THE FACTORS PREDICTING THE HOLISTIC HEALTH STATUS OF CAMBODIAN MIGRANT WORKERS IN THAILAND

BY

MANNDY NGET

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT

OF THE REQUIREMENT THE DEGREE OF

THE DOCTOR OF PHILOSOPHY (NURSING SCIENCE)

FACULTY OF NURSING

THAMMASAT UNIVERSITY

ACADEMIC YEAR 2022

THAMMASAT UNIVERSITY

FUCULTY OF NURSING

DOCTORAL DISSERTATION

BY

MANNDY NGET

THE FACTORS PREDICTING THE HOLISTIC HEALTH STATUS OF CAMBODIAN MIGRANT WORKERS IN THAILAND

Was approved as partial fulfillment of the requirements for
The degree of doctor of philosophy in nursing science
On January 8, 2022

Chainman _____
(Pitakpol Boonyamalik, M.D., Ph.D.)

Member and Advisor _____
(Professor Manyat Ruchiwit Ph.D.,RN)

Member and Co-Advisor _____
(Professor Eileen G. Collins Ph.D., RN, FAACVPR, FAAN)

Member _____
(Assistant Professor Pregamol Rutchanagul, Ph.D.,RN)

Member _____
(Associate Professor Rangsiman Soonthornchaiya, Ph.D., RN.)

Dean _____
(Assistant Professor Pregamol Rutchanagul, Ph.D.,RN)

Thesis Title	THE FACTORS PREDICTING THE HOLISTIC HEALTH STATUS OF CAMBODIAN MIGRANT WORKERS IN THAILAND
Author	Manndy Nget
Degree	Doctor of Philosophy (Nursing Science)
Faculty/University	Faculty of Nursing Thammasat University
Thesis advisor	Professor Manyat Ruchiwit, Ph.D., RN.
Thesis Co-Advisor	Professor Eileen G. Collins Ph.D., RN.
Academic Years	2022

ABSTRACT

The holistic health status of Cambodia migrant worker was suspected to be low and under pressure, therefore this study is illustrated the health and working condition of the migrant workers. There were 304 participant participated in the study. The model of multiple regression was used to illustrate the factor prediction equation of the holistic health status of the Cambodia migrant worker. The social value and adaptation is the only factor predicting the holistic health status of the Cambodian migrant workers. There were the relatively explained since there were some of the predictors are not statistical by significant caused by some the interaction between countries policy, in country policy and international organization actions. Since Cambodian government and Thai government are hardly working on the migrant worker policy under the supervision of International Labour Organization (ILO) and International Organization for Migration (IOM).

Keywords: Holistic Health status, Cambodian migrant worker, Thailand migration policy, Cambodian migration policy.

ACKNOLEGEMENTS

Great thanks to Thammasat University (TU) that given me a golden opportunity to be a Ph.D. holder with full scholarship granted, under the wisely and smart management and administration of Professor Dr. Somkit Lertpaithoon the rector of TU, and special thanks to Professor Dr. Manyat Ruchiwit former dean of Faculty of Nursing, TU for her love and guidance and support. Also I would loved to thanks to professors and staff in Faculty of Nursing, TU for their hard work to fulfilled student education and needs. They have done so many thing to make a student to became a doctorate scholar, especially Asst. Professor Dr. Kasorn Muijeen, and Dr. Kanjanee Phanphairoj, Thanks to Thammasat International Affair for being supportive and bring us to TU also.

With all respectful and gratitude to my beloved Father who a former teacher, teaching me how to live and started my Khmer alphabet, with his unconditional love, advices, times, effort putting me to a place called school, mean while they were strangling with financially difficulties. My poor father is the richest man in my world. Even he is not here joining and celebrate my special day, I do hope he is happy and satisfied with what I am having and doing. Thanks to a woman that always have been supported both psychological and physical with unconditional love called Mom, under her eyes, concentration, attention, love, share, spending time take care me from birth with a respectful advices to live in this world. She is more than a just a mother, she was my educator, sister, consultor, financial supervisor, doctor, cooker. She is a simple mother but she is a great educator.

With gratitude and respect to a couple from USA, Dr. Yang Kang Yong, and his wife Professor Yang Myung Sook, originated from South Korea who really worked hard to put me in a right tract in education field. They have been share all academic and social advices and guidance just want to see my day. I am appreciated for their scarified as a foreigner in a mission in Cambodia just to love and share.

Special thanks to my father-in-law H.E Meas Sina, secretary of state, ministry of defend and H.E Men Socheath, who always love education and given me a special opportunity to join in their family putting his begotten daughter Davy to my life. All yours supportive and love were the reason that I can make this special day happened.

In remembrance with love and thanks to professors, teachers, monks, villagers, relatives, and friends who have been given me a special seat in their heart and care, worry and always seeking me, join men both laugh and tear. They were a special part that push me to go up high with their pure heart.

Manndy NGET

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABRAVIATIONS

Symbols/Abbreviation	Terms
AHHA	American Holistic Health Association
ASEAN	Association of Southeast Asian Nations
FAWH	Factors Affecting Workers Health
HHS	Holistic Health Status
IRB	Institutional Review Board
GDP	Gross Domestic Product
GMS	Greater Mekong Subregion
ILO	International Labour Organization
MFWSI	Migrant Farmworker Stress Inventory
MOU	Memorandum of Understanding
MWSI	Migrant Worker Stress Inventory
WHO	World Health Organization
WHOQOL	WHO quality-of-life assessment
WHOQOL-BREF	World Health Organization Quality of Life -BREF

CHAPTER 1
INTRODUCTION

1.1 Background and Significance

ASEAN (Association of Southeast Asian Nations) integration is changing the economic and cultural environment in this region, particularly by developing the economy in each country. The ASEAN-Integration Agreement is focused on the free flow of products, services, capital investments and skilled workers through a single market. However, according to the Thailand Migration Report of 2014, there are about 4 million in 2014 and 4-to-5million migrants reported by IOM in 2021 (IOM, 2021) and about 2 million registered migrant workers in 2020 (International Labor Organization (ILO), 2021), indicating that there is a large flow of low-skilled workers entering Thailand as a result of international relations, government policies and a memoranda of understanding related to the free flow of workers among countries. The congestion of low-skilled workers, irregular and regular workers has increased in Thailand recently. The Thailand Migration Report of 2014 (Huguet et al., 2014) estimated that around 4 million foreign migrant workers have migrated into Thailand. The Report also stated that while these migrant workers are helping to improve the Thai economy, they have also brought many issues with them. The positive effects of having foreign migrant workers are: 1) increasing the Thai economy (Chalamwong, 2012), 2) increasing the worker's quality of life and 3) the gaining of more skills and experience of the workers for their lifelong careers (Chalamwong & Prugsamatz, 2009).

It has been found that there are two specific advantages of having foreign migrant workers in Thailand (Chalamwong, 2012), namely: 1) the migrant workers help to improve the Thai economy, and the contributions of the foreign workers play an important role in the Thai economy. This contribution can be understood by identifying those issues that lead to smooth growth and effective governance and management more easily and practically. 2) It is in Thailand's interest to improve the economic status of the workers' families by sharing their experiences and improving their skills, thus enabling them to be skilled workers when they return to their homes where they may then enjoy an improved quality of life (Chalamwong & Prugsamatz 2009).

The Thailand Migration Report 2014 (Huguet et al., 2014) indicated that there are 2.7 million legal foreign migrant workers in Thailand. Since there are increasing numbers of illegal or undocumented foreign workers in Thailand, the total number of foreign workers is estimated to be as many as 4 million (Chalamwong & Prugsamatz, 2009). The negative effects of having foreign migrant workers include: 1) worker-policy management problems, 2) an excessive social burden of managing the migrant workers (Bjork & Abid, 2010) and 3) the workers may be abused, violated or trafficked because of the persistent lack of human and worker-rights implementation (Bjork & Abid, 2010).

Another issue is that migrant workers and informal workers are not well protected under the law. Thailand's social protection is aimed mainly at reducing the poverty level of its people. It is mainly focused on promoting an efficient labor market, reducing risks and improving the Thai economy. It further seeks to reduce the level of unemployment and morbidity, along with the problems of aging, of its people (as cited by Chalamwong & Meepien 2012).

Chalamwong and Meepien (2012) stated in their article "Poverty and Just Social Protection in Thailand" that the government is unable to improve and lift the people from poverty, because the poverty line is still too high and the average expenditure per person as subsidized by the government is inadequate. The poverty line is defined by an income level below which it is not possible to obtain basic needs in daily life, such as clothing, food and housing, and to enjoy a sense of satisfaction with society (World Bank, 2012). The Cambodian gross domestic product (GDP) is the lowest of any country in the Greater Mekong Subregion (GMS), as well as in the ASEAN. The huge flow of people seeking a new life and better income from this poor country may affect health issues and problems related to human rights, violations of human safety and human trafficking (Bjork & Abid, 2010).

The Thai economy has been improved by allowing foreign migrant workers to generate further economic growth in the Country (Chalamwong, 2012). In addition to the foreign workers, there has been a demand in the Thai labor market for its own domestic workers, as well. The majority of Thai workers have included low-skilled workers who usually migrate from the rural to urban areas. Such workers have included women and young people ranging in age from their teens to their 20s (Mills 2008).

According to Mills (2008), these Thai low-skilled workers face sizable difficulties, such as long working hours, the obligation to support their families and limited time and resources, all of which have become an excessive burden on the lives of these employees. Rakprasit et al. (2017) stated that many Thai low-skilled workers are confronting communicable diseases as a result of their working conditions. It has been argued that foreign migrant workers receive lower wages as compared to Thai workers, but this disparity has not reduced the employment rates among the Thais. However, published evidence is still not available regarding wages and employment of the migrant workers.

According to the Thailand Labor Profile of 2015, there were approximately 38.7 million workers in Thailand in 2010; among these, 24 million workers were informal, with 15.7 million in agriculture and the fishing industry, 5.2 million in manufacturing and 17.7 million in service areas (ILO, 2015). These low-skilled workers also have reported many problems, such as living beneath power lines (Mills, 2008), high unemployment, migrating from rural to urban areas, adopting a new lifestyle and adaptation and risks associated with their jobs (ILO, 2015). There is a strong relationship between low-skilled work and low education. It may be concluded, therefore, that education has an effect on the jobs that people are able to get. According to the ILO of 2015 on the overall education of the Thai population in 2010, 76% of the employed workers had completed their lower-secondary level of school, 9-14% had completed upper secondary school and 11-16% had completed a tertiary education level. Meanwhile, the presence of the vocational graduate, upper-secondary graduate and upper-education graduate significantly decreased from 32% in 2001 to 28% in 2010 in areas that demanded skilled workers (ILO, 2015).

According to the Thailand Migrant Report of 2014 (Huguet et al., 2014), countries whose people are currently migrating into Thailand include Myanmar, the Lao PDR and Cambodia. There are several reasons that this study focuses on the holistic health of Cambodian migrant workers in Thailand. First, there is a large number of Cambodians migrating into Thailand, well above the number agreed upon in the Thailand and Cambodian Memorandum of Understanding (MOU) (Huguet et al., 2014). Second, the overabundance of unskilled workers is forcing these workers to face many problems. Chantavanich et al. (2016) in their study, Under the Shadow, reported

that the workers are being personally violated in many ways, leading to physical and psychological illness. For example, they are required to work long hours, have inadequate food, drink and rest, are injured at work and do not receive proper care and treatment. In addition, they are often intimidated by their employers.

Low-skilled workers, or "vulnerable-employment" workers, refer to low-skilled people or uneducated people, and typically the nature of their work does not demand education or training. The ILO defined it as insufficient for earning a living wage, with low outcome or productivity. The ILO further describes the nature of the jobs they do as difficult, while usually referring to workers who were covered under the worker's fundamental rights (ILO, 2015). Cambodian migrant workers being considered for this study have shared similar situations in terms of the nature of their work, location and types of jobs. The Cambodian migrant workers are subject to hazardous conditions and are forced to face many problems that affect their daily lives and health conditions. In this study, Cambodian migrant workers were selected in regard to the movement of foreign migrant workers.

Previous studies (Ruchiwit, 2016) found that the holistic-health status (HHS) of the people depended on socioeconomic status, advanced information and technology and their attitudes toward their social and cultural values. Examples include attitudes toward the differences in healthcare in each family or each community, folk pharmacists and traditional medicines. All of these activities have been carried out by the local people for centuries and constitute what is today's culture. As described in some of the literature, there are certain key factors that affect the health care or health status of the workers, such as healthcare services and accessibility, financial status, the living and working environment, and social value and adaptation (Walsh & Ty, M, 2011; Kusakabe & Pearson, 2010; Guinto et al., 2015; Isarabhakdi, 2004; Sword, Watt & Krueger, 2006; Holumyong et al., 2018).

There is limited healthcare services and accessibility for the migrant workers, who often face barriers to health care in the country to which they migrate, including limited or no access to health insurance and restrictions on their entitlement to statutory health care. Undocumented migrants in Thailand cannot access social protection and basic rights (Kusakabe & Pearson, 2010). Consequently, their illegal status in the Country becomes a source of stress and anxiety for these migrants and a

burden for Thai Government services. The healthcare system for migrants is a contentious public service issue. There is also a concern that services being provided to the migrants could increase expenses at the attending hospitals since many migrants do not have health insurance. In fact, documented migrants are eligible for Thai health insurance, but must purchase it annually (Guinto et al., 2015). Also, it is generally assumed that undocumented migrants are not covered by any public health insurance scheme. In practice, they are responsible for paying their own medical expenses in cases of illness. Thus, financial status affects the HHS, because self-medication and out-of-pocket payments for private care are common practices for many migrants (Isarabhakdi, 2004). Financial costs have often been noted as an important barrier to accessing health care. For example, in Canada, immigrant women were more likely to be in the lower socioeconomic group and were more at risk of postpartum depression, but they were less likely to receive financial aid (Sword, Watt & Krueger, 2006). As users of the services, the migrants are at a disadvantage, as they are driven by their own health beliefs, social value and adaptive behaviors to substandard care providers. Dietary and hygiene practices, drugs, alcohol consumption, tobacco use and stress management are all rooted in cultural norms (Holumyong et al., 2018). Moreover, migrant policy or the legal labor law is an influence factor of the holistic health of the Cambodian migrant workers, because it is related to working conditions, healthcare needs and human-rights abuses (Chantavanich et al., 2016). While studying the factors affecting the health of foreign migrant workers is crucial, there have still only been a few articles that have focused on the HHS of foreign migrant workers, especially in term of factors predicting the HHS. The focus of this study, therefore, has been on examining the factors that predict the HHS of this vulnerable group. Migrant workers are studied where they are living in order to gain valuable information for possible future interventions and policy recommendations.

1.2 Research Objectives

1.2.1 General Purpose

The purpose of this research was twofold: 1) to examine the HHS of the Cambodian migrant in Thailand, and 2) to explore key factors affecting the HHS of Cambodian migrant workers in Thailand.

1.2.2 Specific Purposes

1.2.1.1 To identify the HHS of Cambodia migrant workers who work in Thailand

1.2.1.2 To identify the key factors predicting the HHS of Cambodian migrant workers in Thailand: Those factors include financial status, living and working environment, Social value and adaptation, health care services and accessibility, and migrant policy.

1.3 Research Questions

1.3.1 What is the HHS of Cambodia migrant workers who work in Thailand?

1.3.2 Which factors are able to predict the HHS of Cambodian migrant workers in Thailand?

1.4 Study Variables

1.4.1 Independent Variables

The independent variables were identified through a literature review and included five major variables: financial status, living and working environment, Social value and adaptation, healthcare service and accessibility, and migrant policy.

1.4.2 Dependent Variables

HHS is the dependent variable in this study. HHS consists of four majors Components: physical and environmental health, psychological and emotional health, spiritual health and social health.

The Scope of the Study

The number of foreign migrant workers in Thailand was estimated to be around 4 million by the Thailand Migration Report of 2014 (Huguet et al., 2014). This

number includes legal and illegal foreign migrant workers. The scope of this study is limited to legal migrant workers with worker status. This study will not involve undocumented or illegal Cambodian migrant workers whose status makes them difficult to reach. Also, the nature of the work and hiring system are not applicable to them. They usually hide to escape being noticed by the police and are rarely exposed to the public. This group usually works secretly and is kept hidden by their employers or work managers. The time of data collection was June to September of 2021.

1.5 Definitions of Terms

1.5.1 HHS refers to the whole of an individual and includes a person's physical health, psychological-emotional health, social-spiritual health and environmental health. The HHS was assessed by WHOQOL-BREF, which has the four main domains, of physical health, psychological health, social relationships and environment of health. Accordingly, this study was conducted to explore the HHS as a self report measure, in a manner similar to the study on the health-related quality of life (HRQOL) of legal Cambodian migrant workers who work in Thailand. The HHS consists of 34 items and is divided into four main domains.

1.5.2 The Migrant Worker Stress Inventory (MWSI) was used to exam the predictor affecting the HHS of Cambodian migrant workers. The MWSI consists of 28 items self-report instrument that access the following factors:

1.5.2.1 Financial status refers to the perception of the income for Cambodian migrant workers for their daily living.

1.5.2.2 The living and working environment refers to the places where people live and work, and which play an importance role in their lives. The living and working environment of the Cambodian migrant is another essential factor in promoting a healthy life.

1.5.2.3 Social value and adaptation refer to an aspect of human well-being and the action or process of adapting or being adapted to a living environment. The Social value of a place is a measure of how well the people are able to interact with their surrounding environment

1.5.2.4 Healthcare services and accessibility refer to the ability of Cambodian migrants to receive the health care and comfort they need for their physical

and psychological well-being. There are legal mandates for healthcare services and accessibility for international migrant workers.

1.5.2.5 Migrant policy is covered under the Legal Labor Law, which specifies the way in which people are expected to go through the process or complete their paperwork in accordance with the Country's law on migration.

1.6 Research Framework

The conceptual framework of this study was derived from the definition of holistic health as provided by the WHO. On the basis of this definition, health is "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1946). This concept of health was at the basis of the creation of the WHOQOL, which is the most frequently used instrument to assess the HRQOL of refugees as. Because of its multiple adaptations to different languages and cultural backgrounds, it allows direct comparisons between studies and covers multiple dimensions in a culturally adapted way (De Vries & Van Heck, 1994; Skevington & Epton, 2018). This inclusive approach was meant to ensure that this study could truly capture all of the factors that affect holistic health from every point of view of the Cambodian migrant workers in Thailand.

The conceptual framework was based on the bio-psychosocial-spiritual model with the purpose of mapping the Cambodian migrant workers and predicting the HHS of this vulnerable group. The bio-psychosocial-spiritual model was based on concepts of both body and mind, and social and spiritual status (Kimberley et al., 2002; Suls & Rothman 2004; Hatala, 2013), as well as life experiences. These concepts can be regarded as the external components of the biopsychosocial model of stress and involve the collusion of yet another component; the internal human physiological and biochemical factor (Bernard & Krupat, 1994). Furthermore, the internal component consists of major key variables as socio-demographic factors, such as age, sex, type of work, education and income. Meanwhile, other external components were key factors affecting health status, such as healthcare services and accessibility, financial status, the living and working environment, Social value and adaptation, and migrant policy. Holistic health is composed of many factors and embraces the individual as a whole, rather than just a part of an individual. Relevant factors are the body, mind, spirit and emotions (Freeman, 2005; Suzan, 2016; Jenna, 2016; Perkins, 2016).

In relation to health, quality of life is defined in terms of the difference between reality, or perception of reality, and expectations. Quality of life has also been referred to as an effective response to one's role situation and values (Andrews & Withey, 2012). The WHO states that quality of life is affected by an interaction of the health, mental state, spirituality, relationships and environmental elements of an individual (WHO, 1996). The WHOQOL-BREF was used to assess a satisfaction rating and the negative emotions of depression, anxiety and stress. The WHO's QOL scale (WHOQOL-BREF) was used to assess satisfaction on the four domains of life: physical health, psychological and emotional health, social and spiritual health and environmental health. Some studies have suggested that stress, anxiety and depression are also related to poor QOL (Zatzick et al., 1997). Quality of life, or holistic-health status, was relatively associated with the leveling of stress, since there were a bound among the body, mind, spirit or emotions (Freeman, 2005; Suzan 2016; Jenna, 2016; Perkins, 2016). These human elements function together and are affected and interrupted by unpleasant feelings of discomfort from stress, which causes changes in the body, mind, spirit and/or emotions. The conceptual framework of this study was thus adapted from the bio-psychosocial-spiritual model and HRQOL in terms of stressful experience, as shown in Figure 1.1.

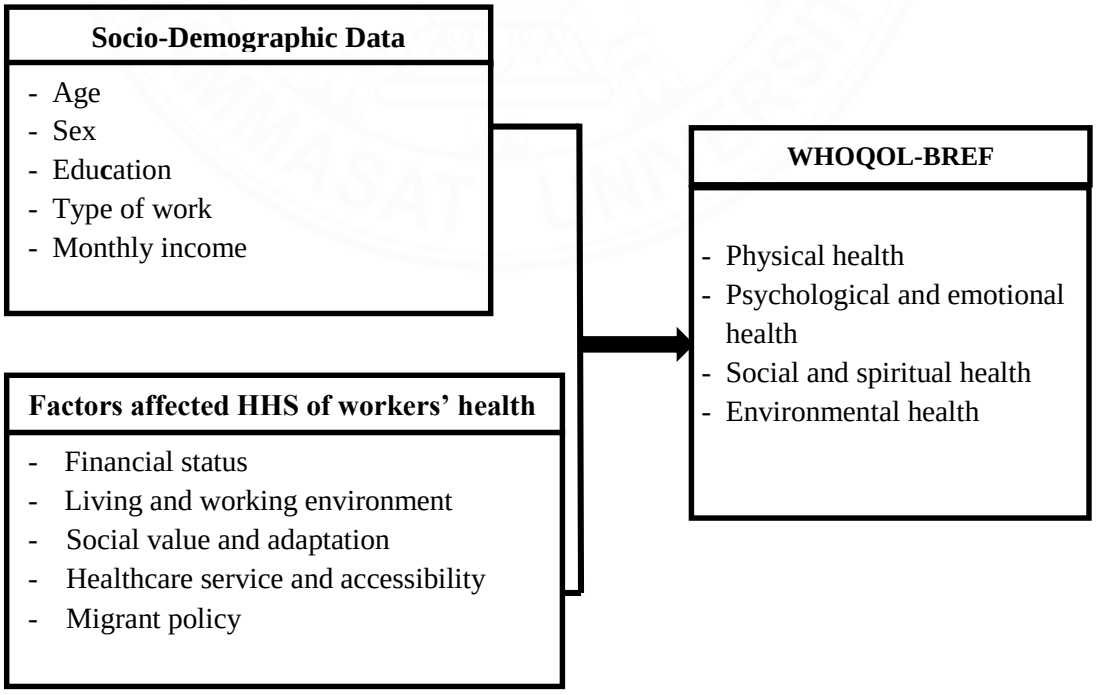

Figure 1.1: The conceptual framework of factors predicting the HHS of Cambodian migrant workers

1.7 Research Hypothesis

1.7.1 The HHS of Cambodian migrant workers will indicate stressful experiences.

1.7.2 Socio-demographic data, financial status, living and working environment, Social value and adaptation, healthcare services and accessibility, and migrant policy, as classified by sex-based education and type of work, were not different.

1.7.3 Socio-demographic data, financial status, living and working environment, social value and adaptation, healthcare services and accessibility, migrant policy, sex-based education, types of work and monthly income are sufficient to predict the HHS of Cambodian migrant workers in Thailand.

1.8 Expected Benefits

1.8.1 Validity and Reliability of the Instrument for Developing Countries

Many instruments have been developed and are used widely, even though they were developed in different environments and cultures. This instrument is well organized and structured through the conceptual framework, theoretical model, literature reviews and modifications and is perfectly applicable to Asian countries. The study will be a contribution to the Asian countries through use of a valid and reliable questionnaire that will be useful in terms of HHS and will be health-related specifically to the quality of life of Asians.

1.8.2 Policy Recommendation for Policy Development

This study will provide a concise and detailed report on the health status of Cambodian migrant workers and the affecting factors, which may be useful in developing interventions and problem-solving strategies at the national level. The predictive factors that may affect Cambodian migrant workers will be used to prepare a guide for the development of new policies and recommendations, as well as interventions regarding labor laws and international relations. The useful and rich information obtained from this study will be crucial for policymakers in both Cambodia and Thailand, enabling them to pursue better relationships, problem-solving approaches and further cooperation.

1.8.3 Nursing Society and Development

In addition, this study will broaden the scope of nursing research to encompass entire communities and to understand the health status of workers in order to engage them into the social networks or information systems as needed. The ASEAN integration objective of the free flow of skilled workers in this area and the new labor laws will open the door for nurses to work in this country. It will also provide an opportunity for them to work closely with the Thai people. A comparison of the HHS of Cambodian migrant workers will form a basis for policymakers as regards international labor laws that are aimed at protecting and providing equality and fringe benefits.

CHAPTER 2
LITERATURE REVIEW

The articles and the information for this literature review were published during the period from 2010 to 2021, or during any essential period of time when the needed information would be available to ascertain the quality of the data obtained and to validate the current understanding of both the holistic health and work environment of foreign migrant workers.

2.1. Theoretical Model of Holistic Health

2.1.1. Holistic Health

The term holistic or holism refers to everything as a whole; it is more than just a single part. The Oxford Dictionary (1989) defines the general meaning of holistic as an interconnection of the body as a whole, consisting of more than just a single part. Holism in medicine in the past focused on treatment and considered a person as a whole and put comparatively more emphasis on the person's mental and social states than on the actual disease. In the theories, the terms holism and holistic consider that something consists of or is composed of many factors, and it sees those things as a whole rather than just a part. "Holism" and "holistic" define health in different ways; however, they all view health as a whole, which refers to the accumulation of many parts (Freeman, 2005).

Health is defined by the WHO as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1946). However, the modern definition of health has been expanded accordingly in terms of socialization and modernization. Health can be viewed according to many dimensions, such as the balance of the body, harmonizing and a system of the integration of body and mind, which has been extended as holistic health (Saylor, 2004). The definition of health has changed over time. Bircher (2005) defined health as a connection of well-being that was identified by body, mind and individual health satisfaction. Health, using a holistic approach, is more concentrated on multiple combinations that seek to

understand human biology and the environment in which humans live, including their society, culture, spirit, ethnicity and sexual identity (Engebretson, 2003).

The term holistic health is identified differently according to the differing theoretical and practical perspectives, but those perspectives all share the same notion, where health is defined as a positive state of bodily function and not merely the absence of disease or symptoms (Guttmacher, 1979). The concept of holistic care of Jasemi et al. (2017) addressed the related term holistic care, indicating that it interacts with medicine and nursing purposefully in patient-centered care; it is simply stated as holistic care.

In other words, holistic health is an approach to life that focuses on a person as a whole and understanding how he or she interacts with the surrounding environment, as indicated by physical, psychological and spiritual factors that must be taken into account in order to achieve his or her optimal health goals. Ultimately, the individual must assume responsibility for his or her own health (Suzan, 2016). In addition, HHS is usually characterized by many factors, such as socioeconomic status, different cultures, people's perceptions, attitudes and beliefs and their living and working environments (Ruchiwit, 2016). These factors may affect the population over time and the actual environment that people are exposed to.

2.1.2. Holistic-Health Definition and Models

2.1.2.1 Holistic Model

Jenna (2016) stated that the holistic model is a useful model used in healthcare services and serves to understand and guide practice. This model consists of several dimensions, such as the body, mind, spirit, emotions and society. Individuals are at the center of this model, including the people that are using healthcare services. When we look at the health issues of an individual, such as stress, this symptom is actually an effect that may affect the whole individual. Likewise, physical problems may lead to emotional issues expressed by passive participation in society or other related issues. A holistic model considers health as a whole, rather than as just one part.

1) Theories of the Holistic Health

Holistic health is a theoretical model developed by Proeschold-Bell et al. (2011), aimed at capturing the factors affecting health for a specific group of

people. The concept of this model is composed of three main aspects: 1) condition, which refers to the integration of the individual within his or her environment; 2) mediator, which relates self-care and coping responses to one's stress, and physical, mental and spiritual elements; and 3) outcomes, which are related to quality of life, physical condition, spiritual well-being and mental health status (Proeschold-Bell et al., 2011). The theory expresses the relationship of the variables to each other.

2) Biopsychosocial Model

The bio-psychosocial model of George Engle (1977) aimed to show the relationship between one's body and a person's sense of well-being, which is that there is a shared and strong relationship between biological and psychosocial factors (Friedman & Downey, 2012). The model plays an important role psychologically and provides a wide range of understanding of people's interactions, especially regarding health-related issues or health-policy development. Kimberley et al. (2002) illustrated a new paradigm of the bio-psychosocial model in its application to health and the healing process. This theory consists of multi-dimensional factors that influence health, including biological, psychological and social factors that are usually known to contribute to a body-mind-social relationship that affects health. The bio-psychosocial view is represented as a theory of holistic practice regarding health, which considers that health can be affected by many different factors.

3) Biopsychological-Spiritual Model

The bio-psychosocial-spiritual model is derived from the bio-psychosocial model of Hatala (2013). This model added the spiritual element from older models, which stated that spirituality was another important factor in terms of health. The author explained that the spiritual is a component that differs from the sociological, and involves practices such as prayer or meditation to achieve health and health-related effects from the body-mind/mental, social and spiritual aspects of one's existence (Hatala, 2013).

2.1.2.2 Health in its Relationship to the Quality-of-Life Model

Sirgy and Lee (2016) identified the quality-of-life model in a study examining work-life balance, which is considered to be a main part of the quality of life. Work-life balance was explained by Greenhaus et al. (2003) and is cited in Sirgy and Lee (2016) as satisfaction with the nature of one's work, engagement and non-work

roles, or personal effectiveness regarding work independence or dependence. This model explains how the nature of one's work life affects life satisfaction or quality of life (Sirgy & Lee, 2016).

Accordingly, this study contains content very similar to that of the WHOQOL-BREF domains, and the definitions that are used in this study share a very strong connection and similarities that are mainly focused on the physical, psychological, social and environmental aspects (WHO, 1996). This instrument is widely used and has been translated into 19 different languages and, with the appropriate translated text, has been aimed at assessing quality of life.

In this study, the model of the HHS of Cambodian migrant workers is composed of physical health, environmental health, psychological health, spiritual health and social health. This model was conceptualized through concept analysis, theoretical frameworks (Proeschold-Bell et al., 2011), literatures (Sirgy & Lee, 2016), definitions and previous publications (Hatala, 2013), which were aimed at examining the HHS of Cambodian migrant workers in Thailand.

2.2 Background of Foreign Migrant Workers

2.2.1 ASEAN Integration and Economic Status

Chalamwong (2012) stated that there is a benefit to the development of the Thai economy, both privately and publicly, from the low labor costs; however, the presence of foreign workers also has an adverse effect on the country and the employer as well. According to Chalamwong and Prugsamatz (2009), the migrant worker is important for improving the Thai economy as well as for meeting the need for low-skilled workers in Thailand. Thailand has become a middle-income country, so it needs low-skilled workers. There are several factors that incentivize these refugees to move to Thailand, including such factors such as seeking new and better jobs with good pay, economic problems, political issues and government policy (as in the Burmese case). These are also called "push and pull factors" (Mon, 2010).

2.2.2 Migrant Workers' Profiles and Statistics

The majority of migrants moving into Thailand come from neighboring countries with a work permit; some, however, are undocumented. The number of

migrants holding work permits in 2013 was as follows: Myanmar (778,258), Cambodia (89,618) and Laos (31,782), and these totals do not include irregular or undocumented workers numbering 1.5 million, according to the Thailand Migration Report 2014 (Huguet et al., 2014). The statistics from the Thailand Migration Report (2014) indicated that there were 1,082,892 migrant workers with work permits and 1,592,870 irregular or undocumented foreign workers working in Thailand in 2014. The Thailand Migration Report (2014) showed that the foreign workers who are holding work permits are located in Bangkok (149,209), the Bangkok vicinity (233,362), the Central Region (298,628), the Northern Region (114,264), the Northeastern Region (22,520) and the Southern Region (356,917) of Thailand (Huguet et al., 2014). In addition, Chalamwong and Prugsamatz (2009) stated that there are many workers in neighboring countries who have been recently working in Thailand, mainly from Myanmar, followed by Laos and Cambodia, with both legal and illegal status.

Tables 2.1: Foreign migrants holding work permits, showing sex and region of residents in July 2013

Region	Both sexes	Males	Females
Thailand	**1,174,900**	**705,495**	**469,405**
Bangkok Metropolis	681,199	419,940	261,259
Northern Region	114,264	61,231	53,033
Northeastern Region	22,520	12,508	10,012
Southern Region	356,917	211,816	145,101

Source: Ministry of Labor, Department of Employment, as cited in the Thailand Migration Report 2014
Available from http://th.iom.int/images/report/TMR_2014.pdf

Tables 2.2: Cambodian migrants holding work permits with nationality verification in 2013

Country	Both sexes	Males	Females
Cambodia	89,618	53,223	36,395

Source: Ministry of Labor, Department of Employment, as cited in the Thailand Migration Report 2014
Available from http://th.iom.int/images/report/TMR_2014.pdf

Recent paper published on September 2021 stated the increasingly the number of Cambodian migrant workers is up to 1.100.000 (ILO, September 2021).

Table 2.3: ILO, September 2021 (UNDESA)

Country	Total Migrant workers
Cambodia 2020	**1.100.000**

Source: ILO (2021), TRIANGLE in ASEAN Program Quarterly Briefing Note
Available from https://www.ilo.org/wcmsp5/groups/public/---asia/---ro bangkok/documents/genericdocument/ wcms_735105.pdf

2.3 Factor Affecting HHS of Workers' Health

2.3.1 Migrant-Worker Financial Status

The low-skilled worker is well known as a source of labor paid for with a low-paying wage, as compared to the cost of local labor that is used to improve the Thai economy (Pholphirul, 2012). Also, the nature of the working conditions is not good (Chalamwong & Prugsamatz, 2009). The financial status of the Cambodian migrant workers is at a critical stage that requires them to leave their home country seeking a better life with better pay, which they hope to find in Thailand (Bjork & Abid, 2010). In some jobs, like those stated by Chantavanich et al. (2016), some fishermen are trafficked up to months and years without pay or at markedly less pay, and they are usually abused and violated. Even children have been reported to be working in this

low-paying job. Most workers are in financially critical condition. A significant number of people are nonetheless waiting to receive the low wages that will be offered them.

Living and Working Environment

The work conditions of low-skilled workers are most likely difficult, more dangerous, less sanitary and lower-paying when compared to Thai workers (Chalamwong & Prugsamatz, 2009). A study by Chantavanich et al. (2016) reported that workers are forced to work in the fishing sector with low pay, particularly those that are undocumented or illegal, and some of them are not supported or allowed by the employer to process legal documents. A study by Molland (2010) indicated that trafficking exists among migrant workers in Thailand in different ways. Low-skilled workers refer to unskilled people without a formal education or training (Cambridge Dictionary, 2017). In this study, low-skilled workers refer to Cambodian migrant workers. A study by Maxwell (2006) defined a low-skilled job as a job requiring an educational level of high school or less, little job experience and limited ability on the part of the worker to perform his or her job. In other words, low-skilled workers or "vulnerable employment" people are referred to as low-skilled people or uneducated people where the nature of work does not demand formal education or training. The ILO has defined low-skilled workers as workers who have insufficient earnings and low outcomes or productivity, where the workers are forced to work without exercising their fundamental rights (ILO, 2015).

2.3.2 Living and Working Environment

Migrant workers can be at high risk of exposure to workplace hazardsand face additional work-related risk factors and unfavorable social determinants of health including employment and wage discrimination, poor working and living conditions, lack of access to social protection and language and culture barriers. These work-related risks can result in a higher incidence of occupational injuries and work-related diseases among migrant workers, as compared to non-migrant workers (Warakiti & Chaiwong, 2021). Nevertheless, working conditions can have both positive and negative impacts on the people's physical, mental and social health. The negative effect of an inadequate working environment on employees' health and well-being has been extensively highlighted in research conducted on the working environment and health of workers (Vos & Kirsten, 2015; Karasek, 2008; Pien et al., 2019; Rasmussen et al., 2011;

Stansfeld & Candy, 2006; Shen & Slater, 2021). Workplace health risks and poor working conditions often breed mental and physical health problems, leading to such problems as sickness absence or even occupational fatalities (Takala et al., 2009).

2.3.3 Social value and Adaptation

Terziev (2017) stated that social adaptation is a component of their surroundings in which people interact with others in their community. Leaving their home country or migrating from their own home in their local rural areas and moving to a city like Bangkok or to an entirely new workplace is not easy for the workers. Mills (2008) stated that workers from rural areas have to face and learn new patterns of living and adapt to life in the city, as well as learn the nature of their difficult work. Loss of Social value may threaten and cause psychological distress to the workers.

2.3.4 Healthcare Service and Accessibility

Recent research has indicated that the health of migrant workers is affected by social integration and that this integration influences their health behaviors (Ford et al., 2014). Foreign migrant workers after having migrated to Thailand may face many problems regarding their health condition and in seeking health services. Usually, this group reports abuse and violations. The victims are often physically and psychologically abused. Also, a study found that they lack access to medical treatment, seek healthcare services only with difficulty and experience social-service inequality. Informal employment typically means low-skilled workers or small businesses that are not included in Thailand's social-security system (ILO, 2015). Therefore, the definition of health care for the workers consists in the prevention of disease, cure and management of illness and maintaining bio-psychological well-being through supportive healthcare services by healthcare personnel and other supportive team members, especially by those in the health-insurance industry (ILO, 2015). The large inflow of low-skilled workers both documented and undocumented has notably increased (Chalamwong & Prugsamatz, 2009). The continuously increasing number of foreign migrants also increases problems, particularly regarding their health as well as incidences of abuse, violence and trafficking. According to Mon (2010), the Thai government has failed to protect the workers and their rights. Such failure leads to violation and sometimes exploitation and trafficking. Nilvarangkul et al. (2008) stated that the factors that affect HRQOL are strongly related to the prevailing social, living

and working conditions. In addition, Islam et al. (2011) showed that living and working conditions are significantly associated with HRQOL.

Healthcare service accessibility became an issue in an effort to protect international migrant workers. Thus, there have been reports related to the inequality of care and treatment of the local Thai people and migrant workers. Regarding this matter, the Thai government and private agencies/organizations have been working to improve the health of migrant workers, but they have also reported inequality of treatment between Thai people and migrant workers in the community (Ford et al., 2014). Healthcare services and accessibility for the workers are other crucial factors in predicting the HHS of Cambodian migrant workers. Chalamwong and Prugsamatz (2009) stated that the overflow of undocumented foreign workers or informal workers in Thailand is a result of the failure of the government and migrant policy, as well as a deficiency in the labor laws. Those undocumented workers are at high risk and may be abandoned by the employer. Furthermore, they may have no access to health care as protected by national law.

2.3.5 Legal Policy and Migrant Policy

The new law of the Kingdom of Thailand was revised and issued on June 23, 2017 by the Royal Decree for migrant workers of B.E. 2560 (2017) by canceling the previous law, namely the Royal-Decree Statement on the Bringing of Aliens to Work in the Kingdom of B.E. 2559 (2016) and the Alien's Work Act of B.E. 2551 (2008), because of the increase in problems related to migrant workers. The Royal Decree addressed two main issues: 1) problems related to foreign workers in Thailand and 2) the hiring of workers (Tungsuwan, 2017). The significant changes between the Aliens Work Act of B.E. 2552 (2008) and the New Royal Degree on Managing the Work of Aliens of B.E. 2560 (2017) were concerned with increasing the penalties and imposing new penalties for various offenses. The definition of work in this new Royal Decree is "Exporting one's energy or employing one's knowledge to perform a profession or perform work, whether for wages or for other benefits" (Tungsuwan, 2017). The new fine for employing foreign workers without a work permit ranges from 400,000 Baht to 800,000 Baht per foreign worker. This fine will increase the employer's responsiveness to the significance of hiring legal workers and is a contribution to the labor economy and social security of the Country (Charoensuthipan,

2017). However, in this sense, many questions have been asked regarding the current situation in terms of the health, living and working conditions of these migrant workers in Thailand. The Thai government has a management policy for these workers, but the implementation of the policy is weak. Several papers have highlighted the poor working conditions of the workers, their healthcare needs and the human-rights abuses they suffer (Chantavanich et al., 2016; Bjork & Abid, 2010; Walsh & Ty, 2011; Molland, 2010; Mon, 2010). Additionally, Thailand has enacted laws protecting workers' rights, and these laws allow this vulnerable group to perform their tasks legally. By protecting their human rights as guaranteed under the law, the extent of the physical and psychological abuse of these people could be reduced.

2.3.6 COVID-19 Crisis and Social Security Scheme for Migrant Workers

The coronavirus disease 2019 (COVID-19) pandemic has been prolonged, increasing the need of workers to return back to their home country. Further, it is notably identified with the need for more support, both physically and financially (Karim et al., 2020). The Cambodians are forced to face this dismissal situation. As many as one-third of the workers have had to return home from Thailand (Lawreniuk, 2020). Therefore, a proper secure policy has to be made during this time, and it is mandatory that both governments respond immediately to these unexpected issues.

In 2001, the Thai government started to set a migrant healthcare policy to help the migrant worker with their healthcare needs, which were being funded by annual payments by the migrant worker. This scheme was changed in 2014 by incorporating more government institutions, which then joined and became involved (Tangcharoensathien et al., 2017). The Thailand Social Security Scheme (SSS) was then enacted. It was reported by Viriyathorn et al. (2021) that only around 50% of the Thai SSS covered the Thai migrant workers in the Central Region of Thailand and did not extend to the remote areas or provinces. On the matter of international migration into Thailand, Kunpeuk et al. (2022) mentioned that the Thai government had been working with the migrant workers to protect their right to healthcare and social welfare for quite a long time, using many schemes and pictures. Consequently, there were changes in both the times and in the interaction of the Country's situation and policy. Issues were raised citing the undocumented status and poor living conditions of the

migrant workers, who were at risk. There was an urgent call for an immediate response from the both Thailand and Cambodia, seeking their intervention in the matter at hand.

The HHS of the Cambodian migrant worker is going to be based mainly on certain issues that have been raised, such as migrant-worker financial status, living and working environment, Social value and adaptation and healthcare service and accessibility, with the combined interaction of both countries on migrant policy.

CHAPTER 3
RESEARCH METHODOLOGY

3.1. Research Design

This cross-sectional study was designed to explore and identify the HHS of Cambodian migrant workers.

3.2. Population and Sample

3.2.1. Population

There are two main groups of Cambodian migrant workers currently working in Thailand, legal Cambodia migrant workers and illegal Cambodia migrant workers. In this study, the legal Cambodian migrant workers were selected. With respect to the Cambodian migrant workers, according to the Thailand Migrant Report of 2014, these migrants are located in six main areas of Thailand and include a high number of foreign migrant workers with working permits (Huguet et al., 2014). They are located in 1) Bangkok: 149,156, 2) the Bangkok vicinity the Bangkok metropolitan area: 233,362, 3) the Central Region: 2,986,282, 4) the Northern Region: 114,264, 5) the Northeastern Region: 22,520 and 6) the Southern Region: 3,569,117. It was therefore decided to conduct this study in Bangkok, the Bangkok vicinity/ the Bangkok metropolitan area. The Thailand Migrant Report of 2014 (Huguet et al., 2014) estimated that there are around 1.5 million irregular workers in Thailand and that this statistic includes foreign workers with work permits from Myanmar (778,258), Laos (31,782) and Cambodia (89,618). The provinces were selected according to the characteristics of the provinces, where workers share a status similar to that of the foreign migrant workers located in Bangkok and the Bangkok metropolitan areas, and where the factories and industries employ a large number of Cambodian workers. Data were collected from June 2021 to September 2021.

3.2.2. Sample of Participants

3.2.2.1 Inclusion Criteria

1) Cambodian Migrant Workers
2) Age range: 20 to 60 years

3) At least one-year work experience in Thailand to ensure that they have already been exposed to various jobs or have settled in Thailand

4) Migrant workers with work permits

5) Literacy: Should be able to read and write Khmer

3.2.2.2 Exclusion Criteria

1) Participants with mental illnesses

2) Illegal Cambodian migrant workers

3.2.3. Sampling Method

The selection of the sample was based on relevant data and the information stated above. The multistage sampling method was used to select the number of samples, as detailed in the following steps: (The selected sample was selected from Cambodian migrant workers who are working in Thailand.)

3.2.3.1 Step One: Researchers defined the group: legal Cambodian migrant workers (N=89,618).

3.2.3.2 Step Two: Quota sampling was used to pick the exact number of samples from each group for the study Bangkok =29,873, and Bangkok vicinity area =59,745 and then the proportion was decreased to 101 and 203 respectively.

3.2.3.3 Step Three: A sample was selected by random sampling from stage two to self-administer the questionnaires by a Google form (N=304).

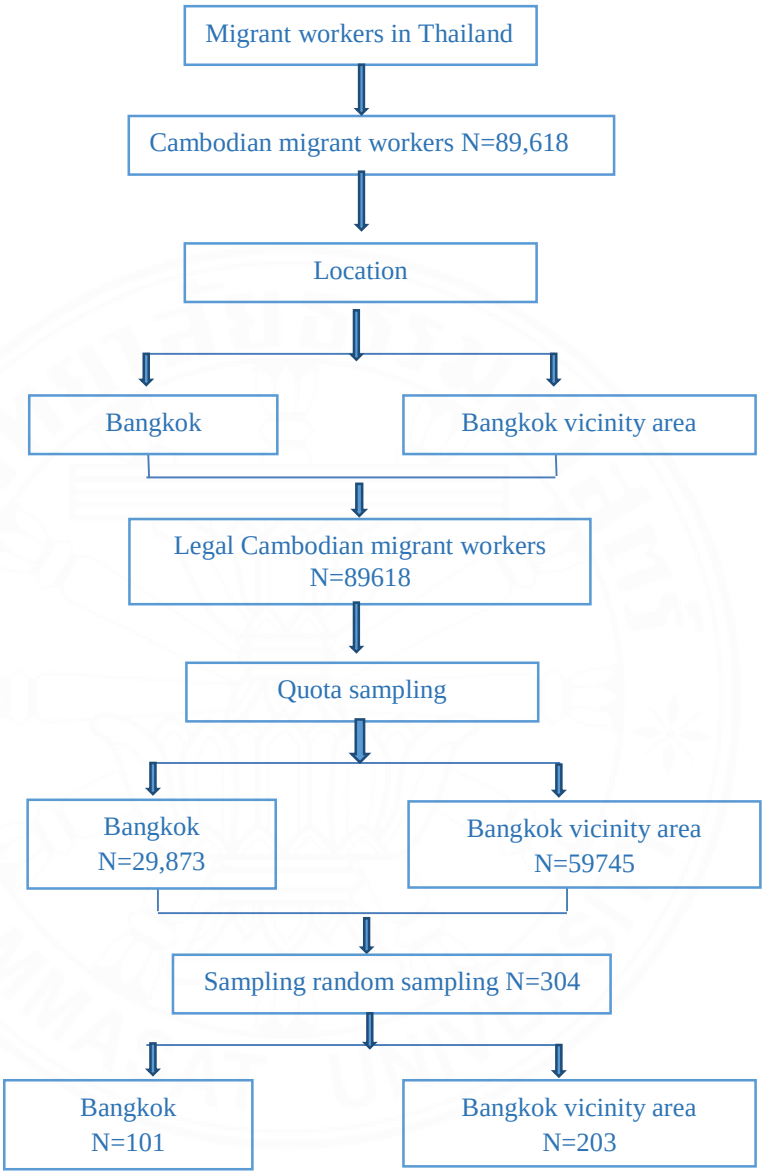

Figure 3.1: Sampling method

3.2.4 Sample Size

The samples were selected randomly through the multistage sampling process and approximately 15 participants were used for the predictor variable for multiple regression as advised by Stevens (1996). Accordingly, this study used G*Power version 3.1.9.2 analysis and a multiple-regression statistical test to calculate

the sample size. The sample size calculation used the reference of effective size as from the previous study, with R2 = 0.14 (Kraemer & Thieman, 1987; Beil et al., 2014; Ruchiwit, 2016). Calculation was carried out within a confidence interval of 0.95 and with an effective size = 0.10. There was a total of 10 predictors with alpha level = 0.05. The G*Power calculation resulted in a sample size of 254 workers. On top of this number, an additional 20% of samples were added to account for participation refusal and missing data or errors. Thus, the sample size was 304.

3.3 The Instruments Used

3.3.1. Instrument Development

Each of the items in these instruments was obtained and adjusted as based on a literature review on related issues on the health status of Cambodian migrant workers. Theoretical models and theories from previous qualitative and quantitative research studies were used to guide the item development. Face validity was ascertained first, and content validity was then measured. The cognitive interviews were conducted with five Cambodian workers, respectively, in order to be certain that the questions were being understood. Appropriate modifications to the questions were made. The Cronbach's alpha was used to measure internal consistency and was then used to determine the validity of the larger study. Additionally, construct validity was tested by examining the relationships among the variables in the model.

3.3.2 Instruments Structure

Three instruments were used in this study.

3.3.2.1 A socio-demographic data instrument was used to collect basic information about the general background and characteristics of the participants.

Socio-demographic data included age, sex, education, types of work, region of residence, duration of work, current workplace in Thailand, monthly income, disease and experience of injuries, all of which may be factors that significantly affect the health status of the migrant workers.

3.3.2.2. The Migrant Worker Stress Inventory (MWSI) was used to evaluate and examine the factors affecting the health condition and health status of foreign migrant workers. MWSI was a 28-item self-report instrument that assesses the quality and severity of stress inherent in the adult migrant worker. The MWSI was

originally known as Migrant Farmworker Stress Inventory (MFWSI), which consisted of 39 items. Some of the items, however, were not relevant to the current situation and status of the Cambodian migrant worker. The MFWSI was therefore adjusted to the MWSI to measure and report the stress level of the migrant workers. A modification of the MFWSI ensured that this instrument would capture every aspect of holistic health and HRQOL. In this way, instrument implementation will be relevant to the Cambodian migrants regarding their living and working environment. The instrument also has further use in assessing the holistic health or factors related to health during their migration or working outside of their country. The reliability and validity test were used to confirm the quality of the instrument. The criteria of scale detail were as follows:
If the statement does not apply to you, circle number 1: Have not experienced stress.
Scales of measurement

5 = Extremely stressful

4 = Moderately stressful

3 = Somewhat stressful

2 = Mildly stressful

1 = Have not experienced stress

Level of measurement

4.50 – 5.00= Severely stressful

3.50 – 4.49 = Moderately stressful

2.00 – 3.49 = Somewhat stressful

1.00 – 1.99 = Mildly stressful

0.50 -0.99 = Have not experienced any stress

3.3.2.3. The WHOQO-BREF instrument was applied to the HHS of the migrants to make sure that the three main themes of health, namely, physical, mental and social well-being, as indicated by the WHO, were being adequately covered. HHS: the instrument development was derived from the conceptual framework to construct the domain and content from existing theoretical definitions. The HHS is a revision and adjustment from the WHO quality-of-life assessment WHOQOL-BREF which consists of 34 items and is divided into 4 main domains: (1) physical health, (2) psychological and emotional health, (3) social and spiritual health and (4) environmental health and safety. The HHS shares similar domains with the WHOQOL-BREF that was devolved

by the WHO in 1996 to measure the quality of life of people who have been used as test subjects in various countries. Therefore, this study will explore the HHS and HRQOL of Cambodia migrant workers who work in Thailand. The scales and scoring system were conducted following the WHOQOL-BREF guideline.

3.4 Monitoring the Quality of the Tools

3.4.1 Translation of the Questionnaire

The questionnaire was translated by the researcher from English to the Khmer language and was verified by three healthcare personnel who were research scholars knowledgeable in the research and currently work in the healthcare field. The questionnaire was then back-translated from the Khmer language back to English to verify the meaning and accuracy with the original English version by three other English-speaking people. The triangulation and verification of the questionnaire from English to Khmer and from Khmer to English was done. Finally, the Khmer-language questionnaire version was complete and approved for use in conducting the data collection.

3.4.2 Methods of Estimating Validity

Theoretically, there are many ways to estimate the validity of a newly developed instrument. The items for the instrument were modified after a thorough literature review and were then generated in each of the four content domains making up the holistic-health model for the assessment of holistic health. In order to assess the validity of the tool, face validity was assessed first, and each item of the questionnaires was then reviewed, modified and back-translated by the language experts. Finally, a formal content validity assessment was conducted. The content validity of the MWSI Khmer version of this study was evaluated by five experts. The index of item objective congruence (IOC) was used to indicate content validity. The IOC indices for each item were reported to be between 0.60 and 1.00.

Methods of Estimating Reliability

Both the WHOQO-BREF and MWSI were adjusted only minimally. The reliability of the instrument was tested by evaluating its internal consistency by a technique known as the Cronbach’s alpha coefficient. For MWSI, the internal consistency reliability of this study was applied to 30 Cambodian migrant workers who

met the same inclusion criteria for participation in the study. The Cronbach's alpha coefficient was 0.914. For WHOQO-BREF, the internal consistency reliability of this study was applied to 30 Cambodian migrant workers who met the same inclusion criteria for participation in the study. The Cronbach's alpha coefficient was 0.73.

3.5 The Activity of Research Data Collection

3.5.1 Preparations

3.5.1.1 Verification and modification of the questionnaires to make sure that the instrument is ready for the data-collection process which would be undertaken through the pilot study

3.5.1.2 A pilot study for the quantitative part, intended to assess the validity and reliability of the questionnaires

3.5.1.3 Obtaining approval from the Institutional Review Board (IRB)

3.5.1.4 As a consequence of the COVID-19-pandemic outbreak, the researcher was unable to reach and communicate directly with the participants. Instead, the questionnaire was prepared in the Google form builder for the participants, who would self-administer the questionnaire under the assistance of the local stake holder and researcher.

3.5.1.5 The local stakeholder was trained online to use Google and generate the Google form and make the "No duplicates" submission.

3.5.2 The Implementation of Data Collection

The data collection was carried out in the following phases:

3.5.2.1 Recruiting the key stakeholder in each place to process the data collection

3.5.2.2 Obtaining permission from the participants verbally or via text or phone call

3.5.2.3 Obtaining informed consent: explaining the consent form to the participants

3.5.2.4 Use of a self-administered questionnaire form via Google as provided by the key stakeholder with participant ID and questionnaire link.

The data collection was carried out by use of the Google form, which is encrypted for each single entry with the label "No Duplicates" in the Google form

builder. Each participant was permitted to submit only one answer in any one of the devices. The “No duplicates” in the Google-form builder thus served to prevent a duplicate submission of a submitted device ID once the questionnaire had been sent out. In addition, it was mandatory that the Google form contain personal contact information, including name, for the confirmation of identity in order to receive a small gift provided by the researcher. The data collection was completed within the 3-month period from June 2021 to September 2021.

3.5.3 Data Entry, Cleaning and Quality

Data was entered into a Microsoft Excel spreadsheet with coding the ID of each participant and examined for outliers and incorrect data, all of which were cleaned and corrected. Five percent of the data was manually checked to confirm accuracy. Patterns of missing data were examined. Re-coding of the data was performed.

3.6 Ethical Consideration

This study was submitted to the Ethical Committee at Thammasat University, Thailand to obtain approval and agreement, which consideredthe possibility of ethical issues between the participants and researchers. The study was approved by the Human Research Ethics Committee of Thammasat University (Science), (HREC-TUSC) # COA No. 027/2564. The proposal was approved by the Committee, and the researchers then handed the questionnaires and the consent form to the participants. The research objectives, advantages, duration of data collection, useful information to be taken from the sample for the research and upholding the rights of the participants were explained to the participants. The researcher provided the proper time and duration for the participants’ responses to the questionnaires.

The informed consent form was provided to the participants upon their expressed agreement to participate in the study. The participants were free to ask questions and to reject or discontinue participation if there were any problems.

Their participation was confirmed as secure. Their privacy was protected with assurances of confidentiality. Documents related to participants containing confidential information were not used to reveal the participant’s answers or willingness, and did not present their names or identities in the results paper or during the data-analisys

phase. It was used only to enter the data and coding. Yet, it is secure and confidentially stored in the researcher cloud.

3.7 Data Analysis

After collecting data from 304 participants, the missing data and outliers were handled using list-wise deletion. As a result, we worked with a total of 290 participants in this study, which is sufficient according to the sample size calculation. The reliability of the HHS and MWSI scale were confirmed by Cronbach's alpha coefficient of 0.73 and 0.914 respectively, which are considered suitable for the data analysis we performed.

Different types of analyses were used for different purposes in this study: SPSS (21.1 Version) and IBM Amos 22.0 were used to generate and analyze the data.

3.7.1 Descriptive Statistic

Descriptive statistics, such as means and standard deviation, was used to analyze the level of the HHS of the Cambodian migrant workers.

3.7.2 Multivariate Statistic

3.7.2.1 Group Differences

1) The differences among the groups of Cambodian migrant workers were analyzed by t-test, and ANOVA. The alpha level of significance was held at $p \leq 0.05$.

2) Multiple-regression analysis was used to determine which factors were able to predict the HHS of the Cambodian migrant workers. The details of each step are explained, as shown below:

- Check assumptions: The researcher tested the data obtained according to the following two assumptions of the multiple-regression analysis: 1) the Shapiro-Wilk normality test, and 2) the multi-collinearity test. As based on the determination criteria, a tolerance greater than 0.4 and a variance inflation factor (VIF) less than 4 indicate no correlation among independent variables (Hair et al., 2010).

- A multiple-regression analysis of age, sex, education, type of work, monthly income, financial status, living and working environment, Social value and adaptation, healthcare service and accessibility, and migrant policy as predictors of HHS was performed, using a stepwise-and-enter regression analysis.

CHAPTER 4
RESULTS AND DISCUSSION

This chapter consists of two major sub-sections, namely, results and discussion. The results of this study consist of four parts: socio-demographic data, basic information about the variables, factors affecting HHS and results from a multiple-regression analysis. Details are as follows.

4.1 Socio-demographic Data

4.1.1 Part 1: Socio-demographic Analysis

It was found from the analysis results that 24 of the 290 participants who had been classified by Type of work were in the agriculture/fishery group, while 66 of the 200 were in the manufacturing/construction group and 200 were in the services and sales group.

Of the participants in the agriculture/fishery group, 17 were males (60.34%) and 7 were females (29.17%). Of all 24 participants in this group, 18 were married (75.00%) and only 6 were single (25.00%). Most had completed their primary education (n=16, 66.67%) and were followed, respectively, by those who were uneducated (n=6, 25.00%) and those who had completed their secondary/high school education (n=2, 8.33%).

The manufacturing/construction group consisted of 37 males (56.06%) and 29 females (43.94%). In terms of marital status, 21 were single (32.81%) and 43 were married (67.19%). Their education was mostly at the secondary/high-school level (n=36, 54.55%), followed by the primary-school level (n=12, 18.18%). Only 7 of them were uneducated (10.61%).

In the services and sales group, there were 121 males (60.50%) and 79 females (39.50%). Of all the participants, 147 were married (n=147, 73.87%) and 52 were single (26.13%). Regarding their educational levels, the majority of the participants attained primary education (n=110, 55.00%), followed by secondary school/high school education (n=69, 34.50%) and university education (n=21, 10.50%). The details are shown in Table 4.1.

Table 4.1. Basic information pertaining to the participants

Variable	Agriculture/fishery		Manufacturing /construction		Services and sales		Total	
	n	%	n	%	n	%	n	%
Sex								
Male	17	70.83	37	56.06	121	60.50	175	60.34
Female	7	29.17	29	43.94	79	39.50	115	39.66
Total	24	100.00	66	100.00	200	100.00	290	100.00
Marital status								
Single	6	25.00	21	32.81	52	26.13	79	27.53
Married	18	75.00	43	67.19	147	73.87	208	72.47
Total	24	100.00	64	100.00	199	100.00	287	100.00
Education								
Uneducated	6	25.00	7	10.61	19	9.50	32	11.03
Primary school	16	66.67	12	18.18	110	55.00	138	47.59
Secondary school/ high school	2	8.33	36	54.55	69	34.50	107	36.90
University	0	0.00	11	16.67	2	1.00	13	4.48
Total	24	100.00	66	100.00	200	100.00	290	100.00

The results showed that the average age of the participants was 32.70 years (SD=7.55), with a minimum and maximum age of 13 and 60 years. Their average net salary per month was 353.26 USD (SD=86.34), with a minimum and maximum monthly salary of 150 and 650 USD. Their average number of working years in

Thailand was 4.23 (SD=2.23), with a lowest and highest number of working years of 1 and 10. The details are as presented in Table 4.2:

Table 4.2. Basic information pertaining to the participants in this research

Variables	Min	Max	Mean	SD
Net salary (USD)	150	650	353.26	86.34
Years working in Thailand	1	10	4.23	2.23

4.1.2 Part 2: Basic Information about the Variables

4.1.2.1 Basic Information about the Variables in This Research

As based on the analysis results, it was found that the financial status was at a somewhat stressful level (mean=3.04, SD=0.89), the living and working environment was at a somewhat stressful level (mean=3.07, SD=0.44), the Social value and adaptation was at a somewhat stressful level (mean=3.13, SD=0.53), the healthcare service and accessibility were at a moderately stressful level (mean=3.74, SD=1.23) and the migrant policy was at a moderately stressful level (mean=3.57, SD=1.21). As for the dependent variable, the HHS was at a somewhat stressful level (mean=3.09, SD=0.29).

Table 4.3. Basic information about the variables

Independent variables					
Variables	**Min**	**Max**	**Mean**	**SD**	**Level**
Financial status	1.00	5.00	3.04	0.89	Somehow stressful
Living and working environment	1.33	3.78	3.07	0.44	Somehow stressful
Social value and adaptation	1.00	4.43	3.13	0.53	Somehow stressful
Healthcare service and accessibility	1.00	5.00	3.74	1.23	Moderately stressful
Migrant policy	1.00	5.00	3.57	1.21	Moderately stressful

Table 4.4. Basic information about the variables

Dependent variable					
Variables	**Min**	**Max**	**Mean**	**SD**	**Level**
HHS	2.21	3.88	3.09	0.29	Somewhat stressful

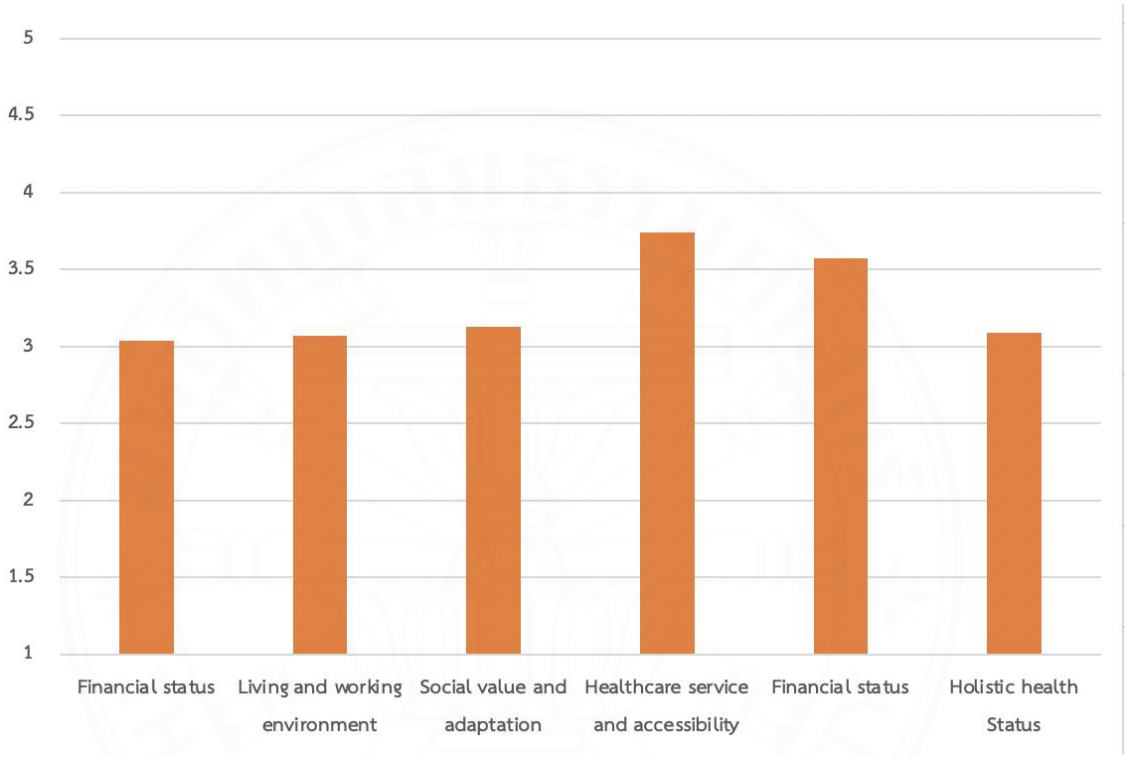

Figure 4.1: Basic information about the variables

4.1.2.2 Comparative Analysis of Financial Status, Living and Working Environment, Social value and Adaptation, Healthcare Service and Accessibility, and Migrant Policy, as Classified by Sex, Education and Type of work

The comparative analysis results of financial status, as classified by sex, education and Type of work, indicated that a person's sex and education are differently associated with financial status with no statistical significance, while that same person's Type of work is differently associated with financial status at a statistical significance level of 0.05. The manufacturing/construction group was found to have a greater effect than the services and sales group with a statistical significance level of 0.05.

Table 4.5. Comparative study of financial status as classified by sex, education and type of work

Variables	N	Mean	SD	Test of homogeneity		ANOVA		
				Levene's test	p	F	p	Pair-wise comparison
Sex								
Female$_1$	115	2.94	0.96	2.04	0.15	2.12	0.15	-
Male$_2$	175	3.10	0.85					
Education								
Uneducated$_1$	32	2.80	0.86					
Primary school$_2$	138	3.11	0.85					
Secondary school /high school$_3$	107	3.02	0.93	0.57	0.64	1.20	0.31	-
University$_4$	13	2.92	1.05					
Type of work								
Agriculture/fishery$_1$	24	3.14	1.15					
Services and sales$_2$	66	2.63	0.95	7.68	0.00	9.35	0.00	3>2
Manufacturing /construction$_3$	200	3.16	0.80					

It was found from the comparative analysis of living and working environment, as classified by sex, education and Type of work, that a person's sex is differently associated with living and working environment with no statistical significance, while education is differently associated with living and working environment at a statistical significance level of 0.05. The primary-school level and the secondary-school/high school level were found to have a greater effect than the uneducated level. Moreover, it was found that Type of work is differently associated with living and working environment at a statistical significance level of 0.05. The manufacturing/construction group was found to have a greater effect than the services and sales group, with a statistical significance level of 0.05.

Table 4.6. Comparative study of living and working environment, as classified by sex, education and Type of work

Variables	N	Mean	SD	Test of homogeneity		ANOVA		
				Levene's test	p	F	p	Pair-wise comparison
Sex								
Female$_1$	115	3.09	0.46	0.00	0.95	0.24	0.63	-
Male$_2$	175	3.06	0.43					
Education								
Uneducated$_1$	32	2.75	0.47					
Primary school$_2$	138	3.14	0.38					
Secondary school /high school$_3$	107	3.10	0.43	4.12	0.01	8.02	0.00	2>1, 3>1
University$_4$	13	2.92	0.62					
Type of work								
Agriculture/fishery$_1$	24	3.01	0.55					
Services and sales$_2$	66	2.96	0.41	4.11	0.02	3.31	0.04	3>2
Manufacturing /construction$_3$	200	3.12	0.42					

The comparative analysis of Social value and adaptation, as classified by sex, education and Type of work showed that a person's sex, education, and Type of work are differently associated with Social value and adaptation with no statistical significance.

Table 4.7. Comparative study of Social value and adaptation, as classified by sex, education and Type of work

Variables	N	Mean	SD	Test of homogeneity		ANOVA		
				Levene's test	p	F	p	Pair-wise comparison
Sex								
Female$_1$	115	3.09	0.56	0.65	0.42	1.19	0.28	-
Male$_2$	175	3.16	0.50					
Education								
Uneducated$_1$	32	3.01	0.53					
Primary school$_2$	138	3.14	0.44					
Secondary school /high school$_3$	107	3.18	0.60	3.06	0.03	2.21	0.09	-
University$_4$	13	2.85	0.64					
Type of work								
Agriculture/fishery$_1$	24	3.18	0.60					
Services and sales$_2$	66	3.10	0.70	11.68	0.00	0.25	0.78	-
Manufacturing /construction$_3$	200	3.13	0.45					

Results from the comparative analysis of healthcare service and accessibility, as classified by sex, education and Type of work, showed that a person's sex is differently associated with healthcare service and accessibility with no statistical significance, while education is differently associated with healthcare service and accessibility at a statistical significance level of 0.05. The primary-school level was found to have a greater influence than the secondary-school/high-school and uneducated levels. Meanwhile, the uneducated level was found to have a greater influence than the university level. In addition, it was found that Type of work is differently associated with healthcare service and accessibility at a statistical significance level of 0.05. The manufacturing/construction group was found to have a

greater effect than the services and sales group, with a statistical significance level of 0.05.

Table 4. 8. Comparative study of healthcare service and accessibility, as classified by sex, education and Type of work

Variables	N	Mean	SD	Test of homogeneity		ANOVA		
				Levene's test	p	F	p	Pair-wise comparison
Sex								
Female$_1$	115	3.84	1.18	1.40	0.24	1.18	0.28	-
Male$_2$	175	3.68	1.26					
Education								
Uneducated$_1$	32	2.89	1.19					
Primary school$_2$	138	4.09	1.10					
Secondary school /high school$_3$	107	3.68	1.23	2.38	0.07	12.91	0.00	2>3>1>4
University$_4$	13	2.79	1.01					
Type of work								
Agriculture/fishery$_1$	24	3.47	1.38					
Services and sales$_2$	66	2.93	1.14	2.82	0.06	24.82	0.00	3>2
Manufacturing /construction$_3$	200	4.05	1.11					

The comparative analysis of migrant policy, as classified by sex, education and Type of work, indicated that a person's sex is differently associated with migrant policy with no statistical significance, whereas education is differently associated with migrant policy at a statistical significance level of 0.05. The results showed that the primary-school level and the secondary-school/high-school level have a greater effect than the uneducated level. Moreover, Type of work education is differently associated with migrant policy at a statistical significance level of 0.05. The manufacturing/construction group was found to have a greater effect than the services and sales group with a statistical significance level of 0.05.

Table 4.9. Comparative study of migrant policy, as classified by sex, education and Type of work

Variables	N	Mean	SD	Test of homogeneity		ANOVA		
				Levene's test	p	F	p	Pair-wise comparison
Sex								
Female$_1$	115	3.61	1.23	0.01	0.92	0.24	0.63	-
Male$_2$	175	3.54	1.20					
Education								
Uneducated$_1$	32	2.84	1.14					
Primary school$_2$	138	3.86	1.04					
Secondary school /high school$_3$	107	3.51	1.30	5.50	0.00	9.07	0.00	2>1, 3>1
University$_4$	13	2.79	1.28					
Type of work								
Agriculture/fishery$_1$	24	3.32	1.19					
Services and sales$_2$	66	2.77	1.16	1.15	0.32	24.33	0.00	3>2
Manufacturing /construction$_3$	200	3.86	1.10					

4.1.3 Part 3: Factors Affecting HHS

In order to explore the factors affecting HHS, such as age, sex, education, Type of work, net salary, financial status, living and working environment, Social value and adaptation, healthcare service and accessibility, and migrant policy. A stepwise regression with dummy variables was conducted as a means of analysis. The variables were arranged as follows: 1) sex (female, male), 2) education (uneducated, primary school, secondary school/high school, and university) and 3) Type of work (agriculture/fishery, services and sales, manufacturing/construction). In addition, the assumptions were examined using the following methods: 1) the Shapiro-Wilk normality test and 2) the multi-collinearity test. As based on the determined criteria, a

tolerance of greater than 0.4 and a VIF of less than 4 indicated no correlation among the independent variables (Hair et al., 2010).

Normality Test Results

The Shapiro-Wilk test was used to examine the assumptions of normality. The results showed that the data distribution of holistic-health status are significantly different from what would be expected from a normal distribution (Shapiro-Wilk=0.98, p=0.00). However, the Q-Q plot analysis yielded results that are consistent with a normal distribution.

Table 4. 10. Normality test

Variable	Shapiro-Wilk	df	p
HHS	0.98	290	0.00

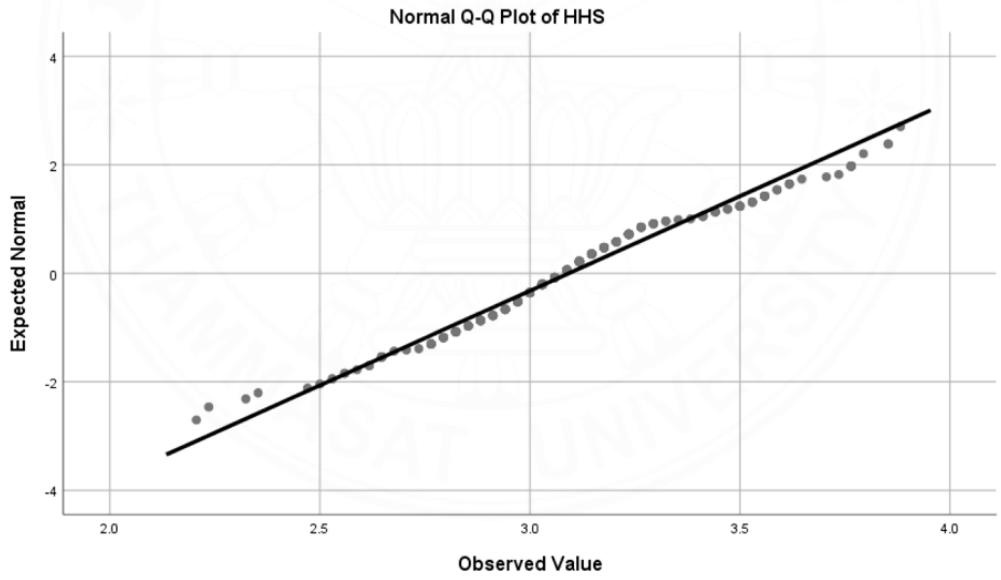

Figure 4.2: Q-Q plot analysis

4.1.4 Part 4: Multiple-Regression Analysis Results

The multiple-regression analysis of age, sex, education, Type of work, net salary, financial status, living and working environment, Social value and adaptation, healthcare service and accessibility, and migrant policy as predictors of HHS was performed using a stepwise approach. As based on the multi-collinearity test results, it

was found that the tolerance value was in the range of 0.70-1.00 and the VIF was in the range of 1.00-1.37, indicating that there was no correlation between the independent variables. In terms of the multiple-regression analysis results, it was found that age, sex, education, Type of work, net salary, financial status, living and working environment, Social value and adaptation, healthcare service and accessibility, and migrant policy could predict holistic-health status at 4% (R^2=0.04). The correlation coefficient (R) was 0.19, with a statistical significance level of 0.05. The coefficients in the raw-score form (B) and the standardized form (Beta) of Social value and adaptation were 0.10 and 0.19, respectively, with a statistical significance level of 0.05. The constant was 2.77, with a statistical significance level of 0.05. The results suggested that an increase of one unit of Social value and adaptation will result in an increment of HHS of (0.10) + 2.77(1) social value and adaptation.

Raw Score Prediction Equation

$$Y_{HHS} = 2.77 + (0.10)\ X_{\text{Social value and adaptation}}$$

Standardized Prediction Equation

$$HHS = (0.19)\ X_{\text{Social value and adaptation}}$$

Table 4.11. Analysis results of the factors affecting HHS

Variable	R	R square	Adjusted R square	Std. error of the estimate	F	p
Social value and adaptation	0.19	0.04	0.03	0.28	10.48	0.00

Table 4. 12. Prediction equations

Variable	Non-standardized coefficients		Standardized coefficients	t	p
	B	Std. error	Beta		
(Constant)	2.77	0.10		27.74	0.00
Social value and adaptation	0.10	0.03	0.19	3.24	0.00

When performing the multiple regression analysis of age, sex, education, Type of work, monthly income, financial status, living and working environment, Social value and adaptation, healthcare service and accessibility, and migrant policy as predictors of HHS using an enter approach, the results showed that all of the above-mentioned factors could predict HHS at 8% (R^2=0.08). The correlation coefficient (R) was 0.28, with a statistical significance level of 0.05. The coefficients in the raw score form (B) and the standardized form (Beta) of social value and adaptation were 0.12 and 0.22, respectively, with a statistical significance level of 0.05. The constant was 3.08, with a statistical significance level of 0.05. The other variables affected HHS with no statistical significance.

Raw score prediction equation

$$Y_{HHS} = 3.17 + (0.01)\,X_{male} + (0.00)\,X_{age} + (0.00)\,X_{net\ salary\ (USD)} + (-0.10)\,X_{primary\ school} + (-0.10)\,X_{secondary\ school/high\ school} + (-0.17)\,X_{uneducated} + (-0.02)\,X_{agriculture/fishery} + (0.02)\,X_{services\ and\ sales} + (-0.03)\,X_{financial\ status} + (-0.11)\,X_{living\ and\ working\ environment} + (0.12)\,X_{social\ value\ and\ adaptation} + (0.05)\,X_{healthcare\ service\ and\ accessibility} + (0.0\text{-}1)\,X_{migrant\ policy}$$

Standardized Prediction Equation

$$HHS = (0.01)\,X_{male} + (0.01)\,X_{age} + (-0.03)\,X_{net\ salary\ (USD)} + (0.03)\,X_{primary\ school} + (-0.18)\,X_{secondary\ school/high\ school} + (-0.16)\,X_{uneducated} + (-0.19)\,X_{agriculture/Fishery} + (0.02)\,X_{services\ and\ sales} + (0.03)\,X_{financial\ status} + (-0.09)\,X_{living\ and\ working\ environment} + (0.22)\,X_{social\ value\ and\ adaptation} + (0.20)\,X_{healthcare\ service\ and\ accessibility} + (0.0\text{-}2)\,X_{migrant\ policy}$$

Table 4. 13. Analysis results of the factors affecting HHS

Variables	R	R square	Adjusted R square	Std. error of the estimate	F	p
Male, age, net salary (USD), primary school, secondary school/high school, uneducated, agriculture/fishery, services and sales, financial status, living and working environment, Social value and adaptation, healthcare service and accessibility, and migrant policy	0.28	0.08	0.03	0.28	1.80	0.04

Table 4.14. Prediction equations

Variables	Non-standardized coefficients		Standardized coefficients	t	p
	B	Std. error	Beta		
(Constant)	3.08	0.17		17.65	0.00
Male	0.01	0.03	0.01	0.21	0.83
Age	0.00	0.00	-0.03	-0.55	0.58
Net salary (USD)	0.00	0.00	0.03	0.53	0.60
Primary school	-0.10	0.09	-0.18	-1.10	0.27
Secondary school/high school	-0.10	0.09	-0.16	-1.10	0.27
Uneducated	-0.17	0.10	-0.19	-1.72	0.09
Agriculture/fishery	-0.02	0.06	-0.02	-0.35	0.73
Services and sales	0.02	0.05	0.03	0.42	0.67
Financial status	-0.03	0.03	-0.09	-1.08	0.28
Living and working environment	-0.11	0.05	-0.16	-2.09	0.04
Social value and adaptation	0.12	0.04	0.22	2.82	0.01
Healthcare service and accessibility	0.05	0.03	0.20	1.54	0.13
Migrant policy	-0.01	0.03	-0.02	-0.16	0.87

In addition, the comparative analysis of holistic-health status as classified by sex, education and Type of work indicated that these three factors are differently associated with holistic-health status with no statistical significance of 0.05. The results showed that the factors of sex, education and Type of work have an equal effect on holistic-health status, which is in line with the results of the stepwise-and-enter regression analyses presented above.

Table 4.15. Comparative study of holistic-health status as classified by sex, education and Type of work

Variables	N	Mean	SD	Test of homogeneity		ANOVA		
				Levene's test	p	F	p	Pair-wise comparison
Sex								
Female$_1$	115	3.09	0.31	2.43	0.12	0.01	0.92	-
Male$_2$	175	3.09	0.27					
Education								
Uneducated$_1$	32	3.01	0.41					
Primary school$_2$	138	3.09	0.23					
Secondary school /high school$_3$	107	3.11	0.31	8.83	0.00	1.22	0.30	-
University$_4$	13	3.16	0.31					
Type of work								
Agriculture/dishery$_1$	24	3.05	0.35					
Services and sales$_2$	66	3.11	0.37	14.29	0.00	0.45	0.64	-
Manufacturing /construction$_3$	200	3.09	0.25					

Table 4.16. Prediction equations of HHS and financial status

Coefficients[a]

Model		Non-standardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	3.049	0.060		51.041	0.000
	Financial status	0.014	0.019	0.045	0.759	0.449

a Dependent variable: HHS

The results of performing the multiple regression analysis have shown that there were no statistical significant differences in the prediction equation of the financial status that could predict HHS.

Table 4.17. Prediction equations of HHS and living and working environment

Coefficients[a]

Model	Non-standardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error	Beta		
1 (Constant)	3.079	0.120		25.650	0.000
Living and working environment	0.004	0.039	0.007	0.113	0.910

a Dependent variable: HHS

The results of performing the multiple-regression analysis have shown that there were no statistically significant differences in the prediction equation of the living and working environment that could predict HHS.

Table 4.18. Prediction equations of HHS and Social value and adaptation

Coefficients[a]

Model	Non-standardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error	Beta		
1 (Constant)	2.773	0.100		27.742	0.000
Social value and adaptation	0.102	0.032	0.187	3.237	0.001

a Dependent variable: HHS

The results of performing the multiple-regression analysis have shown that there were statistical significant differences in the prediction equation of the Social value and adaptation that could predict HHS at p-value of 0.001.

Table 4.19. Prediction equations of HHS and healthcare service and accessibility

Coefficients[a]

Model		Non-standardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	2.969	0.054		55.273	0.000
	Healthcare service and accessibility	0.033	0.014	0.141	2.415	0.016

a Dependent variable: HHS

The results of performing the multiple regression analysis have shown that there were statistically significant differences in the prediction equation of the healthcare service and accessibility that could predict HHS.

Table 4.20. Prediction equations of HHS and migrant policy

Coefficients[a]

Model		Non-standardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	2.987	0.052		57.221	0.000
	Migrant policy	0.029	0.014	0.124	2.126	0.034

a Dependent variable: HHS

The results of performing the multiple regression analysis have shown that there were statistically significant differences in the prediction equation of the migrant policy to predict HHS.

Enter Method:

Analysis Results of the Factors Affecting HHS

A data analysis was conducted through a multiple-regression model of the contributing factors of financial status, living and working environment, social value and adaptation, healthcare service and accessibility, and migrant policy, which were seen as predictors of HHS. The data analysis was performed using an enter approach. The results obtained showed that the combined factor of Social value and adaptation is statistically significant and ultimately affected the HHS of the study participants.

Table 4.21. Data analysis results of the factors affecting HHS

Model summary

				Std. error	Change statistics				
Model	R	R^2	Adjusted R square	of the estimate	R square change	F change	df1	df2	Sig. F change
1	0.243[a]	0.059	0.042	0.28067	0.059	3.551	5	284	0.004

a Predictors: (constant), social value and adaptation

Table 4.22. Prediction-equation results of the factors affecting HHS

coefficients[a]

Model		Non-standardized coefficients		Standardized coefficients		
		B	Std. error	Beta	t	Sig.
1	(Constant)	2.951	0.139		21.229	0.000
	Financial status	-0.025	0.024	-0.079	-1.056	0.292
	Living and working environment	-0.094	0.050	-0.144	-1.897	0.059
	Social value and adaptation	0.117	0.040	0.216	2.967	0.003
	Healthcare service and accessibility	0.043	0.029	0.185	1.494	0.136
	Migrant policy	-0.006	0.031	-0.026	-0.200	0.841

a Dependent variable: HHS

Stepwise Method:

Analysis Results of the Factors Affecting HHS

A data analysis was conducted through use of a multiple-regression model. The factors of financial status, living and working environment, Social value and adaptation, healthcare service and accessibility, and migrant policy were analyzed as predictors of HHS using a stepwise approach. The results obtained showed that the combined factor of Social value and adaptation alone was statistically significant and affected the HHS of the participants.

Table 4.23. Analysis results of the factors affecting HHS

Coefficients[a]

Model		Non-standardized coefficients		Standardized coefficients		
		B	Std. error	Beta	t	Sig.
1	(Constant)	2.773	0.100		27.742	0.000
	Social value and adaptation	0.102	0.032	0.187	3.237	0.001

a Dependent variable: HHS

Table 4.24. Prediction-equation results of the factors affecting HHS

Excluded Variables[a]

Model		Beta	t	Sig.	Partial correlation	Collinearity statistics tolerance
1	Financial status	-0.073[b]	-1.077	0.282	-0.063	0.727
	Living and working environment	-0.094[b]	-1.457	0.146	-0.086	0.807
	Healthcare service and accessibility	0.065[b]	0.986	0.325	0.058	0.764
	Migrant policy	0.031[b]	0.454	0.650	0.027	0.702

a Dependent variable: HHS

b Predictors in the Model: (constant), Social value and adaptation

Discussion

Cambodian migrant workers currently moving from Cambodia are seeking a new life and a better income once they have settled in Thailand. For that reason, the number of migrants is increasing yearly and includes both males and females ranging from 18 to 45 years of age from the various provinces of Cambodia. Among these newly settled migrants, 290 participated in the study. Most of the participants were working in the service areas (mostly in sales) and in manufacturing and construction, followed by agriculture and fishery. The results shown in Table 1 indicate that the majority of migrants to Thailand were male (60.34%), rather than female (39.66%). A division by marital status shows that the majority of Cambodian migrant workers were married (72.24%), while only a minority were single (27.53%). Those who had an education level as primary-school graduates formed the largest group (47.59%), followed those who had completed their secondary-school level (36.90%) and those who were simply uneducated (11.03%). There were also those who were at the university level who had migrated to Thailand and were now working in the manufacturing and construction industries. Their net mean income was $353.26 per month. Most work places provided them with a room and food following four years of work while here in Thailand.

This study has shown that Cambodian migrant workers become at least somewhat stressful in their financial status while here in Thailand, but otherwise become burdened with debt in their home country. They were reported to have been sending money back to their home country. The financial status of the Cambodian migrant workers is at a critical stage and requires them to leave their home country seeking a better life with better pay in Thailand (Bjork & Abid, 2010). For some reason, their monthly income is not subsidized with an allowance to cover their daily living in Thailand's modern society.

Their living and working environment has played an important role in their daily living and has mainly affected their health. Consequently, as this study has revealed, the Cambodian migrant worker has experienced stress at some level in their living and working environment. The literature review that was conducted in this study has highlighted the difficulties they experience in their living and working. In particular, they are often impacted by such problems as drug use, bad weather while on the job,

insufficient food, inadequate shelter, emotional distress and even physical abuse, as well as not having enough time to pursue their normal daily living.

This study has reported that social value, adaptation and relationships are also major problems that tend to increase the stress levels of the migrants. Statistics presented in this study show that the migrants are somewhat stressed out in terms of their social value, adaptation and relationships. Mills (2008) reported that the migrant workers have had to learn a different new lifestyle and adapt to a new culture and unfamiliar people in the city. Social value and adaptation distress have threatened the well-being of the migrant workers and have resulted in their developing psychological symptoms. The social value, adaptation and relationships mentioned in this study refer to the difficulties in their relationships and understanding of life in Thailand, as well as the benefits and personal values, reputations and interactions that occur between the native Thai and Cambodian migrant worker.

The statistics that were reported showed that Cambodian migrant workers were at moderate stress levels in terms of access to healthcare services and overall accessibility. Their experiences with sickness have shown that meeting their basic healthcare needs is crucial and important to their survival and to potential menstrual periods of the women migrants. Accordingly, these people must be granted and retain the right to obtain the healthcare services they need with better access than they have now. There are legal mandates for healthcare services and accessibility for international migrant workers; however, there are still inequalities. Thailand's government policy and private agencies/organizations have been working to improve the health of foreign migrant workers, but they have also reported on the inequality of treatment between Thai people and foreign migrant workers in the community (Ford et al., 2014). Healthcare services and accessibility for the workers is another crucial factor in predicting the HHS of Cambodian migrant workers.

Things that are new and unfamiliar to international travelers and migrant people are even harder for the migrant worker to understand. An equitable migrant policy is not easy to formulate and can be quite complicated in regard to the politics and laws of different countries. In this study, the researchers have reported on the moderately stressful aspects of the migrant policy in Thailand. Since Cambodia and Thailand are neighboring countries that share a very long border, some of the migrant workers were

able to enter into Thailand without documents or by following the law on Thai migration policy. Thus, migration into the Country might be hard to control, resulting in an overflow of Cambodian migrants.

From the results of this study, it was revealed that the significant differences among the five independent variables are based only on the differences in Social value and adaptation in HHS among these variables (financial status, living and work environment, Social value and adaptation, healthcare services and accessibility and migrant policy), Social value and adaptation will therefore be the factors predicting the HHS of the Cambodian migrant workers in Thailand. It has been shown that Social value and adaptation play an important role for the Cambodia migrant workers. This conclusion was established with a statistical significance at p=0.01 on the model that was created through a multiple-regression analysis. The meaning of this finding is that the acceptance level of equality is well regarded among Cambodian migrant workers in Thailand. Kosiyaporn et al. (2020) mentioned that both the private and public sectors in Thailand are trying hard to provide fair treatment to all migrant workers by helping them in their participatory roles and assuring that they are receiving services on an equal basis. The International Organization for Migration (IOM) (2021, November 8) agreed that there are improving signs of inter-cooperation between the Cambodians and the Thai government in solving problems related to Thai migration policy and other legalities to form a standardized migration policy, as required by the ILO and IOM. The ILO (2021), in its 2019-2023 plan, stated that the Cambodian government under the MOU with the Thai government is committed to elevate the benefits of Cambodian migrant workers through long-term cooperation and development. Table 13: The prediction equation found the living and work environment to be at a statistical significance of p=0.04. The remaining three independence variables are not statistically significant in the prediction-equation multiple-regression analysis. Consequently, these independent variables do not affect the HHS of Cambodian migrant workers.

Their Financial Status: From the literature review, it was shown that the reason that Cambodian migrant workers were moving out of their own country is to seek new stable incomes to supplement their financial well-being (Bjork & Abid, 2010). In this case, the Cambodian migrant workers received better payment than they did in

their previous work place in their own home country. Accordingly, financial status is not a predictor of the HHS of the Cambodian migrant worker.

Healthcare Services and Accessibility: Thailand is now known as a medical-tourism country. At the same time, medical services and medical accessibility are accessible to all patients with affordable cost and good quality (Rawat, 2019). Kosiyaporn et al. (2020) mentioned that health services and accessibility have now become a "migrant-friendly health service" that has essentially lessened the problem of healthcare access for all migrant workers to Thailand since the Thailand policy was first implemented in 2003. The process of updating and monitoring should therefore be revaluated to maintain the quality of the services. However, a support program from the Government, as well as from related organizations and institutions, is also needed.

Migrant Policy: The IOM (2021, November 8) issued a statement on revising the policies of the Cambodian and Thai governments. The IOM statement referred to an understanding that had been formed by the two governments pertaining to a memorandum regarding their migration policies for workers in relation to the ethical recruiting and fair prompting of Cambodian migrant workers. The goal of the two governments has been to put a complete stop to human trafficking, job violations, forced labor and the modern practice of slavery, while also promoting the migrant workers' well-being in any way possible. The ILO (2021) reported on the number of undocumented Cambodian migrant workers, stating via a channel and network that they were up to 53% of the total in 2017. This trend may cause trouble in implementing the policy set by the two countries. Altogether, the total number of Cambodian migrant workers in Thailand reached 1,100,000 in the year 2020 (ILO-UNDESA, 2021). This situation imposes a difficult task on the governments of both countries, as they must work harder to solve this problem and promote the standards that are required by the ILO and IOM.

The demographic data shown in Table 4.1 illustrates the large number of migrants who were simply uneducated or educated at the primary, secondary and/or high-school levels. Fully 95.6% of these migrants were reported in this study to have migrated to Thailand seeking a new life. Here, we wanted to show the low level of education of these migrants, some of whom were forced to drop out of their studies at school and, instead, look for a job. Having only a low level of education, they were

mostly prepared to work at only low-skilled jobs, the kind of jobs that the Thai people themselves do not want. Consequently, this vulnerable group could face many problems in life in the course of their migration (International Labor Organization, 2016). Since they left school so very early and had to find a job and start a new working life in Thailand, their futures and carriers are likely to be at high risk. There are two major problems for this group: The first such problem is financial difficulty. The report laid emphasis on their financial status. Most of the participants claimed that they had a significantly large number of people to feed, along with unpaid debts in their home country. There were found to be at a mean of 3.04. Of the total number of participants, there were those who were reported to be at the level of somewhat stressed in terms of their financial status. Findings indicated that they were having difficulty in their present situation, since their income was just enough for their support while in Thailand. So, their hopes of becoming free from their financial difficulties are considered to be very little. The second major problem for this group is the prospect of an unstable life after returning to their home country, since they were not skilled workers and they were not be able to develop a skill or continue their education or vocational training. They will thus face yet another burden when they return home (Wickramasekara, 2008; Viriyathorn et al., 2021). Returning with no skills and having gotten older from the years spent in Thailand with only a monthly supportive income will only lead to more trouble for them in their coming futures.

The results shown in Table 4.3 reveal basic information about the variables indicating the level of stress being imposed upon the Cambodian migrant workers. They are shown to be at the level of somewhat stressed, as based on the analysis results. It was found from these results that their financial status was at a somewhat stressful level (mean=3.04, SD=0.89), their living and working environment was at a somewhat stressful level (mean=3.07, SD=0.44) and their Social value and adaptation were at a somewhat stressful level (mean=3.13, SD=0.53). Therefore, the report clearly showed these workers to be at a somewhat stressful level. It also indicated that the Cambodian migrant workers were engaged in stressful situations in their finances, in their living and working environment and in their Social value and adaptation (Baker, 2006). Cambodian migration abroad is associated with a worse financial status than working in Phnom Penh as a result of high levels of stress incurred in relation to their money,

their futures and, consequently, the impact on their mental health, causing a decrease in their quality of life (Kumar et al., 2018). The report prepared from the results of the study did not indicate an extremely stressful level, but, instead, a level of moderate stress. From the analysis results, an overall mean and standard deviation were found (mean=3.74, SD=1.23), while the financial status of the migrants was at a moderately stressful level (mean=3.57, SD=1.21). The meaning of these results is that there is still a need for more intensive work to elaborate and enhance the migrant workers in terms of their HHS. Both government and NGOs, international NGOs (InNGOs) and institutions - especially the IOM and the ILO - could work together to elevate their HHS, eliminate the existing social barriers (particularly in the area of healthcare accessibility) and address occurrences of human rights violations (ILO, 2016). Some studies on the psychological impact of the working and living environments of the migrant workers report low-to-medium QOL levels among these people who have been working at various occupations in Thailand (Ti & Somrongthong, 2008; Islam et al., 2011; Baumann et al., 2014). The results of this study have shown that the social value and adaptation is statistically significant and has been affected by their holistic-health status. Social value is defined as the quantification of the relative importance that people place on the changes that they experience in their lives, accounting for the broader human and societal factors that affect them (Ashton et al., 2020). This result confirms the literature of Terziev (2017) and Mill (2018), which state that leaving from their own home country in their local rural area to a city like Bangkok is not easy for the worker because they have to face and learn new pattern of living and adapt to life in the city as well as learn the nature of their difficult work. Therefore, loss of social value may threaten the holistic health status of those migrant workers. Moreover, an individual's life is affected by biological, social and environmental influences, which can accumulate and have both positive and negative effects on their holistic health status (Baker & Courtney, 2015).

CHAPTER 5
CONCLUSIONS AND RECOMMENDATIONS

This chapter is presented in three parts. Specifically, it includes the conclusion of this study, the limitations of this study and research recommendations, as described in detail below.

5.1 Conclusion

The purpose of this study was to examine the HHS of the Cambodian migrants in Thailand and to explore key factors affecting their HHS while here in the Country. The research design was based on a cross-sectional study aimed at exploring and identifying the HHS of the 290 legally-present Cambodian migrant workers in Thailand. Inclusion criteria of the participants consisted of migrant-worker status with work permits and at least one year of work experience in Thailand to ensure that they had already been exposed to various jobs or have settled in Thailand, as well as their ability to read and write Khmer.

The 290 participants can be sub-grouped by the jobs they were doing, as follows: 24 were in the agriculture/fishery group, 66 were in the manufacturing/construction group and 200 of the participants were in the services and sales group. In the agriculture/fishery group, the participants consisted of 17 males (60.34%) and 7 females (29.17%). Of the 24 participants in this group, 18 were married (75.00%), and only 6 were single (25.00%). Most of them had attained only primary-education level (n=16, 66.67%), followed by those who were uneducated (n=6, 25.00%) and those who had completed their secondary/high-school education (n=2, 8.33%). The manufacturing/construction group consisted of 37 males (56.06%) and 29 females (43.94%). In terms of marital status, 21 were single (32.81%) and 43 were married (67.19%). Their education was mostly at the secondary/high-school level (n=36, 54.55%), followed by primary-school level (n=12, 18.18%). Only 7 of them were uneducated (10.61%). In the services and sales group, there were 121 males (60.50%) and 79 females (39.50%). Among the participants, 147 (73.87%) were married, and 53 (26.13%) were single. Regarding their educational level, the majority of the participants had completed their primary education (n=110, 55.00%), followed by secondary school/high school education

(n=69, 34.50%) and university education (n=21, 10.50%). The average age of the participants was 32.70 years (SD=7.55), with a lowest and highest age of 13 and 60 years, respectively. Their average net salary per month was 353.26 USD (SD=86.34), with a lowest and highest amount of 150 and 650 USD, respectively. Their average number of working years in Thailand was 4.23 years (SD=2.23), with a lowest and highest number of working years = 1 and 10 years, respectively.

The independent variables in our study were financial status, living and working environment, social value and adaptation, healthcare service and accessibility and financial status, while the dependent variable was HHS. In order to explore the factors affecting HHS, which consisted of age, sex, education, Type of work, net salary, financial status, living and working environment, social value and adaptation, healthcare service and accessibility, and migrant policy, a stepwise regression with dummy variables was used for analysis of these factors. The variables were arranged as follows: 1) sex (female, male), 2) education (uneducated, primary school, secondary school/high school, university), and 3) Type of work (agriculture/fishery, services and sales, manufacturing/construction). In addition, the assumptions were examined using the following methods: 1) the Shapiro-Wilk normality test, which was used to examine the assumptions of normality, where the data distribution of HHS is significantly different from a normal distribution (Shapiro-Wilk=0.98, p=0.00) and 2) the multi-collinearity test. During the course of this study, it was found that the tolerance value was in the range of 0.70-1.00 and that the VIF was in the range of 1.00-1.37, indicating that there was no correlation among the independent variables. In terms of the multiple-regression analysis results, it was found that age, sex, education, Type of work, net salary, financial status, living and working environment, social value and adaptation, healthcare services and accessibility, and migrant policy could predict HHS at 4% (R2=0.04). The correlation coefficient (R) was 0.19 with a statistical significance level of 0.05. The coefficients in the raw score form (B) and the standardized form (Beta) of social value and adaptation were 0.10 and 0.19, respectively, with a statistical significance level of 0.05. The constant was 2.77, with a statistical significance level of 0.05. The results suggested that an increase of one unit of Social value and adaptation will result in an increment of HHS of 2.77 + (0.10) (1) (pertaining to Social value and adaptation). In addition, the comparative analysis of HHS classified by sex, education

and Type of work indicated that sex, education and Type of work are differently associated with HHS with no statistical significance of 0.05. The results showed that sex, education and Type of work have an equal effect on HHS.

There was a statistically significant difference among the independent variables or factors predicting the HHS of Cambodian migrant workers. Their Social value and adaption served as predictors indicating the holistic health status of the Cambodian migrant workers. The remaining independent variables, namely, financial status, healthcare services and accessibility and migrant policy were not among the factors capable of predicting the HHS of the Cambodian migrant workers.

With regard to the current status of Cambodian migrant workers in Thailand, there was a statistically significant difference among the factors predicting the HHS in terms of their Social value and adaption There were two main reasons: 1) a well-structured migrant policy was applied to all migrant workers, which elevated their working and living environments affecting their holistic health status . This policy was formed under the cooperation and involvement of both the Thai and Cambodian Governments. The terms of the MOU pertain to both the movement of migrants and implementation of the policy by the employers, as well as support from the NGOs and InNGOs like the ILO and IOM**.** 2) Thailand's economy and net salary are better as compared to Cambodia. Otherwise, since both Thailand and Cambodia are neighboring countries, their cultures, food and lifestyles have shared certain similarities that have also become key factors that have helped migrant workers to stay in a comfort zone in their adopted country, as well.

5.2 Limitations

The limitations of this study are listed below:

5.2.1 The sample size was not representative of the entire number of Cambodian migrant workers are presently at work in Thailand. The sample does not take into account the undocumented, or illegal, migrant workers physically present in the Country.

5.2.2 During the COVID-19 pandemic, the researchers were unable to meet directly with the participants. The data-collection selection criteria thus did not require

directly meeting face-to-face with, or handing the questionnaire directly to, the participants.

5.2.3 There was a lacking of supporting documents and results of previous researches related to the topic. Therefore, the scientific evidence obtained from the literature reviews cannot corroborate our findings for use in later years.

5.3 Research Recommendations

In this study, the researcher provided data for predicting the HHS of the Cambodian migrant workers. The significant differences in their social status and adaptation might not, however, be the only key factors. The findings from this study can be used to benefit implementation of the nursing practice and further research, as follows:

5.3.1 Recommendations for Implementation

These findings can be used to develop intervention and problem-solving strategies at the national level to improve the health status of Cambodian migrant workers and to eradicate human trafficking. They must never be forced to work. Rather, the goal must be to elevate the quality of life of the migrant workers and make their stay in Thailand more beneficial.

5.3.1.1 The findings can be used for the development of new policies and interventions regarding labor laws and international relations in accordance with the goals and commitment of the Ministry of Labor and Vocational Training of 2019-2023. The purpose of following the ILO and IOM policies should be mainly focused on securing and enhancing the working lives of the migrant workers in Thailand.

5.3.1.2 As shown in the discussion part concerning the social value and adaptation of the Cambodian migrant workers is very crucial that help to elevate their working and living environment. Although a well-structured migrant policy was applied to all migrant workers, this policy should be implemented evaluated and control continuously. Moreover, the low skill levels of the Cambodian workers, most of whom had only a minimal education, their school drop-out rates were quite high. For the benefit of the migrant workers, this study would recommend that the Government, the NGOs and the InNGOs implement a program of vocational training or internal training

to enhance their skills and capacity so that at least they could survive or get a job after returning back to their home country. Therefore, Thailand must recruit more of the skilled workers for the mutual good of both Thailand and Cambodia.

5.3.2 Recommendations for Further Research

5.3.2.1 This research on migrant policy and policy implementation is crucial. The presence of undocumented migrant workers without work permits is a serious concern since they constitute an at-risk group. In addition, there have been reports that they have been indentured into forced labor and have become victims of human trafficking. Many have lost whatever benefits they had hoped to receive and, instead, are being underpaid for their work. Furthermore, they are spending more years here in Thailand than they had expected.

5.3.2.2 Various institutions have issued publications on the migrant workers, showing that an effective migrant policy is needed. Such a policy can contribute significantly toward helping migrant workers. It now remains for the policy makers to formulate such a policy.

5.3.2.3 More investigation and research on the migrant workers will have the potential of helping them to voice their concerns.

5.3.2.4 More documents and publications will need to be published without barriers or concern over their low academic standing. There should be no institutional bias or lack of sincere research interest.

REFERENCES

Books and Books Articles

Bjork, Jenny, and Abid Gulzar. 2010. *10 Things You Need to Know about Labour Trafficking in the Greater Mekong Sub-region.* Bangkok: World Vision International.

Dictionary OE. Oxford english dictionary. Simpson, Ja & Weiner, Esc. 1989:3.

Articles

Andrews, F. M., & Withey, S. B. (2012). Social indicators of well-being: Americans' perceptions of life quality. Springer Science & Business Media.

Ashton, K., Schröder-Bäck, P., Clemens, T., Dyakova, M., Stielke, A., & Bellis, M. A. (2020). The social value of investing in public health across the life course: a systematic scoping review. BMC public health, 20(1), 1-18.

Baker, C., & Courtney, P. (2015). Conceptualising the societal value of health and wellbeing and developing indicators for assessmentColin Baker. European Journal of Public Health, 25(suppl_3).

Baker, S. (2006). Migration and health. Thailand Migration Report 2011, 85.

Baumann, M., Chau, K., Kabuth, B., & Chau, N. (2014). Association between health-related quality of life and being an immigrant among adolescents, and the role of socioeconomic and health-related difficulties. International Journal of environmental research and public Health, 11(2), 1694-1714.

Beil, K., Hanes, D., & Zwickey, H. (2014). Environmental influence on holistic health measures. Explore (New York, NY), 10(2), 115.

Bernard, L. C., & Krupat, E. (1994). Health psychology: Biopsychosocial factors in health and illness. Harcourt Brace College Publishers.

Bircher, Johannes. "Towards a dynamic definition of health and disease." Medicine, Health Care and Philosophy 8, no. 3 (2005): 335-341.

Chalamwong, Y. (2012). Management of Cross-border Low-Skilled Workers in Thailand: An Update. TDRI Quarterly Review, 12-20.

Chalamwong, Y., & Meepien, J. (2012). Poverty and just social protection in Thailand. ASEAN Economic Bulletin, 29(3), 230-244.

Chalamwong, Y., & Prugsamatz, R. (2009). Workers Migration in Thailand: Recent Trends and Implications for Development. TDRI Quarterly Review, 3-9.

Chantavanich, S., Laodumrongchai, S., & Stringer, C. (2016). Under the shadow: Forced workers among sea fishers in Thailand. Marine Policy, 68, 1-7

Charoensuthipan, P. (2017, July 9). No reprieve for officials who abuse migrant worker law. https://www.bangkokpost.com. Retrieved January 6, 2022, from https://www.bangkokpost.com/thailand/general/1283583/no-reprieve-for-officials-who-abuse-migrant-worker-law

De Vos, J., & Kirsten, G. J. C. (2015). The nature of workplace bullying experienced by teachers and the biopsychosocial health effects. South African Journal of Education, 35(3), 1-9.

De Vries, J., & Van Heck, G. L. (1994). Quality of life and refugees. International Journal of Mental Health, 23(3), 57-75.

Engebretson, J. (2003). Cultural Constructions of Health and Illness Recent Cultural Changes Toward a Holistic Approach. Journal of Holistic Nursing, 21(3), 203-227

Ford, K., Chamratrithirong, A., Apipornchaisakul, K., Panichapak, P., & Pinyosinwat, T. (2014). Social integration, AIDS knowledge, and factors related to HIV prevention among migrant workers in Thailand. AIDS and Behavior, 18(2), 390-397.

Freeman, J. (2005). Towards a definition of holism. Br J Gen Pract, 55(511), 154-155.

Friedman, R.C. and Downey, J.I., 2012. The Biopsychosocial Model. Psychodynamic psychiatry, 40(3), pp.371-376.

Fryers, T., Melzer, D., Jenkins, R., & Brugha, T. (2005). The distribution of the common mental disorders: social inequalities in Europe. Clinical Practice and Epidemiology in Mental Health, 1(1), 14.

Greenhaus JH, Collins KM, Shaw JD. The relation between work–family balance and quality of life. Journal of vocational behavior. 2003 Dec 1;63(3):510-31.

Guinto, R. L. L. R., Curran, U. Z., Suphanchaimat, R., & Pocock, N. S. (2015). Universal health coverage in 'One ASEAN': are migrants included?. Global health action, 8(1), 25749.

Guttmacher, S. (1979). Whole in body, mind & spirit: holistic health and the limits of medicine. Hastings Center Report,

Hatala, A. R. (2013). Towards a biopsychosocial-spiritual approach in health psychology: exploring theoretical orientations and future directions. Journal of Spirituality in Mental Health, 15(4), 256-276.

Health and Emotional Well-Being among University Academic Staff during the COVID-19 Outbreak. International Education Studies, 14(3), 82-95.

Holumyong, C., Ford, K., Sajjanand, S., & Chamratrithirong, A. (2018). The access to antenatal and postpartum care services of migrant workers in the greater Mekong subregion: the role of acculturative stress and social support. Journal of pregnancy, 2018.

Huguet JW, Chamratrithirong A, Richter K. Chapter Thailand migration profile. Thailand migration report. 2014;2014:1.

ILO. (2015). Thailand A Labour Market Profile. Retrieved July 5, 2017, from http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_205099.pdf

International Labour Organization. (2016). Non-standard employment around the world: Understanding challenges, shaping prospects.

Isarabhakdi, P. (2004). Meeting at the crossroads: Myanmar migrants and their use of Thai health care services. Asian and Pacific Migration Journal, 13(1), 107-126.

Islam, M. Z., Ahmed, S., Sarker, R. N., Farjana, S., Akter, A., & Saha, S. (2011). Health-related quality of life among adult migrant garment workers in Dhaka City. Bangladesh Medical Journal, 40(3), 14-17.

Islam, M. Z., Ahmed, S., Sarker, R. N., Farjana, S., Akter, A., & Saha, S. (2011). Health-related quality of life among adult migrant garment workers in Dhaka City. Bangladesh Medical Journal, 40(3), 14-17.

Jasemi, Madineh, Leila Valizadeh, Vahid Zamanzadeh, and Brian Keogh. (2017)"A concept analysis of holistic care by hybrid model." Indian Journal of Palliative Care 23, no. 1: 71.

Jenna Robinson (2016) Mental healthy, The holistic model retrieved from http://www.mentalhealthy.co.uk/blogs/the-holistic-model

Karasek, R. (2008). Low social control and physiological deregulation--The stress? disequilibrium theory, towards a new demand? control model. Scandinavian journal of work, environment & health, 34(6), 117.

Karim MR, Islam MT, Talukder B. COVID-19′ s impacts on migrant workers from Bangladesh: In search of policy intervention. World Development. 2020 Dec 1;136:105123.

Kimberley M. Zittel, Shawn Lawrence & John S. Wodarski (2002) Biopsychosocial Model of Health and Healing, Journal of Human Behavior in the Social Environment, 5:1, 19-33, DOI: 10.1300/J137v05n01_02

Kosiyaporn, H., Julchoo, S., Phaiyarom, M., Sinam, P., Kunpeuk, W., Pudpong, N., Allotey, P., Chan, Z.X., Loganathan, T., Pocock, N. and Suphanchaimat, R., 2020. Strengthening the migrant-friendliness of Thai health services through interpretation and cultural mediation: a system analysis. Global Health Research and Policy, 5(1), pp.1-13.

Kraemer, H. C., & Blasey, C. (2015). How many subjects? Statistical power analysis in research. Sage Publications.

Kumar, A. X., Tresise, C. B., Compas, C., & Murphy, A. M. (2018). Policy Briefs on Internal Migration in Southeast Asia.

Kunpeuk W, Julchoo S, Phaiyarom M, Sinam P, Pudpong N, Loganathan T, Yi H, Suphanchaimat R. Access to Healthcare and Social Protection among Migrant Workers in Thailand before and during COVID-19 Era: A Qualitative Study. International Journal of Environmental Research and Public Health. 2022 Mar 6;19(5):3083.

Kusakabe, K., & Pearson, R. (2010). Transborder migration, social reproduction and economic development: a case study of Burmese women workers in Thailand. International Migration, 48(6), 13-43.

Lawreniuk S. Necrocapitalist networks: COVID-19 and the ‘dark side’of economic geography. Dialogues in Human Geography. 2020 Jul;10(2):199-202.

Maxwell, N. L. (2006). Low-skilled jobs: The reality behind the popular perceptions.

Mills, M. B. (2008). Claiming space: Navigating landscapes of power and citizenship in Thai labor activism. Urban Anthropology and Studies of Cultural Systems and World Economic Development, 89-128.

Molland S. ‘The Perfect Business’: Human Trafficking and Lao–Thai Cross-Border Migration. Development and Change. 2010 Sep;41(5):831-55.

Mon, M. (2010). Burmese labour migration into Thailand: governance of migration and labour rights. Journal of the Asia Pacific Economy, 15(1), 33-4415-21

Mulgan, G., 2010. Measuring social value. Stanford Social Innovation Review, 8(3), pp.38-43.

Nilvarangkul, K., McCann, T. V., Rungreangkulkij, S., & Wongprom, J. (2008). Health-related quality of life of Laotian migrant workers in Thailand. Asian and Pacific Migration Journal, 17(2), 133-156.

Pholphirul P. Labour migration and the economic sustainability in Thailand. Journal of Current Southeast Asian Affairs. 2012 Sep;31(3):59-83.

Pien, L. C., Cheng, Y., & Cheng, W. J. (2019). Psychosocial safety climate, workplace violence and self-rated health: A multi-level study among hospital nurses. Journal of nursing management, 27(3), 584-591.

Proeschold-Bell, R. J., LeGrand, S., James, J., Wallace, A., Adams, C., & Toole, D. (2011). A theoretical model of the holistic health of United Methodist clergy. Journal of religion and health, 50(3), 700-720.

Rakprasit, J., Nakamura, K., Seino, K., & Morita, A. (2017). Healthcare use for communicable diseases among migrant workers in comparison with Thai workers. Industrial health, 55(1), 67-75.

Rasmussen, K., Hansen, C. D., Nielsen, K. J., & Andersen, J. H. (2011). Incidence of work injuries amongst Danish adolescents and their association with work environment factors. American journal of industrial medicine, 54(2), 143-152.

Ruchiwit, M. (2016). A study of the Holistic-Health Status of the People in the Greater Mekong Subregion Countries. International Scientific Researches Journal, 72(5).

Saylor, C. (2004). The circle of health a health definition model. Journal of Holistic Nursing, 22(2), 97-115.

Shen, P., & Slater, P. (2021). The Effect of Occupational Stress and Coping Strategies on Mental

Sirgy, M. J., & Lee, D. J. (2016). Work-Life Balance: A Quality-of-Life Model. Applied Research in Quality of Life, 11(4), 1059-1082.

Skevington, S. M., & Epton, T. (2018). How will the sustainable development goals deliver changes in well-being? A systematic review and meta-analysis to investigate whether WHOQOL-BREF scores respond to change. BMJ Global Health, 3(Suppl 1), e000609.

Stansfeld, S., & Candy, B. (2006). Psychosocial work environment and mental health—a meta-analytic review. Scandinavian journal of work, environment & health, 443-462.

Suls, J., & Rothman, A. (2004). Evolution of the biopsychosocial model: prospects and challenges for health psychology. Health Psychology, 23(2), 119.

Suzan Walter, 2016. Holistic Health. Retrieved August 25, 2016, from http://ahha.org/selfhelp-articles/holistic-health/

Sword, W., Watt, S., & Krueger, P. (2006). Postpartum health, service needs, and access to care experiences of immigrant and Canadian-born women. Journal of Obstetric, Gynecologic & Neonatal Nursing, 35(6), 717-727.

Takala, J., Urrutia, M., Hämäläinen, P., & Saarela, K. L. (2009). Global and European work environment—numbers, trends, and strategies. Scandinavian journal of work, environment & health, 35, 15.

Tangcharoensathien V, Thwin AA, Patcharanarumol W. Implementing health insurance for migrants, Thailand. Bulletin of the World Health Organization. 2017 Feb 1;95(2):146.

Terziev, V. (2017). Studying different aspects of social adaptation. Available at SSRN 3143184.

Ti, S., & Somrongthong, R. (2008). Health related quality of life of myanmar migrants in Takuapa and Kuraburi Districts, Phang-Nga Province, Thailand. J Health Res, 22, 79-83.

Tungsuwan, S. (2017, June 29). Thailand: New Law on Foreign Employees and Migrant Workers. Retrieved July 6, 2017, from http://www.bakermckenzie.com/en/insight/publications/2017/06/new-law-on-foreign-employees

Viriyathorn S, Phaiyarom M, Rueangsom P, Suphanchaimat R. Spatial Panel Data Analysis on the Relationship between Provincial Economic Status and Enrolment in the Social Security Scheme amongst Migrant Workers in Thailand, 2015–2018. International Journal of Environmental Research and Public Health. 2021 Dec 24;19(1):181.

Walsh J, Ty M. Cambodian migrants in Thailand: Working conditions and issues. Asian Social Science. 2011 Jul;7(7):23-9.

Walsh, J., & Ty, M. (2011). Cambodian migrants in Thailand: Working conditions and issues. Asian Social Science, 7(7), 23-29.

Warakiti, P. K., & Chaiwong, S. (2021). The Quality of Life of the Migrant's Workers in ASEAN. Buddhist ASEAN Studies Journal, 2(2).

Wehmeyer, M.L. and Bolding, N., 1999. Self-determination across living and working environments: A matched-samples study of adults with mental retardation. Mental retardation, 37(5), pp.353-363.

Wickramasekara, P. (2008). Globalisation, international labour migration and the rights of migrant workers. Third World Quarterly, 29(7), 1247-1264.

World Health Organization. (1996). WHOQOL-BREF: introduction, administration, scoring and generic version of the assessment: field trial version, December 1996 (No. WHOQOL-BREF). World Health Organization.

Zatzick, D. F., Marmar, C. R., Weiss, D. S., Browner, W. S., Metzler, T. J., Golding, J. M., ... & Wells, K. B. (1997). Posttraumatic stress disorder and functioning and quality of life outcomes in a nationally representative sample of male Vietnam veterans. American Journal of Psychiatry, 154(12), 1690-1695.

Website:

International Organization for Migration (IOM) (2021, November 8), UN Migration. National consultation on promoting fair and ethical recruitment between Cambodia-Thailand labour migration corridor. Retrieved Dec 15 2021 from

https://www.iom.int/news/national-consultation-promoting-fair-and-ethical-recruitment-between-cambodia-thailand-labour-migration-corridor

International Labour Organization (ILO) (September 2021). TRAGLE in ASEAN Quarterly Briefing note Retrieved Dec 15 2021 from https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/genericdocument/wcms_735108.pdf

Rawat., V. (2019) Medical tourism Thailand, medical treatment in Thailand. Retrieved Dec 15 2021 from https://www.lyfboat.com/knowledge-center/getting-medical-treatment-in-thailand/

International labour organization, ILO (2021) TRIANGLE in ASEAN Programme Quarterly Briefing Note, Retrieved Dec 15 2021 from https://www.ilo.org/wcmsp5/groups/public/---asia/---ro bangkok/documents/genericdocument/wcms_735105.pdf

WHO. (1946). WHO definition of Health. Retrieved August 10, 2016, from http://www.who.int/about/definition/en/print.html

WHO. (1998). WHO-Five Well-being Index. Retrieved November 30, 2016, from https://www.psykiatri-regionh.dk/who-5/Documents/WHO5_English.pdf

World Health Organization. WHOQOL-BREF: introduction, administration, scoring and generic version of the assessment: field trial version, December 1996. World Health Organization; 1996.

APPENDICES

APPENDIX A

The Panel of Experts

1. Associate Professor Lapatrada Numkham
2. Assistant Professor Penpaktr Uthis
3. Associate Professor Teera Sindecharak
4. Dr. Kanjakee Phanphairoj
5. Dr. Chaiyod Bunyagidj

APPENDIX B

Certificate of Ethical Approval

ScF 03_01 (Eng)

The Human Research Ethics Committee of Thammasat University (Science), (HREC-TUSc)
Room No. 110, Piyachart Building, 1st Floor, Thammasat University Rangsit Campus,
Prathumthani 12121, Thailand, Tel: 0-2986-9213 ext.7358 E-mail: ecsctu3@Staff.tu.ac.th

COA No. 027/2564

Certificate of Approval

Project No. : 147/2563
Title of Project : THE FACTORS PREDICTING THE HOLISTIC HEALTH STATUS OF CAMBODIAN MIGRANT WORKERS IN THAILAND
Principle Investigator : MR. MANNDY NGET
Place of Proposed Study/Institution: Faculty of Nursing, Thammasart University

The Human Research Ethics Committee of Thammasat University (Science), Thailand, has approved the above study project in accordance with the compliance to the Declaration of Helsinki, the Belmont report, CIOMS guidelines and the International practice (ICH-GCP).

Signature:..... Signature: .....
(Assoc. Prof. Jinda Wangboonskul, Ph.D.)
Chairman of the Human Research Ethics
Committee of Thammasat University (Science).

(Assoc. Prof.Laksana Laokiat, Ph.D.)
Secretary of of the Human Research Ethics
Committee of Thammasat University (Science).

Date of Approval: 25 March 2021 **Approval Expire date:** 24 March 2022
Progressing Report Due: 24 March 2022

The approval documents including
1) Research proposal
2) Patient/Participant Information Sheet and Informed Consent Form
3) Principal Investigator's Curriculum Vitae
4) Instrument Structure

APPENDIX C

INSTRUMENTS STRUCTURE

Holistic health status of foreign migrant workers (HHSFMW) aimed to define the key factors determinant factors predicting the holistic-health status of foreign migrant worker in Thailand.

Explanation of the instrument

The instrument adjustment based on the conceptual framework to construct the domain and content from existing theoretical definitions. The concept of health (WHO, (1946, The World Health Organization quality of life assessment (WHOQOL), and the modification of the Migrant Farmworker Stress Inventory (MFWSI) will be used to ensure that this instrument will capture every aspect of holistic health and health-related quality of life.

The tools used in this study prepared by adjusted questionnaires 3 main in sections.

1. Sociodemographic data included Gender, Education, Types of work, Region of resident, Monthly income, Disease, or experience of injuries; these may be the factors that affect the migrant workers' health status.

2. The Migrant Worker Stress Inventory (MWSI) 28 items, divided into five main domains. The five main domains include financial status, living and working environment, Social value and adaptation, healthcare services and accessibility, and migrant policy.

3. The Holistic health Status (HHS) consists of 34 items and divided 4 main domains: (1). physical Health, (2). psychological and emotional health, (3). social and spiritual health and (4). environmental health. The HHS is a revision and adjustment from **World Health Organization Quality of Life (WHOQOL-BREF)** to fix with the migrant workers' health status.

Definition of variables

Holistic health status related to quality of life, physical condition, spiritual wellbeing, and mental health status (Proeschold Bell et al., 2011). There are four major domains derived from the Biopsychosocial-Spiritual Model (Hatala, 2013): Physical and environmental health, Psychological and emotional health, Spiritual Health, and Social Health. Therefore, this study will explore the holistic health status and health-related quality of life of legal and illegal Cambodia migrant workers who work in Thailand. The Holistic Health Status shares the similarity domains with the **WHOQOL-BREF** that devolved by WHO in 1996 to measure the quality of life of people that have been used and tested in various countries.

HHS will be the dependent variable in this study. Holistic health status consists of four major components:

Physical health in this study focuses on the physical dimension and environmental factors that may affect the workers' health of both Cambodian migrant workers. Components of this dependent variable include daily physical performance, healthy lifestyle, the ability to perform their job and daily functioning, getting enough rest, physical activities, exercise, and their living and working environment.

Psychological and emotional health is very important in achieving a healthy life. This refers to the mental status of the workers' ability to cope with stress, their feelings, stress management, and their daily adaption to their living situation.

Social and spiritual health is another important variable, which derived from the theories and definitions that are it a complement to holistic health status. Social health and spiritual health focus on how workers participate in the social and their values in their community, as well as practice their belief.

Environmental Health focuses on how the migrants' workers exposed to their living and working environment and cope with their daily life. It is important to know the effecting costing by the environment on their health. These four major dependent variables are spiritual integration (Hatala, 2013).

Part I: ***Sociodemographic Data***

1. I am ……Year old
2. Gender: □ Male □ Female □ Not indicate
3. Marital status: □ Single □ Married □ Not indicate
   if yes: Number of Children…….,
4. Education: □ Primary school □ Secondary school □ High school □ University □ No education
5. Type your current work:
   a) Agriculture ☐
   b) Fishing ☐
   c) Construction ☐
   d) Services and sales ☐
   e) Manufacturing Industry and Factory ☐
   f) Others: Specify……
6. Region of resident in home country (Please specify the province:…….)
7. Duration of work: ……..Years
8. Current workplace in Thailand : (Please specify the province:…….)
9. Monthly income:……Bah
10. Disease or experienced injuries (Please specify the Disease……)

Part II: The Migrant Worker Stress Inventory (MWSI) is a 28-item self-report instrument that assesses the quality and severity of stress inherent in the migrant worker. **MWSI** originally known as **MFWSI: The Migrant Farmworker Stress Inventory** consisted of 39 items, therefore some item is not fixed with the current situation and status of the Cambodian migrant worker, so it was adjusted to **The Migrant Worker Stress Inventory (MWSI).**

MWSIBelow are a number of statements that migrant workers have reported as stressful. For each statement that you have experienced, **circle only one** of the numbers according to how stressful you find the situation.

If the statement does not apply to you, circle number 1: Have Not Experienced.

1 = HAVE NOT EXPERIENCED
2 = NOT AT ALL STRESSFUL
3 = SOMEWHAT STRESSFUL
4 = MODERATELY STRESSFUL

5 = EXTREMELY STRESSFUL						
N	STATEMENTS	1	2	3	4	5
	Financial Status					
1	At times I have not been able to buy things that I want because I make little money					
2	I have debt at my home country to cover up monthly					
3	My income is Not enough for my daily living					
4	I am depressed because my low income					
	Living and working environment					
5	I have been physically or emotionally abused by my boss and coworker					
6	Because of work, I do not have time to get things done outside of work.					
7	I feel like I am secured, and protected by my company or my workplace					
8	My work is hard work, long hours with no break					
9	I have to work in bad weather and exposed to a dirty environment					
10	It bothers me that there are a lot of drinkers and drug users around my place					
11	We have enough food for daily living					
12	We have enough f facilities for daily living					
13	Sometimes I feel that my housing is inadequate					
	Social value Adaptation and Relationship					
14	I worry about my relationship with my partner					
15	I have difficulty understanding other people when they speak Thai.					
16	I have been taken advantage of by my employer, supervisor, or landlord					
17	I worry about my dependents in my home country, who will look after?					
18	I lost my value and rights when I came here, people make jokes and put down our people, culture and country reputation					
19	I have had to adjust to the different foods in this country					
20	I find it difficult to talk about my feelings to other people					
	Healthcare service and accessibility					
21	I do not have adequate medical care					
22	Because of the physical nature of the framework, I have health problems					
23	Medical service in Thailand is too expensive					
24	I don't get treat well as well as Thai people at the hospital					
	Migrant policy					
25	I worry about not having a permit to work in this country					
26	It is difficult to complete the necessary paperwork to receive the social services.					
27	Migrating to this country was difficult.					
28	I worry about being deported.					

Part III: **The Holistic health Status (HHS)** consists of 34 items and divided 4 main domains: (1). physical Health, (2). psychological and emotional health, (3). social and spiritual health (4). Environmental health. The HHS is a revision and adjustment from **World Health Organization Quality of Life (WHOQOL-BREF)** to fix the migrant workers' health status. Therefore, this study will explore the holistic health status and health-related quality of life of legal Cambodian migrant workers who work in Thailand. The Holistic Health Status shares the similarity domains with the **WHOQOL-BREF** that devolved by WHO in 1996 to measure the quality of life of people that have been used and tested in various countries.

Instructions

Please try to answer all the question as much as you can, it is the response that you have done or felt. Choose one of the best that express and describe about you

No	Items **Identify how good you are experienced to a below items**	Scale **Very poor**	**Poor**	**Neither poor nor good**	**Good**	**Very good**
1	How well are you able to get around?	1	2	3	4	5
2	How would you rate the quality of social services available to you?	1	2	3	4	5
3	I am able to maintain a healthy diet	1	2	3	4	5
Identify how much you are experienced to a below items		Not at all	A little	Moderate amount	Very much	An Extreme amount
4	How much do you enjoy life?	1	2	3	4	5
5	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
6	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
7	I have a chance to practice my spiritual beliefs while I am working in Thailand	1	2	3	4	5
Identify how much you are experienced to a below items		Not at all	A little	Moderate amount	Very much	Extremely
8	To what extent do you feel your life to be meaningful?	1	2	3	4	5
9	How well are you able to concentrate?	1	2	3	4	5
10	Do you feel you are living in a safe and secure environment?	1	2	3	4	5
11	How healthy is your physical environment?	1	2	3	4	5
12	How alone do you feel in your life?	1	2	3	4	5
Identify how complete you are experienced to a below items		Not at all	A little	Moderately	Mostly	Completely
13	Are you able to accept your bodily appearance?	1	2	3	4	5
14	Do you have enough energy for everyday life?	1	2	3	4	5
15	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
16	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5
17	Do you get the kind of support from others that you need?	1	2	3	4	5
18	Do you freely participate in my social or be a part of my community	1	2	3	4	5

Identify how satisfied you are experienced to each below items		Very Dissatisfied	Dissatisfied	Neither nor Dissatisfied	Satisfied	Very satisfied
19	How satisfied are you with your personal relationships?	1	2	3	4	5
20	How satisfied are you with the social care services?	1	2	3	4	5
21	How satisfied are you with your sex life?	1	2	3	4	5
22	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23	How satisfied are you with the conditions of your living place?	1	2	3	4	5
24	How satisfied are you with your access to health services?	1	2	3	4	5
25	How satisfied are you with your sleep?	1	2	3	4	5
26	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
27	How satisfied are you with your capacity for work?	1	2	3	4	5
28	How satisfied are you with yourself?	1	2	3	4	5
29	How satisfied are you with the conditions of your working place?	1	2	3	4	5
Identify how often you are experienced to a below items		Never	Seldom	Quite often	Very often	Always
30	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	1	2	3	4	5
31	How often do you worry about money?	1	2	3	4	5
Overall						
Identify how good you are experienced to a below items		Very poor	Poor	Neither Poor nor Good	Good	Very good
32	How would you rate your quality of life?	1	2	3	4	5
Identify how satisfied you are experienced to a below items		Very Dissatisfied	Dissatisfied	Neither nor Dissatisfied	Satisfied	Very satisfied
33	In general, how satisfied are you with your life?	1	2	3	4	5
34	How satisfied are you with your health?	1	2	3	4	5

លេខកូតរបស់អ្នកចូលរួម..... លេខទូរស័ព្ទ: .....

QUESTIONNAIRES

កំរងសំណួរ

ស្ថានភាពសុខភាពរបស់ពលករចំណាកស្រុកបរទេស (HHSMW) មានគោលបំណងកំណត់កត្តាសំខាន់ៗដែលអាចព្យាករណ៍ពីស្ថានភាពសុខភាពរួមរបស់ពលករចំណាកស្រុកបរទេសនៅក្នុងប្រទេសថៃ។

ការអធិប្បាយអំពី វិធានការស្ទង់មតិ

កំរងសំណួរដែលបានកែសំរួលដោយផ្អែកលើបទដ្ឋាននៃផ្នត់គំនិតដើម្បីសំយោគ និងកំណត់មាតិកា ដើម្បីបញ្ជាក់អំពីនិយមន័យ ទ្រឹស្តីដែលមានស្រាប់ដែលមានដូចជា គោលគំនិតស្តីពីបញ្ហាសុខភាព (WHO, ១៩៤៦), ការវាយតម្លៃគុណភាពជីវិតរបស់អង្គការសុខភាពពិភពលោក (WHOQOL) និងការកែប្រែកំរងសំណួរ អំពី ភាពស្ត្រេសរបស់ពលករចំណាកស្រុកបរទេស (MFWSI) នឹងត្រូវបានប្រើដើម្បីធានាថានេះឆ្លុះបញ្ចាំងពីសុខភាពទូទៅនិងសុខភាពទាក់ទងទៅ នឹងគុណភាពជីវិត។

កំរងសំណួរ ដែលត្រូវបានប្រើក្នុងការសិក្សានេះរៀបចំជា ៣ ផ្នែក ធំៗ:

ផ្នែកទី ១: ទិន្នន័យប្រជាសាស្ត្រ រួមមានភេទ,ការអប់រំ,ប្រភេទការងារ,តំបន់,ចំណូលប្រចាំខែ,ជំងឺឬប្រវត្តិនៃការរងរបួស។ ទាំងនេះអាចជាកត្តាដែលប៉ះពាល់ដល់ស្ថានភាពសុខភាពរបស់ពលករចំណាកស្រុកបរទេស។

ផ្នែកទី២ : ស្ថានភាពសុខភាពផ្លូវចិត្តរបស់ពលករចំណាកស្រុកបរទេស (MWSI) ២៨ ចំនុចចែកជា ៥ ផ្នែកសំខាន់ៗ។ ផ្នែកធំ ៗ ទាំង ៥ រួមមានស្ថានភាពហិរញ្ញវត្ថុ, ការរស់នៅនិងបរិយាកាសការងារ, តម្លៃសង្គមនិងការបន្សុំ, សេវាសុខភាពនិងភាពងាយស្រួលនិងគោលនយោបាយពលករចំណាកស្រុកបរទេស។

ផ្នែកទី ៣: ស្ថានភាពសុខភាពទូទៅ (HHS) មាន ៣៤ សំនួរនិងចែកជា ៤ផ្នែកធំ ៗ ៖១-)សុខភាពរាងកាយ, ២-) សុខភាពផ្លូវចិត្តនិងអារម្មណ៍, ៣-)សុខភាពសង្គម និងខាងវិញ្ញាណនិង ៤-)សុខភាពបរិស្ថាន។ HHS ជាការកែសំរួល World Health Organization Quality of Life (WHOQOL-BREF) ដើម្បីដោះ

ស្រាយជាមួយស្ថានភាពសុខភាពរបស់ពលករចំណាកស្រុកបរទេស។

ផ្នែកទី ១: ទិន្នន័យប្រជាសាស្ត្រ: សូមមេត្តាគូស √ ក្នុងប្រអប់ និងបំពេញចន្លោះរបស់អ្នក

1. ខ្ញុំមានអាយុ.....ឆ្នាំ
2. ភេទ: ប្រុស□ ស្រី□ មិន បង្ហាញ □
3. ស្ថានភាពគ្រួសារ: នៅលីវ □ រៀបការ □ មិន បង្ហាញ□

   បើមាន: ចំនួនកូន.....,

4. ការអប់រំ: បឋមសិក្សា □ អនុវិទ្យាល័យ □ វិទ្យាល័យ □ សាកលវិទ្យាល័យ □ មិនបានរៀន □
5. ការងារបច្ចុប្បន្នរបស់អ្នក:

   ១. កសិកម្ម □ ២. នេសាទ□ ៣. សំណង់□

   ៤. សេវាកម្ម និងការលក់ ការជួញ□ត ៥. ឧស្សាហកម្មនិងរោងចក្រ

   ផ្សេងៗ: បញ្ជាក់.....
6. ទីកន្លែងកំណើត (សូមបញ្ជាក់ខេត្ត: .....)
7. រយៈពេលនៃការងារ: .....ឆ្នាំ
8. កន្លែងការងារបច្ចុប្បន្នក្នុងប្រទេសថៃ: (សូមបញ្ជាក់ខេត្ត: .....)
9. ប្រាក់ចំណូលប្រចាំខែ: ..... U.S.D
10. ជំងឺឬការរងរបួស (សូមបញ្ជាក់អំពីជំងឺ.....)

ផ្នែកទី២ : The Migrant Worker Stress Inventory(MWSI) គឺជា សេចក្តី រាយការណ៍ដោយខ្លួនឯង ដែលមាន ២៨ សំនួរ
ដែលវាយតម្លៃគុណភាពនិងភាពធ្ងន់ធ្ងរនៃស្ត្រេសដែលជាប់ទាក់ទងនឹងពលករចំណាកស្រុកបរទេស។

ខាងក្រោមនេះប្រយោគមួយចំនួនដែលពលករចំណាកស្រុកបរទេសបានបង្ហាញថាគាត់ មានភាពតានតឹង និង បញ្ហាស្ត្រេស។ សូមគូសរង្វង់តែមួយ លេខ ប៉ុណ្ណោះ ចំពោះប្រយោគឬ ឃ្លា ណាមួយដែលអ្នកបានឆ្លងកាត់ ដោយគូសរង្វង់លើ កំរិតស្ត្រេស របស់អ្នក ពី លេខ ២ ដល់លេខ ៥ ប្រសិនបើប្រយោគទាំងនេះមិន កើតមានឡើងចំពោះអ្នកទេ សូមគូសរង្វង់លេខ ១ ។

1 = មិនស្ថិតក្នុងស្ថានភាពស្ត្រេស
2 = ស្ថិតនៅក្នុងស្ថានភាពស្ត្រេសតិចតួចបំផុត
3 = ស្ថិតក្នុងស្ថានភាពស្ត្រេសពេលខ្លះ
4 = ស្ថិតក្នុងស្ថានភាពស្ត្រេសមធ្យម
5 = ស្ថិតក្នុងស្ថានភាពស្ត្រេសខ្លាំង

ល.រ	ប្រយោគបង្ហាញ					
ស្ថានភាពហិរញ្ញវត្ថុ៖						
1	ពេលខ្លះខ្ញុំមិនអាចទិញរបស់ដែលខ្ញុំចង់បានទេព្រោះ ខ្ញុំរកលុយបានតិចតួច	1	2	3	4	5
2	ខ្ញុំមានបំណុលនៅឯប្រទេសកំណើតរបស់ខ្ញុំដែលត្រូវបង់រាល់ខែ	1	2	3	4	5
3	ប្រាក់ចំណូលរបស់ខ្ញុំមិនគ្រប់គ្រាន់សម្រាប់ការរស់នៅប្រចាំថ្ងៃរបស់ខ្ញុំទេ	1	2	3	4	5
4	ខ្ញុំបាក់ទឹកចិត្តព្រោះចំណូលទាប	1	2	3	4	5
បរិស្ថានការងារ និង កន្លែងរស់នៅ						
5	ខ្ញុំត្រូវបានគេរំលោភបំពានលើរាងកាយ ឬខាងផ្លូវចិត្តដោយនិយោជក និងអ្នករួមការងារបស់ខ្ញុំ	1	2	3	4	5
6	ដោយសារតែរវល់នឹងការងាររបស់ខ្ញុំ ខ្ញុំមិនមានពេលវេលាដើម្បីធ្វើអ្វីក្រៅពីការងារទេ	1	2	3	4	5
7	ខ្ញុំមានអារម្មណ៍ថាខ្ញុំត្រូវបានធានាសុវត្ថិភាពនិងការពារដោយក្រុមហ៊ុនឬកន្លែងការងារ	1	2	3	4	5
8	ការងាររបស់ខ្ញុំគឺជាការងារលំបាកហើយត្រូវធ្វើច្រើនម៉ោងដោយគ្មានពេលសម្រាក	1	2	3	4	5
9	ខ្ញុំត្រូវធ្វើការក្នុងអាកាសធាតុមិនល្អ ហើយត្រូវប្រឈមនឹងបរិយាកាសការងារ កខ្វក់	1	2	3	4	5
10	ជាការរំខានខ្ញុំ ព្រោះថាមានអ្នកជិតស្រា និងអ្នកប្រើគ្រឿងញៀនជាច្រើននៅជុំវិញកន្លែងខ្ញុំ	1	2	3	4	5
11	តើមានអាហារគ្រប់គ្រាន់សម្រាប់ការរស់នៅប្រចាំថ្ងៃទេ?	1	2	3	4	5
12	តើមានគ្រឿងបរិក្ខារគ្រប់គ្រាន់សម្រាប់ការរស់នៅប្រចាំថ្ងៃទេ?	1	2	3	4	5
13	ពេលខ្លះខ្ញុំមានអារម្មណ៍ថាផ្ទះរបស់ខ្ញុំ មានលក្ខណៈខ្វះខាត	1	2	3	4	5
តម្លៃសង្គម ការបន្ថែ និងទំនាក់ទំនងសង្គម						
14	ខ្ញុំបារម្ភពីទំនាក់ទំនងរបស់ខ្ញុំជាមួយដៃគូរបស់ខ្ញុំ	1	2	3	4	5
15	ខ្ញុំមានការលំបាកក្នុងការស្វែងយល់ពីមនុស្សផ្សេងទៀតនៅពេលពួកគេនិយាយភាសាថៃ	1	2	3	4	5
16	ខ្ញុំត្រូវបានគេទាញយកផលប្រយោជន៍ពីនយោជិត ថៅកែ ឬ ចៅហ្វាយរបស់ខ្ញុំ	1	2	3	4	5
17	ខ្ញុំបារម្ភពីអ្នកនៅក្នុង ផ្ទះរបស់ខ្ញុំ មិនមានអ្នកមើលថែទាំ	1	2	3	4	5
18	ខ្ញុំបានបាត់បង់តម្លៃ របស់ខ្ញុំនៅពេលខ្ញុំមកទីនេះមានអ្នកសើចចំអក និងមើលងាយមើលថោក ខាង វប្បធម៌ និងកេរ្តិ៍ឈ្មោះ ប្រទេសរបស់យើង	1	2	3	4	5
19	ខ្ញុំត្រូវសម្របខ្លួនទៅនឹងអាហារថៃ	1	2	3	4	5
20	ខ្ញុំពិបាកនិយាយអំពីអារម្មណ៍របស់ខ្ញុំទៅកាន់មនុស្សផ្សេងទៀត	1	2	3	4	5
សេវាកម្មថែទាំសុខភាព និងភាពងាយស្រួល						

21	ខ្ញុំមិនមានសេវាកម្មថែទាំសុខភាពគ្រប់គ្រាន់	1	2	3	4	5
22	ដោយសារតែស្ថានភាព ការងាររបស់ខ្ញុំ ធ្វើអោយខ្ញុំមានបញ្ហាសុខភាព	1	2	3	4	5
23	សេវាកម្មមន្ទីរពេទ្យនៅថៃថ្លៃពេក	1	2	3	4	5
24	ខ្ញុំមិនទទួលបានការព្យាបាលដូចប្រជាជនថៃនៅមន្ទីរពេទ្យនោះទេ	1	2	3	4	5
គោលនយោបាយចំណាកស្រុក						
25	ខ្ញុំបារម្ភពីការមិនមានលិខិតអនុញ្ញាត ធ្វើការនៅក្នុងប្រទេសថៃ	1	2	3	4	5
26	ពិបាកក្នុងការបំពេញឯកសារចាំបាច់ដើម្បីទទួលបានសេវាកម្មសង្គម	1	2	3	4	5
27	ការធ្វើចំណាកស្រុកទៅប្រទេសនេះគឺពិបាកណាស់	1	2	3	4	5
28	ខ្ញុំបារម្ភពីការនិរទេសខ្លួនត្រលប់ទៅវិញ	1	2	3	4	5

ផ្នែកទី ៣៖ ស្ថានភាពសុខភាពទូទៅ (HHS) រួមមានចំនុចនិងចែកជា ៤ ប្រភេទ ៖
១-)សុខភាពរាងកាយ,
២-)សុខភាពផ្លូវចិត្ត,
៣-)សង្គមនិងជំនឿសាសនា,
៤-)សុខភាពបរិស្ថាន ។

HHS គឺជាកំរងសំណួរដែលបានបកប្រែ និង កែសម្រួលពីកម្រងសំណួរដើម “គុណភាពជីវិតរបស់អង្គការសុខភាពពិភពលោក (WHOQOL-BREF)” ដើម្បីស្វែងយល់ពី ស្ថានភាពសុខភាពរបស់ពលករចំណាកស្រុក។ ដូច្នេះ ការសិក្សានេះនឹងស្វែងយល់ពីស្ថានភាពសុខភាពរួម និងគុណភាពជីវិតដែលទាក់ទងនឹងសុខភាពរបស់ពលករចំណាកស្រុកកម្ពុជាទាំងស្របច្បាប់ ដែលធ្វើការនៅប្រទេសថៃ។ ស្ថានភាពសុខភាពរួមចែករំលែកដែនភាពស្រដៀងគ្នាជាមួយ WHOQOL-BREF ដែលបង្កើតឡើងដោយ WHO ក្នុងឆ្នាំ 1996 ដើម្បីវាស់ស្ទង់គុណភាពជីវិតរបស់មនុស្សដែលត្រូវបានប្រើប្រាស់ និងសាកល្បងនៅក្នុងប្រទេសផ្សេងៗជាច្រើនទៀត។

សូមព្យាយាមឆ្លើយ អោយបានគ្រប់សំណួរទាំងអស់ ប្រសិនបើអ្នកមិនច្បាស់ពីហេតុផលដើម្បីឆ្លើយ សំនួរសូមជ្រើសរើសចម្លើយមួយដែលសមស្របបំផុត ហេតុផលនោះអាចជាការឆ្លើយតប ដំបូងរបស់អ្នក។

N.	Items **បញ្ជាក់ពីសមត្ថភាពរបស់អ្នកតាមរយៈសំនួរខាងក្រោម ៖**	Scale **ខ្សោយណាស់**	**ខ្សោយ**	**មធ្យម**	**ល្អ**	**ល្អណាស់**
1	តើអ្នកមានសិទ្ធិដើរហើរ បានដល់កំរិតណា?	1	2	3	4	5
2	តើអ្នកវាយតម្លៃគុណភាពនៃសេវាសង្គមដែលមានសម្រាប់អ្នកយ៉ាងដូចម្តេច?	1	2	3	4	5
3	ខ្ញុំបានហូប របបអាហារដែលមានសុខភាពល្អជានិច្ច	1	2	3	4	5
បញ្ជាក់ពីកំរិតនៃបទពិសោធន៍តាមរយៈសំនួរខាងក្រោម៖		**គ្មានទេ**	**តិចតួច**	**មធ្យម**	**ខ្លាំង**	**ខ្លាំងណាស់**
4	តើអ្នកពេញចិត្ត នឹងជីវិតរបស់អ្នកកំរិតណា?	1	2	3	4	5
5	តើអ្នកមានអារម្មណ៍ថាការឈឺចាប់ខាងរាងកាយជាឧបសគ្គរបស់អ្នកពីការងារដែលអ្នកត្រូវធ្វើដែរឬទេ?	1	2	3	4	5
6	តើអ្នកត្រូវការការព្យាបាលខ្លាំងកំរិតណា ក្នុងដំណើរការរស់នៅប្រចាំថ្ងៃរបស់អ្នក?	1	2	3	4	5
7	ខ្ញុំមានឱកាសអនុវត្តនូវ ជំនឿសាសនា របស់ខ្ញុំកំឡុងពេលធ្វើការនៅប្រទេសថៃ	1	2	3	4	5

បញ្ហាក់ពីកំរិតនៃបទពិសោធន៍តាមរយៈសំនួរខាងក្រោម៖		**គ្មាន**	**តិចតួច**	**មធ្យម**	**មានច្រើន**	**ច្រើនខ្លាំងបំផុត**
8	តើអ្នកមានអារម្មណ៍ថាជីវិតរបស់អ្នកមានន័យខ្លីមសារដល់កំរិតណា?	1	2	3	4	5
9	អ្នកអាចធ្វើការអំអត់ធន់បានល្អ កម្រិតណា?	1	2	3	4	5
10	តើអ្នកយល់ថាអ្នកកំពុងរស់នៅក្នុងបរិស្ថានដែលមានសុវត្ថិភាពនិងស្ងេរភាពទេ?	1	2	3	4	5
11	តើអ្នកគិតថាសុខភាពរាងកាយរបស់អ្នកល្អកម្រិតណា?	1	2	3	4	5
12	តើអ្នកគិតថាជីវិតរបស់អ្នកឯកោ កម្រិតណា?	1	2	3	4	5
បញ្ហាក់ពីកម្រិតនៃការតាមរយៈសំនួរខាងក្រោម៖		**គ្មាន**	**តិចតួច**	**មធ្យម**	**ល្អគ្រប់គ្រាន់**	**គ្រប់គ្រាន់ណាស់**
13	តើអ្នកអាចទទួលយកសភាព នៃរូបរាងកាយរបស់អ្នកបានទេ?	1	2	3	4	5
14	តើអ្នកមានថាមពលគ្រប់គ្រាន់សម្រាប់ជីវិតប្រចាំថ្ងៃទេ?	1	2	3	4	5
15	តើព័ត៌មានដែលអ្នកត្រូវការក្នុងជីវិតប្រចាំថ្ងៃរបស់អ្នកមានគ្រប់គ្រាន់កម្រិតណាដែរ?	1	2	3	4	5
16	តើអ្នកមានឱកាសសម្រាប់សកម្មភាពកម្សាន្តដល់កំរិតណា?	1	2	3	4	5
17	តើអ្នកទទួលបានការគាំទ្រពីអ្នកដទៃដែលអ្នកត្រូវការទេ?	1	2	3	4	5
18	តើអ្នកបានចូលរួមការងារសង្គម ឬបានចូលរួមជាផ្នែកមួយរបស់សង្គមទេ?	1	2	3	4	5
បញ្ហាក់ពីកម្រិតនៃការពេញចិត្តតាមរយៈសំនួរខាងក្រោយ៖		**មិនពេញចិត្ត**	**តិចតួច**	**មធ្យម**	**ពេញចិត្ត**	**ពេញចិត្តបំផុត**
19	តើអ្នកពេញចិត្តចំពោះទំនាក់ទំនងផ្ទាល់ខ្លួនរបស់អ្នកប៉ុណ្ណា?	1	2	3	4	5
20	តើអ្នកពេញចិត្តនឹងសេវាកម្មថែទាំសង្គមយ៉ាងដូចម្តេច?	1	2	3	4	5
21	តើអ្នកពេញចិត្តនឹងជីវិតផ្លូវភេទរបស់អ្នកប៉ុណ្ណា?	1	2	3	4	5
22	តើអ្នកពេញចិត្តនឹងការឧបត្ថម្ភដែលអ្នកទទួលពីមិត្តរបស់អ្នកឬទេ?	1	2	3	4	5
23	តើអ្នកពេញចិត្តនឹងលក្ខខ័ណ្ឌនៃកន្លែងរស់នៅរបស់អ្នកឬទេ?	1	2	3	4	5
24	តើអ្នកពេញចិត្តនឹងការទទួលបានសេវាសុខភាពឬទេ?	1	2	3	4	5
25	តើអ្នកពេញចិត្ត នឹងការទទួលទានដំណេករបស់អ្នកឬទេ?	1	2	3	4	5
26	តើអ្នកពេញចិត្តនឹងសមត្ថភាពរាងកាយរបស់អ្នកក្នុងការអនុវត្តសកម្មភាពប្រចាំថ្ងៃដែរទេ?	1	2	3	4	5

27	តើអ្នកពេញចិត្តនឹងសមត្ថភាពការងាររបស់អ្នកប៉ុណ្ណា?	1	2	3	4	5
28	តើអ្នកពេញចិត្តនឹងខ្លួនឯងប៉ុណ្ណា?	1	2	3	4	5
29	តើអ្នកពេញចិត្តនឹងលក្ខខ័ណ្ឌនៃកន្លែងការងាររបស់អ្នកយ៉ាងដូចម្តេច?	1	2	3	4	5
បញ្ហាក់ពីកម្រិតនៃទម្លាប់របស់អ្នកតាមរយៈសំនួរខាងក្រោម៖		**មិនដែល**	**តិចតួច**	**ពេលខ្លះ**	**ញឹកញាប់**	**គ្រប់ពេល**
30	តើអ្នកមានអារម្មណ៍អវិជ្ជមានដូចជាអារម្មណ៍សោកសៅ ភាពអស់សង្ឃឹមការស្ត្រេស ការធ្លាក់ទឹកចិត្តញឹកញាប់ប៉ុណ្ណា?	1	2	3	4	5
31	តើអ្នកព្រួយបារម្ភអំពីប្រាក់ញឹកញាប់ប៉ុណ្ណា?	1	2	3	4	5
បញ្ហាក់ពីកម្រិតនៃគុណភាពជីវិតតាមរយៈសំនួរខាងក្រោម៖		**គ្មាន**	**តិចតួច**	**មធ្យម**	**ល្អ**	**ល្អណាស់**
32	តើអ្នកវាយតម្លៃគុណភាពជីវិតរបស់អ្នកយ៉ាងដូចម្តេច?	1	2	3	4	5
បញ្ហាក់ពីកម្រិតនៃការទទួលយកបានរបស់ជីវិតអ្នកតាមរយៈកម្រងសំនួរខាងក្រោម		**មិនពេញចិត្តបំផុត**	**តិចតួច**	**មធ្យម**	**ពេញចិត្ត**	**ពេញចិត្តបំផុត**
33	ជាទូទៅតើអ្នកពេញចិត្តនឹងជីវិតរបស់អ្នកកម្រិតណា?	1	2	3	4	5
34	តើអ្នកពេញចិត្តនឹងសុខភាពរបស់អ្នកកម្រិតណា?	1	2	3	4	5

BIOGRAPHY

Name	Manndy NGET
Education Attainment	2010 Bachelor degree
	2013 Master degree
Work Position	President Assistant,
	Head of Post-Graduate Department
	Deputy Dean Faculty of Nursing
	International University, Cambodia

Publications

Thapa, R., Yang, Y. and Nget, M., 2019. Perceptions of Sexual Infidelity in Rural Cambodia: A Qualitative Study of Adolescent Men. American journal of men's health, 13(3), p.1557988319848576.

Nget, M. ., 2016. The Economic Development, Environmental Issue, Affecting on Healthcare System of the Greater Mekong Subregion Review

Nget, M. and Muijeen, K., 2017. A Review of the Relationships among the Key Determinants Affecting the Mental Health Disorders of the People in Greater Mekong Subregion Countries. Current psychiatry reviews, 13(4), pp.252-258.

Manndy, N., Occupational Stress, Job Satisfaction and Job Performance among Nurses in Cambodia (Master dissertation). Ajou university library, South Korea.

Work Experiences	**From the present position to the former ones**
- 2021- Present	: Board Director of Phnom Penh Club Association
- 2018- Present	: Assistant of H.E Secretary of State, Cambodia.
	: Military Officer of General Department of Policy & Foreign Affairs, Ministry of National Defense
- 2018- Present	: Head of Post-Graduate Study Department
	: Deputy Dean Faculty of Nursing, IU, Cambodia.

- Dec 2015 -2018 : Research Assistant, Center for Nursing Research and Innovation (CNRI), Thammasat University, Thailand
- Mar 2013-June 2015 : Head of Nursing Department
  : Lecturer in College of Nursing and Midwifery
  : President of LU Alumni Association,Cambodia
- Jan 2013-Mar 2013 : Project Coordinator: Korea International Cooperation Agency (KOICA), Cambodia
- Jan 2012- Dec 2013 : Project Assistant, Medipeace, South Korea
- May 2010- Jan 2011 : General Nurse, CT Policlinic, Cambodia
- 2010 – 2008 : Lecturer Assistant, Life University, Cambodia