightness or pressure in your head?	Not at all	No more than usual	Rather more than usual	Much more than usual
7	Been having hot or cold spells?	Not at all	No more than usual	Rather more than usual	Much more than usual
8	Lost much sleep over worry?	Not at all	No more than usual	Rather more than usual	Much more than usual
9	Had difficulty in staying asleep once you are off?	Not at all	No more than usual	Rather more than usual	Much more than usual

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No	in the last two weeks	A	B	C	D
10	Felt constantly under strain?	Not at all	No more than usual	Rather more than usual	Much more than usual
11	Been getting edgy and bad-tempered?	Not at all	No more than usual	Rather more than usual	Much more than usual
12	Been getting scared or panicky for no good reason?	Not at all	No more than usual	Rather more than usual	Much more than usual
13	Found everything getting on top of you?	Not at all	No more than usual	Rather more than usual	Much more than usual
14	Been feeling nervous and strung up all the time?	Not at all	No more than usual	Rather more than usual	Much more than usual
15	Been managing to keep yourself busy and occupied?	More so than usual	Same as usual	Longer than usual	Much longer than usual
16	Been taking longer over the things you do?	Quicker than usual	Same as usual	Longer than usual	Much longer than usual
17	Felt on the whole you are doing things well?	Better than usual	Same as usual	Less well than usual	Much less well
18	Been satisfied with the way you are carry out your tasks?	More satisfied	About same as usual	Less satisfied then usual	Much less satisfied
19	Felt that you are playing a useful part in things?	More so than usual	Same as usual	Less useful then usual	Much less useful

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No	in the last two weeks	A	B	C	D
20	Felt capable of making decisions about things?	More so than usual	Same as usual	Less so then usual	Much less capable
21	Been able to enjoy your normal day-to-day activities?	More so than usual	Same as usual	Less so then usual	Much less usual
22	Been thinking of yourself as a worthless person?	Not at all	No more than usual	Rather more than usual	Much more than usual
23	Felt that life is entirely hopeless?	Not at all	No more than usual	Rather more than usual	Much more than usual
24	Felt that life isn't worth living?	Not at all	No more than usual	Rather more than usual	Much more than usual
25	Thought of the possibility that you might makes away with yourself?	Definitely not	I don't think so	has crossed my mind	definitely have
26	Found at time you couldn't do anything because your nerves were too bad?	Not at all	No more than usual	Rather more than usual	Much more than usual
27	Found yourself wishing you were dead and away from it all?	Not at all	No more than usual	Rather more than usual	Much more than usual
28	Found that the idea of taking your life keep coming into your mind.	Definitely not	I don't think so	has crossed my mind	definitely have

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Part 6 Quality of Life

Please respond to the following questions by placing a check mark (√) in the answer box that corresponds to your response.

No	in the last two weeks	Not at all	Not much	Moderately	A great deal	Completely
1	How would you rate your quality of life?					
2	How satisfied are you with your health?					
3	To what extent do you feel that physical pain prevents you from doing what you need to do?					
4	How much do you need any medical treatment to function in your daily life?					
5	How much do you enjoy life?					
6	To what extent do you feel your life to be meaningful?					
7	How well are you able to concentrate?					
8	How safe do you feel in your daily life?					
9	How healthy is your physical environment?					
10	Do you have enough energy for everyday life?					
11	Are you able to accept your bodily appearance?					
12	Have you enough money to meet your needs?					
13	How available to you is the information that you need in your day-to-day life?					
14	To what extent do you have the opportunity for leisure activities?					
15	How well are you able to get around?					

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No	in the last two weeks	Not at all	Not much	Moderately	A great deal	Completely
16	How satisfied are you with your sleep?					
17	How satisfied are you with your ability to perform your daily living activities?					
18	How satisfied are you with your capacity for work?					
19	How satisfied are you with yourself?					
20	How satisfied are you with your personal relationships?					
21	How satisfied are you with your sex life?					
22	How satisfied are you with the support you get from your friends?					
23	How satisfied are you with the conditions of your living place?					
24	How satisfied are you with your access to health services?					
25	How satisfied are you with your transport?					
26	How often do you have negative feelings such as blue mood, despair, anxiety, depression?					

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APPENDIX E ETHICS

AF 02-12

คณะกรรมการพิจารณาจริยธรรมการวิจัยในคน กลุ่มสหสถาบัน ชุดที่ 1 จุฬาลงกรณ์มหาวิทยาลัย
254 อาคารจามจุรี 1 ชั้น 2 ถนนพญาไท เขตปทุมวัน กรุงเทพฯ 10330
โทรศัพท์: 0-2218-3202, 0-2218-3049 E-mail: eccu@chula.ac.th

COA No. 108/2564

ใบรับรองโครงการวิจัย

โครงการวิจัยที่ 062.1/64 : ปัจจัยที่ส่งผลต่อการเตรียมความพร้อมก่อนเกษียณอายุของคนงานในระบบช่วงวัยใกล้เกษียณ : การศึกษาภาคตัดขวาง

ผู้วิจัยหลัก : นางสาวณัฏฐพัชร กุลบุตร

หน่วยงาน : วิทยาลัยวิทยาศาสตร์สาธารณสุข จุฬาลงกรณ์มหาวิทยาลัย

คณะกรรมการพิจารณาจริยธรรมการวิจัยในคน กลุ่มสหสถาบัน ชุดที่ 1 จุฬาลงกรณ์มหาวิทยาลัย ได้พิจารณาโดยใช้หลักของ Belmont Report 1979, Declaration of Helsinki 2013, Council for International Organizations of Medical Sciences (CIOM) 2016, มาตรฐานคณะกรรมการจริยธรรมการวิจัยในคน (มคจค.) 2560, นโยบายแห่งชาติและแนวทางปฏิบัติการวิจัยในมนุษย์ 2558 อนุมัติให้ดำเนินการศึกษาวิจัยเรื่องดังกล่าวได้

ลงนาม ..... ลงนาม .....
(รองศาสตราจารย์ นายแพทย์ปรีตา ทัศนีประดิษฐ) (ผู้ช่วยศาสตราจารย์ ดร.ระวีนันท์ มิ่งภัคนีย์)
ประธาน กรรมการและเลขานุการ

วันที่รับรอง : 11 พฤษภาคม 2564 **วันหมดอายุ** : 10 พฤษภาคม 2565

เอกสารที่คณะกรรมการรับรอง

1) โครงการวิจัย
2) ผู้วิจัย
3) เอกสารข้อมูลสำหรับผู้เข้าร่วมโครงการวิจัยและหนังสือแสดงความยินยอมของผู้มีส่วนร่วมในการวิจัย
4) แบบสอบถาม

062.1/64
วันที่รับรอง 11 พ.ค. 2564
วันหมดอายุ 10 พ.ค. 2565

เงื่อนไข

1. ห้ามเจ้าหน้าที่ในการดำเนินการเกี่ยวกับการวิจัยก่อนได้รับการอนุมัติจากคณะกรรมการพิจารณาจริยธรรมการวิจัยฯ
2. หากใบรับรองโครงการวิจัยหมดอายุ การดำเนินการวิจัยต้องหยุดทันที เมื่อต้องการต่ออายุต้องขออนุมัติใหม่ล่วงหน้าไม่ต่ำกว่า 1 เดือน พร้อมส่งรายงานความก้าวหน้าการวิจัย
3. ต้องดำเนินการวิจัยตามที่ระบุไว้ในโครงการวิจัยอย่างเคร่งครัด
4. ใช้เอกสารข้อมูลสำหรับกลุ่มประชากรหรือผู้มีส่วนร่วมในการวิจัย ใบยินยอมของกลุ่มประชากรหรือผู้มีส่วนร่วมในการวิจัย และเอกสารชี้ชวนชี้ร่วมวิจัย (ถ้ามี) **เฉพาะที่ประทับตราคณะกรรมการเท่านั้น**
5. หากเกิดเหตุการณ์ไม่พึงประสงค์ร้ายแรงในสถานที่เก็บข้อมูลที่ขออนุมัติจากคณะกรรมการ ต้องรายงานคณะกรรมการภายใน 5 วันทำการ
6. หากมีการเปลี่ยนแปลงการดำเนินการวิจัย ให้ส่งคณะกรรมการพิจารณารับรองก่อนดำเนินการ
7. หากยุติโครงการวิจัยก่อนกำหนดต้องแจ้งคณะกรรมการฯ ภายใน 2 สัปดาห์พร้อมเหตุผล
8. โครงการวิจัยไม่เกิน 1 ปี ส่งแบบรายงานสิ้นสุดโครงการวิจัย (AF 01-15) และบทคัดย่อผลการวิจัยภายใน 30 วัน เมื่อโครงการวิจัยเสร็จสิ้น สำหรับโครงการวิจัยที่เป็นวิทยานิพนธ์ให้ส่งบทคัดย่อผลการวิจัย ภายใน 30 วัน เมื่อโครงการวิจัยเสร็จสิ้น
9. โครงการวิจัยที่มีหลายระยะ จะรับรองโครงการเป็นระยะ เมื่อดำเนินการวิจัยในระยะแรกเสร็จสิ้นแล้ว ให้ดำเนินการส่งรายงานความก้าวหน้า พร้อมโครงการวิจัยและเอกสารที่เกี่ยวข้องในระยะถัดไป
10. คณะกรรมการฯ สงวนสิทธิ์ในการตรวจเยี่ยมเพื่อติดตามการดำเนินการวิจัย
11. สำหรับโครงการวิจัยจากภายนอก ผู้บริหารส่วนงาน กำกับการดำเนินการวิจัย

VITA

NAME	Miss Nuttapat Kulabut
DATE OF BIRTH	16 April 1990
PLACE OF BIRTH	Bangkok
HOME ADDRESS	80 Moo 6, Srisuk Village, Tumbon Huai Pong, Amphoe Khok Samrong, Lopburi, 15120

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