


**THE RELATIONSHIPS AMONG JOB DEMANDS, WORK ENGAGEMENT, AND  
TURNOVER INTENTIONS IN THE CONTEXT OF DIFFERENT LEVELS OF  
PERCEIVED ORGANIZATIONAL SUPPORT**

**THANAWATDECH THIRAPATSAKUN**



**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMEN  
OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR  
OF PHILOSOPHY PROGRAM IN BUSINESS ADMINISTRATION  
FACULTY OF BUSINESS ADMINISTRATION  
RAJAMANGALA UNIVERSITY OF TECHNOLOGY THANYABURI  
ACADEMIC YEAR 2013  
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**Dissertation Title** The Relationships among Job Demands, Work Engagement, and Turnover Intentions in the Context of Different Levels of Perceived Organizational Support

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**Academic Year** 2013


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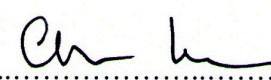
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### ABSTRACT

The purposes of this study were fourfold. Firstly, it aimed at investigating the relationship between job demands and turnover intention. The second objective was to examine the mediating effects of work engagement on the relationship between job demands and turnover intentions. Also, third objective was to study the relationship between perceived organizational supports and turnover intention. Finally, the moderating effect of perceived organizational support on the relationship between job demands and work engagement was investigated.

The sample consisted of 890 professional nurses from 44 hospitals in Bangkok and Metropolitan Area. Questionnaire with 7-level rating scale was employed as the research instrument. The data were statistically analyzed by means of confirmatory factor analysis, multiple groups analysis, and structural equation modeling.

The results indicated that there was a significant positive relationship between job demands and turnover intention. Work engagement had mediating effects on the relationship between job demands and turnover intention. Work engagement mediated the relationship between perceived organizational supports and turnover intentions. Further, the finding revealed that perceived organizational supports did not moderate the relationship between job demand and work engagement.

**Keywords:** job demands, work engagement, turnover intentions, perceived organizational supports, work schedule flexibility, financial reward, multiple groups analysis, Structural Equation Modeling (SEM)



## Declaration

This work contains no material which has been acceptance for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and beliefs, contains on material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my dissertation, when deposited in the university library, being available for loan and photocopying.

Thanawatdech Thirapatsakun



## Acknowledgements

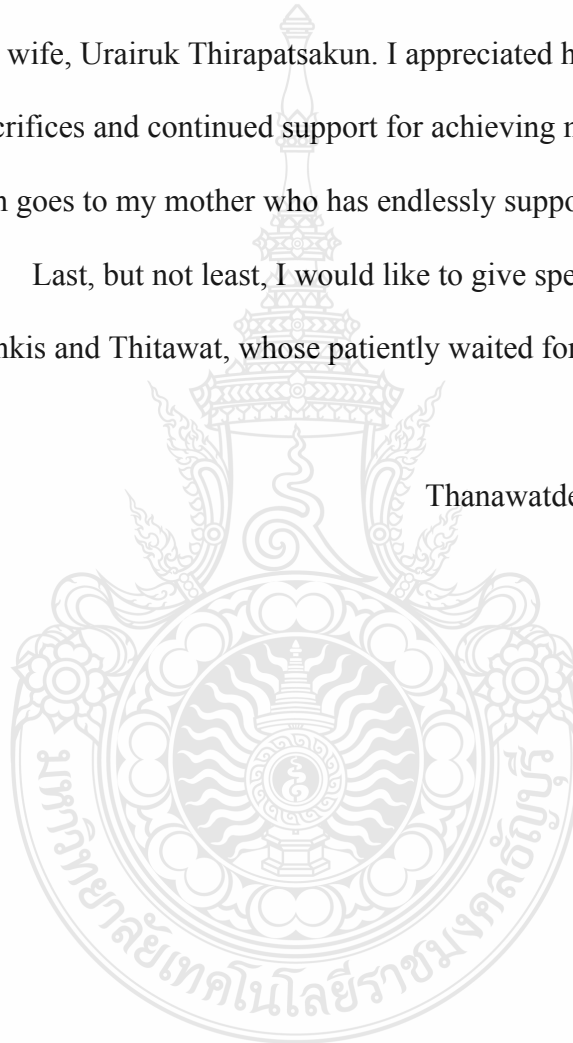
This dissertation is dedicated to the memory of my father, someone who was loved so dearly. This dissertation would not be possible without their support. First, I would like to express my sincere appreciation to my advisor Dr. Chanongkorn Kuntonbutr, for his encouragement and guidance throughout my graduate career. Channongkron is the busiest person I know, but has always made time to listen and offer advice whenever I need it. I would also like to thank my dissertation co-advisor and mentor Dr. Panisa Mechinda for all her support on this dissertation. Her intellectual and scholarly insights provided me with many learning opportunities to expand my knowledge and develop my thinking on organizational research. I really enjoyed working with her. I also wish to deeply thank Dr. Wai Jamornman. His valuable suggestions and comments for dissertation helped me develop my understanding in role of Job demand and Perceived organizational support construct as well as rigorous data review and a data handling.

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## Table of Contents

	Page
Abstract.....	(3)
Declaration.....	(4)
Acknowledgements.....	(6)
List of Tables.....	(11)
List of Figures.....	(12)
List of Abbreviations.....	(13)
CHAPTER 1 INTRODUCTION.....	15
1.1 Background and Statement of the Problem.....	15
1.2 Significance of the Study.....	16
1.3 Purpose of the Study.....	19
1.4 Research Question and Hypothesis.....	19
1.5 Research Framework.....	23
1.6 Limitation of the Study.....	26
1.7 Scope of the Study.....	27
1.8 Organization of the Study.....	28
CHAPTER 2 REVIEW OF THE LITERATURE.....	30
2.1 Introduction.....	30
2.2 Medical Tourism in Thailand.....	30
2.3 Medical Tourism Network of Thailand.....	31
2.4 Professional Nurse.....	32
2.5 Professional Nurse Production: Health Workforce Production.....	32
2.6 Contextual Variable and Control Variable.....	33
2.7 Job Demands.....	34

## Table of Contents (Continued)

	Page
2.8 Perceived Organizational Support .....	40
2.9 Work Engagement .....	44
2.10 Turnover Intentions .....	49
<b>CHAPTER 3 RESEARCH METHODOLOGY .....</b>	<b>58</b>
3.1 Introduction.....	58
3.2 Research Design .....	58
3.3 Population and Sampling.....	60
3.4 Geographic Location.....	61
3.5 Data Gathering.....	61
3.6 Research Instrumentation .....	62
3.7 Measurement.....	63
3.8 Control Variable .....	69
3.9 Exogenous Variable.....	70
3.10 Endogenous Variable.....	72
3.11 Sequence of Analysis.....	75
3.12 Model Analysis, Relationship Types: Mediation and Moderation.....	76
3.13 Summary .....	80
<b>CHAPTER 4 RESEARCH RESULT .....</b>	<b>81</b>
4.1 Introduction.....	81
4.2 Research Result .....	81
4.3 Structural Equation Modeling (SEM) Process.....	88
4.4 Hypothesis Testing .....	120

## Table of Contents (Continued)

	Page
CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS.....	123
5.1 Summary of the Findings.....	123
5.2 Discussion of the Finding.....	124
5.3 Theoretical Implications.....	129
5.4 Managerial Implications.....	130
5.5 Limitations of the Study.....	133
5.6 Recommendations for Future Research.....	134
List of Bibliography.....	137
Appendices.....	156
Appendix A The Permission to modify and use survey instrument.....	157
Appendix B The Survey Instrument.....	164
Biography.....	170

## List of Tables

	Page
Table 2-1 Summary of related research linking constructs of model.....	53
Table 3-1 Means, standard deviations, and reliabilities of the pilot study (N=40) .....	68
Table 4-1 Demographics and work characteristics of sample .....	82
Table 4-2 The hospital name lists of collected data.....	84
Table 4-3 Model testing for the initial confirmatory factor.....	91
Table 4-4 Summarized of modification indices after evaluating.....	92
Table 4-5 Model testing for the respecified confirmatory factors model.....	94
Table 4-6 Means, standard deviations, and reliabilities of major study variables (after confirm factor analysis).....	82
Table 4-7 CFA Factor loading estimates and <i>p</i> -values.....	98
Table 4-8 Standardized factor loading, average variance extracted, and reliability estimates .....	99
Table 4-9 Construct correlation matrix (standardized).....	101
Table 4-10 Fit indices of the model testing for the initial structural equation modeling .....	104
Table 4-11 Summarized of modification indices after evaluating.....	105
Table 4-12 Fit indices of the model testing for the respecified of structural equation modeling .....	107
Table 4-13 Regression weight and estimates for key variable with two control variable: full structural equation model.....	108
Table 4-14 Assessing direct and indirect effects in a mediated model.....	109
Table 4-15 Multiple group models of CFA for testing moderation effect analysis of low & high perceived organizational supports .....	115
Table 4-16 Testing the moderating influence analysis of low & high perceived organizational supports.....	117
Table 4-17 Summary of hypothesis testing .....	122

## List of Figures

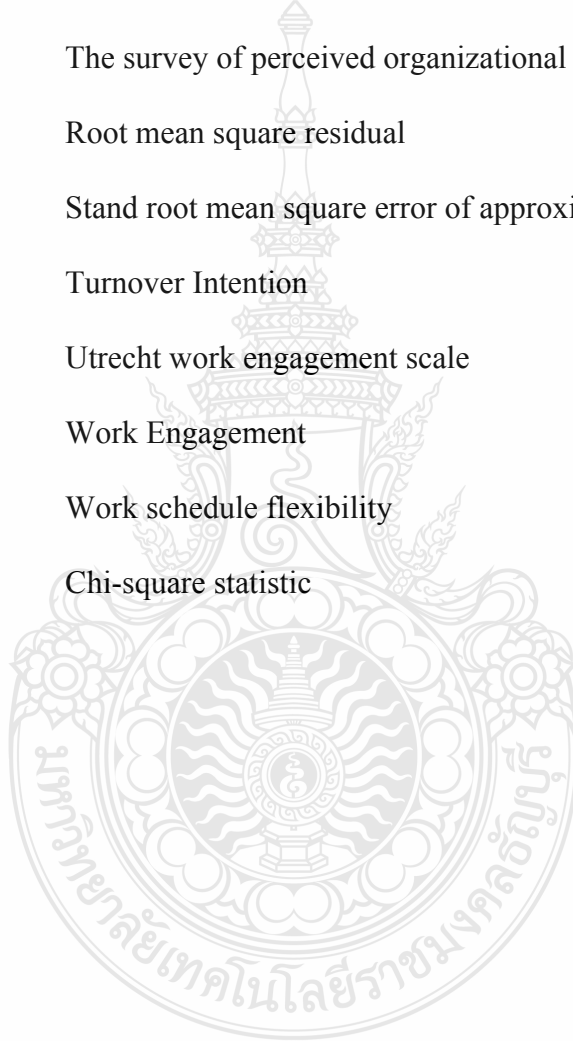
	Page
Figure 1-1 Hypothesized conceptual model for the relationship of constructs .....	20
Figure 1-2 The conceptual framework.....	24
Figure 4-1 Model testing for the initial confirmatory factor analysis: full model of the four constructs and two control variables .....	89
Figure 4-2 Confirmatory factor analysis model after evaluating the modification indices .....	93
Figure 4-3 Model testing for the initial structural equation model: full model of the four constructs and two control variables .....	103
Figure 4-4 Model testing for the respecified structural equation model: full model of the four constructs and two control variables .....	106
Figure 4-5 Unconstrained models (baseline model) of multiple for CFA of multiple group invariance analysis.....	112
Figure 4-6 Unconstrained models: testing moderation effect of low perceived organizational support group by multiple group models .....	118
Figure 4-7 Unconstrained models: testing moderation effect of high perceived organizational support group by multiple group models .....	118
Figure 4-8 Constrained models: testing moderation effect of low perceived organizational support group by multiple group models .....	119
Figure 4-9 Constrained models: testing moderation effect of high perceived organizational support group by multiple group models .....	119

## List of Abbreviations

BOI	The Board of Investment of Thailand
CFA	Confirmatory Factor Analysis
CFI	Comparative fit index
CMIN	Minimum discrepancy function
DC	The demand-control
DCS	The demand-control-support
DDI	Development Dimension International
df	Degree of freedom
FR	Financial reward
HPOS	High level of organizational support
IOR	The index of organizational reactions
ISCO	International standard classification of occupations
JD	Job Demands
JDCS	The job demand-control-support
JCQ	The job content questionnaire
JSIB	The job search behavioral index
LPOS	Low level of organizational support
MOPH	Ministry of Public Health
NSO	National Statistical Office

### List of Abbreviations (Continued)

$p$	$p$ -value
POS	Perceived Organizational Support
SEM	Structural Equation Modeling
SPOS	The survey of perceived organizational support
SRMR	Root mean square residual
RMSEA	Stand root mean square error of approximation
TI	Turnover Intention
UWES	Utrecht work engagement scale
WE	Work Engagement
WS	Work schedule flexibility
$\chi^2$	Chi-square statistic



# CHAPTER 1

## INTRODUCTION

### 1.1 Background and Statement of the Problem

Nowadays, there has been a great amount of research interested in employee engagement. Employee engagement leads to positive employee outcomes, organizational achievements, and financial performance such as total shareholder return (Bates, 2004; Baumruk, 2004; Harter, Schmidt, Hayes, 2002; Richman, 2006). The evidence of previous investigations is integrated in an overall model, which could be used to develop a work engagement resulting in retention to stay and lower turnover intentions. Currently, based on several reports, it is clear that Thailand nursing profession is in a crisis. Regarding medical tourism in Thailand, the volume of international patients traveling to Thailand increased by sixteen percent and generated US\$ 1.3 billion in 2007, with a prediction of US\$ 4.3 billion in 2012 (Kanchanachitra, Lindelow, Johnston, Hanvoravongchai, Lorenzo, Huong, Wilopo, & dala Rosa, 2012: 775). However, while the annual increase of sixteen percent in international patients is maintained during 2005 to 2015, the private sector needs 49,991 nurses (Pagaiya & Noree, 2009).

According to Matsuno (2009: 14), the Thailand Nursing and Midwifery Council projected that professional nurses would support the shortage crisis from 2006 to 2015. Meanwhile, the government has positioned Thailand as the center of excellent health care and as the medical hub in Asia and derives impact from the 2015 launch of the Asean Economic Community (AEC). Moreover, professional nurse levels of work stress or job demand and how it leads to retirement (e.g. within organization moves,



intention to leave) are particularly significant in the modern context of professional nurse shortages. As Simoens, Villeneuve, and Hurst (2005) have noted that the situation of nursing shortages appears to be caused, among other factors, by fewer young people entering the workforce, the low social value given to nursing, and the negative perception of the nursing profession (working circumstance). In addition, employees and organizations perception of the effects of job stress continues to increase. The importance of new era employees, acknowledgment of the advancement of technology, globalization of work, demographic trends, constantly changing work roles, and expectation and increasing work demands could lead to work overload, job dissatisfaction, and job stress (Beehr & Glazer, 2005; Schaufeli & Buunk, 1996; Karoly & Panis, 2004). The importance of nurse shortages and the turnover intentions of professional nurses have significant effects on medical tourism in Thailand. Thus, employers are exploring various incentive strategies to improve retention of their workforce and to support growth aspirations. Due to nursing shortages and the high turnover intention of nurses, this research was conducted to investigate the factors that increase work engagement and the factors that decrease turnover intention.

## **1.2 Significance of the Study**

This study investigated both theoretical and practical significances for perceived organizational support. First of all, it studied job demands, work engagement, and turnover intention by insightfully considering the potential influence of various aspects of the different levels of perceived organizational support moderating between job demands (JD) and work engagement (WE) which are crucial for practice, research, and gap of research. In spite of recent advances in the different levels of perceived

organizational support of professional nurses (who were worked in the private health care service sector of medical tourism in Thailand), there is no available study, which has explored a mechanism of the different levels of perceived organizational support, and its various outcomes. Moreover, this study has combined several approaches by considering various relationships, especially the role of mediating variables, such as work engagement which potentially mediates between job demands and turnover intention. Previous research has mostly investigated job demand and resource, perceived organizational support, burnout or job stress, and turnover intention or work performance.

Second, the current study could provide better understanding in the different levels of perceived organizational support identifying the process by which work engagement may affect turnover intention. As integrated in the overall model, it could be used to develop work engagement and career development in order for good employee retention or to low level turnover intention within the organization. The investigation could provide significant implications for the influence of a cognitive emotional framework for understanding human performance (low level turnover intention) under stress (job demands). Incidentally, the perceived organizational support may play an extrinsic motivation role because it fosters an employee to be effective at engagement creating low level turnover intention or causing employees to stay with the organization. High-performance work practices were expected for good employee retention with the organization (Bailey, Berg, & Sandy, 2001; Huselid, 1995).

Third, this study could provide new knowledge in turnover intention by contributing a meaningful implication since it embraces both leaving job behavior and job search behaviors as a boundary of professional nurses. There are two aspects of a

combination of leaving job behavior and job search behaviors, which were assumed that turnover in enhancing describes the development of a new construct. Definitely, job search behaviors are supposed to be one of the strongest antecedents to actual turnover acting in a conjunction with turnover intention to determine employees' leave (Kopelman, Rovenpor, & Millsap, 1992).

Finally, retention of qualified employees also matters for several reasons. Successful organizations win with skilled and knowledgeable employees, which can generate the factors of performance as innovative and service mind. Currently, jobs are more technologically advanced and thus require workforce who can perform tasks with high technological and social demand (Cronshaw & Alfieni, 2003). The findings from antecedent of reduction turnover are to identify why workforce reduces quite as consequent with the factors related to reasons for leaving (e.g., dissatisfactions, lack of intention career prospects) (Griffeth, Hom, & Gaertner, 2000). These are conceptual, methodological, and paradigmatic reasons further promoting the need for new conceptual advancement in the area of turnover intentions in the context of different levels of perceived organizational support. Due to the paradigmatic level of Luthans (2002) and Sheldon and King (2001), it was found that the negative focus of organizational behavior has attempted to solve organizational problems such as how to resolve turnover problem. The study suggested the new context of the different levels of perceived organizational support to retention of good employees, stage theories, and the concepts developed which focus on the relationships among job demands, work engagement, and turnover intentions (e.g., how to make employees to reduce turnover intention, how to improve employee engagement).

### **1.3 Purpose of the Study**

The first aim of this study was to determine the relationship among job demands (JD) and perceived organizational support (POS), affecting on work engagement and turnover intention of professional nurses (i.e., a person who have has the right to register and obtain a professional license, to be entitled to perform as a professional nurse, nurse-midwife both first class and second class) in the medical tourism setting in Thailand. The second aim was to examine POS as a moderator variable moderating the relationship between job demand and work engagement.

### **1.4 Research Question and Hypothesis**

#### **1.4.1 Research Question**

The research type was the quantitative method, which specifically examined the following research questions and related hypotheses:

*Research Question 1:* Is There a relationship between job demands (JD) and turnover intention (TI)?

*Research Question 2:* Does work engagement (WE) mediate the relationship between job demands (JD) and turnover intention (TI)?

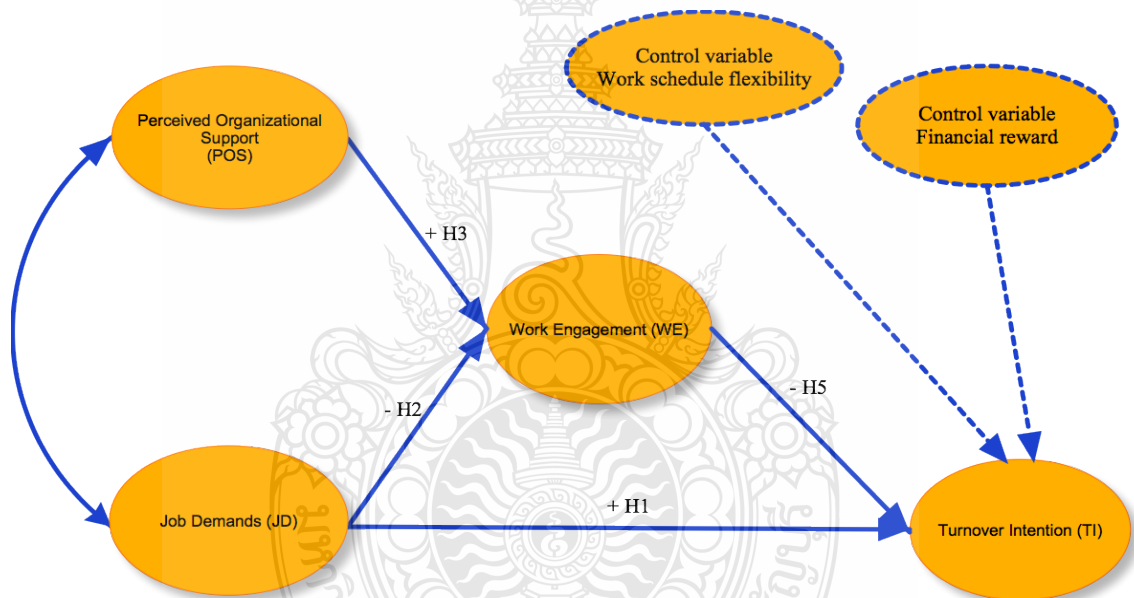
*Research Question 3:* Does work engagement mediate the relationship between perceived organizational supports (POS) and turnover intention (TI)?

*Research Question 4:* Does perceived organizational support (POS) moderate the relationship between job demands (JD) and work engagement (WE)?

#### **1.4.2 Hypothesis**

Hypothesis testing enabled a researcher to derive inferences from a sample that can be extended to a population (Graziano & Raulin, 2004). Guidelines for

developing the hypotheses in the current quantitative research were derived from Creswell (2005) and Cooper and Schindler (2003). Predictions should be stated accordingly so the prediction could be test by using statistical tools (Creswell, 2005). Hypotheses should be testable and adequate for the research purpose (Cooper & Schindler, 2003; Creswell, 2005). By using these guidelines, the following hypotheses were tested to determine possible relationships between the exogenous, endogenous, and moderate variables of the current study:



**Figure 1-1** Hypothesized Conceptual Model for the Relationship of Constructs

To answer research question 1 on “Is there a relationship between job demands (JD) and turnover intention (TI)?”, and research question 2 on “Does work engagement (WE) mediate between job demands (JD) and turnover intention (TI)?”, there are some previous research mentioned the related hypotheses. Maslach, Jackson, and Lieter (1996) described the support for latent variable related or construct linkage with the hypothesis 1 and 2 (H1, H2) that the presence of specific demand (work

overload and personal conflicts) predicted burnout, which in turn was expected to lead to negative outcome as turnover. Moreover, Jackson, Rothmann, and van de Vijver (2006) reported that burnout (disengagement) was related to health problem and turnover intentions, and it mediated the relationship between job demand and turnover intention. Additionally, Structural Equation Modeling (SEM) of job demand (i.e., workload, emotional demands) was positively related to burnout but disengagement (Schaufeli & Bakker, 2004a). Demerouti, Bakker, Nachreiner, and Schaufeli (2001) conducted a study of employees high work demand and control with association of high time pressure with higher level of engagement. Hu and Schaufeli (2011) and Llorens, Bakker, Schaufeli, and Salanova (2006) found that job demands were negatively associated with work engagement, and low imposed demand may have a positive effect on well-being (engagement). Hence, the following hypotheses were conducted:

H1: Job demands (JD) is positively related to turnover intention (TI)

H2: The relationship between job demands (JD) and turnover intention (TI) is mediated by work engagement (WE).

In order to answer research question 3 on “Does work engagement mediate between perceived organizational support (POS) and turnover intention (TI)?”, there are some previous research mentioned the related hypotheses. Bishop, Scott, and Burroughs (2000) described the support for latent variable related or construct linkage with the hypothesis 3(H3) that the positive organizational support is the cause of organizational commitment and predicted turnover intention. According to Rhoades, Eisenberger, and Armeli (2001), perceived organizational support and affective organizational commitment are associated with significant important reductions of voluntary turnover. Besides, Stinglhamber and Vandenberghe (2003) described that perceived

organizational support is able to reduce turnover. Some investigators have proposed perceived organizational support to heighten performance, decrease absenteeism, and lessen the possibility of employees in quitting their jobs (Mathieu & Zajac, 1990; Meyer & Allen, 1997; Mowday, Porter, Steers, 1982; Eisenberger, Huntington, Hutchison, Sowa, 1986). According to Kahn (1990), supportive environment allows employees to experiment and try new things even fail without fear of the consequences. Perceived organizational support is the extent to which employees perceived how an organization values the employees' contributions and care about his or her well-being (Eisenberger et al., 1986). In addition, perceived organizational support might lead to positive consequences through employee engagement (Sak, 2005). On the other hand, employees will be committed to the organization at higher levels than when they do not perceive receiving organizational support (Dessler, 1999). The basis of this rationale and evidence was provided in the earlier studies leading to testing of the following hypotheses:

H3: The relationship between perceived organizational supports (POS) and turnover intention (TI) is mediated by work engagement (WE).

In order to answer research question 4 on “Does perceived organizational support (POS) moderate between job demands (JD) and work engagement (WE)?”, there are some previous research mentioned the related hypotheses. Kahn (1992) described the support for latent variable related or construct linkage with the hypothesis 4 (H4) that perceived organizational support as moderator variable will be generalized from psychological safety involving a sense of being able to exhibit and employ the self without negative consequences. Moreover, Sak (2005) supported that perceived

organizational support might lead to positive consequences through employee engagement. Hence, the following hypotheses were conducted:

H4: Perceived organizational support (POS) moderate the relationship between job demands (JD) and work engagement (WE).

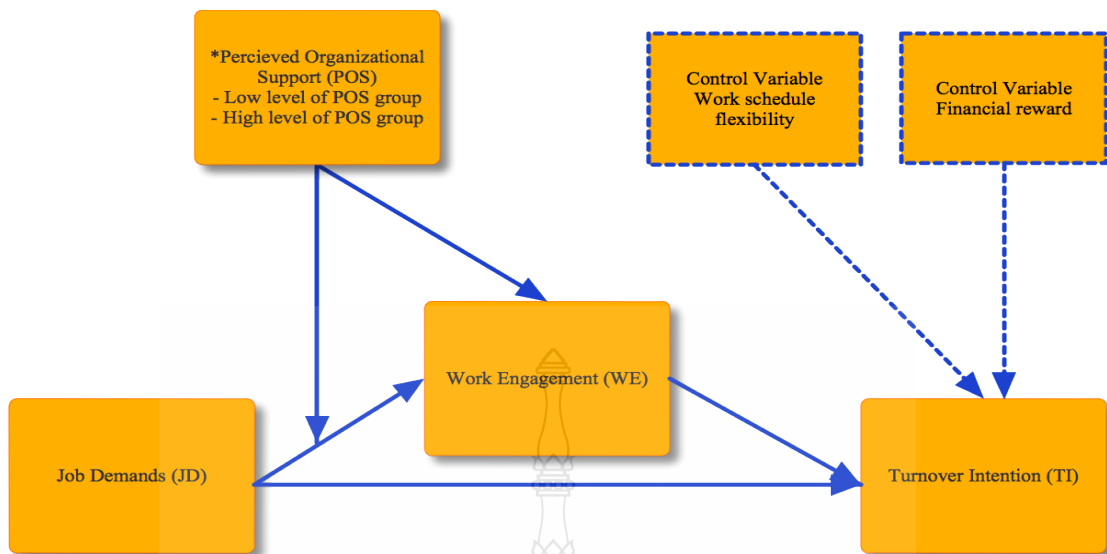
H5: Work engagement (WE) has a significant negative relationship with turnover intention (TI).

In addition, a multi-group equivalence was applied to professional nurses to determine whether the conceptual model proposed in this investigation was equivalent for both the low level perceived organizational support and the high level perceived organizational support. Group difference of perceived organizational support could be accessed through multi-group invariance Structural Equation Modeling (SEM) models (Byrne, 2004). According to Hair, Black, Babin, and Anderson (2010), the researchers supported that if the models are not significantly different, there is nonsupport for moderation because the estimates are not different between groups.

### **1.5 Research Framework**

The evidence of previous studies had combined in an overall model that could be used to develop work engagement to employee retention to stay with organizations in today's conceptual model. Proposed job demands was assumed to influence turnover intention through work engagement, which affects turnover intentions as a result. In addition, perceived organizational support was expected to moderate relationship between job demands and work engagement.





\* A comparison of perceived organization support (POS) of Professional nurses group (low level of POS group, high level of POS group)

**Figure 1-2** The Conceptual Framework

### Part 1: Conceptual model illustration of mediation

Regarding a literature review of involvement, the following conceptual model was drawn as shown in figure 1-1. The conceptual framework consists of four large components including (1) job demand, (2) perceived organizational support, (3) work engagement, and (4) turnover intention.

The conceptual model shown in figure 1-2, hypothesized one of the mediating effects. The relationships between exogenous variables (perceived organizational supports and job demands) and endogenous variable (turnover intentions) were hypothesis to be mediated by one of the constructs (work engagement). The model hypothesized that the effects of perceived organizational support could be fully explained through these mediating variables.

## **Part 2: Conceptual model illustration of moderation**

According to Hair, Black, Babin, and Anderson (2010), moderation refers to the function that “direct effects are those relationships that link two constructs with a single arrow, and indirect effects are those relationships that involve a sequence of relationships with at least one intervening construct involved”.

The concepts were based on the logical theoretical relationship between job demands and work engagement in the context of the different levels of perceived organizational support and turnover intention. Besides, the argument through empirical finding supported the conceptual framework. This study investigated the cooperation between job demands, work engagement, and turnover intention in the context of the different levels of perceived organizational support.

It is suggested that there is a relationship between job demands and work engagement in the context of the different levels of perceived organizational support and turnover intentions. The two types of demands were workload and emotional demands (psychological demands, decision latitude, supervisor support, and coworker support) created by Karasek (1997). Schaufeli and Bakker (2004a) indicated that is negatively related to engagement. According to Demerouti et al. (2001), high work demands and high control were associated with a high time pressure with higher levels of engagement.

Likewise, Eisenberger, Huntington, Hutchison, and Sowa (1986) noted that a perception of organizational support is the extent to which employees perceive organizational values of their contributions and cares about their well-being while, at the same time, perceiving safety in work environments characterized by openness and supportiveness. In other words, it is to encourage an environment to permit employees

to experiment and try new things and even fails without the fear of the consequences (Kahn, 1990). Perceived organizational support creates an obligation on the part of employees to care about the organizational welfare or pay for performance and to help the organization reach its objectives (Rhoades et al., 2001).

Moreover, due to the second conceptual model for the relationship between job demands and work engagement, organizational support is perceived as a moderator variable and in the current study will generalize from psychological safety involving a sense of being able to exhibit employee's self without negative consequences (Kahn, 1992). This study examines job demands and work engagement in the context of the different levels of perceived organizational support, which might lead to positive consequences through employee engagement (Sak, 2005).

### **1.6 Limitation of the Study**

The finding of the current study was limited in considering people conforming one culture since the accuracy of the findings depends on the honesty of participants in the survey. The current study was limited by the validity and reliability of the research instrument used in the data collection process. While every attempt was made to accurately translate the terms, the complex concepts are often difficult, and the sample may have interpreted them differently.

Only professional nurses who had worked in the private health care service sector (medium and large sized hospitals referring to the hospitals with more than 51 beds) of medical tourism in Thailand were asked to participate, and the sample was limited to professional nurses who volunteered to participate in the survey.

Only licensed professional nurses (i.e., a person who has the right to register and obtain a professional license, to be entitled to perform as a professional nurse, nurse- midwife of first class) who were employed full-time by employers were considered to participate the surveys by answering approximately 89 questions, using the research coordinator collecting the surveys, and an application of executing the survey was considered such as assigned a unique tracking number to each employee identification number.

In addition, a delimitation of the study was the geographic. The settings selected to conduct the investigation of the study was based on Bangkok and Metropolitan Area (BMA) and its vicinity. The selected areas mentioned were convenient and rich in potential private hospitals in the medical tourism network of Thailand.

### **1.7 Scope of the Study**

The aim of this dissertation was to extend the body of knowledge regarding the relationship among job demands, work engagement, and turnover intentions in the context of the different levels of perceived organizational support (POS). In addition, it aimed to answer the research questions and to test the hypotheses. A sample of professional nurses who were actively involved in their business was used. The respondents worked in the private health care service sector (medium and large sized referring to the hospitals with more than 51 beds) of medical tourism in Thailand. The requirements were that these nurses should be regarded as professional and registered nurses with the Thailand Nursing and Midwifery Council. There were approximately

25,685 professional nurses in the whole kingdom of Thailand working in the private health care service sector (National Statistical Office, 2007).

Furthermore, the sample was drawn from the directory of practitioners of nursing profession members of the Thailand Nursing and Midwifery Council. The Thailand Nursing and Midwifery Council is the professional regulatory authority in Thailand, and it is a statutory body of the Professional Nursing and Midwifery Act B.E. 2528 (1985), revision of the Act B.E. 2540 (1997) (Thailand Nursing and Midwifery Council, 2010). The Act provides information on the registration of persons qualified to perform the profession of nursing, or midwifery, or both, and conduct their professional nursing services in Thailand. Moreover, the main objective of the registration of professional nurses is to ensure that those who are competent carry out nursing work, which involves protecting the public and assuring quality of service. The respondents worked in the private health care service sector of medical tourism in Thailand while the data collected were analyzed to determine the relationships among the exogenous, endogenous, and moderator variables. The findings were resulted from the organizations continuing to reach their business aspirations in the private health care service sector of medical tourism in Thailand with more engagement and a reduction of turnover. The study could be applied to the situations consistent with robust employee markets, and it is strategically important to the private health care service industry in becoming increasingly attractive as a source of energy.

### **1.8 Organization of the Study**

Considering the aforementioned objectives, the study was conducted as a correlation field study. The different levels of perceived organizational support were

measured the relationships among job demands, work engagement, and turnover intentions with cross-sectional. The research setting included organization and was described in details in chapter three. Multi-group research was applied to identify the need for careful consideration of the level of multi-group equivalence. The research instruments were discussed in details in chapter three. All of the instruments have been previously utilized and validated in the published research in the boundary of job demands, work engagement, turnover intention, and perceived organizational support.



## **CHARTER 2**

### **REVIEW OF THE LITERATURE**

#### **2.1 Introduction**

Chapter two is consisted of the reviews of the pertinent literature related to the medical tourism in Thailand, the medical tourism network in Thailand, professional nurses, professional nurse production, work engagement, job demands, perceived organizational support, and turnover intentions. The concentration was on the definitions of terms and the theories of work engagement. The following sections discussed on job demands, perceived organizational support, and turnover intentions. The last section proposed two conceptual frameworks investigated based upon the literature review.

#### **2.2 Medical Tourism in Thailand**

Thailand has well positioned itself to become the medical hub of Asia, with at least four hundred hospitals of which 130 private general hospitals are in the Bangkok area and 299 private general hospitals are in the urban area (Ministry of Public Health, 2005). The term “medical tourism” describes tourists who travel overseas to obtain healthcare, dental, and surgical care while having the opportunity to combine it with visiting tourist attractions of that country (Connell, 2006). In 2004, Thailand’s government adopted a five-year strategic plan to develop the country into the “Center of Excellent Health of Asia.” This strategic plan, advanced by the Ministry of Public Health, concentrated on three main areas of health care: 1) medical service and healthcare services which include spa and traditional massages; 2) long-stay healthcare

products and services; and 3) Thai Herbal Product (Source: BOI Thailand Investment Review).

### **2.3 Medical Tourism Network of Thailand**

Due to an approval of the strategic plan to develop Thailand, it aims to promote the related sectors consisting of medical care service, health promotion tourism, and Thai herbal and health products. The core business of the medical care service in the private hospital sector has now more than a hundred private hospitals that is able to accommodate foreign customers all over the country. Medical tourism is defined to people traveling as being able to obtain medical care service in a standard hospital or medical center. The activities include treatments, health prevention, and health rehabilitation (e.g., physical check-ups, medical treatments, dentistry, cosmetics surgery, and transsexual surgery). The target areas are divided into three based on the characteristics of a potential in terms of tourism and medical care service. The potential private hospitals refer to the hospitals which fulfill the criteria such as providing medical care services with modern medical equipment and technology by the specialists/doctors and providing convenient and quick services with hospitality. In addition, these private hospitals have the potential to accommodate foreign tourists with persons to provide assistance (i.e., interpreter and the foreign client care staff) and the facilities such as comfortable rooms, international foods, multimedia, and communication systems.



## **2.4 Professional Nurse**

Professional nurses are defined by the international classification of health workers and is largely based on International Standard Classification of Occupations (International Labour Organization, 2008). Nursing professionals provide treatment, support, and care services for people who are in need regarding the effects of aging, injury, illness, other physical/mental impairment, or potential risks to health, according to the practice and standards of modern nursing. They assume responsibility for the planning and management of the care of patients, including the supervision of other health care workers, working autonomously, or in teams with medical doctors and curative measures in clinical and community settings. Such occupations classified include professional nurses, specialist nurses, nurse practitioners, clinical nurses, district nurses, operating theatre nurses, public health nurses, nurse anesthetists, and nurse educators (International Labour Organization, 2008).

## **2.5 Professional Nurse Production: Health Workforce Production**

Nurses are trained for four years at the nursing college. There are sixty nursing colleges in Thailand of which 35 nursing colleges are under the supervision of the Ministry of Public Health, 19 nursing colleges are under supervision of the Ministry of Education and other ministries, and 10 nursing colleges are private colleges under the supervision of the Ministry of Public Health. The nursing colleges are spread throughout Thailand (Ministry of Public Health, 2005).

## **2.6 Contextual Variable and Control Variable**

### **2.6.1 Contextual Variable**

The profession nurses were divided into two groups to which the organization belonged was considered for investigating any differences across the different groups in the relationships among variables that were depicted in the conceptual model. The low level of perceived organizational support and high level of perceived organizational support group were compared.

### **2.6.2 Control Variable**

Control variables measured the influence of socio-demographic and variables related to tasks on four constructs variables included in the model. These control variables were age, marital status, work schedule flexibility, and financial rewards.

#### **2.6.2.1 Work Schedule Flexibility**

Employees who have to work with increasing working hours may have the different work and leisure expectations, but it was reported that these employees want to work with fewer working hours (Baltes, Briggs, Huff, Wright, & Neuman, 1999; Major, Klein, & Ehrhart, 2002; Nelson & Burke, 2002). Several researchers assumed that work does contribute to a conflict between work and non-work life (Allen, Herst, Burck, & Sutton, 2000; Frone, Russell, & Barnes, 1996; Loscocco, 1997; Major, Klein, & Ehrhart, 2002). The long working hours could result in other negative impacts such as a difficulty in balancing home and work life leading to psychological distress, decreased productivity, and decreased job satisfaction (Baltes et al., 1999; Frone et al., 1996; Major et al., 2002). Work schedule flexibility enhances employees' quality of work life and lessens the degree to which work and family role conflict (Baltes et al., 1999; Loscocco, 1997; Major et al., 2002). Rosin and Korabik (2002) described that work

schedule flexibility would be beneficial in motivating employees, particularly high-performing profession as well as decreasing turnover. Considering the benefits of work schedule flexibility, it is supposed that work schedule flexibility would have a negative impact on turnover intention.

#### **2.6.2.2 Financial Reward**

The next proposed control variable of research was to explore the constructs of the model in relation to the satisfaction facets on financial rewards of the index of organizational reactions (IOR). This facet of the index of organizational reactions (IOR) identified the satisfaction facets in eight different categories pertaining to kind of work, amount of work, supervision, physical work conditions, financial rewards, co-workers, company identification, and career future (Cook, Hepworth, Wall, & Warr, 1981). Kahn (1990) found that employees felt obligated to more fully bring themselves into their work performance as compensation for the resources and benefits they have received from the organization. On the other hand, when the organization did not provide these resources, employees felt more likely to disengage from their work role. In addition, if employees did not feel that justice and rewards were being fairly, they withdrew and disengaged from the organization (Rhoades et al., 2001). The individuals felt rewarded leading to sense of engagement, resulting in having feelings of dignity, self-appreciation, and self-worth, promoting a relationship where employees wanted to give to and be received from others in the organization (Saks, 2006).

### **2.7 Job Demands**

This section was divided into three parts. The first part reviewed the current understanding of definitions of job demands while the second part discussed two main

streams of job demands, including workload and emotional demand. The final part reviewed the literature on a measurement of job demands.

### **2.7.1 Definitions of Job Demands**

The notion of job demands obtains its influence in work stress literature (e.g., Caplan, Cobb, French, Van Harrison, & Pinneau, 1975; Karasek, 1979; Payne, 1979). French and Kahn (1962) found that job stress tradition focused on “stressors” at work such as high workload, role ambiguity, and role conflict. In addition, Karasek (1997) described job demands as a factor of all performance work, work stressors, especially “psychological stressors involved in accomplishing the work load, stressors related to unexpected tasks, and stressors of job-related personal conflict,” and “the demands of modern workplaces such as the intensity of output per hour, time pressure, concentration, and social pressures.”

Job demands would be defined in the task requirements or quantitative workloads within a particular job. It consists of the quantity and time pressures of the work, including how fast one must work, how hard one must work, whether there is enough time to complete the work, and interceptions to the work (Karasek, 1979; Karasek & Theorell, 1990). As noted by Jones and Fletcher (1996, p. 34), demands are defined as “the degree to which the environment contains stimuli that peremptorily requires attention and response.” According to Schaufeli and Bakker (2004a) demands are the “things that have to be done” and “in every job something has to be done.”

Job demands, based on the purpose of this investigation, would be theoretically defined as employment-related task requirements or workload, psychological and physical in nature, requiring cognitive arousal, mental awareness, and a static or physical exertion (Karasek, 1997; Karasek & Theorell, 1990; Karasek,

Brisson, Kawakami, Amick, Houtman, & Bongers, 1998). Moreover, Karasek et al. (1998) has noted that job demands would be operationally defined as the subject's total score on the psychological and physical demand scales of the Job Content Questionnaire. The job demands would be defined as a stimulus coming from physical work environment or from the effects of another person that is imposed upon an employee and that commands the employee's attention or reaction. The stimulus was described as coming in the forms of technical, intellectual, physical, social, or financial

### **2.7.2 Mainstream of Job Demands and Literature on Job Measurement of Demand**

Cox and Griffiths (1996) noted that job demands involve those characteristics of the work environment that have the potential to do physical or psychological harm. The psychological demand refers to the measurement of stress factors involved in accomplishing the workload, organizational constraints on task completion, and job-related conflicting demand (Phakthongsuk & Apakupakul, 2008). Moreover, Briner (2005) noted that work stress is a combination of the physical and the psychological environment, which has been developed into two modes in which an individual's psychological environment is created. In the first mode, the psychological environment is derived from the individual's interpretation of their environment whereas the second mode is derived from the combination of key work conditions. Therefore, physical environments which could influence psychological wellbeing in the work environment may include many hidden aspects to a working environment (i.e., heat, noise and lighting, nature and social interaction, and the physical environment and physical safety) that could decrease psychological well being as a result (Briner, 2005). In fact, Schaufeli and Bakker (2004a) also found that job demands such as those that are

physical, psychological, social, or organizational require sustained physical and /or psychological efforts such as cognitive or emotional. Furthermore, demands refer to physical, psychological, social, and organizational aspects of the job requiring an effort by the employee. In addition, job demands would include quantitative (i.e., workload, time pressure, and working hard) and qualitative emotional demands (Bakker et al., 2004). Previously, Perrewé and Ganster (1989) classified the attributes of job demands as quantitative (i.e., quantitative demand relevant to amount of work that an individual needs to accomplish in a timely period) and qualitative (i.e., qualitative demand relevant to the complexity of work or level of required skills, abilities, and knowledge of the individual to complete the job).

Currently, when measuring job demands, there are two significant modes: the demand-control (DC) model and the demand-control-support (DCS) model. Karasek and Theorell (1990) proposed that the demand scales of Karasek's (1985) job content questionnaire (JCQ) were widely used. Moreover, as theories posit high job demands triggering a situation of the negative feelings and therefore have a direct positive relationship on job stress (Lovallo, 2005; Parker & DeCotiis, 1983; Payne, 1979). In contrast, job control or decision latitude has a direct negative effect on job stress (French, Lenton, Walters, & Eyles, 2000; Karasek, 1997; Spector, 1998, 2002). Moreover, some studies found that job demands were negatively associated with work engagement, and low imposed demands may create a positive effect on well-being (Hu & Schaufeli, 2011; Llorens, Bakker, Schaufeli, & Salanova 2006). Meanwhile, van der Doef and Maes (2002) noted that, due to the job demand-control-support (JDCS) model, there are four scales which create the sub scales of the job content questionnaire (JCQ) including decision latitude, psychological demands, social support (i.e., supervisor

support and coworkers support), and physical demands. As previously mentioned, using the proposed job content questionnaire format is to judge stress as it correlates to passive behavior as adapted from Karasek, Brisson, Kawakami, Amick, Houtman, and Bongers (1998).

### **2.7.3 Decision Latitude**

Decision latitude in the theoretical model consists of the JDCS model, which proposes that job control or decision latitude is an important resource used for advantage by the workers to decrease job demands and the level of decision latitude, which has a direct variation effect on job demands (Karasek, 1979; Karasek & Theorell, 1990). Job control or decision latitude is defined as a worker's control over the performance of their task. Decision latitude is proposed to have three-subscale distinct dimensions comprising skill direction, decision authority, and participatory organization influence. Due to skill discretion, it is estimated by the level of creativity required to perform the job, as the degree of creativity or flexibility and efficiency that allows the employee to decide what skills to be utilized to accomplish related tasks. For decision authority, it is determined by the workers' self-dependence such as autonomy, as the degree to which the workers independently make decisions about their tasks. Regarding participatory organization influence, it is relevant to a macro-level component of decision latitude, which is the degree to which employees have opportunities to influence the organizational-level issues and decisions (Karasek et al., 1998).

### **2.7.4 Psychological Demands**

Many researchers described psychological job demands as jobs that require cognitive arousal, mental alertness, and mental work. It consists of evaluation and supervision, information processing, problem solving procedures, decision-making

steps, synthesis matter, and organization of information concerns and task activities. Moreover, organizational constraints (i.e., task completion deadlines requiring the individual to maintain a rapid pace of task activities and accountability of conflicting tasks) are also the components of psychological job demands (Kahn & Byosiere, 1990; Karasek, 1997; Karasek & Theorell, 1990). Regarding the refaction and influence, Karasek and Theorell (1990) indicated psychological strain occurs when psychological demands are high, and control levels are low. Karasek et al. (1998) found that what is known as good stress is considered under the active behavior model, and it only occurs when psychological strain levels and control level are high. Karasek and Theorell (1990) examined the statistical validity of the psychological work dimension scale having sufficient reliability (i.e., ranged from Cronbach's alpha coefficients above 0.9).

### **2.7.5 Social Support**

Karasek and Theorell (1990) proposed that social support is operationally defined as an equally weighed combination of coworkers and supervisor support. Support is considered to reduce strain through several methods (i.e., acting as a buffer between stressor and health outcomes, and simplify active coping practice). In addition, social support tasks (i.e., supervisor social support, coworker social support) are also theorized to have a direct negative effect on job stress (House, 1981; Johnson 1989; Theorell & Karasek, 1996). Amick and Celentano (1991) and Baker, Israel, and Schurman (1996) found that social support from the supervisor has more influence on employee job satisfaction and mental health than social support form coworkers. Social support is proved to be important for the employee's job satisfaction, anxiety levels while lower support (i.e., supervisor support or coworkers) is associated with a higher level of psychosomatic complaints and lower job satisfaction (van der Doef & Maes,



2002). Social support at work refers to helpful social interactions available on tasks from supervisors and coworkers (i.e., friendliness and competence) (Dwyer & Ganster, 1991). Coworker support has been shown to have an impact on job satisfaction (Adams & Bond, 2000; Cox, 2001; Gurney, Mueller, & Price, 1997). In addition, previous reports in literature suggested that supervisory support considers the matters related to concerns for the worker, the employee, and the supervisor's attention to the worker as being helpful to the work performance being done and creating a teamwork environment (a part of dynamics of organizational behavior) contributing to motivation and retention. Furthermore, support from supervisor has been linked to organizational commitment (Bartram, Joiner, & Stanton, 2004; Gurney et al., 1997).

## **2.8 Perceived Organizational Support**

As the research investigates the forecaster of engagement (or in job demand) having been prevalent, there have been relatively few investigations perceived to provide organizational support. This section discussed perceived organizational support in detail, and it is organized based on theoretical models of organizational support.

### **2.8.1 Theoretical Foundation and Models on Perceived Organizational Support**

There are theories and research on how employee's perceptions of organizational supports are related to job demands and work engagement in the context of the different levels of perceived organizational support and turnover intention. Initially, the affective commitment is the strongest positive relationship with desirable outcomes, as long as the organization shows its commitment in turn to employees by providing a supportive work environment (Eisenberger et al., 1986). While employees

perceived that the organization is providing support, they realized that the organization cared about them and values their contributions (Aselage & Eisenberger, 2003). On the other hand, employees would be committed to the organization at higher levels than when they do not perceive receiving organizational support (Dessler, 1999). Several previous investigations have been informative in the direction of the relationship between perceived organizational support and several variables. Perceived organizational support is supposed to mediate the relationship with favorable work conditions (e.g., fairness, supervisor support, organizational rewards, and job conditions) and should increase organizational commitment and trust or decrease turnover (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002).

The organizational support theory also addresses evidence presented where those employees in the organizations form global beliefs concerning the extent to which the organizational values of their contributions and cares about their well-being reduced absenteeism (Eisenberger et al., 1986). More than 70 empirical studies have focused on perceived organizational support related to favorable employees and the organization (Rhoades & Eisenberger, 2002). Valued employee behavior as resource base leads to performance and work engagement; thus, employees commonly value their dedication and loyalty (Rhoades & Eisenberger, 2002). Consequently, workers who are emotionally committed to the organization present heightened performance, decreased absenteeism, and lessened possibility of quitting their job (Mathieu & Zajac, 1990; Meyer & Allen, 1997; Mowday et al., 1982).

The foundation of the organizational support theory (Eisenberger et al., 1986) has three general forms of perceived favorable treatment (i.e., fairness, supervisor

support, and organizational rewards and job conditions) with increased perceived organizational support (Rhoades & Eisenberger, 2002).

### **2.8.2 Supervisor Support**

When a supervisor acts as an organizational agent, an employee's receipt of favorable treatment from a supervisor should contribute to perceived organizational support (Rhoades & Eisenberger, 2002), which is consistent with the view of Eisenberger, Stinglhamber, Vandenberghe, Sucharki, and Rhoades (2002). The strength of this relationship depends on the degree to which an employee identifies the supervisor with an organization as opposed to viewing the supervisor's actions as idiosyncratic or peculiar to the individual. Since employees form global perceptions concerning their valuation of the organization, they develop general views concerning the degree to which supervisors value their contributions and care about their well-being such as perceived supervisor support (Kottke & Sharafinski, 1988). According to Rhoades and Eisenberger (2002), employees' understandings of the supervisor's evaluations of subordinates are frequently communicated to upper management, further contributing to worker cooperation of supervisor support with perceived organizational support. Many researchers (e.g., Kottke & Shrafinki, 1988; Rhoades et al., 2001; Shore & Tetrick, 1991; Yoon, Han, & Seo, 1996; Yoon & Lim, 1999) have measured supervisor support by substituting the word "supervisor for organization in" the SPOS, such as "my supervisor really cares about my well-being."

### **2.8.3 Fairness**

Fairness is defined by procedural justice as an instance of fairness in decisions concerning resource distribution that has a strong cumulative effect on perceived organizational support by indicating a concern for employees' welfare (Shore & Shore,

1995). Besides, procedural justice concerns the fairness of the ways used to determine the distribution of resources among employees (Geenberg, 1990). Moreover, procedural justice is as a structural determinant which involves formal rules and policies concerning decisions that affect employees, including adequate notice before implementing decisions and a receipt of accurate information (Rhoades & Eisenberger, 2002). Associated to procedural justice is the idea of perceived organizational politics, referring to the attempts to influence others in modes which promote self-interest, frequently at the expense of rewards for an individual's merit or the improvement of the organization (Cropanzano et al., 1997; Kaemer & Carlson, 1997; Nye & Witt, 1993; Randall et al., 1999).

#### **2.8.4 Organizational Rewards and Job Conditions**

**2.8.4.1 Recognitions, Pay and Promotion.** Referring to the organizational support theory, favorable opportunities for rewards serve to communicate a positive valuation of the employee's contributions and thus contribute to perceived organizational support (Rhoades & Eisenberger, 2002).

**2.8.4.2 Job Security.** Allen, Shore, and Griffeth (1999) found that job security defines a guarantee that the organization wishes to maintain the employee's future membership and is expected to provide a strong indication of perceived organizational support, when downsizing has been prevalent.

**2.8.4.3 Autonomy.** Rhoades and Eisenberger (2002) found that autonomy means employees perceived control over how they carry out their job, including scheduling, weekly procedures, and task variety. Meanwhile, Eisenberger, Rhoades, and Cameron (1999) found that, with autonomy, indicating the organization's trust in

employees to decide wisely how they will carry out their job should increase perceived organizational support.

**2.8.4.4 Training.** Wayne et al., (1997) found that job training is a discretionary practice communicating an investment in the employee, thus leading to increased perceived organizational support.

**2.8.4.5 Role Stressors.** Lazarus and Folkman (1984) found that stressors refer to context demand with which individuals feel unable to deal. Eisenberger et al., (1999) found that stressors related to the aspects of employees' role in the organization had been investigated as antecedents to a lessened perceived organizational support: (1) work overload, involving demands that exceed what an employee can reasonably accomplish in a given time and (2) role ambiguity, involving the absence of clear information about one's job responsibilities.

## **2.9 Work Engagement**

This section described the definitions and theories of work engagement.

### **2.9.1 Definitions and Theories of Work Engagement**

Engagement refers to involvement, commitment passion, enthusiasm, absorption, focused effort, and energy. In contrast, no agreement exists among practitioners or scholars on particular conceptualization of work engagement, as business and academic perspectives (Bakker & Leiter, 2010). Work engagement has received increased attention by both individuals (i.e. practitioners, and academicians) and the organizations (i.e., financial industry, medical institutions, mine industry, service industry, and academic institutions). In addition, engagement has been a rather popular term, first in business and consultancy, and recently in academics. According to

Buckingham and Coffman (1999), the point of origin of the term “employee engagement” is not entirely clear, but most likely it was first used in the 1990’s by the Gallup Organization.

### **2.9.1.1 Engagement in Business**

It exhibits that all major human resource-consulting organizations are in the business to improve the levels of work engagement, and they have found evidence that work engagement increases profitability through higher productivity, sales, customers’ satisfaction, and employee retention. Furthermore, the business management consultants (i.e., Development Dimension International (DDI), Hewitt, Towers Perrin, and Mercer) had a brief explanation of each (Bakker & Lieter, 2010).

*Development Dimension International (DDI)* focused that engagement has three dimensions as: “(1) cognitive-belief in and support for the goals and values of the organization, (2) affective-sense of belonging, pride and attachment to the organization, and (3) behavioral-willingness to go the extra mile intention to stay with the organization” (Source: Development Dimensions International).

*Hewitt’s* implication is that “engaged employees consistently demonstrate three general behaviors: (1) say- consistently speak positively about the organization to co-workers, potential employees, and customers; (2) stay- have an intense desire to be a member of the organization despite opportunities to work elsewhere; and (3) strive- exert extra time, effort, and initiative to contribute to business success” (Source: Aon Public Company Limited).

*Towers Perrin’s* connotation stated that employee engagement is considered as an emotional state that reflects employees “personal satisfaction and a sense of

inspiration and affirmation they get from work and being a part of the organization”  
(Source: Towers Watson).

*Mercer's* implication is that “employees engagement, also called commitment or motivation, refers to a psychological state where employees feel a vested interest in the company’s success and perform to a high standard that may exceed the stated requirements of the job” (Source: Mercer).

In addition, Harter, Schmidt, and Hayes (2002) found that the *Gallup* method had a slightly different conceptualization, which, instead of the organization, refers to the employee’s work. It is stated “the term employee engagement refers to an individual’s involvement and satisfaction with, as well as enthusiasm, for work.”

#### **2.9.1.2 Engagement in Academic**

The first scholar who conceptualized engagement at work was Kahn (1990) by describing it as the “harnessing of organization member’s selves to their work role: in engagement, people employ and express themselves physically, cognitively, emotionally, and mentally during role performance.” In other words, engaged employees put a lot of effort into their work because they identify with it. Researchers like Bakker and Leiter (2010) who pointed out academic conceptualization by defining engagement in its own right agree that it entails an energetic behavior (vigor), an emotional (dedication), and a cognitive (absorption) component. Saks (2006) found another conceptualization of engagement, which is the role of performance of an employee’s engagement (i.e., behavior, cognitive, and emotional components). In addition, Saks pointed out that employee engagement is similar to other concepts such as organizational commitment (i.e., intention turnover, job satisfaction, and organizational citizenship behavior). Meanwhile, organizational engagement was

characterized by an individual's participation in the organization and perception of well-being to be a part of the organization. The positive work experience and work engagement are similarly described in the motivational theories.

Salanova, Agut, and Peiro (2005) described work engagement as a motivational theory characterized by the three factors of construct of Schaufeli et al. (2002a). Previously, work engagement was defined "an energetic state in which the employees is dedicated to excellent performance at work and confidence of his or her effectiveness" (Schutte, Toppinen, Kalimo, & Schaufeli, 2000). Due to another definition, it defines "engagement as characterized by energy, involvement, and efficacy" (Rothmann, 2003). Another declares that "engaged employees have a sense of energetic and effective connection with their work activities and they see themselves as able to deal well with the demands of their job" (Schaufeli, Taris, & Van Rhenen, 2008). It is also suggested that "employee engagement refers to the individual's involvement and satisfaction with, as well as enthusiasm, for work" (Harter et al., 2002). Work engagement is multi-functional (i.e., independent, dependent, and moderator variables) in several previous studies. This study investigated the literature on the antecedents and outcome of engagement. An analysis was conducted to define the predictability of engagement on the organization's outcomes (i.e. turnover intentions). Work engagement has been widely linked to the organizational environment. Intense relationships between engaged employees and their positive effects have been identified (Harter et al., 2002). Benchmarks of the research have focused on the models of the antecedents and the consequences of engagement. Antecedents of work engagement occur when an employee experiences the suitable blend of workload, control, reward, sense of community fairness, and value congruence



(Maslach, 1998). Possible advantageous consequences of engagement for an organization include outcomes such as increased profit and productivity, increased customer satisfaction, decreased turnover, and a sense of well-being with a higher job safety score (Harter et al., 2002). The consequences are organizational outcomes ranging from improving employee performance, intention turnover, and personal well-being to positively impacting the organization's stability (i.e., profitability, customer satisfaction and loyalty, and low turnover). In addition, researchers such as Schaufeli and Bakker (2004a), Hallberg and Schaufeli (2006), and Sak (2006) supported the relationship between engagement and turnover intentions (i.e., work engagement negatively predicted an intention to leave and the relationship between job resources and turnover intentions being mediated by engagement). However, there is a relationship between engagement and turnover where employees with low engagement ("vocal in their critiques of the organization") are considered as a "threat" to the organization and have a high risk of turnover (Gostick & Elton, 2007). Organizations need to release the talents and motivation of their employees if they are to achieve best performance (Burke & Cooper, 2007; Katzenbach, 2000; Leiter & Bakker, 2010).

### **2.9.2 Engagement as an Independent Variable**

Researchers such as Harter et al. (2002) described the levels of engagement as a positive correlation with a business's unit performance such as on the customer side (i.e., customer satisfaction and loyalty), the capability side (i.e., profitability and productivity), and the employee side (i.e., turnover levels and safety). Furthermore, Demerouti and Cropanzano (2010), Schaufeli and Salanova (2007, 2008), and Bakker and Demerouti (2008) suggested that engagement is associated with positive employee

attitudes, proactive job behaviors, higher levels of employee psychological well-being, and increased individual job and organizational performance.

### **2.9.3 Engagement as a Dependent Variable**

Schaufeli and Bakker (2004a) found that structural equation modeling (SEM) of job demands (i.e., workloads and emotional demands) was positively related to burnout, but not to engagement. Besides, Demerouti et al. (2001) pointed out that high-work demands and high controls are associated with higher engagement. Mauno, Pykko, and Hakanen (2005) also supported an association of high-time pressure with higher levels of engagement.

### **2.9.4 Engagement as a Moderation Variable**

Leiter and Harvie (1997, 1998) reported that engagement moderated the relationship of supportive supervision confidence in management, effective communication, and work meaningfulness and acceptance of change. Work engagement and evaluation of hazards contributed to predicting members' engagement.

## **2.10 Turnover Intentions**

This section consisted of two parts. The first part reviewed the current understanding of definitions on turnover intentions. The second part discussed two main streams of turnover intentions, including considering leaving job behaviors and job search behaviors.

### **2.10.1 The Current Understanding of Definitions on Turnover Intentions**

The importance of employee's turnover intentions has been recognized as the demand for good employees wanting to leave. To understand the turnover intention process, the researcher has turned to a literature on turnover. However, in the current

investigation, the assumption is that turnover is analogous and describes the development of new construct referring to a person's considering leaving job behaviors and job search behaviors. The case is made that the investigation of turnover intentions is able to indicate an employee's plans to leave but would be informative about whether employees who remain feel true work engagement, job demand, and perceived organizational support.

Contrary to traditional notions, the necessity to address turnover is not just the result of an economically prosperous situation. During economical prosperous situations with high demand for employees, turnover becomes significant because it is easy for good employees to leave an organization to acquire jobs elsewhere. Nevertheless, during recessions, with a shortage of skilled individuals in the job market (e.g., professional nurses), the demand for good employees is even greater. Regardless of the situation of the economy, the demand for good employees (high-performing individuals) remains relatively constant. According to Huselid, Jackson, and Schuler (1997), a resource-based view of an organization indicates that human resource capital typically provides a very important source of competitive advantage. Successful organizations win with a skilled, knowledgeable workforce that is able to create new ideas and show the innovations of products and services. If employees who possess such knowledge and skills (professional nurse) leave, an organization essentially loses their (expansively acquired) intellectual capital. The focus of the turnover research is to identify why employees quit.

### **2.10.2 The Streams of Turnover Intentions**

Historically, the necessity for the organizations to change their industrial planes less on the efficiency tenets of scientific management and more on the basis of

the social relations of their workers if problems like turnover were to be controlled (Mayo, 1923). Turnover research began with the scientific management when the organizations and applied psychologists tried to describe the efficiency of their organizations (Miller, 1926). In addition, it appears that turnover's practical relevance for an organization has evolved from being only an indicator of efficiency and cost savings to being a proxy for worker satisfaction and health (Stockford & Kunze, 1950). According to Lee and Mowday (1987), cited in Luthans (1989), a moderate relationship exists between satisfaction and turnover, and there is a relationship with perceived organizational support. Bishop, Scott, and Burroughs (2000) pointed out that maintaining the positive organizational support is the cause of organizational commitment and predicted turnover intentions. Moreover, Howes, Cropanzano, Grandey, and Mohler (2000) demonstrated that organizational support for the individual was the best predictor of organizational commitment and turnover intentions.

#### **2.10.2.1 Turnover Intention Factor Referring to Leaving Job Behaviors**

Today's organizational and turnover approach concentrating on how to decrease turnover is reactive in emphasis and would be incomplete in work engagement for good employees. Sager, Griffeth, and Hom (1998:) referred to turnover intentions cognition as mental decisions intervening between an individual's attitude regarding the job and their decision to leave or stay. At this point, turnover intention was conceptualized as an indicator of considering leaving job behaviors. Due to Elangovan (2001), an intention to leave represents an attitudinal orientation or a cognitive manifestation of the behavioral decision to leave. Thus, Mitchell, Holtom, Lee, Sablynski, and Erez (2001) found that job embedment was associated with low intention to leave and actual voluntary turnover.

### **2.10.2.2 Turnover Intention Factor Referring to Job Search Behaviors**

Research examining job search behaviors of employed individuals is important since they are supposed to be a fine predictor of actual behavior. It has been exhibited in several studies that behavioral intention to leave is consistently correlated with turnover intention. Certainly, job search behaviors are supposed to be one of the strongest antecedents to actual turnover acting in conjunction with turnover intentions to determine employee's leave (Kopelman et al., 1992). In addition, job search behaviors can still engender psychological processes that induce turnover or reduce commitment over time (Bretz, Boudreau, & Judge, 1994; Hom & Griffeth, 1991). The job search behavior literature has primarily examined the effectiveness of different job search methods by particular behavior (Azrin, Flores, & Kaplan, 1995; Dyer, 1973; Gottfredson & Swatko, 1979; Reid, 1971; Rosenfeld, 1975; Vinokur, van Ryn, Gramlich, & Price, 1991). Another research on job search behavior has also investigated job search intensity (Quint & Kopelman, 1995). Moreover, previous research most clearly demonstrated a linkage between search intensity and financial need (Dyer, 1973; Schweb, Rynes, & Algdag, 1987). Several research has examined the relationship between research intensity and unemployment compensation (Burgess & Kingston, 1976; Classen, 1977; Ehrenberg & Oaxaca, 1979). Quin and Koperman, (1995) reported that a positive relationship has consistency been found between the level of unemployment benefits and the duration of unemployment. Others investigated and found that search intensity is related to an individual's difference variables such as self-esteem, type A behavior, gender, school performance, and age (Ellis, Heneman, & Lascola, 1991; Ellis & Taylor, 1983; Kanfer & Hulin, 1985; Steffy, Shaw, & Noe,

1989). Furthermore, Rife and Belcher (1993) found a significant positive relationship between social support and job search intensity among older unemployed works.

**Table 2-1** Summary of Related Research Linking Constructs of Model

<b>Author(s)</b>	<b>Variable related or Construct linkage</b>	<b>Purpose</b>
Maslach, Jackson and Lieter (1986)	Job demands (JD) is related to turnover intention (IT)	Hypothesize that the presence of specific demand (work overload and personal conflicts) predicts burnout, which in its turn is expected to lead to negative outcome as turnover (JD & TI)
Jackson, Rothmann & Van de Vijver (2006)		Reports that burnout is related to health problem and turnover intentions, and that it mediates the relationship between job demands and health problem. (JD & TI)
Demerouti et al., (2001)	Job demands (JD) is related to work engagement (WE)	Study of employees reported high work demand and control wear association of high time pressures with higher levels of engagement. (JD & WE)
Schaufeli and Bakker (2004a)		The job demand –resources model structure equation modeling (SEM) revealed that job demand were positively related to burnout, lead to disengagement. (JD & WE)
Schaufeli et al., 2008		“ Engaged employees have a sense of energetic and effective connection with their work activities and they see them selves as able to deal well with the demand of their Job” (JD & WE)

**Table 2-1** Summary of Related Research Linking Constructs of Model (continued)

<b>Author(s)</b>	<b>Variable related or Construct linkage</b>	<b>Purpose</b>
Q.Hu & Schaufeli (2011); Llorens, Bakker, Schaufeli & Salanova (2006)	Job demands (JD) is related to work engagement (WE)	Job demand were negative associated with work engagement, low imposed demand may positive effect to well-being (JD & WE)
Maslach, (1998)		Antecedents of work engagement occur when an employee experiences the suitable blend of workload, control, reward, sense of community fairness and value congruence (WE & JD)
Demerouti et al (2001)		High-work demands and high control were associated with higher engagement.
Demerouti & Cropanzano (2010); Schaufeli & Salanova (2007,2008); Bakker & Demerouti (2008)		Support that engagement is associated with positive employee attitudes, proactive job behaviors, higher levels of employee psychological well-being, and increased individual job and organization performance. (WE & JD)
Schaufeli & Bakker (2004a)		Structural equations modeling (SEM.) of job demands (i.e., workload, emotional demands) were positively related to burnout, but not to engagement.

**Table 2-1** Summary of Related Research Linking Constructs of Model (continued)

Author(s)	Variable related or Construct linkage	Purpose
Mauno, Pykko and Hakanen (2005)	Job demands (JD) is related to work engagement (WE)	Support for an association of high-time pressure with higher levels of engagement. (WE & JD)
Leiter and Harvie (1997,1998)		Engagement as a moderated the relationship of supportive supervision confidence in management, effective communication and work meaningfulness and acceptance of change, their work engagement and evaluation of hazards, contributed to predicting worker member's engagement. (WE & JD)
George, Reed, Ballard, Colin & Fielding (1993); Rhoades and Eisenberger (2002)	Perceived organization supports (POS) are related to job demands (JD).	Perceived organization support (POS) is expected to reduce aversive Psychological and Psychosomatic reaction (i.e., Strains) to stressors by indicating the availability of material aid and emotional support when needed to high demands at work. (POS & JD)
Rhoades and Eisenberger, (2002); Viswesvaran, Sanchez & Fisher (1999)		Perceive organization support could decrease employees' general level of stress at both high and low exposure to stressors. (POS & JD)



**Table 2-1** Summary of Related Research Linking Constructs of Model (continued)

Author(s)	Variable related or Construct linkage	Purpose
Kaha, 1992	Perceived organization supports (POS) moderate the relationship between job demands (JD) and work engagement (WE).	Perceived organization support (POS) as a moderator variable will generalize from Psychological safety involves a sense of being able to exhibit and employ the self without negative consequences
Leiter and Harvie (1997, 1998)		Report that engagement as moderated the relationship of supportive supervision confidence in management, effective communication and acceptance of change, their work engagement and evaluation of hazards, contributed to predicting worker member's engagement.
Sak, 2006		Perceived organization support (POS) might lead to positive consequences in through employee engagement

**Table 2-1** Summary of Related Research Linking Constructs of Model (continued)

<b>Author(s)</b>	<b>Variable related or Construct linkage</b>	<b>Purpose</b>
Harter, Schmidt & Hayes, 2002	Work engagement (WE) is related to turnover intention (IT).	Advantageous consequences of engagement for an organization include outcome such as increased profit and productivity, increase customer satisfaction, decreased turnover, and well-being higher job safety score Described support for levels of engagement were positive correlated with business-unit performance such as customer side (i.e., customer satisfaction, and loyalty), capability side (i.e., profitability, and productivity), employee side, (i.e., turnover levels, and safety).
Schaufeli & Bakker, (2004a); Hallberg and Schaufeli (2006); Sak (2006)		The relationship between engagement and turnover intentions (i.e. work engagement negatively predicted intention to leave, and the relationship between job resources and turnover intentions being mediated by engagement).
Gostick & Elton, 2007		The relationship between engagement and turnover, employees with low engagement is “vocal in their critiques of the organization” as a “threat” to the organization, and have a high risk of turnover

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Chapter three presented the methodology and procedures utilized to explore or answer the research questions regarding the relationships among job demands, work engagement, and turnover intentions in the context of the different levels of perceived organizational support. The constructs of the concepts were identified in chapter one.

#### **3.2 Research Design**

The purpose of the study was to extend the body of knowledge regarding the relationship between job demands and work engagement in the context of the different levels of perceived organizational support. A quantitative research method selected for the current study was guided by the research problem being addressed, the research questions contemplated, and access to both data and samples (Cooper & Schindler, 2003; Sproull, 2004; Yin, 2003). The research design was a quantitative correlation design that provided the advantage of addressing the issue of work engagement.

This finding was integrated in an overall model that could be used to develop work engagement and career development for employee retention or to lower turnover intention within an organization. In order to build the overall model of work engagement, an assumption was drawn from job demands. Two types of demands included were workload and emotional demands (psychological demands, decision latitude, supervisor support, and co-worker) support created by Karasek et al. (1998). The first assumption of the first conceptual model was that job demands such as

psychological demands, decision latitude, supervisor support, and co-workers support are mediators between perceived organizational support and work engagement. Given the timing of effects described in the theory and confirmed with evidence, it is expected that a high job demand is related to low work engagement. In addition, there is high level of perceived organizational support in relation to high work engagement. The second assumption of the second conceptual model was that perceived organizational support has an impact on the relationship between high job demands and high work engagements when perceived organizational support is high. Therefore, both of the conceptual models referred to the relationship between the energetic process and the motivational process. The motivational process links job demands with work engagement. The model offers a cognitive emotional framework for understanding human performance under stress. It is concerned with the continuation of efficiency and stability under demanding conditions, which requires the gathering and management of mental effort (Schaufeli & Bakker, 2004a), when the perceived demands are too high to be met by usual working efforts (Hockey, 1997). Incidentally, the motivational process impacts perceived organizational support (POS) via job demands with work engagement outcomes (vigor, dedication, and absorption). Perceived organizational support (POS) may play an extrinsic motivation role because it fosters employees with three high performance work practices: (a) perceived supervisor support; (b) fairness; and (c) organizational rewards and job related conditions. High performance work practices were expected to be particularly motivating for employee retention since they are supposed to be commitment enhancing and intrinsically motivating (Bailey et al., 2001; Huselid, 1995). Besides, perceived organizational support (POS) systems would be effective in engaging employees to stay or creating low turnover intention. Finally,

employees who are engaged and perform well are able to create their own resources, which then foster engagement again overtime (Schaufeli & Bakker, 2004a). The research method is quantitative. Specifically, this dissertation examined the research questions and the associated hypotheses for the variables, the moderating effects in the context of the different level of perceived organizational support (POS), and the relationships among job demands (JD), work engagement, and turnover intentions concentrating on the private health care service sector of medical tourism in Thailand.

### **3.3 Population and Sampling**

The current study initially targeted a sample of 890 professional nurses (ten times of observations as the number of variables) who had worked in the private health care service sector (medium and large sized referring to the hospitals with more than 51 beds) of medical tourism in Thailand. The requirements were that these nurses should be regarded as professional and registered based on the Thailand Nursing and Midwifery council (i.e., a person who has the right to register and obtain a professional license, to be entitled to perform as a professional nurse, nurse-midwife of first class). The specific information available indicated that the population sample did not differ from the medical tourism industry. The term “medical tourism industry” has almost at least four hundred private general hospitals from high potential tourism provinces in the kingdom of Thailand (Source: BOI Thailand Investment Review). Regarding the sample size, Hair et al. (2010) suggested to (1) be guided by conceptual and practical considerations and then obtain an adequate sample size for the number of variables examined and (2) as a general rule, the minimum is to have at least five times as many observations as the number of variables to be analyzed, and the more acceptable sample

size would have a 10:1 ratio, which the current study using a sample of 890 professional nurses, is calculated from a survey questionnaires' 89 item of observations variables.

### **3.4 Geographic Location**

Sampling was limited to employers as professional nurses were actively involved in their business. Respondents had worked in the private health care service sector of medical tourism in Thailand. Target areas in this study were selected from high potential tourism provinces, referring to a major tourism destination with the high potential to provide tourism and medical care service all over the country (Source: Tourism Investment, Tourism Authority of Thailand). The settings selected to conduct the investigation of the study was based on Bangkok and Metropolitan Area (BMA) and its vicinity. The selected areas mentioned were convenient and rich in potential private hospitals in the medical tourism network of Thailand.

### **3.5 Data Gathering**

The recent investigation used an archival dataset to test the proposed model (see figure 1-2). Data consisted of a questionnaire survey completed by professional nurses who had worked in the private health care service sector (medium and large sized hospitals referring to a hospital with more than 51 beds) of medical tourism in Thailand. One month before starting data collection process, all professional nurses in the private hospitals of the medical tourism network in Thailand received a letter describing the purpose of the study and the directions for filling in a survey. Participating organizations provided addresses for the prospective participants so that they could be communicated directly. An informed consent letter was emailed to each

participant as an introduction to the survey instrument, and it was highlighted confidentiality, risks faced by respondents in the current study, and the distress problems faced by employers, as professional nurses were actively involved in their businesses. Respondents had benefits from the relationship with the current study. An electronic copy of the survey responses from the respondents was retained for a minimum period of 2 years, and after it was destroyed after that. Confidentiality was maintained through password-protected access to the electronic copy. To heighten confidentiality, all responses were coded during the analysis, and no names of participants or their employers were disclosed. Participants were encouraged to finish and return the completed survey within a two-week period while a follow up email was sent to those who had not yet completed the survey. A cut-off date of 45 days from the date of conducting the survey was established for returning the surveys to be included in the current study

### **3.6 Research Instrumentation**

A survey with closed-ended questions was conducted. The questions were developed to elicit the answers to the research questions regarding the employees' intention to all variables of the study model from their current employment. The survey administration and data collection process were designed to protect the identity of the sample and any participating respondent. All responses to the survey instrument were forwarded to a secure and private survey, and dishonest behavior was independent of any participating respondent.

In order to answer the research questions and tests the hypotheses of the current study, a sample of employers of professional nurses who were actively involved

in their business was selected. Respondents who had worked in the private health care service sector of medical tourism in Thailand were asked to participate of the surveys. Responses to close-ended questions using the 7-point Likert scale survey were analyzed, and the statistical relationships were determined. The Likert scale survey was electronically conducted to employees among participating employers, as professional nurses were actively involved in their businesses. Respondents had worked in the private health care service sector of medical tourism in Thailand. The data collected were analyzed for the relationships among the dependent, independent, and moderator variables. Thus, the receipt of the completed survey responses to the survey questions coded, as 1 to 7 along with the continuum was in consistent with the 7-point instrument. Coded data were tabulated on a spreadsheet (the Microsoft Excel program) in a preparation for statistical analyses.

### **3.7 Measurement**

A variety of single item and multiple items of measures were used. Data collected were personal demographics, work status, and control variable. These included gender, age, marital status and parental status, education background, tenured in hospital, rank in hospital, department, work schedule flexibility, and financial rewards of employment mode.

#### **3.7.1 Validity and Reliability**

The survey instrument using all of the measures in the study were ground in the literature and adopted with modification from previous studies, which have been validated by those researchers with the inclusion of four aspects of constructs. Hence, the following three descriptions were specified.



First of all, *work engagement* used the finish version of the Utrecht work engagement measured scales developed by Schaufeli et al. (2002b) and Schaufeli and Bakker (2004a). The factorial validity of this scale has been demonstrated in the (cross national) several studies such as China (Yi-wen & Yi-Qun, 2005), Portugal (Schaufeli et al., 2002b), Spain (Salanova, Agut, & Peiro, 2005a). However, it appears that the three of subscales of very closely related such as the correlations between the latent factors approximately range from .80 to .90 (Bakker & Leiter, 2010). In addition, previous research has demonstrated that the reliability of Cronbach's alpha coefficients ranging from .90 to .92 was high values for the Utrecht work engagement scale (Schaufeli et al., 2002b).

Second, *job demand* was measured by using job content questionnaire (JCQ) scales of Karasek (1997). The factorial validity of JCQ scale has been demonstrated in previous research, and several studies have demonstrated the cross-national validity. This exhibited evidence in the samples from the different countries such as the United States (Karasek & Theorell, 1990), Canada (Larocque et al., 1998), Dutch, and Japan (Kawakami & Fujigaki, 1996; Kawakami et al., 1995). Studies in French version of Karasek et al. (1998) clearly showed the two-factor confirmations for decision latitude and psychological demands, while having the internal consistency factorial validity of instrument, and discriminant validity was assessed for the whole population to support "Job content questionnaire" (Larocque et al., 1998). Using principle component analysis and varimax rotation of 22-item TJCQ for the 4-factor models did the exploratory factor analysis result. The value of 0.83 suggested a sufficient correlation for conducting analysis, while the 4-factor model, according to job demand-control-

support (JDCS) model, explained 45.3% of the total variance (Phakthongsuk & Apakupakul, 2008).

Third, *the perceived organizational support (POS)* was measured by using the 9-scale items survey by Eisenberger et al. (1986). Shore and Tetrick (1991) found a construct validity of the survey of perceived organizational support to confirmatory factor analysis to establish unidimensionality. Previous research and several studies surveying many occupations provided evidence for the high internal consistency and unidimensionality of the survey generally used to assess POS (survey of perceived organizational support, or SPOS) (Eisenberger et al., 1986, 1990, 2002; Shore & Tetrick, 1991; Shore & Wayne, 1993). Furthermore, over 70 previous researches have demonstrated that the reliability of Cronbach's alpha coefficients ranging from .74 to .95 was high value for the survey of perceived organizational support (SPOS) scale (Rhoades & Eisenberger, 2002; Fields, 2002).

Finally, *turnover intentions* refer to consistent job leaving behaviors, which were measured by using the 14-item scale questionnaire developed by Roodt (2004b) and job search behavioral index, which were measured by using the 10-item scale by JSBI (Kopelman et al., 1992). The turnover literature lacks a formal validity scale to present turnover cognitions (Sager et al., 1998). The questionnaire of turnover intention is that most instrument in measure on only a relatively very few number of items (Jacobs & Roodt, 2008). Guimaraes (1997) has reported that various researchers have used only one item. In addition, Sager et al. (1998) suggested that the approach to use single-item indicator to measure turnover intention is construct validity unknown. Previous research by Jacobs and Roodt (2008) found that General Linear Modeling (GLM), the most parsimonious model, was chosen to be use including the entire

variable with interactions, explaining almost 49% of variance in turnover intentions. The result of the most parsimonious predictive model for turnover intention showed that the interaction between organizational culture and job satisfaction ( $B = - 0.145$ ) decreased turnover intentions. Moreover, a Cronbach's alpha coefficient of 0.913 was obtained in this study indicating an acceptable reliability of questionnaire. Job search behavior index (JSBI), which measured the number of job search behaviors engaging during the past twelve months, reported the internal consistency reliability of Cronbach's alpha coefficient ranging from .73 to .85. A test-retest correlation after two months of  $r = .82$  and a somewhat lower test-retest correlation after two years (as expected) of  $r = .59$  were conducted. Furthermore, evidence of convergent, discriminant, and substantive validity was found for the JSBI as a measure of job search behaviors (Kopelman et al., 1992). Quint and Kopleman (1995) found that three search behaviors were added to the JSBI to reflect opportunities available to college students. Internal consistency reliability of Cronbach's alpha coefficients of the JSBI were .68 and .76 for two consecutive samples and .75 for the combined sample.

To establish the validity of the modified survey instrument, a pilot study was conducted with 40 employees, as professional nurses were actively involved in their businesses. Respondents who had worked in the private health care service sector of medical tourism in Thailand were used as the sample. Regarding the validity measures, Creswell (2005) suggested that content validity measures the ability of the survey questions to represent all of the construct validity to determine the extent to which it is safe to generalize findings derived from a survey instrument. Moreover, establishing construct validity required a pilot study to be conducted to generate an acceptable correlation coefficient. Rewriting of survey questions and another pilot test might have

been necessary if an acceptable correlation coefficient was not derived from the pilot test and retest. Odom and Morrow (2006) advised that the “Pearson’s r coefficient is an estimate of validity and is termed the validity coefficient”. For the current study, it was determined that a minimum validity coefficient of .7 had to be derived from the pilot study as it is considered adequate to establish the validity of the instrument. A test - retest reliability pilot study of two groups of 40 samples with a correlation analysis was undertaken to ensure the validity of the survey instrument to be in consistent with possible questions related to the subject. Content validity could be established with the assistance of an expert team to review the validity of the survey questions (Creswell, 2005). Regarding the concept of Fields (2005), the reliability is used to measure the consistency of the construct being tested, and the approaches for reliability testing are the use of Cronbach’s alpha. Finally, the importance of validity and reliability requires having the expert capabilities of a minimum of three doctoral research experts and two human resources management professionals to review the survey instrument for content validity.

### **3.7.2 Reliability and Scale Statistics of the Constructs**

The reliability of the constructs was adequately accepted with a Cronbach’s alpha coefficient of .70 or .60 in the exploratory research (Hair et al., 1998; Nunnally, 1978). The result of the study indicated that all variables produced reliabilities above the recommended level of .70. As demonstrated in table 3-1, this measurement scale provided reliabilities scale of major study variables

**Table 3-1** Means, Standard Deviations, and Reliabilities of the Pilot Study (N=40)

	Case Processing Summary		Reliability Statistics	Scale Statistics			
	N	%	Cronbach's Alpha based on Standardized Item	Mean	Variance	Std. Deviation	N of Item
Work schedule flexibility (WS)	40	100	.843	3.985	.573	1.200	5
Financial rewards (FR)	40	100	.927	4.100	.070	1.182	5
Perceived organizational support (POS)	40	100	.958	4.571	.011	1.012	7
Job demands (JD)	40	100	.779	4.864	.519	.431	29
Work engagement (WE)	40	100	.933	4.972	.143	.856	17
Turnover intentions (TI)	40	100	.913	3.310	.332	.894	24

### **3.8 Control Variable**

#### **3.8.1 Work Schedule Flexibility**

Work schedule flexibility has assessed by using Rothausen's (1994). The questionnaire consisted of 5 items, which were measured on a 7-point Likert scale ranging from 1 (very dissatisfied) to 7 (very satisfied). Work schedule flexibility scale was used to measure about the extent to which employees feel they have flexibility in scheduling work, doing flextime work, and balancing work and family responsibilities. Coefficient alpha of this scale was 0.91. The items included the statements such as "The extent to which my department accommodates family responsibility needs without any negative consequence" and "The ease of getting time off for family as needed."

#### **3.8.2 Financial Reward**

Due to financial rewards, this facet of the Index of Organizational Reactions (IOR) identifies the employment's position regarding the relationship of the job performance and the amount of money received based on responses to items 33 to 37 of the survey instrument (Cook et al., 1981). The questionnaire consisted of 5 items, which were measured on a 7-point Likert scale ranging from 1 to 7. Dunham, Smith, and Blackburn (1977) validated the IOR through 12,971 respondents, and the 42 items of questions were divided into the eight facets of job satisfaction identified. The reliability of the internal consistency of the eight facets ranged from .68 to .91. The items included the statements such as "To what extent are your needs satisfied by the pay and benefits you received" and "Does the way pay is handled around here make it worthwhile for a person to work especially hard?"

### **3.9 Exogenous Variable**

#### **3.9.1 Perceived Organizational Support**

Perceived organizational support was measured by a shortened version of the survey of perceived organizational support (SPOS) or unidimensionality of the scales of Eisenberger et al. (1986). Short forms of the survey have been used with success in previous research (Eisenberger et al., 1986, 1990; Wayne et al., 1997). The questionnaire consisted of 9 items, which were measured on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). POS scale was used to measure an employee's perceptions about the extent to which an organization values their contributions and cares about their well-being. Coefficient alpha of this scale was 0.90 (Rhoades & Eisenberger, 2002). Previous research has demonstrated reliability where Cronbach's alpha estimates ranged from .74 to .95 (Fields, 2002). The items included the statements such as "The organization is willing to extend itself in order to help me perform my job to the best of my ability" and "The organization cares about my opinions."

After conducting the data editing, antecedents of perceived organizational support as three measures comprised: (a) perceived supervisor support relates to constructive performance evaluations and the employees' view that the supervisor represents the organization; (b) fairness refers to organizational policies and procedures related to information sharing; and (c) organizational rewards and job conditions refer to recognition and remuneration (Patrick & Laschinger, 2006).

#### **3.9.2 Job Demands**

Two types of demands included workload and emotional demands. The workload was based on job demands and measured by using a sub dimension of

Karasek et al. (1998). According to the Job Content Questionnaire (JCQ), this dimension consisted of 26 items measured on a 7-point Likert scale. Job demands were further divided into a subset of four main groups including 1) psychological 2) demands, 2) decision latitude, 3) supervisor support, and 4) co-worker support. Respondents were asked to rate their present job on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The reliability and validity of the measures are available elsewhere (Karasek, 1985). In a portion of the decision latitude measure, Karasek et al. (1998) found that the consistency of Cronbach's alpha coefficients for decision latitude ranging from 0.61 to 0.71 in turn. Moreover, work-related social support was operationally defined as the subject's total score on the social support scale (i.e., supervisor social support, and co-worker social support) of the Job Content Questionnaire (JCQ) (Karasek et al., 1998). Regarding social support measure, van der Doef and Maes (1999) found that the supervisor supports consistency of Cronbach's alpha coefficient of 0.89, and co-workers support consistency of Cronbach's alpha coefficient of 0.82. Finally, the supervisor and coworkers are the essential origin of the social support at task (Johnson, 1989; House, 1981; Karasek & Theorell, 1990).

(1) Psychological demand was measured based on nine items. The reliability of Cronbach's alpha coefficients of 0.54 was a fair value for psychological factors (e.g. "my job requires working very fast.")

(2) Decision latitude was measured based on nine items. The reliability of Cronbach's alpha coefficients of 0.71 was a fair high value for decision latitude factors (e.g. "my job requires that I learn new things.")



(3) Coworker support was measured based on four items. The reliability of Cronbach's alpha coefficients of 0.74 was a fair high value for co-worker factors (e.g. "people I work with take a personal interest in me.")

(4) Supervisor support was measured based on four items. The reliability of Cronbach's alpha coefficients of 0.82 was a fair high value for supervisor support factors (e.g. "my supervisor pays attention to what I am saying.")

### **3.10 Endogenous Variable**

#### **3.10.1 Work Engagement**

The measure of work engagement generally used was the three-components comprising vigor, dedication, and absorption (Schaufeli et al., 2002a). The concepts of work engagement developed by Schaufeli et al. (2002a) are reliable and valid. Researchers such as Harter et al. (2002) and Schaufeli et al. (2004a) pointed out that difference in the definitions of engagement, as the identified positive outcomes are similar in nature. Kahn (1990) found that personal engagement is defined as an expression of self in the work one does, physically, cognitively, and emotionally, when there is a complete mixture of the role performance. Besides, Schaufeli et al. (2002a) noted that work engagement is "a positive fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption" (p. 74). Considering the three factors of engagement, *vigor* is related to high levels of energy resilience and the willingness to invest in work performance, even when confronting the difficult situations. *Dedication* is characterized by concentrated involvement in one's work, which results in a sense of significance and a positive feeling about work (i.e., enthusiasm, pride, and inspiration). Finally, *absorption* is a state of being deeply

engrossed in one's work, such that one has difficulty detaching during work. However, these three scales are appraised by using the Utrecht Work Engagement Scale (UWES) as developed by Schaufeli et al. (2002a). Work engagement measure was from the UWES (Schaufeli, Bakker, & Salanova, 2006). "UWES" (2006) were the construct and instrumentation used throughout this investigation. Based on international academic perspective, UWES is the most widely used (to measure thoroughly validated instruments for measuring work engagement) (Bakker et al., 2008). Researchers such as Harter et al. (2002), Kahn (1990), and Schaufeli and Salanova (2008) supported the forms among vigor, dedication, and absorption, which most studies defined and developed for more than 20 years ago. The reasons mentioned above are used throughout the investigation of the study. Regarding each of the investigations, work engagement was appraised with the work engagement scale with the 17 items based on three factors (i.e., vigor, dedication, and absorption) questionnaire measuring work engagement on individual employee perceptions of personal. The UWES executed very consistently and with a high degree of validity score (Bakker et al., 2008; Schaufeli & Bakker, 2003).

The Utrecht work engagement scale (Schaufeli et al., 2002a) was used to measure employee engagement. The UWES consisted of 17 items, which measure three-subcales. The UWES is scored on a 7-point Likert frequency rating scale, ranging from 1 (never) to 7 (always). Research in various countries showed that the fit of the hypothesized three-factor structural to data was superior to that of alternative factor models. Three aspects of work engagement have measured by using scales developed by Schaufeli et al. (2002a) and Schaufeli and Bakker (2004a).

(1) Vigor was measured based on six items. The reliability of Cronbach's alpha coefficients of 0.92 was a high value for a vigor factor (e.g. "at my work I am bursting with energy.")

(2) Dedication was measured based on five items. The reliability of Cronbach's alpha coefficients of 0.91 was a high value for a dedication factor (e.g. "I am proud of the work that I do.")

(3) Absorption was measured six items. The reliability of Cronbach's alpha coefficients of 0.90 was a high value for an absorption factor (e.g. "I am immersed in my work.")

### **3.10.2 Turnover Intention**

The current investigation was based on the assumption that turnover is analogous and describes the developments of a new construct referring to considering leaving job behavior and job search behavior. However, turnover intention factors refer to the dependent variables as considering leaving job behaviors and job search behaviors. Moreover, in relation to work engagement, Halbesleben and Wheeler (2008) suggested a recent meta-analysis of the work engagement. The work engagement literature found from Koyuncu, Burke, and Fiksenbaum (2006) and Saks (2006) demonstrated the strong relationships between work engagement and intentions to leave with the corrected population correlations ranging from a -.25 of factor loading for the vigor dimension to a -.45 factor loading for the dedication dimension in turn. Bishop, Scott, and Burroughs (2000) pointed out that maintaining positive organizational support is the cause of organizational commitment and predicted turnover intentions.

Turnover intentions refer to considering leaving job behaviors and were measured by a questionnaire developed by Roodt (2004b), which consisted of 14 items

measured on a 7-point Likert scale ranging from a 1-low intensity (never) to a 7-high intensity (always). The questionnaire included the statements such as “How often have you recently considered leaving your job?” and “How frequently have you been scanning newspapers for new job opportunities?” Previous research has demonstrated the reliability of Cronbach’s alpha coefficient of .91 (Jacobs & Roodt, 2008).

Moreover, turnover intentions refer to job search behaviors with 10 items from the job search behavioral index (JSBI) (Kopelman et al., 1992). The questions were asked to the respondents if they have been involved in various search activities in the past year. The job search behavioral index is scored from 1 (not at all) to 7 (to a great extent). The items used to create one job search index of a high number on this index suggested more search activity. Cronbach’s alpha coefficient was .90 (Kiazad, 2010). The questionnaire included statements such as “Talked to friends or relatives about getting a new job” and “Read a book about getting a new job.” Previous research had used this measure (e.g., Boudreau, Boswell, Judge, & Bretz, 2001; Kopelman et al., 1992).

### **3.11 Sequence of Analysis**

The data were analyzed by using descriptive and inferential statistical analysis. Descriptive statistics including means, standard deviations, and correlations among variables were analyzed. In addition, statistical analyses like moderated structural equation modeling (MSEM) analyses using the AMOS software package were used to test the five hypotheses (Arbuckle, 2010). Structural equation modeling (SEM) is a family of statistical models that seeks to explain the relationships among multiple variables or a multivariate technical combining the aspects of factor analysis and

multiple regression enabling the researcher to simultaneously examine a series of interrelations dependence among the measured variables and latent constructs (variants) and among several latent constructs (Hair et al., 2010: 634). In addition, SEM is able to find both direct and indirect effects of variables involved with a given model (Shumacker & Lomax, 2004; Kline, 2005). SEM explicitly estimates error variance, whereas traditional multivariate approaches do not take error variance into account (Raykov & Marcoulides, 2006). SEM consists of two components, The first component is that the measurement model as latent variables are proposed and tested through confirmatory factor analysis (CFA) while the second component is that the structural models and latent variables are linked together and latent variables and observed variables are linked together (causal and relational way) (Hair et al., 2010). Measurement model was first identified to determine whether the latent was defined. SEM was tested to simultaneously identify the relationships among the variables with a set of equations. While the confirmatory factor model indicates the relationships between observed variables and underlying the latent variables, the structural model specifies the relationships among the latent variables (Shumacker & Lomax, 2010). Regarding the two components, a strong measurement model should be first confirmed before implementing the structural model.

### **3.12 Model Analysis, Relationship Types: Mediation and Moderation**

#### **Part 1: Conceptual model illustration of mediation**

The conceptual model shown in figure 1-2 hypothesized one of mediating effects. The relationships between exogenous constructs (perceived organizational

supports (POS and job demands (JD)) have influenced endogenous variables (turnover intention (TI)) and have hypothesized to be fully mediated as work engagement (WE).

### **Part 2: Conceptual model illustration of moderation**

To determine model fit, an explanation of the overall set of the relationships was used to confirm the model. In order to conceptualize the model, multiple groups' analysis was conducted to examine whether the different levels of perceived organizational support play a role as a moderator between job demands and work engagement. According to Baron and Kenny (1986), moderation refers to the function "which partitions a focal independent (predictor) variable into subgroups that establishes its domains of maximal effectiveness in regard to a given dependent variable". To assess the moderating influence of perceived organizational support, the data were divided into two groups including the low levels of perceived organizational support and the high levels of perceived organizational support based on the median of perceived organizational support. Those two groups were tested to see whether their measurement models were different. If the measurement model is different, it could be concluded that the two groups are different. Finally, the standardized coefficients in the paths of job demands and work engagement were compared between the two groups when the two models were found to be different.

In order to answer *research question 1* on "Is there a relationship between job demands (JD) and turnover intention (TI)?", the structural equation model (SEM) reflected a direct relationship among the latent variables. SEM was analyzed by investigating the direct effects among the latent variables. The statistical significance of the parameter estimates for the path among the latent variables was examined.

In order to answer *research question 2* on “Does work engagement (WE) mediate the relationship between job demands (JD) and turnover intention (TI)?”, and *research question 3* on “Does work engagement mediate the relationship between perceived organizational support (POS) and turnover intention (TI)?”, the structural equation model (SEM) reflected the indirect causal mediate effects, and it was analyzed by investigating the indirect effects among the latent variables to be fully mediated by exogenous variables through the effect of endogenous variables. The statistical significance of the parameter estimates for the path among the latent variables was examined. Moreover, the statistical significance of this path was judged by a critical value, which is also referred as a Z-statistic in testing that the estimate is statistically different from zero based on a probability level of 0.05. Then, the test statistic needs to be  $> \pm 1.96$  before the hypothesis (that the estimate equals 0.0) could be rejected. Parameter estimates were investigated to determine whether they had the expected direction, either a negative or a positive relationship, and they were examined by using standardized path coefficients ( $\beta$ ) to determine whether they were in a reasonable range of magnitude (Hair et al., 2010).

In order to answer *research question 4* on “Does perceived organizational support (POS) moderate the relationship between job demands (JD) and work engagement (WE)?”, multi-groups analysis were conducted to examine whether perceived organizational support (POS) plays a role as a moderator between job demands (JD) and work engagement (WE). Multiple groups SEM was used to test the moderating effects when the moderating variable is either nonmetric or metric moderator having been transformed into a nonmetric variable (Hair et al., 2010). The process was from an extension of the multiple group analysis for testing measurement.

As an initial step, some forms of metric invariance must be established before examining the difference in the structural model estimates. Therefore, the structural model estimate was then assessed for moderation by a comparison of group models, much like invariance testing. The first group model was estimated with the path estimates separately calculated for each group. Meanwhile, the second group model was estimated where the path estimate of interest was constrained to be equal between the groups. Comparison of the different test with a Chi-square different test ( $\Delta\chi^2$ ) indicates if the model fit significantly decreases (i.e., an increase in Chi-square), and then the estimates were constrained to be equal. A statistical significant difference between models indicated that the path estimates were different (i.e., the model fit was significantly better when separated path estimates were made), and that moderation did exist. If the models are not significantly different, then there is no support for moderation since the path estimates are not different between the groups (Hair et al., 2010).

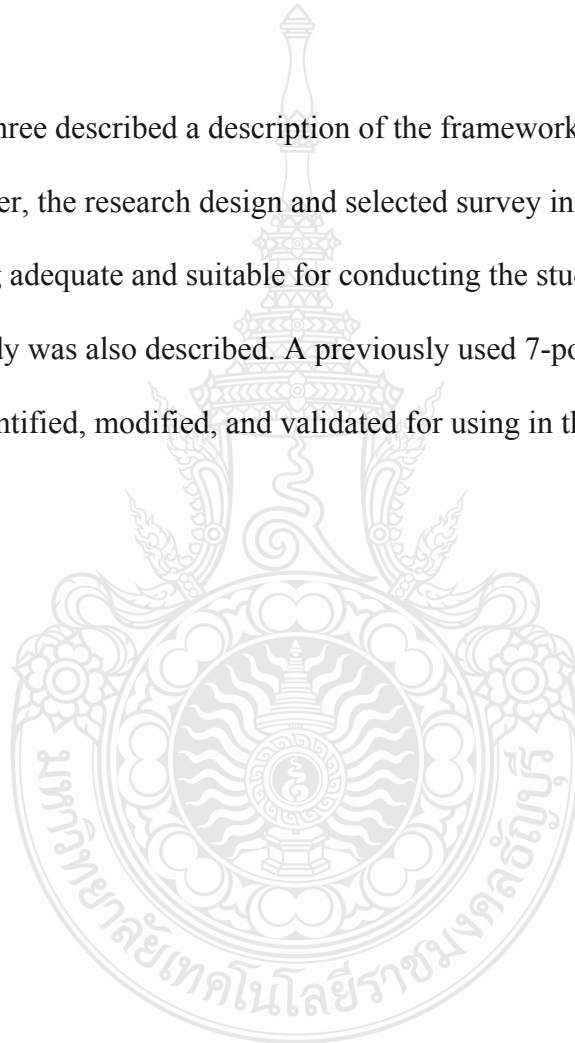
Data were divided into two groups consisting of the low level of perceived organizational support (LPOS) and the high level of perceived organizational support (HPOS), based on the median of the perceived organizational support. Group difference between the low level of perceived organizational support (LPOS) and the high level of perceived organizational support (HPOS) could be assessed through the multiple-group SEM models. The multiple-group models were examined based on several steps. The first step was that the measurement model was analyzed to examine the acceptance of the measurement models and measurement invariance for the groups. The second step depended on the result of the first step measurement model analysis whether or not the structural model analysis needed to be led to decide. In other words, if the structural



weights models were significantly identical between the two groups, the structural model analysis needed to be further carried out to examine statistically significant difference in standardized path coefficient between two groups (Shumacker & Lowmax, 2004).

### **3.13 Summary**

Chapter three described a description of the framework used to conduct the study. In this chapter, the research design and selected survey instruments were reaffirmed as being adequate and suitable for conducting the study. A process for conducting the study was also described. A previously used 7-point Likert scale survey instrument was identified, modified, and validated for using in the current quantitative correlational study.



## **CHAPTER 4**

### **RESEARCH RESULT**

#### **4.1 Introduction**

Chapter four presented the analysis and results of the findings by utilizing statistical approaches to analyze the research data and hypotheses. The first section presented the descriptive statistics summarizing the sample characteristics, and then the reliability of the survey instruments was tested. The second section provided the results of the confirmatory factor analysis to develop the measurement model (Byrne, 2001; Kline, 2005). The third section reported the results of the structural equation model, after each latent construct was specified and evaluated to determine the overall fit and hypothesis testing. The fourth section presented the results of the mediation effect test for the latent variable of work engagement. The chapter concluded with a summary of the analysis of each research question. The last section presented the result of the moderation effect test for the latent variable of perceived organizational support indicating the results of the multiple group models for two groups of perceived organizational support (the low levels of perceived organizational supports and the high levels of perceived organizational supports).

#### **4.2 Research Result**

##### **4.2.1 Descriptive Statistics**

This section described the sample population (890 professional nurses) and associated demographic data. Frequency distributions and descriptive were provided for the variables including age, gender, marital status, education, number of years with the

current hospitals, current position, average monthly income, and total of years of working experience in nursing.

**Table 4-1** Demographics and Work Characteristics of Sample

<b>Item</b>	<b>Category</b>	<b>Count</b>	<b>Percentage</b>
Gender	Female	875	98.31
	Male	15	1.69
Age	Under 30 years old	493	55.39
	30 – 40 years old	330	37.1
	40 – 50 years old	55	6.17
	Over 50 years old	12	1.34
Marital status	Single	609	68.43
	Married	263	29.55
	Divorce/widowed	18	2.02
Education	Diploma of nursing	22	2.47
	Bachelor's degree	840	94.38
	Higher than Bachelor's degree	28	3.15
Years of working experience in nursing	Less than 1 years	78	8.76
	More than 1 – 5 years	369	41.46
	More than 5 – 10 years	258	28.99
	More than 10 years	185	21.79
Years of working with the hospital	Less than 1 year	169	18.99
	More than 1 – 2 years	156	17.53
	More than 2 – 5 years	264	29.66
	More than 5 years	301	33.82

**Table 4-1** Demographics and Work Characteristics of Sample (continued)

<b>Item</b>	<b>Category</b>	<b>Count</b>	<b>Percentage</b>
Department	Intensive care unit (ICU)/ Emergency room (ER)	42	4.72
	Pediatrics or mother and child	151	16.97
	Surgery	183	20.56
	Internal medicine	356	40
	Other	158	17.75
Current position	Registered nurse	797	89.55
	Senior registered nurse	16	1.8
	Head / Division Head	38	4.27
	Others	39	4.38
Average monthly income	Under 15,000 THB	30	3.37
	15,001 – 30,000 THB	516	57.98
	30,001 – 45,000 THB	303	34.04
	45,001 – 60,000 THB	34	3.82
	Over 60,000 THB	7	0.79

**Table 4 -2** The Hospital Name Lists of Collected Data

<b>Item</b>	<b>Hospital Name</b>	<b>No. of Beds</b>	<b>Count of Data (N)</b>	<b>Percentage of Data</b>
1	Bumrungrad International Hospital	554	30	3.37%
2	Bangkok Hospital	256	20	2.25 %
3	Bangkok Christian Hospital	198	20	2.25 %
4	BNH Hospital	86	20	2.25 %
5	Bangkok 9 Hospital	200	20	2.25 %
6	B Care Medical center Hospital	136	20	2.25 %
7	Camillian Hospital	120	20	2.25 %
8	Central General Hospital	200	20	2.25 %
9	Kasemrad Hospital (Sukhapibal 3)	100	20	2.25 %
10	Kasemrad Hospital (Prachachuen)	373	20	2.25 %
11	Kasemrad Hospital (Bangkae)	317	20	2.25 %
12	Kluaynamthai Hospital 1	200	20	2.25 %
13	Kluaynamthai Hospital 2	100	20	2.25 %
14	Krung Siam St. Carlos Medical Center Hospital	100	20	2.25 %

**Table 4-2** The Hospital Name Lists of Collected Data (continued)

<b>Item</b>	<b>Hospital Name</b>	<b>No. of Beds</b>	<b>Count of Data (N)</b>	<b>Percentage of Data</b>
15	Ladprao General Hospital	180	20	2.25 %
16	Mayo Hospital	162	20	2.25 %
17	MongkutwatanaGeneral Hospital	100	20	2.25 %
18	Nakornthon Hospital	150	20	2.25 %
19	Nonthavej Hospital	280	20	2.25 %
20	Pathumvech Hospital	200	20	2.25 %
21	Paolo Siam Hospital (Ladprao)	120	20	2.25 %
22	Paolo memorial Hospital ( Phayathai)	237	20	2.25 %
23	Petcharavej Hospital	200	20	2.25 %
24	Phatara-Thonburi Hospital	350	20	2.25 %
25	Phyathai Hospital 1	350	20	2.25 %
26	Phyathai Hospital 2	260	20	2.25 %
27	Phyathai Hospital 3	300	20	2.25 %
28	Praram9 Hospital	160	20	2.25 %
29	Piyavate Hospital	100	20	2.25 %

**Table 4-2** The Hospital Name Lists of Collected Data (continued)

<b>Item</b>	<b>Hospital Name</b>	<b>No. Of Beds</b>	<b>Count of Data (N)</b>	<b>Percentage of Data</b>
30	Ramkhamhaeng Hospital	486	20	2.25 %
31	Rangsit General Hospital	200	20	2.25 %
32	Saint Louis Hospital	315	20	2.25 %
33	Samitivej Hospital (Sukhumvit)	275	20	2.25 %
34	Samitivej Hospital (Srinakarin)	154	20	2.25 %
35	Srisaim Hospital	100	20	2.25 %
36	Sikarin Hospital	126	20	2.25 %
37	Synphaet General Hospital	287	20	2.25 %
38	Thainakarin Hospital	350	20	2.25 %
39	Thonburi 1 Hospital	150	20	2.25 %
40	Vejthani Hospital	263	20	2.25 %
41	Vichiyut Hospital & Medical Center.	236	20	2.25 %
42	Vibharam Hospital	150	20	2.25 %
43	Vibhavadi Hospital	230	20	2.25 %
44	Yanhee Hospital	400	20	2.25 %

Regarding the characteristics of the respondents, 98.31 percent of nurses were female while 1.69 percent of nurses were male. The age distribution demonstrated homogeneity across the groups of less than 30 years and greater than 30 to 40 years old. The respondents with ages under 30 years old were accounted for 55.39 percent. The number of the respondents who obtained a degree or post qualification in nursing was accounted for 96.85 percent. Interestingly, 81.01 percent of the sample had more than one year of working experience in a hospital. The dominant average monthly income was between 15,001 to 45,000 THB, accounted for 92.02 percent. Table 4-1 demonstrated demographic information and work characteristics of the samples. The perceived organizational support data, which were collected from 890 samples had a distribution across each of the two levels offered tiny differentiation. The result indicated that 46.18 percent of total respondents were rated relational as the high level of perceived organizational support while the low level of perceived organizational support were rated collective as accounted for 53.82 percent. Meanwhile, due to the data from the Department of Health Professionals, Ministry of Public Health as at September 20, 2011, it revealed that the number of operators of private hospitals in the country were a total of 321 hospitals with 32,828 beds. While 98 hospitals with 13,337 beds were located in Bangkok, the other 223 hospitals with 19,491 beds were located in the region. Table 4-2 demonstrated the hospital name lists and the numbers of hospitals from data collected. The data showed that 47.95 percent (44 hospitals) of hospitals were located in Bangkok.

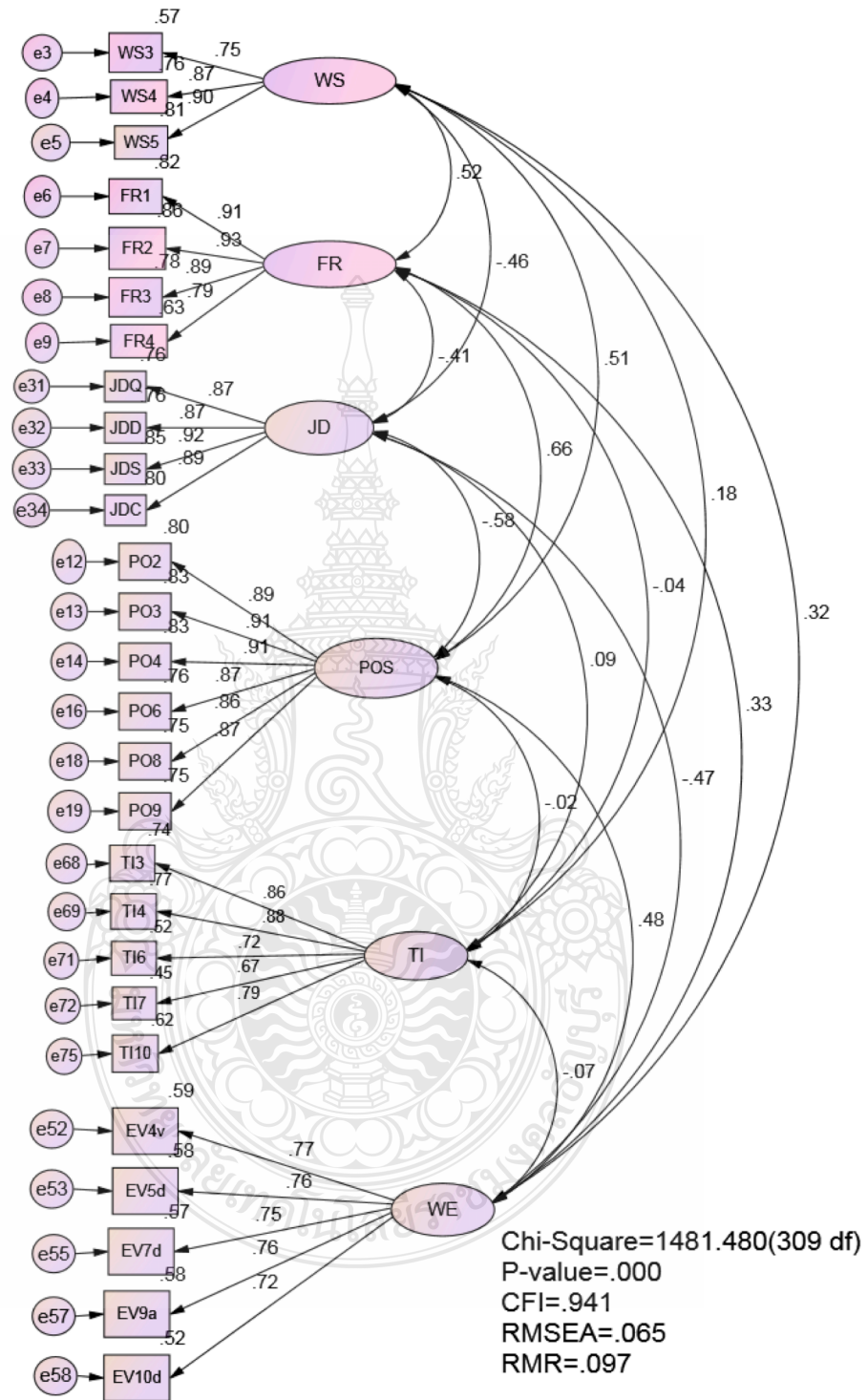


### **4.3 Structural Equation Modeling (SEM) Process**

The Confirmatory Factor analysis was employed using AMOS program. This methodology was evaluated for the feasibility of parameter estimates, appropriateness of standard errors, and significance of the parameter (Byrne, 2001; Kline, 2005). Meanwhile, a hierarchical approach was applied to evaluate the alternative factor associations of consistency with literature. As turnover intention (IT) difference variables were calculated by the sum of the difference between turnover intention behavior and job search behavior index (JSBI) on twenty-four observed variables of turnover intention factors. Meanwhile, the completeness of the measurement model for each latent construct and the entire structure model were evaluated for fit. Immediately, an acceptable fit was obtained, and the final structural model was utilized for the hypothesis testing.

#### **4.3 .1 The confirmatory factors analysis (CFA) conducted for the each construct groups**

This section described the confirmatory analysis for each construct groups. Each individual latent variable was discussed, and a confirmatory factor analysis on the entire model was completed to develop the full measurement model.



**Figure 4-1** Model Testing for the Initial Confirmatory Factor Analysis: Full Model of the Four Constructs and Two Control Variables

### *Model Testing*

The objective of model testing is to fit the sample data to the specified theoretical model. As a good model fit means that the specified model is supported by the sample data. In contrast, a poor model fit implies the need for respecification to gain a better fit since the theoretical model is not properly supported by the sample data (Kline, 2005; Byrne, 2001; Hair et al., 1998). Table 4-3 presents fit indices for model testing. The Chi-square statistic was equal 1481.480, with 309 degrees of freedom  $P$  value of .000, and CMIN/DF of 4.794. The Chi-square statistic was significant, which means that the specified confirmatory factor model was not supported by the sample variance, covariance data. Incidentally, the Standardized Root Mean Square Residual (SRMR) was .097, which is higher than the acceptable model fit ( $SRMR < .08$ ). In addition, the goodness of fit (GFI) index and the adjusted goodness of fit index (AGFI) were .887 and .884 respectively, which were below the acceptable criterion of model fit ( $GFI, AGFI > .90$ ). In summary, the fit of the initial confirmatory factor model was poor.

### *Model Modification*

The modification index (MI), some model modification was determined to be to execute a better fitting model. The standardized residual and the expected parameter change statistic were considered to change the initial model. The modification index suggests to add several paths, from financial reward, perceived organizational support, job demand, work engagement and turnover intention. Even though, the suggested paths from the modification indices were not proper in terms of theoretical perspective for that reason these paths were not included.

**Table 4-3** Model Testing for the Initial Confirmatory Factor

Statistic	Model Fit Criteria	Initial Model
<b>GOF Index</b>		
Absolute Measures		
$\chi^2$ (chi-square)		1481.480
Degrees of freedom (DF)		309
<i>p</i> -value		.000
CMIN/DF	3 or <	4.794
SRMR	.080 or less	.097
GFI	> .90	.884
RMSEA	.07 <	.065
Incremental Fit Measures		
RFI	> .90	.917
CFI	> .90	.914
NFI	> .90	.927
Parsimony Measures		
AGFI	> .90	.854
CAIC	< Than saturated	Yes
*Hoelters CN	200 or >	222

\*  $p < .01$

*Model Modification* Besides, principle the modification indices, error covariance among the observed variable were correlated the largest modification index was for the measurement error covariance between e68 and e69 of observed variable of turnover intention construct (MI = 135.796, Par change = .323). Then a measurement error covariance between e68 and e69 was specified. Other modifications were also

conducted for the specifications of a measurement error covariance. These included the following table 4-4.

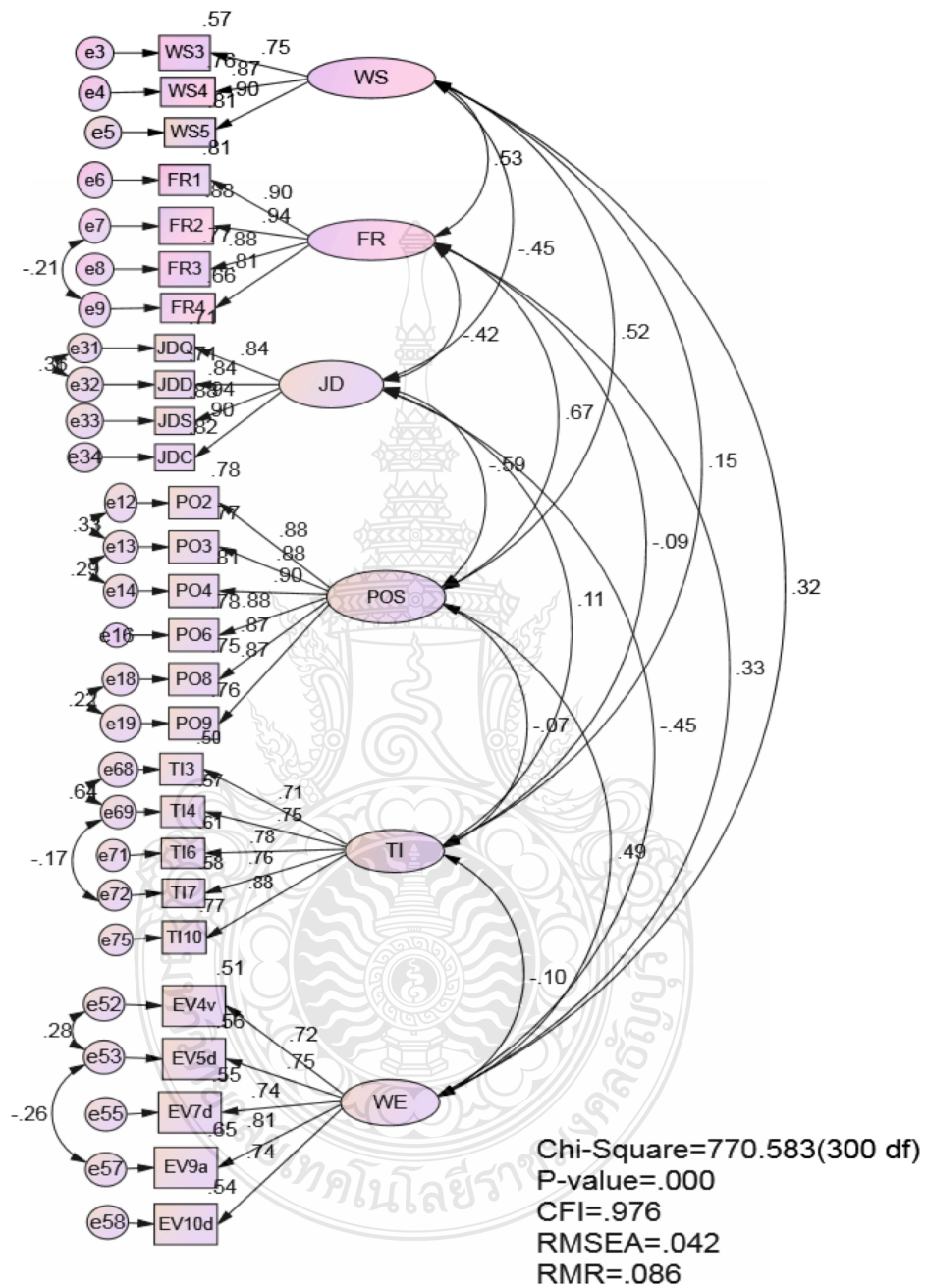
**Table 4-4** Summarized of Modification Indices after Evaluating

<b>Latent Variables</b>	<b>Covariance</b>	<b>MI</b>	<b>Par change</b>
Work engagement	e58 -e52	10.857	-.079
	e57 -e53	14.862	-.091
	e53 -e52	10.194	.066
Turnover intention	e72-e69	26.824	-.175
	e69-e68	135.796	.323
Perceived organizational support	e19-e18	23.082	.069
	e14-e13	41.482	.077
	e13-e12	57.232	.104
Job demand	e32-e31	58.862	.136
	e9-e7	8.703	-.055

Consequently, Figure 4-2 displays the respecified estimate of the confirmatory factor model after model modifications were made. In the respecified model, all of the parameters were significantly different from zero ( $P < .05$ ).

Furthermore, the result of respecified model testing was show in table 4-5. The revised confirmatory factor model revealed a decrease 1481.480 to 770.583 of Chi-square, with 300 degrees of freedom. The Chi-square statistic was insignificant, indicating that the sample data in observed model adequately fit the theoretical model.

While meaning that the fit indices for this revised scale were improve with CFI of .976, RMSEA of .042 and CMIN/DF of 2.569. Thus, respecified model was determined as the best fitting confirmatory factor model.



**Figure 4-2** Confirmatory Factor Analysis Model after Evaluating the Modification Indices

**Table 4-5** Model Testing for the Respecified Confirmatory Factors Model

<b>Statistic</b>	<b>Model Fit Criteria</b>	<b>Respecified Model</b>
<b>GOF Index</b>		
Absolute Measures		
$\chi^2$ (chi-square)		770.583
Degrees of freedom (DF)		300
<i>p</i> -value		.000
CMIN/DF	3 or <	2.569
SRMR	.080 or less	.086
GFI	> .90	.939
RMSEA	.07 <	.042
Incremental Fit Measures		
RFI	> .90	.956
CFI	> .90	.976
NFI	> .90	.962
Parsimony Measures		
AGFI	> .90	.923
CAIC	< Than saturated	Yes
*Hoelters CN	200 or >	416

\**p* < .01

**Table 4-6** Means, Standard Deviations, and Reliabilities of Major Study Variables (after Confirm Factor Analysis)

Variable	Case Processing Summary		Reliability Statistics of Cronbach's Alpha on Standardized Item	Scale Statistics			
	N	%		Mean	Variance	Std. Deviation	N of Item
**Work schedule flexibility (WS)	890	100	.879	3.442	.015	1.275	3
**Financial rewards (FR)	890	100	.930	3.812	.022	1.291	4
Perceived organizational support (POS)	890	100	.949	3.997	.005	1.213	5
Job demand (JD)	890	100	.939	3.477	.004	1.287	4
Work engagement (WE)	890	100	.867	4.863	.039	.983	5
Turnover intentions (TI)	890	100	.893	2.741	.091	1.352	5

\*\* Variable is factor of control variable.



### 4.3.2 Reliability and Scale Statistics of the Constructs after Processing

#### Confirm Factor Analysis

After a process of Confirmatory Factor Analysis was taken, all variables of the study revealed the reliabilities above the recommended Cronbach's alpha coefficient of .70. As demonstrated in table 4-6, this measurement scale provided the reliability scale of major study variables after processing confirm factor analysis.

#### Construct Validity after Processing Confirm Factors Analysis

To assess construct validity, this study examined convergent, discriminant validity. Due to convergent validity, confirm factors analysis provided a range of information used in several ways evaluating to estimate the relationships among convergent validity item measures. All of factor loading should be statistically significant based on a good rule of thumb that a standardized loading estimates should be .7 or higher. Average variance extracted (AVE) was calculated for the items loading on a construct and a summarized indicator of convergence. This value could be calculated by using an equation below:

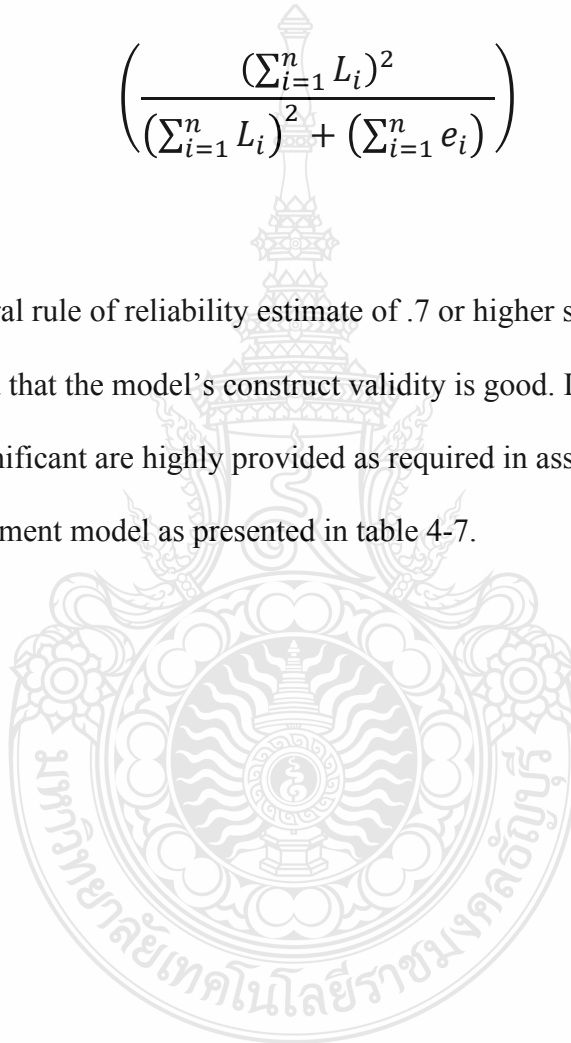
$$AVE = \frac{\sum_{i=1}^n L_i^2}{n}$$

The  $L_i$  represent the factor loading and  $i$  is the number of item.  $L_i$  AVE is computed as the total of all squared standardized factor loadings divided by the number of items. The variance-extracted measures should equal or exceed 50 percent, indicating a good model of adequate convergence. AVE measure should be computed for each latent construct in a measurement model. An AVE estimate is needed for work engagement, job demand, perceived organization support, turnover intention, work

schedule flexibility, and financial rewards constructs. Construct reliability (CR) is also an indicator of convergent validity, which is computed from the square sum of standardized factor  $L_i$  loading for each construct and the sum of the error variance terms for a construct ( $e_i$ ) as shown in an equation below:

$$\left( \frac{(\sum_{i=1}^n L_i)^2}{(\sum_{i=1}^n L_i)^2 + (\sum_{i=1}^n e_i)} \right)$$

The general rule of reliability estimate of .7 or higher suggesting good reliability indicated that the model's construct validity is good. Loading estimates that are statistically significant are highly provided as required in assessing the convergent validity of measurement model as presented in table 4-7.



**Table 4-7** CFA Factor Loading Estimates and *p*-Values

Indicator	Constructs	Estimated Loading	Standard Error	<i>p</i> -value
FR1	FR	1.000	_a	_a
FR2	FR	.967	.022	***
FR3	FR	.927	.024	***
FR4	FR	.987	.030	***
WS3	WS	.863	.032	***
WS4	WS	.987	.030	***
WS5	WS	1.000	_a	_a
JDS	JD	1.000	_a	_a
JDD	JD	.876	.023	***
JDQ	JD	.871	.023	***
JDC	JD	.978	.022	***
PO2	POS	1.146	.031	***
PO3	POS	1.102	.031	***
PO4	POS	1.100	.029	***
PO6	POS	1.049	.029	***
PO8	POS	1.060	.026	***
PO9	POS	1.000	_a	_a
EV4v	WE	1.000	_a	_a
EV5d	WE	.960	.041	***
EV7d	WE	1.055	.053	***
EV9a	WE	1.180	.056	***
EV10d	WE	.972	.049	***
TI3	TI	1.000	_a	_a
TI4	TI	1.077	.032	***
TI6	TI	1.090	.051	***
TI7	TI	1.100	.053	***
TI10	TI	1.256	.054	***

\*\*  $p < .01$  \*\*\*  $p < .001$  \_a Not estimated when loading set to fixed value (i.e., 1.0).

**Table 4-8** Standardized Factor Loading, Average Variance Extracted, and Reliability Estimates

	FR	WS	JD	POS	WE	TI
FR1	.899					
FR2	.938					
FR3	.880					
FR4	.811					
WS3		.754				
WS4		.871				
WS5		.902				
JDS			.938			
JDD			.843			
JDQ			.841			
JDC			.904			
PO2				.881		
PO3				.879		
PO4				.900		
PO6				.882		
PO8				.866		
PO9				.870		
EV4v					.716	
EV5d					.751	
EV7d					.744	
EV9a					.806	
EV10d					.735	
TI3						.706
TI4						.753
TI6						.780
TI7						.761
TI10						.879
Average Variance Extracted	78.00%	67.58%	77.87%	77.39%	60.51%	56.12%
Composite Construct Reliability	.933	.892	.933	.953	.884	.884

Instead, this examined that individual standardized factor loadings should be at least .7. In addition, variance extracted measures should equal or exceed 50 percent, and .70 is considered as the minimum threshold for construct reliability. The AVE estimates construct reliabilities were shown at bottom of table 4-8. The AVE estimates ranged from 56.12 percent of TI to 78.00 percent of FR. All exceeded the 50 percent rule of thumb. In addition, construct reliabilities ranged from 0.884 for the WE and TI construct to .953 for POS, this also exceeded .7, suggesting an adequate accept reliability. These values were computed by using the equation shown earlier. Thus, the evidence supported the convergent validity of the measurement model. Although one loading estimate was below .7, it did not appear to be significantly harming model fit or internal consistency. All of the average variance extracted estimates exceeded .5 and the reliability estimates also exceeded .7. Moreover, the model fit relatively well. Hence, all the items were retained at this point and adequate evidence of convergent validity was provided. Discriminant validity was assessed for the interconstruct covariances. The covariances are expressed as correlations. The approach for establishing discriminant validity compares the AVE estimates of each factor with the squared interconstructs correlations associated with that factor. All AVE estimates in table 4-8 were greater than the corresponding interconstructs squared correlation estimate in table 4-9. Therefore, this indicated that they were acceptable with discriminant validity for the CFA model.

**Table 4-9** Construct Correlation Matrix (Standardized)

	<b>FR</b>	<b>WS</b>	<b>JD</b>	<b>POS</b>	<b>TI</b>	<b>WE</b>
<b>FR</b>	1.00	(0.238)	(0.152)	(0.041)	(0.449)	(0.089)
<b>WS</b>	0.488**	1.00	(0.177)	(0.228)	(0.019)	(0.077)
<b>JD</b>	-0.390**	-0.421**	1.00	(0.303)	(0.007)	(0.184)
<b>POS</b>	0.642**	0.478**	-0.550**	1.00	(0.002)	(0.194)
<b>TI</b>	0.67*	0.139**	0.085**	-0.044	1.00	(0.006)
<b>WE</b>	0.299**	0.278**	-0.429**	-0.440**	-0.077*	1.00

Significance level: \* = .05, \*\* = .01, \*\*\* = .001

(Correlation)<sup>2</sup>: ( )

Note: Value below the diagonal was correlation estimates among constructs, where diagonal elements are construct variances, and values above the diagonal are squared correlations.

### 4.3.3 Analysis of the Full Structural Equation Modeling

Similar to process of confirmatory factor analysis as model specification, model identification, model estimation, model testing, and model modification were conducted. By utilizing the two-step approach prior to testing the structural model, the latent constructs of the hypothesized six-factor model were evaluated for factor loading and intercorrelations (Anderson & Gerbing, 1988). A combination of scale and unique indicators was utilized in the measurement model.

#### *Model Specification*

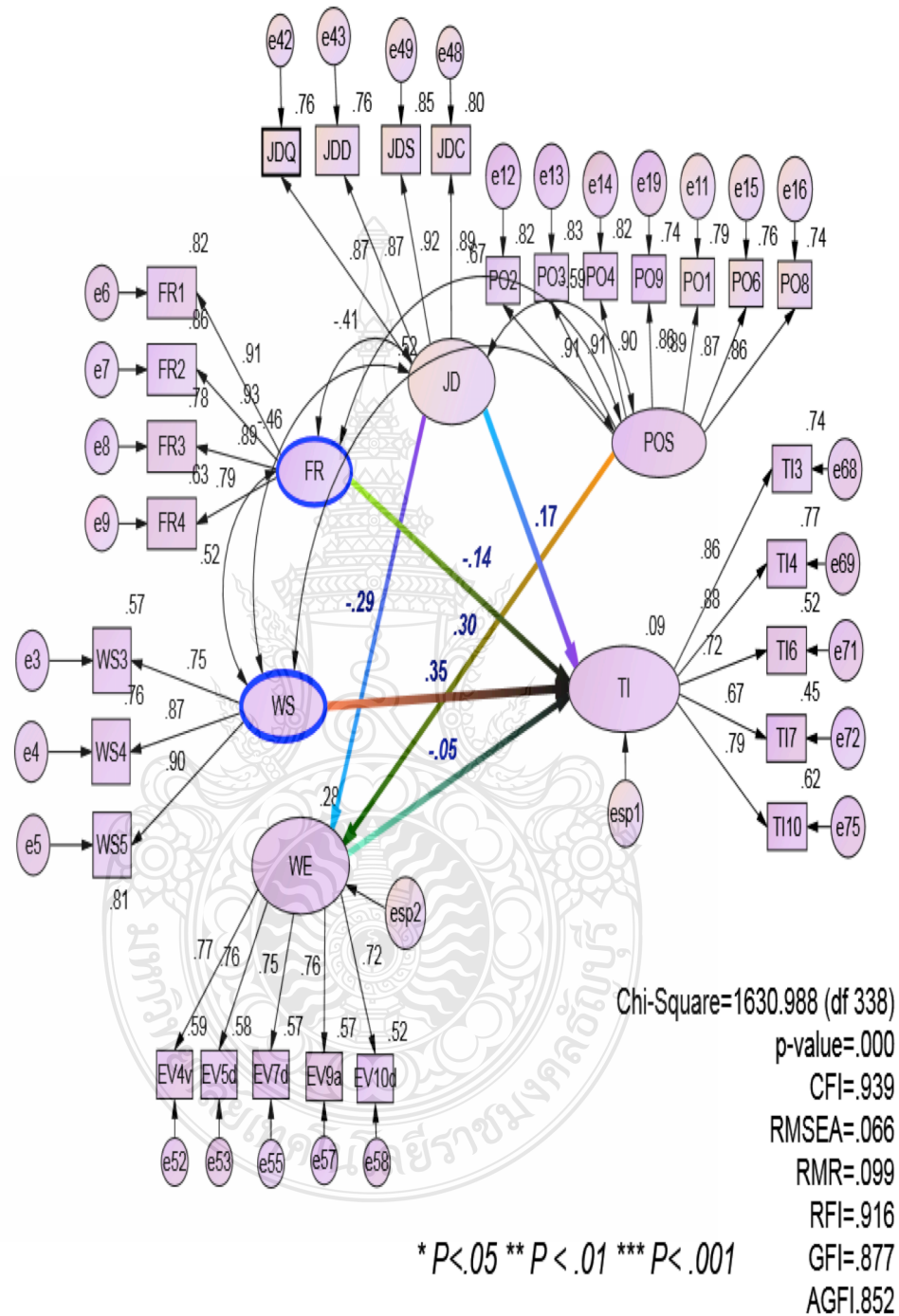
The structure equation model was using AMOS software, the first run of the full measurement model was presented in figure 4-3. Thus, this model was used as the structural model to test the research hypotheses. The model is composed of six latent variables included: 1) two control variables; financial reward and work schedule flexibility, 2) two exogenous latent constructs; job demand and perceived organizational

support, 3) one latent mediating variable; work engagement, 4) one endogenous latent construct was turnover intention.

The measurement model for each latent variable identification observed variables defined the particular latent variable. The observed variables were presented to rectangles; 1) financial reward was defined by four indicators as FR1, FR2, FR3 and FR4, 2) work schedule flexibility was defined by three indicators as WS3, WS4, and WS5, 3) job demand was defined by four indicators including Quantitative demand (JDQ), decision latitude (JDD), supervisor social support (JDS), Co-work social support, 4) perceived organizational support was defined by six indicators PO2, PO3, PO4, PO6, PO8, PO9, 5) work engagement was defined by five indicators including vigor (EV4v), dedication (EV5d, EV7d, EV10d), absorption (EV9a), 5) Turnover intention was defined by five indicators as TI3, TI4, TI6, TI7, TI10.

#### *Model Testing*

The chi-square statistic was 1630.988, with 338 degree of freedom and *P* value of .00. The Chi-square statistic was significant, which signifies that the observed model and the implied model were different. In addition, CMIN/DF was equal to 4.825, which higher than the acceptable level of model fit (CMIN/DF < 3). Similarly, the good-of-fit (GFI) index and the adjusted –goodness- of- fit index (AGFI) was .877 and .852 respectively, which were below the acceptable criterion of model fit (CFI, AGFI > .90). The initial structural equation model was not acceptable.



**Figure 4-3** Model Testing for the Initial Structural Equation Model: Full Model of the Four Constructs and Two Control Variables



**Table 4-10** Fit Indices of the Model Testing for the Initial Structural Equation Modeling

Statistic	Model Fit Criteria	Initial Model
<b>GOF Index</b>		
Absolute Measures		
$\chi^2$ (chi-square)		1630.988
Degrees of freedom(DF)		338
<i>p</i> -value		.000
CMIN/DF	3 or <	4.825
SRMR	.080 or less	.099
GFI	> .90	.877
RMSEA	.07 <	.852
Incremental Fit Measures		
RFI	> .90	.916
CFI	> .90	.939
NFI	> .90	.925
Parsimony Measures		
AGFI	> .90	.852
CAIC	< than saturated	Yes
*Hoelters CN	200 or >	219

\**p* < .01

#### *Model Modification*

If the fit to the implied theoretical model is not acceptable as one would like, then the next step is to model and subsequently evaluate the modified model.

The modification indices suggested to add the path from e53 (observed variable of work engagement) and e9 (observed variable of financial reward)

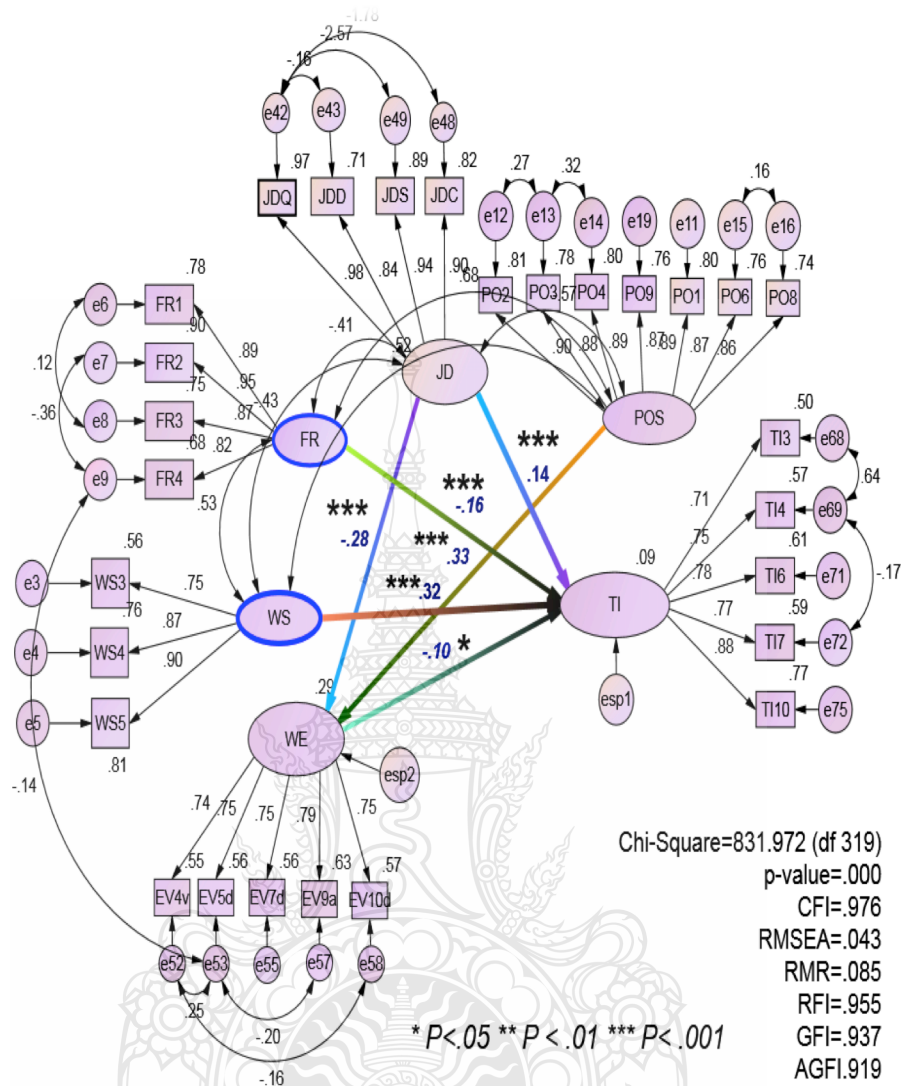
(MI=10.902 Par change = -.077). Other modification were also conducted for the specification of a measurement error covariance these included the following table 4-11

**Table 4-11** Summarized of Modification Indices after Evaluating

Latent Variables	Covariance	MI	Par change
Work engagement	e58-e52	10.555	-.077
	e57-e53	14.132	-.087
	e53-e52	9.442	.062
Turnover intention	e72-e69	78.469	-.342
	e69-e68	154.784	.354
Perceived organizational support	e16-e15	9.851	.046
	e14-e13	37.869	.074
	e13-e12	44.186	.085
Job demand	e43-e42	21.07	.079
	e42-e48	8.703	-.042
	e42-49	26.534	-.078
Financial reward	e6-e8	10.861	-.067
	e7-e9	8.959	-.055

After the initial model was modified, the respecified model was evaluated.

Figure 4-4 displays the respecified estimates of structural equation model. In the respecified model, all of the estimates were significantly different from zero ( $P < .05$ ).



**Figure 4-4** Model Testing for the Respecified Structural Equation Model: Full Model of the Four Constructs and Two Control Variables

The result of the respecified model testing was presented in table 4-12. The revised structural equation model showed a decrease of Chi-square from 1630.988 to 831.972 with 319 degree of freedom and P-value of .000. The Chi-square statistic was insignificant, which indicated that the observed model and the implied model were similar.

Moreover, the fit of the Chi-square was acceptable, but other model fit indices were also assessed. The model fit indices revealed an acceptable level of fit (CMIN/DF of 2.608, RMSEA of .043, RFI of .955, GFI of .937 and AGFI of .919). Thus respecified model was determined as the best fitting structural equation model.

**Table 4-12** Fit Indices of the Model Testing for the Respecified of Structural Equation Modeling

Statistic	Model Fit Criteria	Initial Model
<b>GOF Index</b>		
Absolute Measures		
$\chi^2$ (chi-square)		831.972
Degrees of freedom (DF)		319
<i>p</i> -value		.000
CMIN/DF	3 or <	2.608
SRMR	.080 or less	.085
GFI	> .90	.937
RMSEA	.07 <	.043
Incremental Fit Measures		
RFI	> .90	.955
CFI	> .90	.976
NFI	> .90	.962
Parsimony Measures		
AGFI	> .90	.919
CAIC	< Than saturated	Yes
*Hoelters CN	200 or >	407

\*  $p < .01$

The relationship between key variables produced a unstandardized coefficient, standard error, and critical ratio, which is significant at  $p < .001$ . The summary of the regression weights for the model was presented in table 4-13.

**Table 4-13** Regression Weight and Estimates for Key Variable with Two Control Variable: Full Structural Equation Model

Relationship	Unstandardized Regression Weight	Standard Error	Critical Ratio	Significance
WE <--- JD	-.200	.028	-7.257	***
WE <--- POS	.236	.030	7.980	***
TI <--- JD	.122	.037	3.329	***
TI <--- FR	-.143	.040	-3.617	***
TI <--- WE	-.117	.053	-2.202	.028
TI <--- WS	.303	.045	6.671	***

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

#### 4.3.4 Mediation Effect Test Model.

To assess the mediating role of work engagement, analyzing the total effect and indirect effect between latent constructs performed effect decomposition. The standardized affected both the paths of the job demand on turnover intention and work engagement and those of the perceived organizational support on turnover intention and work engagement. For this study, the results of estimated covariance between perceived organizational support and work engagement is 0.489, which the model showed that the

paths were significant ( $p < .05$ ), indicating that there was influence mediated through work engagement construct are reported in table 4-14.

**Table 4-14** Assessing Direct and Indirect Effects in a Mediated Model

Effects of Element Path Analysis	Direct Path (A) <sup>a</sup>	Indirect Path(B) <sup>a</sup>	Total (A) <sup>a</sup> + (B) <sup>a</sup>
WE <--- POS	.33		
WE <---JD<---POS		.159	
Total = Direct + Indirect (Estimated Covariance)			.489

a values in the table represent standardized effects

#### 4.3.5 The Moderation Effect Test

The fifth section presented the results of the moderation effect test for the latent variable of perceived organizational supports. This section offered the results of multiple group models for two groups of perceived organizational support (the low levels of perceived organizational support and the high levels of perceived organizational support).

To examine whether perceived organizational support moderates between job demands (JD) and work engagement (WE), the multiple group structural equation model was conducted. The data were divided into two groups: 1) the low level of perceived organizational supports and 2) the high level of perceived organizational supports based on the median of values of perceived organizational supports. Then, those two groups model were tested to see if their measurement models were different. If the measurement models are different, it could be concluded that two models are different. Testing for multiple group invariance, the initial step (the configural model) in testing for invariance requires only that the same number of factor and the factors

loading pattern shall be the same across the groups. Thus, the same parameters estimated in the baseline model for each group separately are again estimated the multiple group model (Byrne, 2010). This model was tested as a multiple group representation of the baseline models. Accordingly, it incorporated the baseline models for the high level of perceived organizational support and the low level of perceived organizational support within the same file. Considering model assessment, the goodness of fit statistics for this multiple group model was reported.

#### **4.3.6 Testing for Multiple Groups Invariance**

Testing for invariance necessarily lead a multistep processed. However, when the analyses each step of process has been identified accordingly.

Step1: testing for the validity of hypothesized model across high level of perceived organization support and low level of perceived organization support.

As a preliminary step in testing, for invariance across groups has been testing for validity of structure model. Given that this test of model fit was previously conducted in the process of determining the baseline model. This multi group analysis result only one set of fit statistics for overall model fit. Given that Chi-square statistic, together with their degree of freedom, are summative, the overall Chi-square values for the multiple group model should equal the sum of the Chi-square values obtained when the baseline model is tested separately for each group (Byrne, 2004).

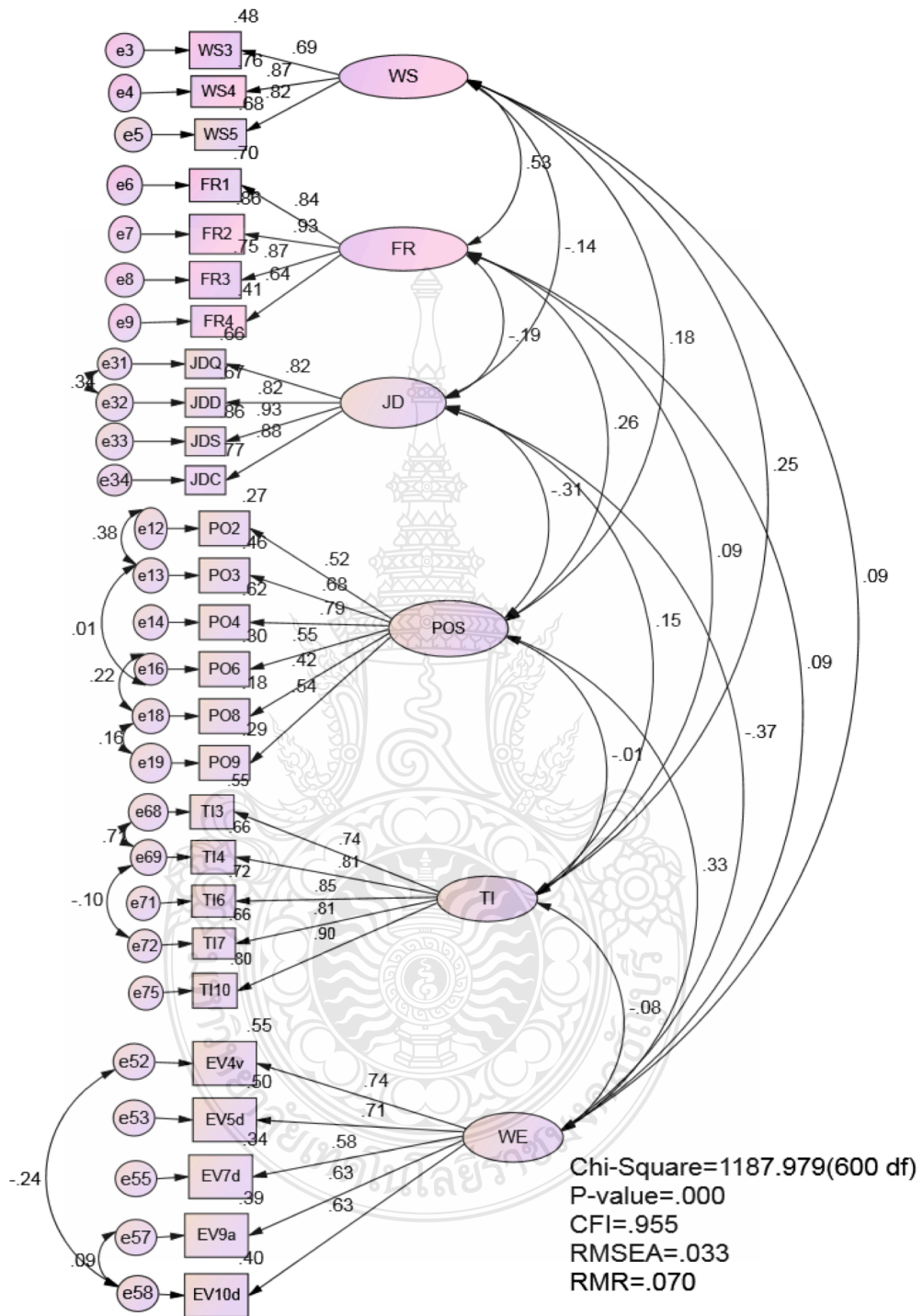
##### *Model assessment*

Goodness- of-fit statistics related to this two group unconstrained model (Model1) are reported in table 4-15. The Chi-square values of 1187.979, with 600 degree of freedom, provide the baseline values against which subsequent tests for invariance may by compare. Comparative fit index (CFI) and Root Mean Square Error

of Approximation (RMSEA) values of .955 and .033, respectively, indicator that the hypothesized six factor model, although same what less than the recommend cut off criterion of .90. Recommend by Hu and Bentler (1999), still represented a relatively good fit across the two panels of perceived organizational support. According, the processed in testing for invariance of the revised had 27-item across groups.







**Figure 4-5** Unconstrained Models (Baseline Model) of Multiple for CFA of Multiple Group Invariance Analysis

Step2: Testing for invariance of fit full-constrained model across high-perceived organizational support and low perceived organization support.

Prior to testing for the equality of sets of parameter as to test for the possibility that a fully constrain model in invariant across group. Moreover, this application, this would mean specification of a model in which all factor loadings all, all factor variance, all factor covariance, and the nine error covariance are constrained equal across high level of perceived organizational support and low level of perceived organizational support.

*Model assessment*

Goodness- of - fit statistic related to this constrained two-group model (Model 2) are presented as the second entry in the table 4-15. In testing for the invariance of this constrained model, the result of Chi-square values of 1373.071 (642 df) were compare with that for initial model (Model 1) in which no equality constrained were imposed, Chi-square difference values of 185.92 with 42 df was more than 58.124, which statistically significant ( $P < .05$ ). This indicated that some equality constraints do not hold across the two groups.

Step 3: testing for invariance of factor loadings across high level of perceived organizational support and low level of perceived organization support.

This step in the invariance process in to test for the equivalence of all factor loading across the two groups. Any reduction in the number of parameters to be test necessarily require that all parameter labels, except these associated with parameter under test, be deleted from the model (Byrne, 2004).

*Model assessment*

As indicated in table 4-15, findings revealed all factor loading to be equivalent across high level of perceived organizational support and low level of perceived organizational support, as reflected in a Chi-square difference between the model test (Model 3) and model 1; which was statistically significant. The test results of Chi-square values of 1226.929 (df = 621) were compared with that from initial model (Model 1) in which no equality constraints were imposed, Chi-square of 1187.799 (df = 600). The comparison results as a Chi-square difference values of 39.13 with 21 df was more than 32.671, which statistically significant ( $P < .05$ ). Given these findings, that some equality constraints do not hold across two groups.

Step 4: testing for invariance of factor variance and covariance across high level of perceived organizational support and low level of perceived organization support.

Finally test step, the invariance of factor variances groups. Given findings of fully invariant factor loading matrix and model specification had to the factor variance. Thus, the model had to be tested (Model 4).

#### *Model assessment*

As shown in table 4-15, the test result from the estimation of model 4 yielded a Chi-square of 1614.832 (df = 678). Because, the difference in Chi-square values between this model and model 1 has statistically significant ( $P < .05$ ). The comparison results as a Chi-square difference values of 427 with 78 df was more than 99.617, which statistically significant ( $P < .05$ ). Overall, the result of testing group invariance across the four models had shown that multiple groups were statistically significant. This difference value is distributed as Chi-square with degree of freedom. Evidence of not invariance is claimed if this Chi-square difference value is statistically significant (Byrne, 2010)

**Table 4-15** Multiple Group Models of CFA for Testing Moderation Effect Analysis of Low & High Perceived Organizational Supports

Stage	Model Description	Comparative of Model	Model fit measures				Model difference			
			Chi-square	DF	RMSEA	CFI	<i>p</i> -value	Diff. in Chi-square	Diff. in DF	Sig.
	High level of POS		563.252	300	.046	.957	.000	-	-	-
	Low level of POS		624.772	300	.048	.952	.000	-	-	-
1	Unconstrained model (Baseline model 1)	-	1187.979	600	.033	.955	.000	-	-	-
2	Structural covariance model (factor loading, variance, covariance, model 2)	1-2	1373.071	642	.036	.943	.000	185.092	42	Sig.
3	Measurement weights model (factor loading, model 3)	1-3	1226.929	621	.033	.953	.000	39.13	21	Sig
4	Measurement residuals model (Invariance uniqueness)	1-4	1614.832	678	.039	.928	.000	427	78	Sig

NS: No Significant, Sig.: Significant\*  $p < .05$

#### 4.3.7 Analysis of the Full Measurement Multiple Groups

Model testing was conducted to examine how well the data fit the model. The model specification required a test of the moderating influence of perceived organizational support on the relationship between job demand and work engagement constructs. To test the moderating effect, a multi-group path analysis was employed (Bagozzi and Yi, 1989).

The multi group path analysis is a technique especially appropriate when the covariance matrices differ significantly across treatment (Voss, Parasuraman and Grewal 1998). Additional analysis was conducted to examine difference between the high and low perceived organizational supports. These different were tested using a split group analysis procedure (high versus low level of perceived organizational support groups) on the moderating variable. The moderating effect of perceived organizational support was tested and observed the relative change in model fit (Osterhus, 1997).

To assess the difference between low and high lever perceived organizational support groups, parameter constrained path as the relationship between job demand and work engagement constructs were constraint, multiple sample model were estimated. Thus, a constrained model was estimated, in which the one relationship (job demand and work engagement path) that the low and high perceived organizational supports.

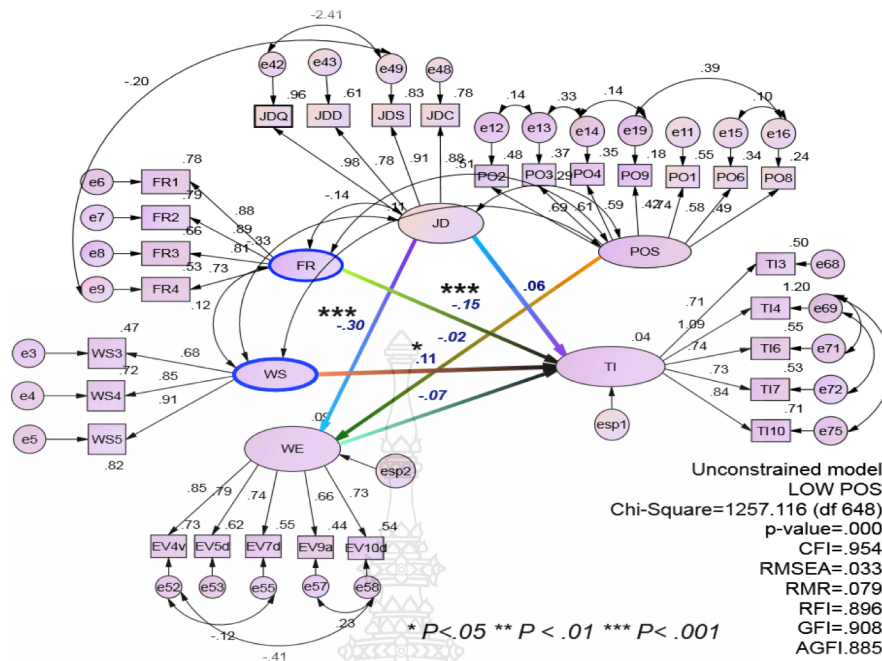
A significant interaction effect exists if the change in the Chi-square vale in the significant. For the high versus low perceived organizational support group, the unconstrained model provided a Chi-square value of 1257.119 with 648 df. Then, that the Chi-square value and degree of freedom are equal to the respective sums for the structural model estimated separately for the two groups (Byrne, 2004). The model with equality constrains on the one common relationships provided a Chi-square value

of 1258.452 with  $df = 649$ . Since, the test result was the rejection of hypotheses that these relationships were invariant across two samples ( $\Delta\chi^2 = 1.333$ ,  $df = 1$ ). According to the table of the critical value of Chi-square, critical value at the alpha of 0.05 and degree of freedom of 1 is equal 3.84, ( $1.33 < 3.84$ ), which was not statistically significant. Thus the difference is statistically at a more than .05, the result can confident that all measurement of perceived organizational support operating in the same way for both groups as shown in table 4-16. That perceived organizational support has not moderating impact on the hypothesized (H4) relationships.

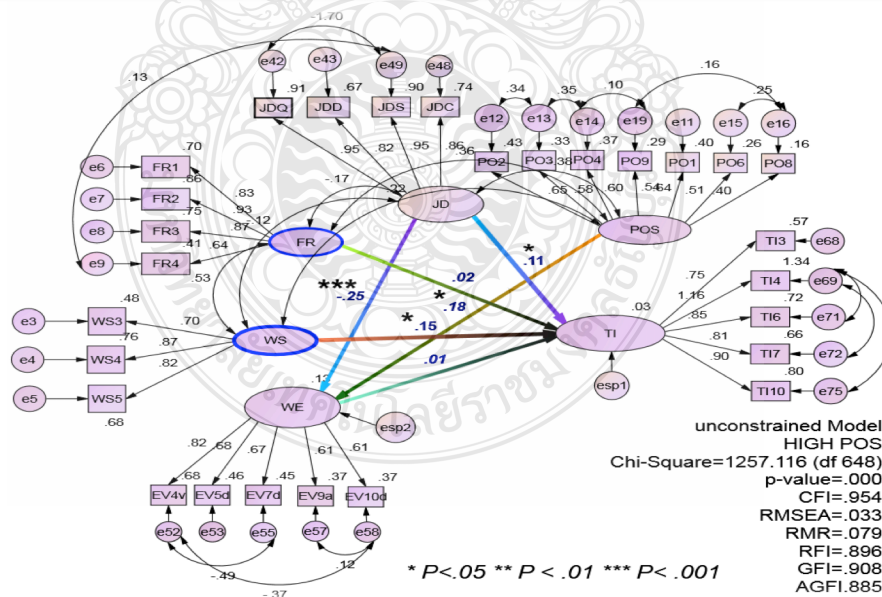
**Table 4-16** Testing the Moderating Influence Analysis of Low & High Perceived Organizational Supports

Parameter constructs	The change in the Chi-square values and df.
- Unconstrained Model (all path in model)	Chi-square = 1257.119 with $df = 648$ .
- Constrained Model (only relationship of Job demand and work engagement path)	Chi-square = 1258.452 with $df = 649$ .
- Difference in Chi-square values	$\Delta\chi^2 = 1.333$ , $df = 1$ ( $P > .05$ )

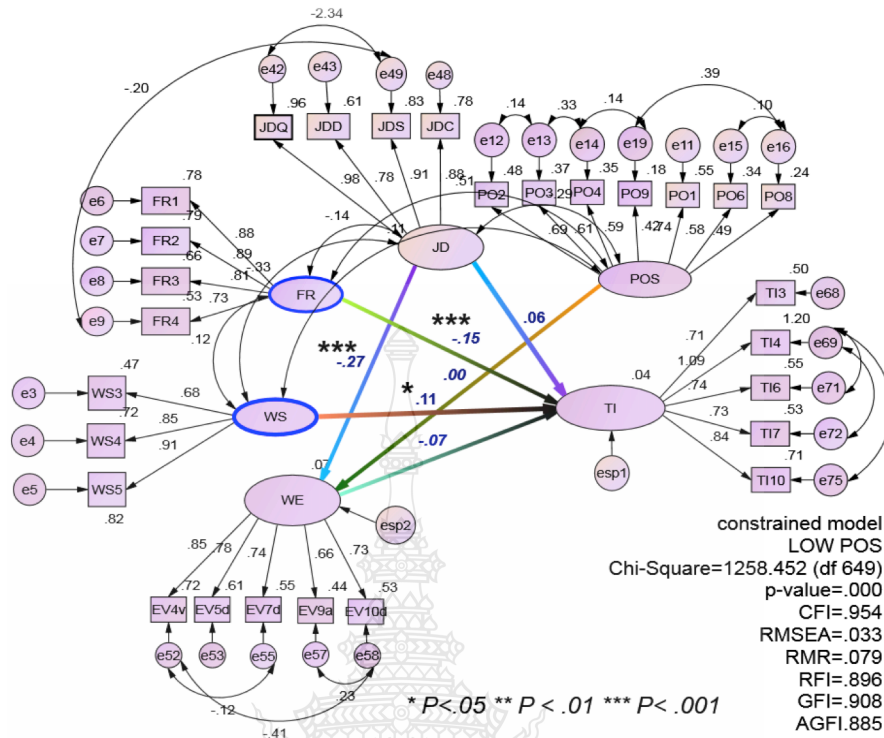
Constrained refer to the restriction of the beta coefficient to be equal between the high and low moderator groups.



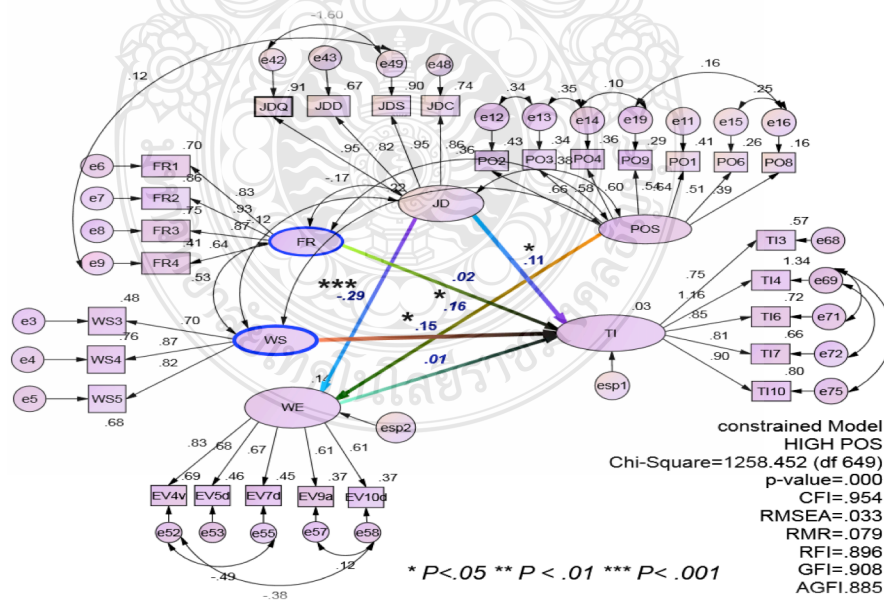
**Figure 4-6** Unconstrained Models: Testing Moderation Effect of Low Perceived Organizational Support Group by Multiple Group Models



**Figure 4-7** Unconstrained Models: Testing Moderation Effect of High Perceived Organizational Support Group by Multiple Group Models



**Figure 4-8** Constrained Models: Testing Moderation Effect of Low Perceived Organizational Support Group by Multiple Group Models



**Figure 4-9** Constrained Models: Testing Moderation Effect of High Perceived Organizational Support Group by Multiple Group Models



#### 4.4 Hypotheses Testing

H1: Job demands (JD) is positively related to turnover intentions (IT).

Table 4-13 demonstrated that job demand behaviors had a significant and positively effect on turnover intentions. The path was significant with a unstandardized coefficient of .122 and critical ratio of 3.329 ( $P < .05$ ), which indicated that the result did support the hypothesis. Therefore, the findings demonstrated that the more job demands in employees are the turnover intentions in workplace are, while they are likely to have the high level of job demands.

H2: The relationship between job demands (JD) and turnover intention (TI) is mediated by work engagement (WE).

Job demand was found to have an influence on turnover intention through work engagement. The results showed that job demand did expressing negative turnover intention through work engagement. Since, the unstandardized coefficient affected the path of job demand on work engagement was significant with -.20 and had a critical ratio of -7.257 ( $P < .05$ ). Meanwhile, the path of work engagement on turnover intention, showed a negative effect was significant with unstandardized coefficient of -.117 and critical ratio -2.202 ( $P < .05$ ). Thus, this hypothesis was supported.

H3: The relationship between perceived organizational supports (POS) and turnover intention (TI) is mediated by work engagement (WE).

Perceived organizational support was found to have an influence on turnover intention through work engagement (WE). The results showed that perceived organizational support did expressing negative turnover intention through work engagement, which indicated that the result was support the hypothesis. Thus the unstandardized coefficient affected the path of perceived organization on work

engagement was significant with .236 and critical ratio of -7.980 ( $P < .05$ ). Equivalent of hypothesis 2 the path of work engagement on turnover intention, showed a negative effect was significant with unstandardized coefficient of -.117 and critical ratio -2.202 ( $P < .05$ ). Employees are likely to be committed to the organization at higher levels than when they do perceive receiving organizational support (Dessler, 1999).

H4: Perceived organizational support (POS) moderate the relationship between job demands (JD) and work engagement (WE).

Due to the result of H4, the multiple group structural equation modeling was conducted to determine if there was group invariance of parameter estimates across the two groups (the low level of perceived organizational support and the high level of perceived organizational support). Then, the groups were tested to determine whether their structure models were different. As presented in table 4-15, and 4-16, the analysis of the structural model different in the relationship between job demands and work engagement under the conditions of the low level of perceived organizational support and the high level of perceived organizational support did not moderate between job demands and work engagement, resulting that both groups of perceived organizational support were not effect relationship to the outcome variable from job demands to work engagement. Thus, this hypothesis was not supported.

H5: Work engagement (WE) has a significant negative relationship with turnover intention (TI).

As illustrated in table 4-13, total sample model showed, that work engagement had a negative effect on turnover intention. The path was insignificant with an unstandardized coefficient of -.117, ( $P < .05$ ). This hypothesis was supported.

**Table 4-17** Summary of Hypotheses Testing

Hypothesis	Results
H1: Job demands (JD) is positively related to turnover intentions (IT)	Supported
H2: The relationship between job demands (JD) and turnover intention (TI) is mediated by work engagement (WE).	Supported
H3 The relationship between perceived organizational supports (POS) and turnover intention (TI) is mediated by work engagement (WE).	Supported
H4 Perceived organizational supports (POS) moderate the relationship between job demands (JD) and work engagement (WE).	Not supported
H5 Work engagement (WE) would have a significant negative relationship with turnover intention (TI).	Supported

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

Chapter five consisted of six sections. The first section discussed the summary of the findings. The second section discussed the details of the research finding while the third section presented theoretical implications. The fourth section presented managerial implications, and the fifth section presented limitation of the study. The last section presented recommendations for future research.

#### 5.1 Summary of the Findings

A summary of the results of the study was discussed in the following paragraphs.

*Research question 1:* Is there a relationship between job demands (JD) and turnover intention (TI)? There was a significant positive relationship between job demands and turnover intention. The result was consistent with the hypothesis (H1), where job demand had an influence on a turnover intention. As workplaces (hospitals) increase their job demand, the turnover intentions, such as, are increased as well.

*Research question 2:* Does work engagement (WE) mediate the relationship between job demands (JD) and turnover intention (TI)? The result showed that job demands had a significant influence on turnover intention through work engagement.

*Research question 3:* Does work engagement mediate the relationship between perceived organizational supports (POS) and turnover intention (TI)? The results showed that perceived organizational support had an indirect influence on turnover intention through work engagement, which means the hypothesis was supported.

*Research question 4:* Does perceived organizational support (POS) moderate the relationship between job demands (JD) and work engagement (WE)? The results indicated that perceived organizational support did not moderate the relationship between job demand and work engagement.

## **5.2 Discussions of the Findings**

This section presented interpretations of the findings and issues arising from the results of the study, especially the investigation of the findings of the current study were compared to previous literature. Hence, all of the findings were synthesized across the research questions. Discussion of the findings was based on the results of the current study. The findings were discussed in accordance with the hypotheses as follows.

H1: Job demands (JD) is positively related to turnover intention (TI).

The results found that the path showed a positive effect on turnover intention and was significant with, meaning that the result did support the hypothesis 1. Therefore, the finding indicated that job demands was positively related to turnover intention, with a reason that job demand construct has only supervisor support factor in the hypothesis model. The current research found that factor was high potential and adequately fit the model. Meanwhile, the result of social support factor (in trail available on task from supervisors) of job demand could lead to positive turnover intention, as support when job demand levels are high, and high job unsatisfactory has been shown to have an impact on increasing turnover intention, which is linked with previous studies (Kahn & Byosiere, 1990; Karasek, 1997; Karasek & Theorell, 1990; Adam & Bind, 2000; Gurney et al., 1997; Bartram, Joiner, & Stanton, 2004).

H2: The relationship between job demands (JD) and turnover intention (TI) is mediated by work engagement (WE).

As proposed the hypothesis 2 was supported, indicating that job demands did have an influence on turnover intention through work engagement, it suggested that the effect of work engagement was potential and adequately fit the hypothesis model such as vigor, a dedication and absorption predict job satisfactory. In addition, the finding of the study did confirm an argument that employees' high job demand could be meaningful if it could provide an expected level of work engagement well-being of employees (Hu & Schaufeli, 2011; Llorens et al., 2006). In this regard, the hypothesis model through work engagement was achieved to produce the effect of employee retention to stay with the workplace (decrease turnover intentions).

H3: The relationship between perceived organizational supports (POS) and turnover intention (TI) is mediated by work engagement (WE).

The hypothesis 3 was supported, where perceived organizational support was found to have an influence on turnover intention through work engagement (WE), the path expressed that perceived organizational support indirectly affecting turnover intention through work engagement was a negative value and significant. This result suggested that the relationships between perceived organizational support expressed positive such work engagement and turnover intention. These results, which were effective with expected fit a broader pattern indicated that perceived organizational supports to positively express are highly desirable. An examination of table 4-13 indicated that employees who have positive perceived organizational support are more likely to have work engagement and positively suppress turnover intention. Several research have examined the subsequence of perceived organizational support. The

employee who's the organization is providing support would believe that the organization cares about them and values the contribution that they are making to the organization (Aselage & Eisenberger, 2003). Moreover, perceived organizational support appears to mediate the relationship between favorable work conditions. Therefore, workers who are emotionally committed to the organization present heightened performance, decreased absenteeism, and lessened possibility of quitting their job (Mathieu & Zajac, 1990; Meyer & Allen, 1997; Mowday et al., 1982).

H4: Perceived organizational support (POS) moderate the relationship between job demands (JD) and work engagement (WE).

The hypothesis 4 was not supported, revealing that the high level of perceived organizational support and the low level of perceived organizational support were as not moderators between job demands and work engagement. This may occur because employees express positively perceived organizational support construct via work engagement as they regard of the different levels of perceived organizational support is not as strong as would like. In addition, employees do conform to express positively perceived organization construct via work engagement when they do feel present to repay the organization for valuing them. Consistent with this idea, there was very few effect of job demand on work engagement. Unlike the expectation of the moderating of perceived organizational support, moderation exists between job demand and work engagement. The results did support the contingency perspective of the relationship between findings, which are consistent with the previous literature on. Thus, this finding did not confirm the contingency approach, which emphasized that the organization with high value on perceived organizational support was expected to have superior work engagement and subsequently reduced turnover intention rather than those with low

value on perceived organizational support. Potential expectations could be provided regarding the result. The extent of the perceived organizational support can determine the degree of resources to support employee's engagement. Indeed, top management who are most likely to provide development tends to devote more attention to employee's engagement in the workplace. Nonetheless, the difference in magnitude was considerable between the two groups. Therefore, it is not adequate to say that the relationships specified in the conceptual model are different between the two groups. However, the finding did not support an argument that when top management is more committed to support employee's engagement with a clear vision of perceived organizational support, the organization seems to provide employees with more perceived organizational support to reduce turnover intention or improve performance (Bailey et al., 2001; Huselid, 1995).

H5: Work engagement (WE) have a significant negative relationship with turnover intention (TI).

As proposed in the hypothesis 5, it predicted that work engagement expressing negative effect would have a negative (-.117) relationship with turnover intention. Hence, the finding of this study implied that work engagement could be a strong predictor for turnover intention, even if the relationship between them is significant. However, the result can be given regarding the prediction of work engagement to turnover intention. The explanation is related to indicators of turnover intention used in the current study, which assessed turnover intentions with leaving behavior and job search behavior. Meanwhile, the use of indicator of turnover intention about the organization did have the supported results in the current study. Besides, the subjective measures asserted that a certain set of turnover intention indicators to measure



organizational turnover intention is not appropriate since every organization has its own characteristics and situation even in the same strategy management and vision of management. Furthermore, a significant negative relationship was found in the relationship between work engagement and turnover intentions, which did confirm the finding in previous literature (Sak, 2006; Hallberg & Schaufeli, 2006; Schaufeli & Bakker, 2004a; Harter et al., 2002). Work engagement could result in improved turnover intention only when those organizations meet the expectations of the organizational needs. Moreover, the finding confirmed an argument that employee's high job demand can be meaningful if it could result in an expected level of work engagement or anticipated well-being of employees (Hu & Schaufeli, 2011; Llorens et al., 2006).

The finding of the model with the control variable was used as an indicator of turnover intention about the organization, which did have the supported results in the current study. In addition, the subjective measures asserted that a certain set of turnover intention indicators to measure organizational turnover intention is not appropriate since every organization has its own characteristics and situation even in the same strategy management and vision of management. Based on this discussion, turnover intention may be more suitably explained by work engagement if other indicators, other measurement for turnover intention, are used to assess turnover intention. The explanation regarding the prediction of an organization's work engagement for turnover intention is about the appropriateness for high level of work schedule flexibility and financial reward, which were control variables, and high level of job demand to manifest in a visible turnover intention. It is clear that human resource practices could be transformed to employee's work engagement after human resource program has been

implemented. The current study, which had between implementation of job demand and work engagement activities and measurement for turnover intention was enough to assess the materialization of perceived organization support. Finally, a reason worth mentioning regarding the predication of work engagement for turnover intentions is the issue of measure such as perceived organizational support (fairness, supervisor support, and organizational reward and job conditions). The finding that work engagement did adequately explain a turnover intention is in agreement with perceived organizational support. Numerous researchers (Mathieu & Zajac, 1990; Meyer & Allen, 1997; Mowday et al., 1982; Eisenberger et al., 1986; Kahn, 1990; Dessler, 1999; Sak, 2006) have emphasized the need for including various perceived organizational supports (fairness, supervisor support, and organizational reward and job conditions) when measuring turnover intention. Therefore, the result implied that turnover intention could be better predicted when including other functions such as work schedule flexibility and financial reward, rather than when having only the context of the perceived organizational support. In other words, turnover intention can be increased and maximized when control variable and work engagement can effectively interact with the content of the different levels of perceived organizational support.

### **5.3 Theoretical Implications**

All the results of this finding did support previous research that the positive roles of perceived organizational support on job demand and work engagement reduced turnover intentions, which negatively related to the model. As predicted, the findings confirmed that work schedule flexibility and financial reward were control variable measurements, and the influence of variables relations related to tasks on four construct

variables include in the studies model could influence negative turnover intention through work engagement. This finding suggested that positive work engagement and perceived organizational support can be achieved from reduction of an employee's turnover intention, and success can be guaranteed (Campion, 1991; Maertz & Campion, 1998). Hence, this finding supported that the perceived organizational support helps employees and the organization increase their performance (Griffeth et al., 2000; Maertz & Campion, 1998).

Moreover, new construct in turnover intention was by offering meaningful implication to embrace both leaving job behavior and job search behaviors as boundary of professional nurse. That new knowledge (leaving job behavior and job search behaviors) in enhancing describes the strongest antecedents to actual turnover acting in conjunction with turnover intention to determine employee's leave (Kopelman et al., 1992). However, the results of this study pointed out the importance of job demand and work engagement in the context of the different levels of perceived organizational supports to achieve turnover intention.

#### **5.4 Managerial Implications**

The main practical contribution of this study was to find the relationship among job demand, work engagement, perceived organizational support and turnover intention from the empirical point of view. There is a general consensus on the importance of work engagement and perceived organizational support as a mechanism to help the workplaces (hospitals) maintain turnover intentions based on their human resource. However, in fact, the job demand activities of hospitals have relatively high negative effects on work engagement. Theories posit high job demands trigger a

situation of negative feelings and therefore have a direct and positive on job stress (Lovallo, 2005; Parker & DeCotiis, 1983; Payne, 1979). These positive effects of perceived organizational support in employee's practical may be due to the certainty about the impact of situation of level perceived organizational support of hospitals. Moreover, several researchers (Hu & Schaufeli, 2011; Llorens et al., 2006) pointed out that job demand was negatively related to work engagement, and low imposed demands may create a positive effect on well-being, thereby improving employee's performance and decreasing turnover intention. Second, employers should consider developing more perceived organizational support in the difference levels. For example, the high level of perceived organizational support may play an extrinsic motivation role because it fosters employees to be effective at engaging in creating good employee retention to stay with the workplace (hospitals) or the low level turnover intention (Bailey et al., 2001; Huselid, 1995).

The current research finding suggested that high level perceived organizational support on work engagement and job demand could not ensure reductive level turnover intention of professional nurse. The study demonstrated that employee's high level of perceived organizational support could not assure better work engagement results of hospitals. Therefore, employers need to reinforce the high level of perceived organizational support outcome to achieve greater work engagement. Instead of focusing on employee's engagement to the organization, benefits pertaining to the organization's turnover intention to employee are highlighted by the current finding. Employers could decrease turnover intention of their employees by decreasing job demand. In order to increase perceived organizational support among high performers, work engagement and strategic practices play important roles. Besides, the organization

needs to ensure that their supervisor supportive of the contributions are made by their employees who are high performers. Furthermore, the organizations would need to ensure that motivation to decrease turnover intention factors practices are focused on work schedule flexibility to good working conditions (i.e. busy schedule and high workload) and financial rewards providing to employees.

The findings suggested employee's intensity of the effect as the most dominant aspect of decreasing turnover intentions. Regarding employee retention, it is found that high level of perceived organizational support will increase work engagement and thus decrease turnover intentions. It appears then that the above practices would help decrease employees' turnover intention, which will result in organizational beneficial outcomes. However, the use of perceived organizational support and work engagement practices will not only directly enhance employees' intensity of decreasing turnover intentions but also likely improve and enhance employees' perceptions that they are staying volitionally. Consequently, other employees might not pose as much of a threat to retention of their high engagement. Together, enhancing the aspects of decreasing turnover intention will offer an improvement of the organization's context in which a joyous work environment could be promoted.

In addition, the finding suggested that job demand (supervisor support factor) might determine work engagement and became the more important factors of job demand (i.e. psychological demand, decision latitude, and coworker support). The organizations could place more emphasis on improving and strengthening the demand they make available to their workforces in order to increase job engagement as well as take valuable inputs from employees on what kind of improvements they may need in

perceived organizational support available to them. Finally, the organizations could also hire more educated individuals and proactively promote the better support to higher job levels in order to enhance their engagement with their jobs. According to Robinson et al., (2008), turnover intention could be predicted from the employees' response to work opportunities for perceptions of being valued and cared by supervisors. Based on the recommendation of Robinson et al., (2008), professional nurses may need to place greater emphasis on the recruitment and selection process to ensure a greater organizational fit to help address in the issue of turnover among professional nurse in the industry.

### **5.5 Limitations of the Study**

The finding of the current study was limited in considering people conforming one culture since the accuracy of the findings depends on the honesty of participants in the survey. Data were collected from a number of private hospitals in Bangkok and Metropolitan Area (BMA) and its vicinity, so the fact that data could not be collected from many private hospitals of medical tourism across the country was another limitation. Although, these organizations were selected because their characteristics varied in terms of organizational size, location and type of health care and medical tourism, the sample was still limited to a few hospitals. It is possible that there are particular characteristics of the hospitals that may influence the research findings differently if several hospitals are included. However, each of the participating organizations had a policy that disallowed researchers to inquire information due to corporate confidentiality policies.

Another limitation of the study was the restriction on the number of questions in the questionnaire. The questionnaire contained 109 questions and required approximately 25 to 30 minutes to complete. Nevertheless, the organizations required that employees completed the questionnaires during their private time, so they were unwilling to solicit participation if it requires more than 15 minutes has completed the questionnaire.

Finally, this study employed cross-sectional data, precluding any conclusions causality. In contrast, opposite to what was predicted here with longitudinal data, it was found that turnover intention resulted in the use of more control mechanical, decreased positive effect of job demand to turnover intention, and increased perceived organizational supports or some other combination. However, turnover intention did not always predict actual behaviors. Meanwhile, actual turnover behaviors measurement would be examined six months later (Ajzen & Fishbein, 1977; Ajzen & Madden, 1986). In addition, Rhoades et al. (2001) took repeated measure of perceived organizational support overtime to determine that perceived organizational support was related to temporal changes in affective commitment. In the future longitudinal designs may be used in order to better understand the antecedent of job engagement.

## **5.6 Recommendations for Future Research**

The result of the study generally provided several ideas of the trend for future research. First of all, future research may include a wider range of job demand when examining the relationships among job demand, work engagement, and turnover intentions in the context of the different levels of perceived organizational support with turnover intention outcomes. The current study included leaving job behaviors and job

search behaviors of turnover intention. However, in the real work of the organization, the levels of job demand of employees, who have different conditions in a boundary of industry, the quality of work life balance, and their influence on outcomes could be investigated. Gupta and Sharma (2011) think that a high quality of work life occurs when employees have positive feeling towards their job, and their future prospects are motivated to stay on the job, perform well, and feel their working life suitable for their private life of personal values. The demonstrated improvement in a quality of work life has reducing grievance, turnover, and absenteeism (Goodman, 1980).

Third, this investigation explicated that the high level of perceived organizational support resulted in an organizational outcome, which subsequently leads to performance (the low level of turnover intention). The comparison analysis among perceived organizational support, turnover intention, and work engagement produced positive finding. Thus, the current study examining the linkages between professional nurse and the workplace could provide more clear evidence by investigating the relationships and outcomes in terms of the hospitals under the government's control aspect of organizational performance, and comparing with the private hospitals. Fourth, the levels (individual, group or team organization) can be considered for future research by examining the linkage of employee's stage and turnover intention, as the organizations are multi levels in nature since employees are in groups and team within the organizations (Klein, Dansereau, & Hall, 1994). In future research, where data are collected from individuals to research, the organization constructs such as work schedule flexibility and financial rewards investigating the relationships among job demand, work engagement, and turnover intentions level issue should be identified.



Klein et al. (1994) suggested that the level of measurement issue must be addressed since data would be collected from different sources.

Finally, this study used indicators including job demand, perceived organizational support, and work engagement to measure turnover intentions outcome at the individual level of professional nurse working in the private hospitals of the medical tourism in Thailand. The result presented that these are crucial indicators, but in future research other measurements could be considered in terms of the organization and the employee level regarding other occupations such as engineers of general construction contractor, petroleum or refinery, and power plant industries working in public company groups. The research findings suggested that the impacts of turnover intentions include work engagement, perceived organizational support, job demand, work schedule flexibility, financial reward, and the quality of work life balance. The topic of turnover is critical for organizational effectiveness since decreasing in the turnover can lead to an increase in organizational performance. Therefore, future research could consider the utilization of measures for assessing turnover intention outcomes in terms of employees, teams, and organizational levels.

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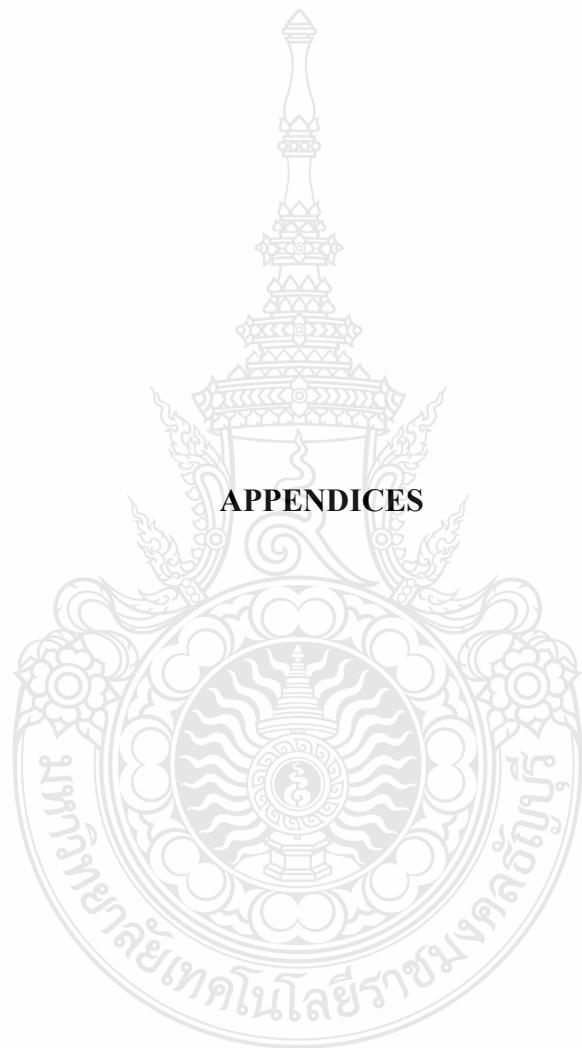
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**APPENDICES**



**APPENDIX A**

**The Permission to modify and use survey instrument.**

From: Thanawat Thirapatsakun <thanawat8@hotmail.com>  
Subject: Doctoral Dissertation Research- Job Content questionnaire scale.  
Date: October 10, 2555 BE 4:14:04 PM GMT+07:00  
To: Robert\_karasek@uml.edu

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Subject: Doctoral Dissertation Research- Job Content questionnaire scale.

Dear Sir: Prof. Dr. Robert A. karasek

E-mail: [Robert\\_karasek@uml.edu](mailto:Robert_karasek@uml.edu)

My name is Mr. Thanawatdech Thirapatsakun. I am a doctoral student in Ph.D. business administration program, faculty of business administration at the Rajamangala University of Technology Thanyaburi Thailand.

My dissertation topic involves the Relationships between Job demands, Work engagement and Turnover Intention in the context of different level of perceived organizational support. I plan to use the survey of Job content questionnaire to measure the Job demand of professional nurses they had worked private health sector of medical tourism in Thailand. The current study initially targeted a sample 800 of professional nurses.

I am currently writing the methodology section of my dissertation (Proposal). At present, I am considering with in multiple group method of SEM. analysis to test moderation. I have been to download the information about assessing the Job Content Questionnaire scale from [www.icqcenter.org](http://www.icqcenter.org).

I want to confirm that my study is for non-commercial educational research purposes only also I agree to share my data (SPSS.) with you.

Thanks so much for all the research you've done on the Job content questionnaire, and for allowing the use of the questionnaire scale for educational research.

Best regards,

Mr. Thanawatdech Thirapatsakun

Ph.D. candidate, Ph.D. Business administration Program

Faculty of Business administration

The Rajamangala University of Technology Thanyaburi, Thailand. [Thanawat8@hotmail.com](mailto:Thanawat8@hotmail.com)

Cell 081-443 5641

From: Thanawat Thirapatsakun <thanawat8@hotmail.com>  
Subject: Re: JCQ request  
Date: October 12, 2555 BE 3:19:37 PM GMT+07:00  
To: jcccenter <jcccenter@uml.edu>

2 Attachments, 1.8 MB

Dear Sandra Gibson

Thank for your kindly suggestion to me. I had prepared the Data Base and the Permission Contract, complete and SIGN the Contract and Send both to you. (Please see attachment)

Best Regards

Thanawatdech Thirapatsakun

Doctoral Student



[JCQ Databas...xlsx \(14 KB\)](#)



[Contract for...pdf \(1.8 MB\)](#)

On Oct 12, 2555 BE, at 1:00 AM, jcccenter wrote:

Dear Thanawatdech:

You may receive the JCQ in two ways. You can send me your complete mailing address ( street, po box , city etc.) OR you can go to the website at [jcccenter.org](http://jcccenter.org) and download the Data Base and the Permission Contract, complete and SIGN the Contract and send both to me by e-mail. scan or fax 978-452-5711. The website method is faster, especially since you are located so far away.

Thank you,  
Sandra Gibson  
JCQ Center



**From:** Richard Kopelman <Richard.Kopelman@baruch.cuny.edu>  
**Subject:** RE: Doctoral Dissertation Research- job search behaviors questionnaire scale.  
**Date:** October 10, 2555 BE 1:06:02 AM GMT+07:00  
**To:** Thanawat Thirapatsakun <thanawat8@hotmail.com>  
**Cc:** "Janet.rovenpor@manhattan.edu" <janet.rovenpor@manhattan.edu>

---

Dear Mr. Thirapatsakun,  
You have our permission to use the JSBI for academic research.  
Please do keep me posted as to your findings.  
Good luck.  
Richard Kopelman

Richard E. Kopelman  
Professor of Management and  
Academic Director, Executive MSILR Program  
Management Department VC 9-237  
Zicklin School of Business  
Baruch College  
One Bernard Baruch Way  
New York, NY 10010-5585  
tel: 646.312.3629, fax: 646.312.3621

---

**From:** Thanawat Thirapatsakun [mailto:thanawat8@hotmail.com]  
**Sent:** Tuesday, October 09, 2012 5:57 AM  
**To:** Richard Kopelman  
**Subject:** Doctoral Dissertation Research- job search behaviors questionnaire scale.

Subject: Doctoral Dissertation Research- job search behaviors questionnaire scale.  
Dear Sir: Prof. Dr. Richard Kopelman  
E-mail: [richard.kopelman@baruch.cuny.edu](mailto:richard.kopelman@baruch.cuny.edu)

My name is Mr. Thanawatdech Thirapatsakun. I am a doctoral student in Ph.D. business administration program, faculty of business administration at the Rajamangala University of Technology Thanyaburi Thailand.

My dissertation topic involves the Relationships between Job demands, Work engagement and Turnover Intention in the context of different level of perceived organizational support. I plan to use the survey of job search behaviors questionnaire scale (JSBI) to measures the turnover intention of professional nurses they had worked private health sector of medical tourism in Thailand. The current study initially targeted a sample 800 of professional nurses.

I am currently writing the methodology section of my dissertation (Proposal). At present, I am considering with in multiple group method of SEM. analysis to test moderation. I have been to your site and download the information about assessing job search behaviors questionnaire scale (JSBI) from article-Rational and construct validity evidence for the job search behavior index: because intentions and new year's resolutions often come to naught, Journal of vocational behavior, 40: 269-287.

I want to confirm that my study is for non-commercial educational research purposes only also I agree to share my data (SPSS.) with you.

Thanks so much for all the research you've done on job search behaviors index, and for allowing the use of the job search behaviors questionnaire scale (JSBI)for educational research.

Best regards,  
Mr. Thanawatdech Thirapatsakun  
Ph.D. candidate  
Ph.D. Business administration Program  
Faculty of Business administration

From: "Roodt, Gert" <groodt@uj.ac.za>  
Subject: RE: Doctoral Dissertation Research-Leaving job behaviors questionnaire scale.  
Date: October 9, 2555 BE 5:55:54 PM GMT+07:00  
To: Thanawat Thirapatsakun <thanawat8@hotmail.com>

---

Dear Thanawat

Thank you for letting me know! Best of luck with your studies.

Regards

Prof Roodt

---

**From:** Thanawat Thirapatsakun [mailto:thanawat8@hotmail.com]  
**Sent:** 09 October 2012 11:42 AM  
**To:** Roodt, Gert  
**Subject:** Doctoral Dissertation Research-Leaving job behaviors questionnaire scale.

Subject: Doctoral Dissertation Research-Leaving job behaviors questionnaire scale.

Dear Sir or Madam: Prof. Dr. Gert Roodt

E-mail: [groodt@uj.ac.za](mailto:groodt@uj.ac.za)

My name is Mr. Thanawatdech Thirapatsakun. I am a doctoral student in Ph.D. business administration program, faculty of business administration at the Rajamangala University of Technology Thanyaburi Thailand.

My dissertation topic involves the Relationships between Job demands, Work engagement and Turnover Intention in the context of different level of perceived organizational support. I plan to use the survey of leaving job behaviors questionnaire scale to measures the turnover intention of professional nurses they had worked private health sector of medical tourism in Thailand. The current study initially targeted a sample 800 of professional nurses.

I am currently writing the methodology section of my dissertation (Proposal). At present, I am considering with in multiple group method of SEM. analysis to test moderation. <http://www.uj.ac.za/en/faculties/management/departments/hrm/about/staff/Pages/ProfGertRoodt.aspx> I have been to your site and download the information about assessing leaving job behaviors questionnaire scale from article- Health SA Gesondeid; Organizational culture of Hospitals to predict turnover intentions of professional nurses. <http://hsag.co.za/index.php/HSAG/article/viewArticle/258>

I want to confirm that my study is for non-commercial educational research purposes only also I agree to share my data (SPSS.) with you.

Thanks so much for all the research you've done on leaving job behaviors, and for allowing the use of the leaving job behaviors questionnaire scale for educational research.

Best regards,

Mr. Thanawatdech Thirapatsakun

Ph.D. candidate

Ph.D. Business administration Program

Faculty of Business administration

The Rajamangala University of Technology Thanyaburi, Thailand.

[Thanawat8@hotmail.com](mailto:Thanawat8@hotmail.com)

Cell 081-443 5641

---

From: "Schaufeli, W.B." <w.schaufeli@uu.nl>  
Subject: RE: Doctoral Dissertation Research- UWES  
Date: October 9, 2555 BE 8:20:30 PM GMT+07:00  
To: 'Thanawat Thirapatsakun' <thanawat8@hotmail.com>

---

Dear mr. Thirapatsakun.

With this email I confirm that you may use the UWES freely for non-commercial, academic research.

With kind regards  
Wilmar Schaufeli

**Wilmar B. Schaufeli, PhD** | *Social and Organizational Psychology* | P.O. Box 80.140 | 3508 TC Utrecht, The Netherlands |  
Tel: (31) 30-253 9093 | Mobile: (31) 6514 75784 | Fax: (31) 30-253 7842 | Site: [www.wilmarschaufeli.nl](http://www.wilmarschaufeli.nl) | |

---

**Van:** Thanawat Thirapatsakun [mailto:thanawat8@hotmail.com]

**Verzonden:** dinsdag 9 oktober 2012 12:19

**Aan:** Schaufeli, W.B.

**Onderwerp:** Doctoral Dissertation Research- UWES

Subject: Doctoral Dissertation Research- UWES

Dear Sir: Prof. Dr. Wilmar B. Schaufeli

E-mail: [w.schaufeli@uu.nl](mailto:w.schaufeli@uu.nl)

My name is Mr. Thanawatdech Thirapatsakun. I am a doctoral student in Ph.D. business administration program, faculty of business administration at the Rajamangala University of Technology Thanyaburi Thailand.

My dissertation topic involves the Relationships between Job demands, Work engagement and Turnover Intention in the context of different level of Perceived organizational support. I plan to use the UWES to measure the work engagement of professional nurses they had worked private health sector of medical tourism in Thailand. The current study initially targeted a sample 800 of professional nurses.

I am currently writing the methodology section of my dissertation (Proposal). At present, I am considering with in multiple group method of SEM. analysis to test moderation. I have been to your site (<http://www.schaufeli.com>) and download the manual and the English version of the UWES information about assessing.

I want to confirm that my study is for non-commercial educational research purposes only also I agree to share my data (SPSS.) with you.

Thanks so much for all the research you've done on the work engagement, and for allowing the use of the UWES for educational research.

Best regards,

Mr. Thanawatdech Thirapatsakun

Ph.D. candidate, Ph.D. Business administration Program

Faculty of Business administration

The Rajamangala University of Technology Thanyaburi, Thailand. [Thanawat8@hotmail.com](mailto:Thanawat8@hotmail.com)

Cell 081-443 5641

**From:** "Eisenberger, Robert W" <reisenbe@Central.UH.EDU>  
**Subject:** RE: Doctoral Dissertation Research- SPOS  
**Date:** October 9, 2555 BE 9:29:03 PM GMT+07:00  
**To:** Thanawat Thirapatsakun <thanawat8@hotmail.com>, "reisenberger2@uh.edu" <reisenberger2@uh.edu>

---

Dear Mr. Thirapatsakun

Thank you for your interest in the SPOS survey, which I am happy to give. Best of luck with your research.

Cordially,  
Bob

Robert Eisenberger  
Professor of Psychology  
College of Liberal Arts & Soc. Sciences  
Professor of Management  
C. T. Bauer College of Business  
University of Houston  
[reisenberger2@uh.edu](mailto:reisenberger2@uh.edu)  
(302)353-8151

---

**From:** Thanawat Thirapatsakun [thanawat8@hotmail.com]  
**Sent:** Tuesday, October 09, 2012 4:31 AM  
**To:** reisenberger2@uh.edu  
**Subject:** Doctoral Dissertation Research- SPOS

Subject: Doctoral Dissertation Research- SPOS

Dear Sir: Prof. Dr. Robert Eisenberger

E-mail: [reisenberger2@uh.edu](mailto:reisenberger2@uh.edu)

My name is Mr. Thanawatdech Thirapatsakun. I am a doctoral student in Ph.D. business administration program, faculty of business administration at the Rajamangala University of Technology Thanyaburi Thailand.

My dissertation topic involves the Relationships between Job demands, Work engagement and Turnover Intention in the context of different level of Perceived organizational support. I plan to use the survey of perceived organizational support: SPOS to measure the perceived organizational support of professional nurses they had worked private health sector of medical tourism in Thailand. The current study initially targeted a sample 800 of professional nurses.

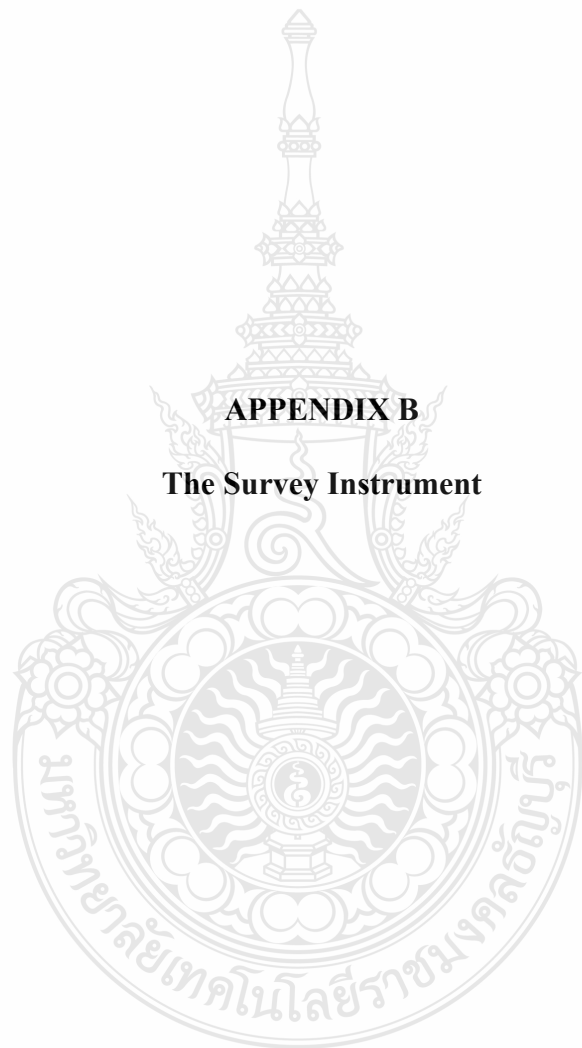
I am currently writing the methodology section of my dissertation (Proposal). At present, I am considering with in multiple group method of SEM. analysis to test moderation. I have been to your site (<http://www.psychology.uh.edu/faculty/eisenberger>) and download the information about assessing perceived organizational support and the shorter version of scale (SPOS).

I want to confirm that my study is for non-commercial educational research purposes only also I agree to share my data (SPSS.) with you.

Thanks so much for all the research you've done on perceive organizational support, and for allowing the use of the SPOS for educational research.

Best regards,

Mr. Thanawatdech Thirapatsakun  
Ph.D. candidate, Ph.D. Business administration Program  
Faculty of Business administration  
The Rajamangala University of Technology Thanyaburi, Thailand. [Thanawat8@hotmail.com](mailto:Thanawat8@hotmail.com)  
Cell 081-443 5641



**APPENDIX B**

**The Survey Instrument**



## แบบสอบถามงานคุณวุฒิพนธ์

เลขที่.....

เรียน ท่านผู้ตอบแบบสอบถาม

กระผม นายชนาวัฒน์เดช ชีระพัฒนสกุล นักศึกษาปริญญาเอก สาขาการจัดการ คณะบริหารธุรกิจ มหาวิทยาลัยเทคโนโลยีราชมงคลธัญบุรี ได้จัดทำคุณวุฒิพนธ์เรื่อง “ความสัมพันธ์ระหว่างการปฏิบัติงานที่ต้องกระทำ ความมุ่งมั่นพยายามของพนักงานและเจตนาสมัครใจของการลาออก ในบริบทของระดับความแตกต่างของการรับรู้การสนับสนุนจากโรงพยาบาล (*The Relationships between job demand, work engagement, and turnover intentions in the context of different levels of perceived organizational supports*)” คำตอบของท่านมีคุณค่า สำหรับเราเป็นอย่างยิ่ง ข้อมูลทั้งหมดจะเก็บรักษาเป็นความลับและไม่มีการนำเสนอเป็นรายบุคคล แบบสอบถาม ไม่ได้ทำให้เกิดผลลัพธ์ที่คิดหรือถูก ดังนั้น โปรดกรุณาตอบตามความเป็นจริงและกรุณาตอบทุกข้อเท่าที่ท่านสามารถทำได้

ขอขอบพระคุณท่านสำหรับการสละเวลาในครั้งนี้และหวังเป็นอย่างยิ่งว่าผลงานวิจัยชิ้นนี้จะเป็นประโยชน์ต่ออาชีพการงานของท่านทั้งหลายในภายภาคหน้า

นายชนาวัฒน์เดช ชีระพัฒนสกุล

081-4435641, [thanawat8@hotmail.com](mailto:thanawat8@hotmail.com)

ส่วนที่ 1. ข้อมูลทั่วไปและสถานภาพการทำงาน

(กรุณาทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับ ความเป็นจริงของท่าน)

- ท่านเป็นพยาบาลวิชาชีพที่มีใบอนุญาตจากสภาพยาบาล (1) ใช่ (2) ไม่ใช่ (จบการสัมภาษณ์)
- เพศ (1) ชาย (2) หญิง
- อายุ (1) ต่ำกว่า 30 ปี (2) มากกว่า 30 ถึง 40 ปี (3) มากกว่า 40 ถึง 50 ปี (4) มากกว่า 50 ปี
- คุณวุฒิสูงสุดของท่าน (1) อนุปริญญาการพยาบาล (2) ปริญญาตรี (3) สูงกว่าปริญญาตรี
- ท่านปฏิบัติงานในอาชีพพยาบาลมาแล้วเป็นระยะเวลาเท่าใด.....ปี
- ท่านปฏิบัติงานในอาชีพพยาบาลที่โรงพยาบาลแห่งนี้มาแล้วเป็นระยะเวลาเท่าใด.....ปี
- แผนกของท่าน (1) หน่วยรักษาพยาบาลผู้ป่วยชั้นวิกฤต/ห้องฉุกเฉิน (2) กุมารเวชศาสตร์หรือแม่และเด็ก (3) ศัลยกรรม (4) อายุรกรรม (5) อื่นๆ โปรดระบุ.....
- ตำแหน่งของท่านในปัจจุบัน (1) พยาบาลวิชาชีพ (2) พยาบาลวิชาชีพอาวุโส (3) หัวหน้าหรือหัวหน้าแผนก (4) อื่นๆ โปรดระบุ .....
- สถานภาพสมรส (1) โสด (2) สมรส (3) หย่าร้าง/หม้าย
- รวมรายได้เฉลี่ยต่อเดือน (1) ต่ำกว่า 15,000 บาท (2) 15,001-30,000 บาท (3) 30,001-45,000 บาท (4) 45,001-60,000 บาท (5) มากกว่า 60,000 บาทขึ้นไป

ส่วนที่ 2. ข้อมูลเกี่ยวกับทัศนคติของท่าน (กรุณาทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่าน โดยใช้สเกลต่อไปนี้)

ไม่เห็นด้วยอย่างยิ่ง = (1), ไม่เห็นด้วย = (2), ไม่เห็นด้วยเล็กน้อย = (3), เฉยๆ = (4), เห็นด้วยเล็กน้อย = (5), เห็นด้วย = (6), เห็นด้วยอย่างยิ่ง = (7)

### 1. Work Schedule Flexibility

WS1.แผนกของท่านให้ความสำคัญสนับสนุนแก่ท่านในการแสดงความรับผิดชอบต่อ (1) (2) (3) (4) (5) (6) (7) ครอบครัวโดยไม่มีผลในเชิงลบใดๆตามมา

WS2.ท่านสามารถปฏิบัติงานได้เป็นอย่างดี ในขณะที่เดียวกันก็ยังสามารถปฏิบัติงาน (1) (2) (3) (4) (5) (6) (7) เกี่ยวกับครอบครัวของท่านได้อย่างเหมาะสม

WS3. ท่านสามารถลาหยุดงานได้เสมอ เมื่อท่านมีความต้องการ	(1)	(2)	(3)	(4)	(5)	(6)	(7)
WS4. ท่านมีโอกาสทำงาน part-time หรือมีช่วงเวลาที่ยืดหยุ่น	(1)	(2)	(3)	(4)	(5)	(6)	(7)
WS5. ตารางงานของท่านมีความยืดหยุ่นพอสมควร	(1)	(2)	(3)	(4)	(5)	(6)	(7)

## 2. Financial Rewards Items

FR1. สำหรับการทำงานที่ท่านทำ ท่านรู้สึกว่าคุณค่าตอบแทนที่ได้รับมีความเหมาะสม	(1)	(2)	(3)	(4)	(5)	(6)	(7)
FR2. ความจำเป็นของท่านได้รับการตอบสนองอย่างเพียงพอจากค่าจ้างและผลตอบแทน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
FR3. เมื่อพิจารณาค่าใช้จ่ายเพื่อการดำรงชีวิตในปัจจุบันท่านพบว่าค่าจ้างของท่านเหมาะสม	(1)	(2)	(3)	(4)	(5)	(6)	(7)
FR4. โรงพยาบาลแห่งนี้มีวิธีการแบ่งจ่ายค่าจ้างที่คุ้มค่าสำหรับคนที่ต้องการทำงานหนัก	(1)	(2)	(3)	(4)	(5)	(6)	(7)
FR5. จำนวนเงินที่ท่านได้รับในปัจจุบันส่งผลต่อทัศนคติในการทำงานของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)

## Perceived organizational support.

PO1. โรงพยาบาลแห่งนี้พิจารณาเป้าหมายและคุณค่าของท่านอย่างจริงจัง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PO2. เมื่อท่านประสบปัญหาท่านได้รับการช่วยเหลืออย่างสม่ำเสมอจาก โรงพยาบาลแห่งนี้	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PO3. โรงพยาบาลแห่งนี้ห่วงใยเอาใจใส่ในความเป็นอยู่ที่ดีของท่านอย่างแท้จริง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PO4. โรงพยาบาลแห่งนี้มีความเต็มใจที่จะสนับสนุนช่วยเหลือเพื่อให้ท่านสามารถปฏิบัติงานได้อย่างเต็มกำลังความสามารถ	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PO5. ถึงแม้ว่าท่านได้ปฏิบัติงานอย่างเต็มกำลังความสามารถของท่านแล้ว โรงพยาบาลแห่งนี้ก็ไม่เคยเห็นความดีของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PO6. โรงพยาบาลแห่งนี้เอาใจใส่ในความพึงพอใจในการปฏิบัติงานของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PO7. โรงพยาบาลแห่งนี้ให้ความห่วงใยน้อยมากเกี่ยวกับตัวท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PO8. โรงพยาบาลแห่งนี้ให้ความสนใจต่อความคิดเห็นของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PO9. โรงพยาบาลแห่งนี้มีความภาคภูมิใจในการปฏิบัติงานของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)

## Job demands ( Quantitative demand).

QD1. งานของท่านต้องทำงานด้วยความรวดเร็วอย่างมาก	(1)	(2)	(3)	(4)	(5)	(6)	(7)
QD2. งานของท่านต้องการการทำงานที่หนักอย่างมาก	(1)	(2)	(3)	(4)	(5)	(6)	(7)
QD3. ไม่มีเครื่องรื้อให้ทำงานหนักกว่าภาระหน้าที่ในที่แห่งนี้	(1)	(2)	(3)	(4)	(5)	(6)	(7)
QD4. ท่านมีเวลาเพียงพอที่จะทำงานให้เสร็จ	(1)	(2)	(3)	(4)	(5)	(6)	(7)
QD5. ท่านปราศจากความต้องการที่ขัดแย้งกับบุคคลอื่น	(1)	(2)	(3)	(4)	(5)	(6)	(7)
QD6. งานของท่านต้องใช้ความเอาใจใส่มุ่งมั่นอย่างยาวนานมาก	(1)	(2)	(3)	(4)	(5)	(6)	(7)
QD7. งานของท่านมักถูกขัดจังหวะก่อนที่สำเร็จ	(1)	(2)	(3)	(4)	(5)	(6)	(7)
QD8. งานของท่านมีความรีบเร่งเป็นอย่างมาก	(1)	(2)	(3)	(4)	(5)	(6)	(7)
QD9. การต้องรอคอยงานจากบุคคลหรือแผนกอื่นทำให้ท่านทำงานช้าลง	(1)	(2)	(3)	(4)	(5)	(6)	(7)

กรุณาทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่าน โดยใช้สเกลต่อไปนี้

ไม่เห็นด้วยอย่างยิ่ง = (1), ไม่เห็นด้วย = (2), ไม่เห็นด้วยเล็กน้อย = (3), เฉย = (4), เห็นด้วยเล็กน้อย = (5), เห็นด้วย = (6), เห็นด้วยอย่างยิ่ง = (7)

## Job demands (Decision latitude).

DL1. งานของท่านทำให้ท่านได้เรียนรู้สิ่งใหม่ๆ	(1)	(2)	(3)	(4)	(5)	(6)	(7)
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DL2. งานของท่านค่อนข้างซ้ำซากจำเจ	(1)	(2)	(3)	(4)	(5)	(6)	(7)
DL3. งานของท่านต้องการความคิดสร้างสรรค์	(1)	(2)	(3)	(4)	(5)	(6)	(7)
DL4. งานของท่านอนุญาตให้ท่านทำการตัดสินใจด้วยตัวของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
DL5. งานของท่านต้องการระดับของทักษะการทำงานที่สูง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
DL6. ท่านมีอิสระน้อยมากในการตัดสินใจเกี่ยวกับงานของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
DL7. ท่านได้ทำงานที่หลากหลาย	(1)	(2)	(3)	(4)	(5)	(6)	(7)
DL8. ท่านมีอะไรจะปวดมากมายเกี่ยวกับสิ่งที่เกิดขึ้นในงานของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
DL9. ท่านมีโอกาที่จะการพัฒนาความสามารถพิเศษของท่านเอง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>Job demands (Social support: Supervisor social support).</b>							
SC1. หัวหน้างานของท่านห่วงใยสวัสดิภาพของพนักงานที่อยู่ภายใต้บังคับบัญชาของเขา	(1)	(2)	(3)	(4)	(5)	(6)	(7)
SC2. หัวหน้างานของท่านเอาใจใส่ในสิ่งที่ท่านพูด	(1)	(2)	(3)	(4)	(5)	(6)	(7)
SC3. ท่านมีปัญหบางประการทางด้านความสัมพันธ์กับเจ้านายของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
SC4. หัวหน้างานของท่านเต็มใจช่วยเหลือให้ท่านทำงานสำเร็จ	(1)	(2)	(3)	(4)	(5)	(6)	(7)
SC5. หัวหน้างานของท่านประสบความสำเร็จในการทำให้ผู้คนที่ทำงานร่วมกันได้	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>Job demands (Social support: Co-work social support).</b>							
CS1. ผู้คนที่ท่านทำงานด้วยเป็นผู้ที่มีความสามารถในการทำงาน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
CS2. ผู้คนที่ท่านทำงานด้วยเอาใจใส่ในตัวของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
CS3. ท่านมีปัญหบางประการทางด้านความสัมพันธ์กับเพื่อนร่วมงาน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
CS4. ผู้คนที่ท่านทำงานด้วยมีความเป็นมิตร	(1)	(2)	(3)	(4)	(5)	(6)	(7)
CS5. ผู้คนที่ท่านทำงานด้วยให้กำลังใจซึ่งกันและกันในการที่จะทำงาน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
CS6. ผู้คนที่ท่านทำงานด้วยเต็มใจช่วยเหลือในการทำงานให้สำเร็จ	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>Work Engagement.</b>							
EV1. ขณะที่ทำงาน ท่านรู้สึกที่เต็มไปด้วยพลังงานในการทำงาน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV2. ท่านพบว่างานที่ท่านทำมีความหมายและ วัตถุประสงค์	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV3. เวลาผ่านไปอย่างรวดเร็ว เมื่อท่านกำลังทำงาน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV4. ขณะที่ทำงาน ท่านรู้สึกขี้เมื่อยและ ไร้แรง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV5. ท่านมีความกระตือรือร้นในการทำงานของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV6. เมื่อท่านกำลังทำงาน ท่านลืมทุกสิ่งทุกอย่างรอบๆตัวท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV7. งานของท่านสร้างแรงบันดาลใจให้ท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV8. ท่านตื่นนอนขึ้นมาในตอนเช้าและรู้สึกอยากไปทำงาน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV9. ท่านรู้สึกมีความสุขมากเมื่อท่านได้ทำงานอย่างเต็มที่	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV10. ท่านมีความภาคภูมิใจในงานที่ท่านทำ	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV11. ท่านหมกมุ่นในการทำงานของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV12. ท่านต้องทำงานต่อเนื่องในช่วงเวลาดังนั้นมาก	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV13. งานที่ท่านทำอยู่นี้เป็นงานที่ทำทายนมาก	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV14. เมื่อท่านทำงาน ท่านได้ดำเนินการอย่างต่อเนื่อง	(1)	(2)	(3)	(4)	(5)	(6)	(7)



EV15. เมื่อท่านทำงาน ท่านมีความยึดหยุ่นทางความคิดมาก	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV16.มันเป็นเรื่องยากที่จะแยกตัวท่านออกจากงานที่ท่านรับผิดชอบขณะนี้	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EV17.ที่ทำงานของท่านท่านพยายามยิ่งขึ้นถึงแม้ว่าสิ่งต่างๆจะไม่ราบรื่นเพื่อความสำเร็จของการทำงาน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>Turnover intention</b>							
TI1. ท่านอ่านหนังสือ เอกสารเกี่ยวกับวิธีการหางานใหม่	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI2. ท่านได้มีการปรับปรุงแก้ไขประวัติการทำงาน Resumeของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI3. ท่านส่งสำเนาเอกสารประวัติการทำงาน Resume แก่ผู้ว่าจ้างรายใหม่	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI4.ท่านติดต่อกับตัวแทนรับจัดหางานหรือกับบริษัทที่เปิดรับสมัครงานเพื่อได้รับการว่าจ้างงานกับโรงพยาบาลอื่นๆ	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI5.ท่านอ่านประกาศโฆษณาต้องการรับสมัครงานในหนังสือพิมพ์	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI6. ท่านเคยไปสัมภาษณ์งานมาเมื่อไม่นานมานี้	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI7.ท่านพูดคุยกับเพื่อนหรือบุคคลใกล้ชิดเกี่ยวกับการหางานใหม่	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI8.ท่านมองหาโอกาสที่จะเปลี่ยนแปลงหน้าที่ใหม่ในโรงพยาบาลของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI9.ท่านพูดถึงเพื่อนร่วมงานเกี่ยวกับการหางานใหม่ในโรงพยาบาลอื่น	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI10. ท่านโทรศัพท์สอบถามข้อมูลกับนายจ้างใหม่ที่คาดหวังไว้	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>Turnover Intentions item refer:considering leaving job behaviors, format for the 14-item (Roodt, 2004b:1)</b>							
TI11. ท่านมีการพิจารณาที่จะลาออกจากงานปัจจุบันอยู่บ่อยครั้ง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI12. ท่านมีการตรวจสอบช่องทางหางานใหม่จากสื่อต่างๆอยู่บ่อยครั้ง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI13. ท่านมีความคิดเกี่ยวกับการเริ่มต้นเป็นเจ้ากิจการเองอยู่บ่อยครั้ง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI14. งานที่ท่านได้รับมอบหมายให้ปฏิบัติอยู่ขณะนี้ไม่ได้อยู่ในขอบเขตหน้าที่ของท่าน	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI15. ท่านมีการมองล่วงหน้าไปถึงวันอื่นๆถัดไปในที่ทำงานอยู่บ่อยครั้ง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI16.มีความเป็นไปได้ที่ท่านจะออกจากงานของท่านถ้าท่านได้รับข้อเสนอที่เหมาะสมอื่นๆ	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI17. เป้าหมายสำคัญที่สุดในการทำงานของท่านมีโอกาสมากที่จะถูกทำลาย	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI18. คุณค่าส่วนบุคคลของท่านถูกรุกรานในที่ทำงานอยู่บ่อยครั้ง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI19. ท่านสิ้นกลางวันเกี่ยวกับงานที่มีความแตกต่างออกไปที่จะสามารถตอบสนองความต้องการส่วนตัวของท่านได้อยู่บ่อยครั้ง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI20. ภาระในครอบครัวของท่านทำให้ท่านไม่สามารถลาออกจากงานได้อยู่บ่อยครั้ง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI21. ผลตอบแทน (เช่น กองทุนบำนาญ, กองทุนสำรองเลี้ยงชีพ) มักจะทำให้ป้องกันไม่ให้ ท่านลาออกจากงานอยู่บ่อยครั้ง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI22. ท่านเกิดอารมณ์บ่นป่วนหลังจากเลิกงานเมื่อกลับถึงบ้านแล้วอยู่บ่อยครั้ง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI23. การทำงานของท่านในปัจจุบันนี้ส่งผลกระทบต่อสวัสดิภาพส่วนบุคคลของท่านอยู่บ่อยครั้ง	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TI24.ปัญหาอันเนื่องมาจากการ โยกย้ายที่พักป้องกันไม่ให้ท่านลาออกได้อยู่บ่อยครั้ง	(1)	(2)	(3)	(4)	(5)	(6)	(7)

โปรดกรณาส่งชื่อสมมุติของท่านผู้ตอบสอบถามและเบอร์โทรศัพท์เพื่อว่าผู้วิจัยจะได้ทำการตรวจสอบว่าข้อมูลมีการเก็บจริง

นามสมมุติ.....เบอร์โทรศัพท์.....

สถานที่เก็บข้อมูล.....

ชื่อผู้สัมภาษณ์.....

ขอขอบพระคุณท่านเป็นอย่างสูง



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