

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**THE ROLE OF WORK ENGAGEMENT IN PROMOTING  
SERVICE-ORIENTED ORGANIZATIONAL CITIZENSHIP  
BEHAVIOR**



By  
**CHONG RONG PIN**  
821962

**UUM**  
Universiti Utara Malaysia

**Thesis Submitted to  
Othman Yeop Abdullah Graduate School of Business  
Universiti Utara Malaysia  
In Partial Fulfillment of the Requirement for the Master of Science  
(Management)**



**Pusat Pengajian Pengurusan  
Perniagaan**

SCHOOL OF BUSINESS MANAGEMENT

**Universiti Utara Malaysia**

**PERAKUAN KERJA KERTAS PENYELIDIKAN**  
*(Certification of Research Paper)*

Saya, mengaku bertandatangan, memperakukan bahawa  
*(I, the undersigned, certified that)*  
**CHONG RONG PIN (821962)**

Calon untuk Ijazah Sarjana  
*(Candidate for the degree of)*  
**MASTER OF SCIENCE (MANAGEMENT)**

telah mengemukakan kertas penyelidikan yang bertajuk  
*(has presented his/her research paper of the following title)*

**THE ROLE OF WORK ENGAGEMENT IN PROMOTING SERVICE-ORIENTED  
ORGANIZATIONAL CITIZENSHIP BEHAVIOR**

Seperti yang tercatat di muka surat tajuk dan kulit kertas penyelidikan  
*(as it appears on the title page and front cover of the research paper)*

Bahawa kertas penyelidikan tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.  
*(that the research paper acceptable in the form and content and that a satisfactory knowledge of the field is covered by the research paper).*

Nama Penyelia Pertama : **DR. CHOO LING SUAN**  
*(Name of 1<sup>st</sup> Supervisor)*

Tandatangan :  
*(Signature)*

Nama Penyelia Kedua : **PROF. MADYA DR. NORSIAH BT. MAT**  
*(Name of 2<sup>nd</sup> Supervisor)*

Tandatangan :  
*(Signature)*

Tarikh : **19 DISEMBER 2017**  
*(Date)*

## PERMISSION TO USE

In presenting this dissertation in partial fulfillment of the requirement for a Post Graduate degree from Universiti Utara Malaysia (UUM), I agree that the Library of this university may make it freely available for inspection, I further agree that permission of copying this dissertation in any manner, in whole or in part, for scholarly purposes may be granted by supervisor(s) or his absence, by the Dean of Othman Yeop Abdullah Graduate School of Business where I did my dissertation. It is understood that any copying or publication or use of this dissertation parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to be UUM in any scholarly use which may be made of any material in my dissertation.

Request for permission to copy or to make other use of materials in this dissertation in whole or in part, should be addressed to:

Dean of Othman Yeop Abdullah Graduate School of Business

Universiti Utara Malaysia

06010

Kedah Darul Aman

Malaysia

## ABSTRACT

Service-oriented organizational citizenship behavior (SO-OCB) is a form of the extra-role behavior performed by service employees when delivering services to customers. SO-OCB includes three dimensions, which are loyalty, service delivery and participation. In the context of private hospitals, nurses representing the hospital to deliver services to patients and nurses have the most frequent interaction with patients. Therefore, SO-OCB exhibited by nurses is imperative in warranting the outstanding service quality of the private hospitals. This study aims to examine the mediation role of work engagement between organizational resources (training, performance appraisal, and empowerment), social resources (co-worker support and patient cooperation) and SO-OCB among nurses in private hospitals. The sample of this study was nurses in Malaysian private hospitals. A total of 30,335 nurses working in 137 private hospitals in Malaysia were invited to participate in this study. However, only 15 private hospitals agreed to participate in this study. Hence, 345 nurses were involved in this study and 345 set of questionnaires were distributed. Of that, 324 set questionnaires were returned and 318 set of questionnaires were usable. Statistical Package for Social Sciences 22.0 (SPSS) and Partial Least Squares 2.0 (PLS) were used to analyse the data. The findings indicate that work engagement mediates all the hypotheses except the relationship which hypothesized between training and SO-OCB. Based on findings, suggestions and limitations of the study were put forward.

Keywords: SO-OCB, organizational resources, social resources and work engagement



UUM  
Universiti Utara Malaysia

## ABSTRAK

Gelagat kewarganegaraan organisasi berorientasikan perkhidmatan ialah satu bentuk tingkah laku peranan tambahan yang dilaksanakan oleh pekerja perkhidmatan apabila memberikan perkhidmatan kepada pelanggan. SO-OCB merangkumi tiga dimensi, iaitu kesetiaan, pemberian perkhidmatan, dan penyertaan. Dalam konteks hospital swasta, jururawat mewakili hospital untuk memberikan perkhidmatan kepada pesakit and jururawat mempunyai interaksi yang paling kerap dengan pesakit. Oleh itu, gelagat kewarganegaraan organisasi berorientasikan perkhidmatan yang dipaparkan oleh jururawat adalah sangat penting bagi menjamin kualiti perkhidmatan yang cemerlang di hospital swasta. Kajian ini bertujuan untuk meneliti keterlibatan kerja sebagai pengantara bagi sumber organisasi (latihan, penilaian prestasi, dan pemerksaan), sumber sosial (sokongan rakan sekerja dan kerjasama pesakit), dan gelagat kewarganegaraan organisasi berorientasikan perkhidmatan di kalangan jururawat di hospital swasta. Sampel kajian ini terdiri daripada jururawat di hospital swasta di Malaysia. Seramai 30,335 jururawat yang bekerja di 137 hospital swasta telah dijemput untuk menyertai kajian ini. Walau bagaimanapun, hanya 15 hospital swasta bersetuju untuk menyertai kajian ini. Oleh itu, 345 jururawat terlibat dalam kajian ini dan sebanyak 345 set soal selidik telah diedarkan. Daripada jumlah tersebut, 324 set soal selidik dikembalikan dengan 318 set soal selidik boleh digunakan. Perisian *Statistical Package for Social Sciences* (SPSS) dan *Partial Least Squares 2.0* (PLS) digunakan untuk menganalisis data. Dapatan kajian menunjukkan yang keterlibatan kerja menjadi pengantara bagi kesemua hipotesis kecuali bagi hipotesis hubungan antara latihan dan gelagat kewarganegaraan organisasi berorientasikan perkhidmatan. Berdasarkan dapatan kajian, cadangan dan batasan kajian telah dikemukakan.

Kata kunci: Gelagat kewarganegaraan organisasi berorientasikan perkhidmatan, sumber organisasi, sumber social dan keterlibatan kerja

## ACKNOWLEDGEMENT

First and foremost, I would like to thank God for making this successful. My deepest gratitude is to the people who helped me throughout this master study. Without their understanding, encouragement and support, I would not be able to complete this research paper.

I would like to express my deepest gratitude and appreciation to my supervisors, Dr. Choo Ling Suan, for her advices, guidance and encouragement in guiding me in completing this thesis. I would also like to extend my appreciation to Prof. Madya Dr. Norsiah Bt Mat for her guidance and advices throughout the duration of preparing this thesis. Truly appreciate of having both good supervisors guiding me in doing this research paper. In addition, I would also like to thank Dr. Siti Noratisah Mohd Nafi as the chairman and Dr. Hanissah A. Razak as the examiner for my viva session. Truly appreciate for their inputs and advices.

Besides, my special sense of gratitude to both my parents and siblings that continuous support me with emotional and physically support. They give me a lot positive advices, opinions, constant demonstration of love and moral supports throughout my years of study. Furthermore, I would like to express my gratitude to my master's friends, especially Mah Pei Yew, who supported and assisted me during the process of doing the research paper. Last but not least, I would like to thank all respondents for the cooperation in answering the questionnaires and those who involved directly or indirectly throughout the process of doing this research.

I am sincerely and gratefully thankful to all of you.

## TABLE OF CONTENTS

<b>CONTENT</b>	<b>Page</b>
PERMISSION TO USE	i
ABSTRACT	ii
ABSTRAK	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	ix
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS	xii
LIST OF APPENDICES	xiii
<b>CHAPTER ONE: INTRODUCTION</b>	
1.1 Background of Study	1
1.2 Problem Statement	5
1.3 Research Questions	9
1.4 Research Objectives	10
1.5 Significance of the Study	10
1.6 Definition of Key Terms	11
1.7 Summary and Organization of Remaining Chapters	13
<b>CHAPTER TWO: LITERATURE REVIEW</b>	
2.0 Introduction	14



<b>CONTENT</b>	<b>Page</b>
2.1 Conceptualization of Service-oriented Organizational Citizenship Behavior (SO-OCB)	14
2.2 Predictors of SO-OCB	15
2.2.1 Organizational Related Factors	15
2.2.2 Social Related Factors	21
2.2.3 Personal Related Factors	22
2.3 Variables in this Study	25
2.3.1 Organizational Resources	25
2.3.2 Social Resources	28
2.3.3 Work Engagement	30
2.4 Underpinning Theory	31
2.5 Research Framework	35
2.6 Hypotheses Development	35
2.6.1 Relationship between Training, Work Engagement and SO-OCB	35
2.6.2 Relationship between Performance Appraisal, Work Engagement and SO-OCB	37
2.6.3 Relationship between Empowerment, Work Engagement and SO-OCB	39
2.6.4 Relationship between Co-Worker Support, Work Engagement and SO-OCB	40
2.6.5 Relationship between Patient Cooperation, Work Engagement and SO-OCB	42
2.7 Conclusion	43

<b>CONTENT</b>	<b>Page</b>
<b>CHAPTER THREE: METHODOLOGY</b>	
3.0 Introduction	45
3.1 Research Design and Unit of Analysis	45
3.2 Population, Sample of Study and Sampling Method	45
3.3 Sample Size	46
3.4 Data Collection Procedure	46
3.5 Questionnaire Design	47
3.6 Measurement of Variables	47
3.6.1 Service-oriented Organizational Citizenship Behavior (SO-OCB)	47
3.6.2 Training	48
3.6.3 Performance Appraisal	49
3.6.4 Empowerment	50
3.6.5 Co-Worker Support	50
3.6.6 Patient Cooperation	51
3.6.7 Work Engagement	52
3.7 Pre-Test	53
3.8 Statistical Design and Analysis	53
3.9 Partial Least Square – Structural Equation Modelling (PLS-SEM)	53
3.10 Evaluation of Measurement Model	54
3.11 Evaluation of Structural Model	56
3.12 Conclusion	57

<b>CONTENT</b>	<b>Page</b>
<b>CHAPTER FOUR: DATA ANALYSIS AND RESULTS</b>	
4.0 Introduction	58
4.1 Response Rate	58
4.2 Respondents' Profile	59
4.3 Assessment of Measurement Model	62
4.4 Assessment of Structural Model	69
4.5 Conclusion	72
<b>CHAPTER FIVE: DISCUSSIONS</b>	
5.0 Introduction	73
5.1 Recapitulation of the Study Findings	73
5.2 Discussions of Findings	74
5.2.1 The Role of Work Engagement between Organizational Resources and SO-OCB	74
5.2.2 The Role of Work Engagement between Social Resources and SO-OCB	75
5.3 Implications of the Study	76
5.4 Limitations of the Study and Suggestions for Future Study	78
5.5 Conclusion	79
 <b>REFERENCES</b>	 80
 <b>APPENDICES</b>	 90

## LIST OF TABLES

<b>Table</b>	<b>Title</b>	<b>Page</b>
Table 2.1	Summarize of Organizational Related Factors as Predictor of SO-OCB in Previous Studies	17
Table 2.2	Summarize of Social Related Factors as Predictor of SO-OCB in Previous Studies	21
Table 2.3	Summarize of Personal Related Factors as Predictor of SO-OCB in Previous Studies	23
Table 3.1	List of Items of SO-OCB	48
Table 3.2	List of Items of Training	49
Table 3.3	List of Items of Performance Appraisal	49
Table 3.4	List of Items of Empowerment	50
Table 3.5	List of Items of Co-Worker Support	51
Table 3.6	List of Items of Patient Cooperation	52
Table 3.7	List of Items of Work Engagement	52
Table 3.8	Rule of Thumb for Reflective and Formative Model Evaluation	55
Table 4.1	Response Rate	58
Table 4.2	Respondents' Profile	59
Table 4.3	Results of Items Loading, Average Variance Extracted (AVE), Composite Reliability (CR) and Cronbach's Alpha	64

<b>Table</b>	<b>Title</b>	<b>Page</b>
Table 4.4	Latent Variable Correlation	67
Table 4.5	Cross Loading	67
Table 4.6	The Result of the Hypotheses Testing	71



## LIST OF FIGURES

<b>Figure</b>	<b>Title</b>	<b>Page</b>
Figure 2.1	Research Framework	35
Figure 4.1	Measurement Model Diagram	63
Figure 4.2	Structural Model Diagram	70



## LIST OF ABBREVIATIONS

<b>Abbreviation</b>	<b>Description of Abbreviation</b>
AVE	Average Variance Extracted
CI	Confidence Interval
COR	Conservation of Resources
CR	Composite Reliability
CWS	Co-worker Support
E	Empowerment
GDP	Gross Domestic Products
JD-R	Job–Demand-Resource
OCB	Organizational Citizenship Behavior
PA	Performance Appraisal
PC	Patient Cooperation
PLS	Partial Least Square
SECB	Service Employee Citizenship Behavior
SO-OCB	Service-oriented Organizational Citizenship Behavior
SPSS	Statistical Package for the Social Science
STPM	Sijil Tinggi Persekolahan Malaysia
T	Training
UAE	United Arab Emirates
WE	Work Engagement

## LIST OF APPENDICES

<b>Appendix</b>	<b>Title</b>	<b>Page</b>
Appendix A	List of 15 Private Hospitals Participated in this Study	90
Appendix B	Questionnaire	92
Appendix C	Respondents' Profile	100
Appendix D	Results of Items Loading, Average Variance Extracted (AVE), Composite Reliability (CR) and Cronbach's Alpha Before Delete Items	104
Appendix E	Results of Items Loading, Average Variance Extracted (AVE), Composite Reliability (CR) and Cronbach's Alpha After Deleted Items	106
Appendix F	Latent Variable Correlation	108
Appendix G	Cross Loading	109



## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of Study

Malaysian service sector has become the key player to the growth of economy. Service sector accounted for the largest share of Malaysia's Gross Domestic Products (GDP) in 2016 which contributed RM595 billions or 53.8% from RM1,106.1 billions of Malaysia's GDP (Economic Planning Unit, 2016). According to Economic Planning Unit (2016), this sector will continue to growth at 6.9% per annum, and increasing its share to the GDP from 53.8% in 2016 to 56.5% in 2020.

In addition, service sector also plays a significant role in creating employment opportunity to Malaysian. According to Economic Planning Unit (2016), service sector contributed 60.8% of total employment in 2014, increased to 61% in 2015 and expected to contribute 62.5% of total employment by 2020. Since service sector is important to Malaysia GDP and employment opportunities, it is essential to focus on the development of this sector.

Within the service sector, healthcare industry is one of the players. In Malaysia, healthcare industry consists of public healthcare industry and private healthcare industry. Public healthcare industry is subsidized by the Government and majority of the Malaysian population is using this facility provided by the Government. Meanwhile, private healthcare industry is profit-oriented entities which

targeting the rather well off members of Malaysian population. The establishment of public hospitals is aim to reduce the medical cost of society whereby private hospitals is focusing on service provided, profit, customer relationship and satisfaction (Ali, Habidin, Jamaludin, Khaidir, & Shazali, 2013).

In the recent years, it has been seen the trend of growth in private hospitals. There are three main reasons contributed to the growth. First, public healthcare industry in Malaysia faces the challenges of lack of healthcare budget and experienced talents (Frost & Sullivan, 2016). In 2015, the budget allocated for healthcare industry was RM23.31 billion, reduced to RM23.03 billion in 2016, which reported a reduction of RM300 million (Khoo, 2016). This has provided opportunities to private healthcare industry such as private hospitals to penetrate into the market in which more and more Malaysian are getting their healthcare services in private hospitals.

Second, the blooming of medical tourism is another factor which leads to the growth of private hospitals. Medical tourism is one of the top growth sectors in Asia Pacific due to the arising demands of quality healthcare (Teo, 2013). In 2016, Malaysia Healthcare Travel Council (2017) stated that the total revenue contributed by medical tourism was RM1 billion from an estimated 900,000 medical tourists and it is expected that the medical tourist will increase to one million with revenue of RM1.3 billion in 2017. Therefore, it is an opportunity for the growth of private hospitals.

Third, according to Teo (2013), another factor that leads to the growth of private hospitals is the competitive among private medical insurance companies. In Malaysia, there are several insurance companies such as Prudential Malaysia, Great Eastern Insurance and Allianz Malaysia. These insurance companies tie-ups with private hospitals to provide different types of healthcare packages to fulfil the needs of domestic patients (Teo, 2013). Generally, the coverage of health insurance included common ailments, hospital fees, doctor's consultations and prescription medication (AIA Malaysia, 2017). The competitive packages offered by the various insurance companies have attracted more subscription rate of Malaysian and subsequently shifted customers from public hospitals to private hospitals.

In the context of hospital, nurses can be considered as the backbone of the hospital. According to Ministry of Health Malaysia (2016), nurses are the biggest population in employed in the hospital. In an average, 50.22% of employees in hospitals are nurses (Ministry of Health Malaysia, 2016). In addition, nurses represent the hospital to deliver services to patients. The responsibilities of nurses included maintaining patients' medical histories report, monitoring changes of patients' conditions, observing and recording patients' behavior and to provide emotional and psychological support to patients and their families. Thus, nurses have the most frequent interactions with patients (Kazemipour, Amin, & Pourseidi, 2012). As such, it can be deduced that nurses are considered the customer-contact employees that play a vital role in helping hospitals to achieve organization goals by providing greater service quality to patients (Knol & Linge, 2008).

According to Kazan and Gumus (2013), organization performance is relying on the employees' performance. In particular, positive employee's behaviors are beneficial to the organization performance. Employees are encouraged to perform extra role behavior or organizational citizenship behavior (OCB) to enhance organization performance and the effectiveness of organization (Organ, 1988). Organ (1988) defined OCB as discretionary work behaviors that practiced by employees which is not formally recognized in organization's reward system.

While for the service organizations, Bettencourt, Meuter, and Gwinner (2001) asserted that the construct of SO-OCB is more appropriate. This is because SO-OCB focused on measuring the extra-role behavior of customer-contact employees. Since customer-contact employees are representatives of service organization to outsider (Bettencourt et al., 2001), customer-contact employees provide strategic link between external environment and internal operation (Bettencourt et al., 2001), and performance of customer-contact employees will have direct impact on customers satisfaction (Bettencourt et al., 2001). Given that private hospitals considered as service organization, and nurses are the customer-contact employees in the context of hospital who has direct contact with patients, hence it is essential to promote SO-OCB among nurses in the private hospitals (Bettencourt et al., 2001).

According to Bettencourt et al. (2001), SO-OCB consisted of three dimensions, namely loyalty OCB, service delivery OCB and participation OCB. In loyalty OCB, service employees act as the advocate to promote the products, services and positive images of the service organization to customers (Bettencourt et al., 2001). In service delivery OCB, service employees behave in a conscientious manner in performing

their duty (Bettencourt et al., 2001). In participation OCB, service employees take the initiative to communicate to the organization and co-workers on how to enhance their service delivery (Bettencourt et al., 2001).

Thus, shall the private hospitals are inspired striving to enhance its performance such as service quality, it is vital to promote SO-OCB among nurses. Specifically, displaying loyalty OCB infers that nurses promote the products, services and good images of the hospital; displaying service delivery OCB among nurses mean nurses behave in a conscientiousness manner in performing the duties; while exhibiting participating OCB among nurses mean that nurses communicate with the hospital and their co-workers on enhancing their service delivery.

Based on above discussion, the aim of this study is investigate how to enhance SO-OCB among nurses in private hospitals.

## **1.2 Problem Statement**

Although there is no published data available on the lacking SO-OCB among nurses in private hospitals, but manpower availability in private hospitals may related to the possible of SO-OCB lacking among nurses. In particular, nurses shortage is a main issue faced by both developed and developing countries (Lu, While, & Barriball, 2005). In Malaysia, the ratio of nurse-to-patient is 1: 325 (Economic Planning Unit, 2016). In 2015, the total workforce of nurses in Malaysia were 99,925 where the number of nurses in private hospitals were 30,335 (Ministry of Health Malaysia, 2016). The number of nurses is far less than targeted 130,000 nurses in all

specialisations by 2020 (Goh, 2017). The shortage of nurses in hospitals caused nurses to perform working hours that exceeds 12 hours daily or 40 hours per week. In another words, nurses need to carry more workload at workplace. Under this condition, it is likely that nurses may only choose to focus on performing their in-role duties rather than extra role such as promote hospital services, giving extra-care to patients and participating in improving hospital healthcare quality.

Second, it can be observed that nurses are facing great stress at work. The stress situation may due to the need to work with less experienced colleagues while receiving poor salary. According to Lajiun (2016), nurses received poor salary as opposed to other profession. Hence, experienced nurses prefer to seek employment in foreign lands such as Singapore. Among every 60 nurses graduate yearly, there were 20% of nursing graduates are working abroad (Health Care Asia, 2015). By implication, the remaining nurses who worked in Malaysia private hospitals are challenged with the condition to work with inexperienced co-workers. Poor salary coupled with the poor working conditions may lead them to experience stress at work. Ultimately, the stressful working condition may cause them to give slow responses, wrong responses, low service quality and limited participation in improving service quality of their hospitals.

Based on above discussed issues, it is importance to promote SO-OCB among nurses in Malaysia. However, in the review of literature, it was found that most of the previous studies were conducted to investigate OCB (e.g. Donavan, Brown, & Mowen, 2004; Dyne & Ang, 1998; Jain, 2015; Kazemipour et al., 2012; Kiyanzad, Kandelousi, & Sardar, 2016; Muhammad, 2014; Rose, 2016; Sharif, Yaqub, & Baig,

2015; Teh & Sun, 2012; Wen, Li, & Hou, 2016; Yulianti, 2014). Limited studies have examined SO-OCB (e.g. Chen, 2016; Lin & Lin, 2011; Tang & Tang, 2012; Tang & Tsaur, 2016; Wang, 2009a; Wu & Liao, 2016).

From the review of previous literature related to SO-OCB revealed that there are limited studies to investigate SO-OCB in healthcare industry. Most of the previous studies on SO-OCB were conducted on different field of occupation, such as transportation (Limpanitgul, Robson, Gould-Williams, & Lertthairakul, 2013), hotels (Chen, 2016; Choo & Nasurdin, 2014c; Lin & Lin, 2011; Tang & Tang, 2012; Tang & Tsaur, 2016; Wu & Liao, 2016), and bank (Chiu, Lin, & Han, 2015; Lin & Lin, 2011; Muhammad, 2014). Hence, it is timely to focus on examination of SO-OCB among nurses in private hospitals.

In understanding the SO-OCB, many studies have examined the role of positive attitudes such as organizational commitment (Donavan et al., 2004; Kazemipour et al., 2012; Lin & Lin, 2011; Williams & Anderson, 1991) and job satisfaction (Donavan et al., 2004; Harter, Schmidt, & Hayes, 2002; Jiang, Sun, & Law, 2011; Ladebo, 2008; Lomoya, Pingol, & Teng-Calleja, 2015; Williams & Anderson, 1991). According to Job-Demand-Resource (JD-R) model, resources facilitate employees' achievement of their work goals and reduced their work demands. This implies that when employees' work goals are likely to be achieved, employees with positive attitudes are more likely to go beyond their role to perform extra-role behavior.

JD-R model explained that one of such positive attitude is work engagement (Bakker & Demerouti, 2007). In the context of private hospitals in Malaysia, limited of studies have examined the role of work engagement in promoting SO-OCB. Majority of previous studies have confined into the scope of job resources (e.g. Bakker, Demerouti, Boer, & Schaufeli, 2003; Bakker, Demerouti, & Verbeke, 2004; Hakanen, Schaufeli, & Ahola, 2008; Schaufeli & Bakker, 2004; Schaufeli, Bakker, & Rhenen, 2009; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009a, 2009b), limited of studies have examined the role of organizational resources (except: Albrecht & Andreetta, 2011; Albrecht, Bakker, Gruman, Macey, & Saks, 2015; Jiang et al., 2011; Lin & Lin, 2011; Wang, 2009a).

Hence, it would be beneficial to examine the role of organizational resources in predicting work engagement which ultimately lead to the SO-OCB. According to Salanova, Agut, and Peiro (2005), organizational resources defined as organizational aspects of a job which help to achieve work goals, reduce job demands, physiological and psychological cost as well as to stimulate personal growth, learning and development. Specifically, this study includes training, performance appraisal and empowerment as a form of organizational resources.

Besides, there are several studies have examined the role of social resources (e.g. Bakker & Demerouti, 2008; Chen, 2016; Limpanitgul et al., 2013; Schaufeli & Bakker, 2004). Recognizing the fact that nurses are working closely with their co-workers and patients in accomplishing their task, therefore this study expands the literature by including the role of social resources in predicting work engagement which in turn leads to SO-OCB. According to Salanova et al. (2005), social resources



defined as social aspects of a job that help employees to achieve work goals, reduce job demands and the associated physiological and psychological costs, stimulate personal growth, learning and development. Specifically, co-worker support and patient cooperation are seen as a form of social resources in this study.

In sum, a study to examine the role of organizational resources, social resources and work engagement on SO-OCB is warranted.

### **1.3 Research Questions**

The research questions for this study are:

1. Does work engagement mediate the relationship between training and SO-OCB?
2. Does work engagement mediate the relationship between performance appraisal and SO-OCB?
3. Does work engagement mediate the relationship between empowerment and SO-OCB?
4. Does work engagement mediate the relationship between co-worker support and SO-OCB?
5. Does work engagement mediate the relationship between patient cooperation and SO-OCB?

#### **1.4 Research Objectives**

This study aims to:

1. examine the mediation effect of work engagement between training and SO-OCB.
2. examine the mediation effect of work engagement between performance appraisal and SO-OCB.
3. examine the mediation effect of work engagement between empowerment and SO-OCB.
4. examine the mediation effect of work engagement between co-worker support and SO-OCB.
5. examine the mediation effect of work engagement between patient cooperation and SO-OCB.

#### **1.5 Significance of the Study**

This study conducted to examine the role of organizational resources, social resources and work engagement on SO-OCB. It believes that the findings of this study able to provide information to scholars and practitioners to promote and enhance SO-OCB.

In the context of theoretical contribution, the potential findings of this study will provide knowledge on SO-OCB as this study assessing the mediating role of work engagement between the relationship of organizational resources and SO-OCB as well as the mediating role of work engagement between the relationship of social resources and SO-OCB.

Next, in terms of practical contribution, the potential findings of this study will provide crucial information to private hospitals on how organizational resources and social resources can enhance the level of SO-OCB among nurses. This study also helps management in private hospitals to strengthen the organizational and social resources in enhancing the work engagement of nurses which in turn helps to uplift the SO-OCB among nurses in private hospitals.

## **1.6 Definition of Key Terms**

### **Service-oriented Organizational Citizenship Behavior (SO-OCB)**

SO-OCB defined as the citizenship behaviors performed by service employees when delivery services to customers and SO-OCB includes three dimensions, which are loyalty, service delivery and participation (Bettencourt et al., 2001).

### **Organizational Resources**

Organizational resources refers to organizational aspects of a job which help to achieve work goals, reduce job demands, physiological and psychological cost as well as to stimulate personal growth, learning and development (Salanova et al., 2005). In this study, training, performance appraisal, and empowerment have been conceptualized as organizational resources.

### **Training**

Training refers to a set of planned activities organized by organization to its employees to improve employees' job knowledge, job skills, align employees' attitudes and behavior with organization goals (Lomoya et al., 2015).

### **Performance Appraisal**

Performance appraisal is a practice where organization can integrate performance feedback of employees from superiors, colleagues, employees themselves, subordinates as well as customers (Tang & Tang, 2012).

### **Empowerment**

Empowerment defined as managers giving authority to their employees to make decisions on job related issues which have direct impact on their performance (Del Val & Llyod, 2003).

### **Social Resources**

As adapted from the definition of organizational resources, social resources defined as social aspects of a job that help employees to achieve work goals, reduce job demands and the associated physiological and psychological costs, stimulate personal growth, learning and development (Salanova et al., 2005). In this study, social resources are co-worker support and patient cooperation.

### **Co-worker Support**

Co-worker support defined as co-workers assisting each other in performing their tasks when needed (Zhou & George, 2001).

### **Patient Cooperation**

Patient cooperation defined as the willingness of patient to cooperate in receiving the services delivered from nurses (Bendapudi & Leone, 2003).

## **Work Engagement**

Work engagement refers to positive, fulfilling work-related state of mind that consist of three main characteristics, which are vigor, dedication and absorption (Schaufeli, Bakker, & Salanova, 2006).

### **1.7 Summary and Organization of Remaining Chapters**

This chapter has provided overview of research background, research problem, research questions, research objectives, significance of the study and definition of key terms. Chapter two will provide review of previous literature related to SO-OCB, organizational resources (training, performance appraisal, and empowerment), social resources (co-worker support and patient cooperation), and work engagement. In addition, underpinning theory, theoretical framework and hypotheses of this study also will explain in chapter two.

Chapter three devotes to discuss about the research design which include the overall information from various aspects of research methodology. In this chapter also consists of information about population and sampling, data collection, and analysis method. Chapter four explains the results of data analysis. Finally, chapter five discusses the results, implications, limitation of this study and further suggestion as well as a conclusion is provided to summarize the whole study.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

This chapter explains the literature review of the concept of SO-OCB and its predictors. In addition, this chapter also explain the underpinning theory that support the proposed research framework and discuss the hypotheses development in this study.

#### 2.1 Conceptualization of Service-oriented Organizational Citizenship Behavior (SO-OCB)

Organ (1988) defined OCB as a discretionary work behavior which is not recognized in organization's formal reward system and employees who are performing OCB are consider going extra mile.

Bettencourt et al. (2001) further extend OCB into a specific form of OCB performed by customer-contact employees in service settings, which labelled as SO-OCB. Bettencourt et al. (2001) proposed three dimensions of SO-OCB, which are loyalty, participation and service delivery. First, loyalty refers to employees promote organization image and interests to outsiders (Bettencourt et al., 2001). Second, participation means that employees are voluntary communicate with co-workers in order to improve service delivery quality (Bettencourt et al., 2001). Third, service delivery refers to employees behave in conscientiousness manner when they deliver service to customers (Bettencourt et al., 2001).

Within the service organizations, there are many rules and norms which are unable to clearly stated in regulatory system (Lin & Lin, 2011). Consequently, the distinction between in-role and extra-role of works are confusing and hard to measure (Wu & Liao, 2016). Therefore, SO-OCB is more appropriate to represent the characteristics of service industry in sum.

In sum, it can be conclude that SO-OCB is the extra roles performed by service employees that are helpful in promoting the efficiency and effectiveness of service organizations.

## **2.2 Predictors of SO-OCB**

According to the findings from previous studies, the predictors of SO-OCB can be categorized into organizational related factors, social related factors and personal related factors.

### **2.2.1 Organizational Related Factors**

The examples of studies on organizational related factors as predictor of SO-OCB are (e.g. Chiu et al., 2015; Choo & Nasurdin, 2014a; Chou & Lopez-Rodriguez, 2013; Jiang et al., 2011; Lin & Lin, 2011; Sun, Aryee, & Law, 2007; Tang & Tang, 2012; Wang, 2009a, 2009b, 2010).

Wang (2009a) conducted a study among 1,387 contact employees and 666 supervisors in a large supermarket chain in Taiwan indicated that organizational support can encourage employees to perform SO-OCB and this relationship will strengthen by service climate of organizations. Another study conducted by Wang

(2009b) among 318 contact employees and their supervisors in Taiwan demonstrated that contact employees' on perceived organizational support has positive effect on their SO-OCB.

In addition, Wang (2010) conducted a study among 1,387 contact employees and 108 managers in a large supermarket chain reported similar result with the studies of Wang (2009a) and Wang (2009b), which reported that contact employees' perception of organizational support is positively related to their SO-OCB. Likewise, study by Lin and Lin (2011) among 3,140 service employees and 253 managers in Taiwan revealed the similar result, which is organizational support perceived by employees has positive effect on SO-OCB.

Besides, study conducted in China by Sun et al. (2007) among 81 human resource managers and 405 supervisors found that high-performance human resource practices are positively related to SO-OCB. Another study focused on high-performance HR practices conducted by Tang and Tang (2012) in Taiwan among 1,133 customer contact employees and 119 human resource (HR) managers reported that high-performance HR practices have positive effect on SO-OCB through the mediation of justice and service climates. A study by Jiang et al. (2011) among 232 subordinates and their immediate supervisor in Guangdong discovered that perceived empowerment practice is directly related to SO-OCB of service employees. Similarly, Choo and Nasurdin (2014a) conducted a study among 438 customer-contact employees in Malaysian hotel industry found that human resource management practices have significant effect on employees' SO-OCB.



Furthermore, a study conducted by Chou and Lopez-Rodriguez (2013) among 283 service employees in USA reported that perceived procedural justice significantly predicts SO-OCB. In addition, study conducted by Chiu et al. (2015) focused on employment status among 270 employees and their supervisors revealed that employment status is positively related to SO-OCB, where permanent employees performed higher SO-OCB.

Based on the mentioned studies regarding organizational related factors on SO-OCB, it shows that organizational factors are the drivers of SO-OCB. The details of the finding are summarized in Table 2.1.

Table 2.1  
*Summarize of Organizational Related Factors as Predictor of SO-OCB in Previous Studies*

Author/s / years	Country	Variables	Sample	Findings
Li-Yun Sun, Samuel Aryee, Kenneth S. Law (2007)	China	<b>Independent Variable</b> High-Performance Human Resource Practices  <b>Mediator</b> SO-OCB  <b>Moderators</b> -Unemployment Rate -Business Strategy  <b>Dependent Variables</b> -Turnover -Productivity	81 human resource managers and 405 supervisors from 86 hotels	-High-performance human resource practices are positively related to SO-OCB. -SO-OCB mediates the relationship between high-performance human resource practices and turnover. -SO-OCB mediates the relationship between high-performance human resource practices and productivity. -Under conditions of low unemployment rate, SO-OCB was weakly related to turnover. -Business strategy moderates SO-OCB and productivity relationship in such a way that the relationship is stronger for hotels with a service-quality strategy.
Mei-Ling Wang (2009a)	Taiwan	<b>Independent Variable</b> Perceived Organizational	1,387 contact employees and 666 supervisors from 36 store	-Contact employees' perception of organizational support is positively related to their SO-OCB.

Author/s / years	Country	Variables	Sample	Findings
		Support (POS) <b>Moderator</b> Service Climate  <b>Dependent Variable</b> SO-OCB	branches	-The positive relationship between POS and SO-OCB role definitions is strengthened by the service climate, such that the positive relationship between POS and SO-OCB role definitions is greater when there is a strong service climate.
Mei-Ling Wang (2009b)	Taiwan	<b>Independent Variable</b> -Perceived Organizational Support (POS)  <b>Mediator</b> -Affective Commitment (AC)  <b>Dependent Variable</b> SO-OCB	318 contact employees and their immediate supervisors from the largest supermarket chain with 36 branches	-Contact employees' perception of POS has a significant positive effect on their SO-OCB. -Contact employees' AC towards the organization exerts a significant positive influence on their exhibition of SO-OCB. -Contact employees' perception of POS has a significant positive effect on their AC towards the organization. -Contact employees' AC towards the organization partially mediates the relationship between their perception of POS and SO-OCB.
Mei-Ling Wang (2010)	Taiwan	<b>Independent Variable</b> Perceived Organizational Support (POS)  <b>Moderator</b> Market-focused Human Resource Management (HRM)  <b>Dependent Variable</b> SO-OCB	1,387 contact employees and 108 managers in a large supermarket chain	-Contact employees' perception of organizational support is positively related to their SO-OCB. -Market-focused HRM has a positive effect on contact employees' SO-OCB. -The relationship between POS and SO-OCB is partially moderated by market-focused HRM.
Jennifer Shu-Jen Lin, Shu-Cheng Lin (2011)	Taiwan	<b>Independent Variable</b> Organizational Support  <b>Moderator</b> Organizational Climate (OC)	253 branch managers and 3140 service employees working in hypermarket chains, department stores, hotels and banks	-Organizational support perceived by employees has positive effect on loyalty, service-delivery and participation related SO-OCB. -Organization climate do not has positive effect on SO-OCB. -Organizational climate has positive effect on

Author/s / years	Country	Variables	Sample	Findings
		<b>Dependent Variable</b> SO-OCB		organizational support, loyalty and service-delivery related SO-OCB.
Jane Y. Jiang, Li-Yun Sun, Kenneth S. Law (2011)	Guangdong	<b>Independent Variable</b> Perceived Empowerment Practices  <b>Mediator</b> Job Satisfaction  <b>Moderator</b> Organicity  <b>Dependent Variable</b> SO-OCB	232 employees and their immediate supervisors working in four service-sector organizations	-Perceived empowerment practices are directly related to SO-OCB of the service employees. -Job satisfaction mediates the relationship between perceived empowerment practices and SO-OCB of service employees. -The direct relationship between perceived empowerment practices and SO-OCB not moderated by organicity. -The relationship between perceived empowerment practices and job satisfaction is moderated by organicity. -The relationship between job satisfaction and SO-OCB will not moderated by organicity.
Ta-Wei Tang, Ya-Yun Tang (2012)	Taiwan	<b>Independent Variable</b> High-Performance HR Practices  <b>Mediators</b> -Justice Climate -Service Climate  <b>Dependent Variable</b> SO-OCB	1,133 customer-contact employees and 119 HR managers	-The implementation of high-performance HR practices is positively related to the justice climate and service climate. -The justice climate and service climate are positively related to SO-OCB. -The justice climate and service climate mediates the relationship between high-performance HR practices and SO-OCB.
Shih Yung Chou, Erlinda Lopez-Rodriguez (2013)	USA	<b>Independent Variables</b> -Perceived Distributive Justice -Perceived Procedural Justice  <b>Moderators</b> -Need for Affiliation -Need for Achievement	276 service employees from a large service organization	-A service employee's perceived distributive justice was not a significant predictor of his SO-OCB. -A service employee's perceived procedural justice had a significant positive impact on his SO-OCB. -The need for affiliation was not a statistically significant moderator for the relationship between perceived distributive justice and SO-OCB. -The need for affiliation significantly moderated the relationship between

Author/s / years	Country	Variables	Sample	Findings
		<b>Dependent Variable</b> SO-OCB		perceived procedural justice and SO-OCB. -The need for achievement significantly moderated the relationship between perceived distributive justice and SO-OCB. -The need for achievement was not a statistically significant moderator for the relationship between perceived procedural justice and SO-OCB.
Choo Ling Suan, Aizzat Mohd Nasurdin (2014)	Malaysia	<b>Independent Variables</b> -Service Training -Service Rewards -Performance Appraisal -Information Sharing <b>Dependent Variable</b> SO-OCB	438 customer-contact employees in Malaysian hotel industry	-Service training is a significant predictor of the three dimensions of SO-OCB. -Service rewards is not a predictor of the three dimensions of SO-OCB. -Performance appraisal is a significant predictor of the three dimensions of SO-OCB. -Information sharing is a significant predictor of the three dimensions of SO-OCB.
Su-Fen Chiu, Shih-Tse Lin, Tzu-Shian Han (2015)	Taiwan	<b>Independent Variable</b> Employment Status <b>Mediators</b> -Internal Mobility Opportunity -Job Insecurity <b>Dependent Variable</b> SO-OCB	270 employees and their supervisors of one retail and one banking companies	-Employee's SO-OCB is lower for temporary compared to permanent employees. -Internal job mobility opportunity mediates the relationship between employment status and SO-OCB. -Job insecurity mediates the relationship between employment status and SO-OCB.

### 2.2.2 Social Related Factors

There are several studies conducted to investigate the social related factors with SO-OCB (e.g. Chen, 2016; Limpanitgul et al., 2013; Tang & Tsaur, 2016).

Study conducted by Limpanitgul et al. (2013) among 335 cabin service crews in Thailand proved that co-worker support and customer cooperation have positive effect on service employee citizenship behavior (SECB) through the mediation of job attitudes. Similarly, in Taiwan, a study among 689 hotel employees by Chen (2016) indicated that customer-employee exchange positively affect employee's internal service behavioral intention and this intention is correlated with SO-OCB. In addition, another study conducted in Taiwan by Tang and Tsaur (2016) among 476 frontline employees reported that supervisory support climate is positively related to employees' SO-OCB.

Based on the mentioned studies regarding social related factors on SO-OCB, it shows that social factors are drivers of SO-OCB. The details of the finding are showed in Table 2.2.

Table 2.2  
*Summarize of Social Related Factors as Predictor of SO-OCB in Previous Studies*

Author/s / years	Country	Variables	Sample	Findings
Thanawut Limpanitgul, Matthew J. Robson, Julian Gould-Williams, Weerawit Lertthairakul (2013)	Thailand	<b>Independent Variables</b> -Co-worker Support -Customer Cooperation  <b>Mediator</b> Job Attitudes	335 national airline's cabin crew	-Co-worker support and customer cooperation have positive effects on job satisfaction and organizational commitment. -The effects of co-worker support and customer cooperation on SECB are mediated by job attitudes.

Author/s / years	Country	Variables	Sample	Findings
		<b>Dependent Variable</b> Service Employee Citizenship Behavior (SECB)		
Wen-Jung Chen (2016)	Taiwan	<b>Independent Variables</b> -Customer-employee Exchange -Internal Service Behavior Intention	689 frontline service personnel at the international tourist hotels	-Customer-employee exchange can positively affect an employee's internal service behavioral intention and SO-OCB. -Employees' internal service behavioral intention is significantly correlated with SO-OCB.
		<b>Dependent Variable</b> SO-OCB		
Ya-Yun Tang, Sheng-Hsiung Tsaur (2016)	Taiwan	<b>Independent Variable</b> Supervisory Support Climate  <b>Mediator</b> Positive Group Affective Tone  <b>Dependent Variable</b> SO-OCB	476 frontline employees from 41 international tourists hotels	-A supervisory support climate positively affects positive group affective tone and SO-OCB of frontline employees. -A positive group affective tone positively affects the SO-OCB of frontline employees. -A positive group affective tone has a mediating effect on the relationship between a supervisory support climate and the SO-OCB of frontline employees. -The positive group affective tone moderates the effect of a supervisory support climate on the SO-OCB of frontline employees, and the more the positive group affective tone, the stronger the effect.

### 2.2.3 Personal Related Factors

Aside to organizational and social related factors, there are several studies conducted to identify the effect of personal related factors on SO-OCB (e.g. Chen & Kao, 2012; Choo & Nasurdin, 2014c; Jain, Malhotra, & Guan, 2012; Wang, 2009b).

Wang (2009b) conducted a study among 318 contact employees and their supervisors in Taiwan demonstrated that contact employees' affective commitment exerts a significant positive influence on their exhibition of SO-OCB. Study by Jain et al. (2012) among 125 medical sales representatives, 48 supervisors and 150 doctors in India reported that volunteerism has positive impact on SO-OCB. Likewise, Choo and Nasurdin (2014c) conducted a study among 438 customer contact employees discovered that emotional intelligence had greatest effect on SO-OCB. In addition, study by Chen and Kao (2012) among 815 students in Taiwan Police College revealed that work values can enhanced SO-OCB through the mediation of psychological contract and professional commitment.

Based on the mentioned previous studies on personal related factors, it indicates that personal related factors are drivers to encourage employees to perform SO-OCB. The details of the finding are showed in Table 2.3.

Table 2.3  
*Summarize of Personal Related Factors as Predictor of SO-OCB in Previous Studies*

<b>Author/s / years</b>	<b>Country</b>	<b>Variables</b>	<b>Sample</b>	<b>Findings</b>
Mei-Ling Wang (2009b)	Taiwan	<b>Independent Variable</b> -Perceived Organizational Support (POS)  <b>Mediator</b> -Affective Commitment (AC)  <b>Dependent Variable</b> SO-OCB	318 contact employees and their immediate supervisors from the largest supermarket chain with 36 branches.	-Contact employees' perception of POS has a significant positive effect on their SO-OCB. -Contact employees' AC towards the organization exerts a significant positive influence on their exhibition of SO-OCB. -Contact employees' perception of POS has a significant positive effect on their AC towards the organization. -Contact employees' AC towards the organization partially mediates the relationship between their perception of POS and SO-OCB.
Ajay K. Jain, Naresh	India	<b>Independent Variable</b>	125 medical sales	-Volunteerism has a positive effect on PA.

Author/s / years	Country	Variables	Sample	Findings
K. Malhotra, Chong Guan (2012)		<p>-Volunteerism</p> <p><b>Mediators</b></p> <p>-Positive Affectivity (PA)</p> <p>-Negative Affectivity (NA)</p> <p><b>Dependent Variables</b></p> <p>-SO-OCB</p> <p>-Customer Loyalty</p>	representative, 48 supervisors and 150 doctors.	<p>-Volunteerism has negative effect on NA.</p> <p>-PA has positive impact on SO-OCB.</p> <p>-NA has negative impact on SO-OCB.</p> <p>-SO-OCB has a positive effect on customer loyalty.</p> <p>-Volunteerism has a positive impact on SO-OCB.</p> <p>-Volunteerism has a positive impact on customer loyalty.</p>
Chun-hsi Vivian Chen, Rui Hsin Kao (2012)	Taiwan	<p><b>Independent Variable</b></p> <p>Work Values</p> <p><b>Mediators</b></p> <p>-Psychology Contract</p> <p>-Professional Commitment</p> <p><b>Dependent Variable</b></p> <p>SO-OCB</p>	815 students in Taiwan Police College (TPC)	<p>-Individuals' work values have a positive effect on their perceptions of psychological contract fulfilled by organizations.</p> <p>-Employees' work values have a positive effect on their professional commitment.</p> <p>-The fulfilment of psychological contract has a positive effect on employees' SO-OCB.</p> <p>-Employees' professional commitment has a positive effect on their SO-OCB.</p> <p>-The fulfilment of psychological contract mediates the relationship between employees' work values and SO-OCB.</p> <p>-Employees' professional commitment mediates the relationship between work values and SO-OCB.</p>
Choo Ling Suan, Aizzat Mohd. Nasurdin (2014)	Malaysia	<p><b>Independent Variables</b></p> <p>-Self-emotion Appraisal (SEA)</p> <p>-Other's Emotion Appraisal (OEA)</p> <p>-Use of Emotion (UOE)</p> <p>-Regulation of Emotion in Self (ROE)</p> <p><b>Dependent Variable</b></p> <p>SO-OCB</p>	438 customer-contact employees in Malaysian hotel industry	<p>-SEA has a positive and significant relationship with loyalty and service delivery OCB.</p> <p>-OEA has a positive and significant relationship with service delivery and participation OCB.</p> <p>-UOE and ROE have a positive and significant relationship with each dimension of OCB.</p>



## **2.3 Variables in this Study**

### **2.3.1 Organizational Resources**

Organizational resources defined as organizational aspects of a job which help to achieve work goals, reduce job demands, physiological and psychological cost as well as to stimulate personal growth, learning and development (Bakker & Demerouti, 2007; Salanova et al., 2005). In this study, training, performance appraisal and empowerment has been conceptualized as organizational resources.

### **Training**

The first predictor categorised as organizational resources is training. According to Karatepe, Yavas, and Babakus (2007), training refers to programs offered to employees to improve job skills in delivery services to customers. Likewise, Elmadag, Ellinger, and Franke (2008); Lomoya et al. (2015) and Goldstein and Ford (2002) defined training as systematic development of employees' knowledge, skills, and abilities that help them to perform their tasks effectively and achieve organization goals.

Lomoya et al. (2015) explained that the purposes of training are enhancing employees' job knowledge, skills, abilities and align their behaviors and attitudes with organization goals and job requirement. On-going training programs received by employees help to enhance employees' performance, communication with peers (Rodriguez & Gregory, 2005) and enable them to deal with customers' needs effectively (Elmadag et al., 2008). In the positive side, this can encourage employees to engage in discretionary behaviors such as SO-OCB (Sun et al., 2007).

In the nursing context, training programs help to improve nurses' knowledge, skills and abilities in terms of detecting patients' problems, communication and giving support to patients (Heaven & Maguire, 1996). In addition, training programs also vital in enhancing nurses' competencies in delivery necessary care for patients (Franco & Tavares, 2013). There are several training programs nurses required to attend, which are mandatory training organized by hospital's management, such as life support training every two years and body mechanic training every year (Franco & Tavares, 2013). In addition, nurses also need to attend talks that are related to latest update of infection control and drugs.

### **Performance Appraisal**

Besides training, performance appraisal also a predictor conceptualized as organizational resources. Zheng, Zhang, and Li (2012) defined performance appraisal as structured formal interaction between a supervisor and their subordinates in the form of periodic interview. Tang and Tang (2012) further explained that, performance appraisal is an organization practice to integrate employees' performance feedbacks from superiors, colleagues, employees themselves, subordinates and customers.

The purposes of the implementation of performance appraisal in organization are to assess employees' efficiency when they carry out their work (Rusli & Ali, 2004), identify employees' strengths and weaknesses, provide opportunities to employees for performance improvement (Zheng et al., 2012) and distribution of rewards (Fletcher, 2001). Thurston and McNall (2010) elaborated that performance appraisal practiced by an organization should be fair, accurate and without bias in order to enhance employees' motivation to perform discretionary behaviors.

In the nursing context, performance appraisal focused on monitoring nurses' performance, motivate nurses and improve hospital morale (Choudhary & Puranik, 2014). Specifically, performance appraisal of nurses conducted twice a year by their immediate supervisor and co-workers. The performance appraisal result will pass to the nursing manager. The result of performance appraisal is used to make decision on the year-end bonuses and rewards given to nurses. Choudhary and Puranik (2014) explained that when nurses are aware that the hospital concern of their performance, and they are rewarded with increment and promotion, they will work harder and engage in discretionary behaviors, such as SO-OCB.

### **Empowerment**

In addition to performance appraisal, empowerment is the third predictor conceptualized as organizational resources. Del Val and Llyod (2003); Jiang et al. (2011); Mills and Ungson (2003) defined empowerment as managers giving authority to their employees to make decisions on job related issues which have direct impact on their performance. In other words, empowerment refers to subordinates at lower level are given power to make decisions in the process of serving customers (Zeglat, Aljaber, & Alrawabdeh, 2014).

The purposes of empowerment are to increase the involvement of employees in decision making process (Del Val & Llyod, 2003), give employees more control over job-related situations (Zeglat et al., 2014) and motivating employees to improve work outcomes (Ahmad & Oranye, 2010). In service industry, customer-contact employees are require to explain and provide answers to customers' inquires on the spot rather than waiting for the feedback from their immediate supervisor (Zeglat et

al., 2014). Therefore, when employees are empowered to make decisions on their daily tasks, they have more flexibility to fulfil customers' needs, which can enhance customer satisfaction (Zeglat et al., 2014).

In nursing context, Knol and Linge (2008) proved that empowerment plays a significant role in nurses participation in their workplace and nurses felt they are empowered when their leader encourage them to participate in decision making (Laschinger, Finegan, Shamian, & Wilk, 2001). Nurses are empowered to make decision under certain situations. For instances, in emergency unit and intensive care unit, when immediate decisions are required, nurses are empowered to make decision.

### **2.3.2 Social Resources**

As adapted from the definition of organizational resources, social resources defined as social aspects of a job which help to achieve work goals, reduce job demands, physiological and psychological cost as well as to stimulate personal growth, learning and development (Bakker & Demerouti, 2007; Salanova et al., 2005). In this study, co-worker support and patient cooperation has been conceptualized as social resources.

#### **Co-worker Support**

The first predictor categorised as social resources is co-worker support. Zhou and George (2001) defined co-worker support as the willingness of co-workers to assist and support one another when they carry out their tasks. Joiner (2007) explained that co-workers support also defined as employees together build a harmony relationship and peaceful working environment.

Co-worker support is important in workplace because it involved interaction among co-workers and will have impact on employees' work performance (Gountas, Gountas, & Mavondo, 2014). Co-workers who support each other are more willing to share information, knowledge and expertise to reduce employees' uncertainty in their works, help employees to complete their tasks successfully (Chiaburu & Harrison, 2008) and achieve work goals (Kundu & Lata, 2017). In addition, supportive between co-workers to create a harmony work environment can motivate employees to engage in their work and perform discretionary behaviors (Shuck, Rocco, & Albornoz, 2010).

In nursing context, nurses rely heavily on their colleagues when carry out their works (Lampert, 2015), thus it is important for nurses to support each other in their workplace. For instance, nurses helping each other such as pull patient up in bed also a form of support (Lampert, 2015). A simply action between co-worker can make nurses feel supported and lead to engage in their work (Lampert, 2015).

### **Patient Cooperation**

In addition to co-worker support, patient cooperation also a predictor conceptualized as social resources. Bendapudi and Leone (2003) defined patient cooperation as the willingness of patient to cooperate in receiving the services delivered from nurses.

According to Van Dolen, De Ruyter, and Lemmink (2004), smooth cooperation between nurses and patient can create positive and pleasant service experiences for both nurses and patients. Likewise, Korczynski (2003) advocates that cooperation from patients is an important source of work experiences for nurses.

Similarly, Clemmer and Hayes (1979) stated that patients' unwillingness to cooperate with nurses can destroy the best treatment planning provided by hospital.

Larson (2012) mentioned that nurses play an important role in getting cooperation from patients. For instance, patients may not understand the technical details of what is happening during their hospitalization (Larson, 2012). Therefore, nurses are responsible on communicate with patients and showing respect and support in helping patients (Larson, 2012). By doing so, it can enhance patients' willingness to cooperate when receiving services from nurses.

### **2.3.3 Work Engagement**

Work engagement is the mediator in this study. Schaufeli, Salanova, Gonzalez-Roma, and Bakker (2002) defined work engagement as a positive, fulfilling, and work-related state of mind that is characterized by vigor, dedication and absorption.

Vigor refers to employee exhibit high levels of energy and mental resilience while they carry out their work, willing to invest effort in their works and persistence when they face difficulties in their work (Schaufeli et al., 2002). Dedication is characterized by employees are strongly participate in their work and experiencing the sense of significance, enthusiasm, inspiration, pride and challenge (Schaufeli et al., 2002). Absorption refers to employees fully concentrated, happy and engrossed in their work, whereby time passes quickly and employees are hardly detaching from their work (Schaufeli et al., 2002).

Perrin (2003) indicated that employees who exhibit high work engagement in their work will have high job performance, productivity, commitment and willing to perform discretionary effort in their work, in the form of spend extra time and energy in their work. Besides, Saks (2006) explained that employees who have high engagement towards their job will make substantive contribution to their organization that can leads to organizational success.

Work engagement is important in nursing context as nurses' work engagement will have direct impacts on patients' service experiences and satisfaction (Dempsey & Reilly, 2016). Larson (2012) asserts that when nurses are engaged in their work, they are more willing to provide extra care and build a good relationship with patients (Larson, 2012).

#### **2.4 Underpinning Theory**

In present study, resources are the main variables in predicting SO-OCB among nurses in private hospitals. Therefore, this study investigate SO-OCB using conservation of resources (COR) theory proposed by Hobfoll (1989).

COR theory suggested that resources are something that individuals appreciate, strive to retain, protect and build since resources assist in the achievement of work goals (Hobfoll, 1989). In addition, COR theory also explained that individuals are always try to preserve and protect those resources they value and appreciate (Hobfoll, Freedy, Lane, & Geller, 1990). Furthermore, this theory elaborated that strong resources pool will preserves further resource development and resource security

(Hobfoll et al., 1990). In short, resources are used to fulfil the demands of an individual (Hobfoll et al., 1990).

There are four kinds of resources, which are objects, personal characteristics, conditions and energies (Hobfoll, 1989). First, object resources such as car and house are valued due to its physical nature and its ability to obtain secondary status value based on its scarcity and expense (Hobfoll, 1989). Second, conditions are those resources that are valued and sought after, such as status at work (Hobfoll, 1989). Third, personal characteristics such as occupational skills are the resources that able to overcome stress resistance (Hobfoll, 1989). Finally, energies such as time and money are resources that are not characterized by their intrinsic value, which aimed to acquire other kinds of resources (Hobfoll, 1989).

According to Hobfoll (1989), people tend to enrich their resources by investing other resources. For instance, employees might invest their time and energy in their work in order to gain other more valuable resources, such as power and money. When individuals have surpluses of resources, they will experience positive well-being (Hobfoll, 1989). Besides, individuals who have more resources will have less fear and have more capable to manage their gain.

Hobfoll et al. (1990) proposed four outcomes of COR theory. The first outcome of this theory explained that individuals are the active participants throughout the process of retrieving resources and avoiding their loss (Hobfoll et al., 1990). Individuals will not wait passively in getting resources, in fact, they have enough motivation to enhance resources and avoiding the loss of resources (Hobfoll et



al., 1990). In nursing context, nurses have motivation in enhancing resources and avoiding their loss. For example, nurses enhancing their job skills and job knowledge to ensure that they have sufficient knowledge in taking care patients.

The second outcome of COR theory suggested that individuals will use other resources to protect the resources they have (Hobfoll et al., 1990). For example, in nursing context, nurses will use other resources, such as job skills to protect the resources they have, which include their status at work.

The third outcome of COR theory explained that to invest, to gain resources and to prevent the loss of resources, it occurs in a price. Some resources are expended or placed at risk when used (Hobfoll et al., 1990). In nursing context, when nurses are in the process of gaining resources they desire, such as status at work, nurses are requires to scarifies their time to enhance their knowledge and skills.

The last outcome of COR theory stated that the objective status of resources loss and its appraisal are vital where appraisals tend to follow real-world circumstances (Hobfoll et al., 1990). For example, in nursing context, different nurses have different respond towards stress they face in their work. This reflected that the different respond among nurses is due to the reason of they have different resources such as their self-esteem or emotional intelligence in dealing with stress they faced.

In nursing context, resources received by nurses are important to motivate them to improve their work performance. From the above discussion, there are four types of resources, which are object, conditions, personal characteristics and energies.

Object resources are important for nurses because it help nurses to obtain secondary status. Conditions resources are vital in affecting nurses' future works. Next, personal characteristics help nurses to eliminate stress from their works and energies resources enable nurses to acquire other resources. When nurses have sufficient resources, they are motivated to invest those resources in their works in the forms of engagement which in turn leads to extra role behavior.

As mentioned in section 2.3, the independent variables in this study are organizational resources (training, performance appraisal, and empowerment) and social resources (co-worker support and patient cooperation). Therefore, COR theory is suitable for this study. This is because COR theory suggested that resources are something that individual appreciate, strive to retain and protect as resources help individual to achieve work goals. In sum, it can be explained that both organizational resources and social resources are essential in enhancing nurses work engagement, which in turn help to uplift SO-OCB among nurses in private hospitals.

## 2.5 Research Framework

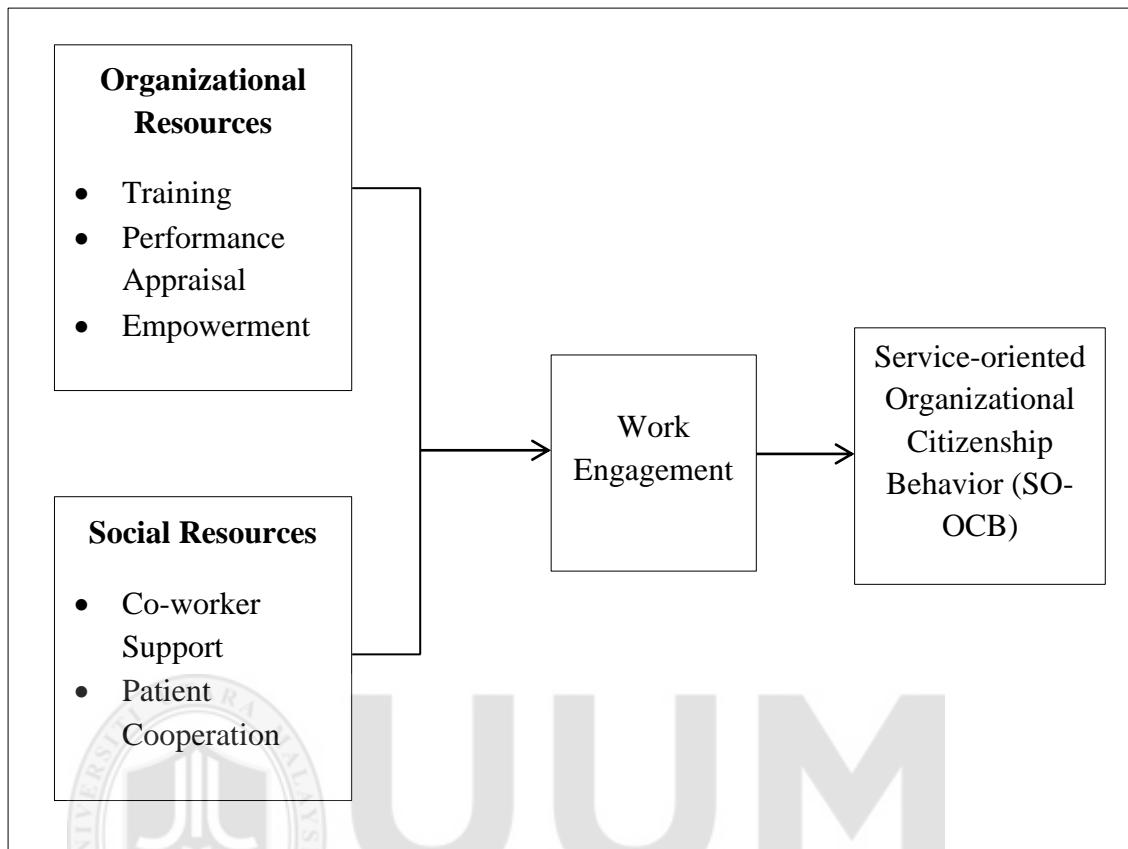


Figure 2.1

Research Framework

## 2.6 Hypotheses Development

This section discusses the relationship between the studies variables in the research framework.

### 2.6.1 Relationship between Training, Work Engagement and SO-OCB

Training programs provided by the management of private hospitals help to enhance nurses' knowledge, skills and expertise in dealing with patients' problems. In particular, training improves nurses' service accuracy and service performance which can motivate nurses to engage in their work.

There are several empirical studies conducted to investigate the relationship between training and work engagement. Anitha (2014) conducted a study among 383 middle managerial level and lower managerial level employees from small-scale organization reported that training has significant impact on employee engagement. Similarly, Salanova et al. (2005) conducted a research among 342 contact employees and 1,140 customers from 114 service units found that training is a key resource that is positively associated with work engagement among employees. Likewise, research conducted by Memon, Salleh, and Baharom (2016) among 409 oil and gas professionals in Malaysia's oil and gas sector indicated that training satisfaction has positive effect on work engagement.

In addition to empirical studies, Gruman and Saks (2011), Crawford, LePine, and Rich (2010) and Albrecht et al. (2015) conducted conceptual review to identify the relationship between training and work engagement. The result showed that training provided by organization is a crucial resource to prepare employees to exhibit work engagement.

Engagement is characterized as vigor, dedication and absorption. Employees who engaged in their work are more likely to work with passion, which in turn leads to SO-OCB. There are various previous studies conducted on the relationship between work engagement and positive behaviors among employees, such as OCB, SO-OCB and extra-role behaviors. Saks (2006) conducted a study among 102 employees working in variety jobs and organizations in Canada found that job engagement is positively related to OCB. In addition, this study showed that job engagement as a mediator partially mediate organizational support and social support towards OCB.

A study by Sulea et al. (2012) among 258 employees from three Romanian organizations indicated that work engagement is positively related to OCB. Besides, Simone, Cicotto, Pinna, and Guistiniano (2016) conducted a study among 137 inspectors operating a public organization in southern Italy found that engagement leads to strong degree of OCB.

Popli and Rizvi (2015) conducted a study among 106 managers working in private service sector organizations in India demonstrated that work engagement is a strong predictor for service orientation. Another study conducted by Popli and Rizvi (2017) among 329 front-line employees from five service sector organizations in India indicated similar result with the previous study conducted in 2015, which is employee engagement is positively associated with service orientation.

Based on this discussion, it can be further assumed that nurses who receive training from hospital will tend to engage in their work and are more likely to perform SO-OCB. Thus, the following hypothesis is proposed:

*H1: Work engagement mediates the relationship between training and SO-OCB.*

## **2.6.2 Relationship between Performance Appraisal, Work Engagement and SO-OCB**

Performance appraisal helps to identify nurses' strengths and weaknesses, provide chances for performance improvement and distribution of rewards. Specifically, fair performance appraisal received by nurses can encourage nurses to engage in their work.

There are various studies conducted to examine the relationship between performance appraisal and work engagement. Gupta and Kumar (2013) conducted a study among 323 professionals working in Indian subsidiaries of multinational corporations (MNCs) found that performance appraisal justice is positively associated with work engagement. Similarly, study conducted by Choo and Nasurdin (2014b) among 438 customer-contact employees from 34 upscale hotels throughout Malaysia indicated that performance appraisal has a positive and significant relationship with work engagement.

In addition, several researchers conducted conceptual review to identify the relationship between performance appraisal and work engagement. Conceptual review conducted by Gruman and Saks (2011) suggested that performance management system is a best way to promote employee engagement. Likewise, Albrecht et al. (2015) conducted conceptual review reported that performance management practices that strategically focused on work engagement has influence employees' work engagement. Besides, conceptual review conducted by Saratun (2016) found that new type of performance management that has less management and direct control of performance can enhance employees' work engagement.

Employees who engaged in their work are more likely to work with passion, which in turn leads to SO-OCB. As mentioned in the previous section, there are several previous studies conducted to examine the relationship between work engagement and SO-OCB which reported that work engagement is positively related to SO-OCB (e.g. Popli & Rizvi, 2015, 2017; Saks, 2006; Simone et al., 2016; Sulea et al., 2012).

Based on above discussion, it can be further assumed that performance appraisal plays a significant role in hospital context. Nurses who receive fair performance appraisal process from hospital are more likely to engage in their work, which will leads to SO-OCB. Thus, the following hypothesis is proposed:

*H2: Work engagement mediates the relationship between performance appraisal and SO-OCB.*

### **2.6.3 Relationship between Empowerment, Work Engagement and SO-OCB**

Empowerment enables nurses to make decisions when deliver services to patients. When nurses are given authority in decisions making process, they have more control over job-related situations, which can motivate nurses to engage in their work.

There are previous studies conducted by researchers to examine the relationship between empowerment and work engagement. Study conducted by Ugwu, Onyishi, and Rodriguez-Sanchez (2014) among 715 employees from banking and production sectors in Nigeria demonstrated that psychological empowerment has direct and predictive value on employees' work engagement. Similarly, Zaabi, Ahmad, and Hossan (2016) conducted a study among 189 United Arab Emirates (UAE) national employees from the major petroleum companies in UAE reported the same result as the study by Ugwu et al. (2014), which is psychological empowerment is positively related to employees' work engagement.

In addition, study conducted by Maden (2015) among 240 employees from the major industries in Turkey stated that employees' perception of empowerment practices is positively related to work engagement. Besides, Joo, Lim, and Kim (2016)

conducted a study among 599 knowledge workers in a Korean conglomerate indicated the same result with the study of Maden (2015), which is work empowerment is positively related to work engagement.

Employees who engaged in their work are more likely to work with passion, which in turn leads to SO-OCB. As mentioned in the previous section, there are several previous studies conducted to examine the relationship between work engagement and SO-OCB which reported that work engagement is positively related to SO-OCB (e.g. Popli & Rizvi, 2015, 2017; Saks, 2006; Simone et al., 2016; Sulea et al., 2012).

Based on this discussion, it can be further assumed that nurses who are empowered to make decisions are more likely to engage in their work, which in turn leads to perform SO-OCB. Thus, the following hypothesis is proposed: —

*H3: Work engagement mediates the relationship between empowerment and SO-OCB.*

#### **2.6.4 Relationship between Co-Worker Support, Work Engagement and SO-OCB**

Co-worker support is nurses helping each other when performing their tasks. The willingness of nurses' to support each other by assisting and helping in job-related tasks can create a harmony working environment which can enhance nurses' work engagement.



There are previous studies conducted to explore the relationship between co-worker support and work engagement. Anitha (2014) conducted a study among 383 middle managerial level and lower managerial level employees from small-scale organization showed that team and co-worker relationship has a statistically significant and positive impact on employee engagement. Similarly, study conducted by Caesens, Stinghambert, and Luypaert (2014) among 343 PhD students in Belgian University reported the same result as the study by Anitha (2014), in which perceived co-worker support is positively related to work engagement. In addition, study conducted by Kundu and Lata (2017) among 211 employees from manufacturing and service industry found that supportive work environment that include peer group interaction is positively and significantly related to organizational engagement.

Besides, Schaufeli and Bakker (2004) conducted a study among 1698 employees from four different organization revealed that social support is important in enhancing employees' engagement. Likewise, Bakker and Demerouti (2008) conducted a study among 2,000 Finnish teachers indicated the same result as the study conducted by Schaufeli and Bakker (2004), in which social support is positively associated with work engagement. Furthermore, Shuck (2011) conducted an integrative literature review on employee engagement found that psychological climate which includes supportive management, contribution and challenge are significantly related to work engagement.

Employees who engaged in their work are more likely to work with passion, which in turn leads to SO-OCB. As mentioned in the previous section, there are several previous studies conducted to examine the relationship between work

engagement and SO-OCB which reported that work engagement is positively related to SO-OCB (e.g. Popli & Rizvi, 2015, 2017; Saks, 2006; Simone et al., 2016; Sulea et al., 2012).

Based on this discussion, it can be further assumed that co-worker support in workplace will motivate and encourage nurses to engage in their work which will leads to SO-OCB. Thus, the following hypothesis is proposed:

*H4: Work engagement mediates the relationship between co-worker support and SO-OCB.*

### **2.6.5 Relationship between Patient Cooperation, Work Engagement and SO-OCB**

Patient cooperation is the willingness of patient to cooperate with nurses in receiving services delivered by nurses. Cooperation from patients is an important source of work experiences for nurses which can motivate nurses to engage in their work.

There are limited studies conducted to investigate the relationship between patient cooperation and work engagement. Hence, studies on social support and customer cooperation were adapted to develop the hypothesis of patient cooperation, work engagement and SO-OCB.

A study conducted by Saks (2006) among 102 employees working in different jobs and organizations in Canada reported that social support is positively related to job engagement. Similarly, Anaza and Rutherford (2012) conducted a study among 297 employees working in a cooperative extension system in the Midwestern of USA

found that the result is corroborate with the study by Saks (2006), in which employees who are strongly identified by customers displayed greater work engagement. In addition, study conducted by Othman and Nasurdin (2012) among 402 staff nurses working in three general hospitals in Peninsular Malaysia found that certain elements grouped under social support is positively related to nurses' work engagement.

Employees who engaged in their work are more likely to work with passion, which in turn leads to SO-OCB. As mentioned in the previous section, there are several previous studies conducted to examine the relationship between work engagement and SO-OCB which reported that work engagement is positively related to SO-OCB (e.g. Popli & Rizvi, 2015, 2017; Saks, 2006; Simone et al., 2016; Sulea et al., 2012).

Although there are limited studies conducted in investigating the relationship between patient cooperation and work engagement, the above discussion can further assumed that harmony relationship between patient and nurses and willingness of patient to cooperate when receiving medical treatment will motivate and encourage nurses to engage in their work. Thus, the following hypothesis is proposed:

*H5: Work engagement mediates the relationship between patient cooperation and SO-OCB.*

## **2.7 Conclusion**

Existing literature related to the variables of present study has been reviewed and explained in this chapter. Furthermore, the underpinning theory of this study was

discussed to support the research model. Finally, the development of hypotheses was presented in this chapter.



## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Introduction**

This chapter explains the applicable research techniques used in this study. In particular, the sections under this chapter explain the research design, unit of analysis, sample size, data collection procedure, pre-test, questionnaire design and measurement, statistical analysis implemented in this study.

#### **3.1 Research Design and Unit of Analysis**

The purpose of this study is to investigate the relationship between organizational resources, social resources, work engagement and SO-OCB. Therefore, correlation analysis was used in this study to investigate the relationship variations in one factor correspond with variations in one or more factors. Besides, in this study, cross-sectional study was used to measure all variables at one point of time using a field of study. The unit of analysis of this study is at individual level as this study focuses on investigating the SO-OCB among nurses in Malaysian private hospitals.

#### **3.2 Population, Sample of Study and Sampling Method**

The population of this study is nurses in Malaysia, while the sample for this study is nurses in Malaysian private hospitals. In addition, probability sampling is the type of sampling used in this study. It represents that respondents from the sample has an equal chance to be selected (Sekaran & Bougie, 2009). In particular, simple random

sampling was used in this study. This indicated that every nurse in private hospitals has a known and equal chance of being selected to participate in this study.

### **3.3 Sample Size**

G\*Power was used to identify the sample size required for this study. G\*Power served as an efficient, broadly applicable and easy-to-use research tool (Erdfelder, Faul, & Buchner, 1996). Besides, G\*Power is a general stand-alone power analysis program for statistical tests used in social and behavioral research (Erdfelder et al., 1996). The suggested sample size using G\*Power version 3 in this study by considering five predictors (training, performance appraisal, empowerment, co-worker support and patient cooperation) indicated that the numbers of the total sample size is 138 respondents.

### **3.4 Data Collection Procedure**

This study uses survey questionnaire to collect data from respondents with regards to their perceptions on organizational resources (training, performance appraisal, and empowerment), social resources (co-worker support and patient cooperation), work engagement as well as SO-OCB.

All nurses in Malaysia from 137 private hospitals were invited to participate in the survey. A total of 30,335 nurses working in 137 private hospitals in Malaysia were invited to participate in this study. However, only 15 private hospitals agreed to participate. Hence, 345 nurses were involved in the study. Assistance from the HR officer was sought to distribute the questionnaires to the nurses. Respondents were given three weeks to complete the questionnaire. Respondents were assured that all

the information provided will be kept as confidential and only used for academic and learning processes. After the respondents have completed the questionnaire, they were requested to submit to the HR officer and researcher collected the completed questionnaires with the respective HR officer. The list of 15 private hospitals participated in this study is attached in Appendix A.

### **3.5 Questionnaire Design**

In this study, the questionnaire was divided into eight sections, which are sections A to H. Section A to G contains the information on training, performance appraisal, empowerment, co-worker support, patient cooperation, work engagement and SO-OCB. Section H contains the information of respondent's background, which include gender, age, race, marital status, highest qualification, current position, work routine and current position tenure. In addition, cover page was included in the first page of the questionnaire to provide an overview objective of this study.

### **3.6 Measurement of Variables**

#### **3.6.1 Service-oriented Organizational Citizenship Behavior (SO-OCB)**

SO-OCB defined as the citizenship behaviors performed by service employees when delivery services to customers and SO-OCB includes three dimensions, which are loyalty, service delivery and participation (Bettencourt et al., 2001). SO-OCB is the dependent variable in this study which measured by using 7-point scale. The range of measure is from "1" (strongly disagree) to "7" (strongly agree). There were 16 items of SO-OCB and the items adapted from Bettencourt et al. (2001). The cronbach's alphas of the adapted items for loyalty was 0.77, service delivery was 0.79 and was participation 0.80. Table 3.1 shows the items for SO-OCB.

Table 3.1

*List of Items of SO-OCB*

<b>Items</b>	
As a nurse in this hospital, I...	
1.	tell outsiders this is a good place to work.
2.	say good things about hospital to others.
3.	generate favourable goodwill for the hospital.
4.	encourage friends and family to use hospital's products and services.
5.	actively promote the hospital's products and services.
6.	follow customer service guidelines with extreme care.
7.	conscientiously follows guidelines for patient promotions.
8.	follow up in a timely manner to patient requests and problems.
9.	perform duties with unusually few mistakes.
10.	always have a positive attitude at work.
11.	deliver exceptionally courteous and respectful to patients regardless of circumstances.
12.	encourage co-workers to contribute ideas and suggestions for service improvement.
13.	contribute many ideas for patient promotions and communications.
14.	make constructive suggestions for service improvement.
15.	frequently presents to others creative solutions to patient problems.
16.	take home brochures to read up on products and services.

*Source: Adapted from Bettencourt et al. (2001)*

### **3.6.2 Training**

Lomoya et al. (2015) defined training as a set of planned activities organized by organization to its employees to improve employees' job knowledge, job skills, align employees' attitudes and behavior with organization goals. Training is one the independent variables under organizational resources. Training was measured by using 7-point scales and the range of the measure is from "1" (strongly disagree) to "7" (strongly agree). There were five items of training and the items adapted from Elmadag et al. (2008). The cronbach's alpha of the adapted items was 0.85. Table 3.2 shows the items for training.



Table 3.2  
*List of Items of Training*

Items
1. I received extensive formal training before I come into contact with patients.
2. I received on-going formal training on how to serve patients better.
3. I am formally trained to deal with patients' complaints.
4. I received on-going formal training on resolving patients' problems.
5. I received on-going formal training on our hospital's services.

*Source: Adapted from Elmadag et al. (2008)*

### 3.6.3 Performance Appraisal

Performance appraisal is a practice where organization integrates performance feedback of employees from superiors, colleagues, employees themselves, as well as customers (Tang & Tang, 2012). Performance appraisal is the independent variable under organizational resources. Performance appraisal was measured by using 5-point Likert scale. The range of the measure is from "1" (strongly disagree) to "5" (strongly agree). There were three items of performance appraisal and the items adopted from Tang and Tang (2012). The cronbach's alpha of the adopted items was 0.88. Table 3.3 shows the items for performance appraisal.

Table 3.3  
*List of Items of Performance Appraisal*

Items
1. My performance appraisal is based on input from multiple sources (superior, peers, myself, patients, etc).
2. My performance appraisal includes developmental feedback.
3. My performance appraisal is based on objective, quantitative results.

*Source: Adopted from Tang and Tang (2012)*

### 3.6.4 Empowerment

Empowerment refers to managers giving authority to their employees to make decisions on job related issues which have direct impact on their performance (Del Val & Llyod, 2003). Empowerment is the independent variable under organizational resources. Empowerment was measured by using 5-point Likert scale. The range of the measure is from “1” (strongly disagree) to “5” (strongly agree). There were five items of empowerment. The items adapted from Cakar and Erturk (2010). The cronbach’s alpha of the adapted items was 0.74. Table 3.4 shows the items for empowerment.

Table 3.4  
*List of Items of Empowerment*

Items
In this hospital...
1. the authority to make a decision is delegated to the person who is responsible to perform the task.
2. decisions are usually made at the level where the best information is available.
3. information is widely shared so that everyone can get the information he or she needs when it is needed.
4. everyone believes that he or she can have a positive impact.
5. every employee in our hospital attends both short and long-term planning processes.

*Source: Adapted from Cakar and Erturk (2010)*

### 3.6.5 Co-worker Support

Co-worker support is defined as co-workers assisting each other in performing their tasks when needed (Zhou & George, 2001). Co-worker support is an independent variable under social resources. Co-worker support was measured by using 5-point Likert scale. The range of the measure is from “1” (strongly disagree) to “5” (strongly agree). There were five items of co-worker support which adopted from Kazan and

Gumus (2013). The cronbach's alpha of the adopted items was 0.73. Table 3.5 shows the items for co-worker support.

Table 3.5  
*List of Items of Co-Worker Support*

Items
In this hospital...
1. we are like a family altogether with my colleagues.
2. teamwork is one places emphasis on rather than personal work.
3. work environment is quite peaceful.
4. discrimination among the employees is never made.
5. there is always someone substituting me when I get medical leave or take a leave.

*Source: Adopted from Kazan and Gumus (2013)*

### 3.6.6 Patient Cooperation

Patient cooperation is defined as the willingness of patient to cooperate in receiving the services delivered from nurses (Bendapudi & Leone, 2003). Patient cooperation is the independent variable under social resources. Patient cooperation was measured by using 7-point scales. The range of the measure is from "1" (strongly disagree) to "7" (strongly agree). There were five items of patient cooperation which adapted from Limpanitgul et al. (2013). The cronbach's alpha of the adapted items was 0.85. Table 3.6 shows the items for patient cooperation.

Table 3.6  
*List of Items of Patient Cooperation*

Items
In this hospital...
1. patients always treat me with kindness and respect.
2. patients try to do things to make my job easier (patients are ready to accept rules and regulations of the hospital).
3. patients carefully observe and follow the policies of the hospital.
4. patients give me full cooperation when requested.
5. patients avoid requesting tasks that are not in my job scope.

*Source: Adapted from Limpanitgul et al. (2013)*

### 3.6.7 Work Engagement

Work engagement refers to positive, fulfilling work-related state of mind that consist of three main characteristics, which are vigor, dedication and absorption (Schaufeli et al., 2006). Work engagement is measured using the measurement scale of 7-point scale. The range of the measure is from “0” (never) to “6” (always). There were nine items of work engagement adopted from Schaufeli et al. (2006). The cronbach’s alpha of the adopted items was 0.9. Table 3.7 shows the items for work engagement.

Table 3.7  
*List of Items of Work Engagement*

Items
1. At my work, I feel bursting with energy.
2. At my job, I feel strong and vigorous.
3. I am enthusiastic about my job.
4. My job inspires me.
5. When I get up in the morning, I feel like going to work.
6. I feel happy when I am working intensely.
7. I am proud of the work that I do.
8. I am immersed in my work.
9. I get carried away when I am working.

*Source: Adopted from Schaufeli et al. (2006)*

### **3.7 Pre-Test**

Before distributing questionnaires to respondents, pre-test was conducted for this study. The purpose of conducting pre-test is to ensure that respondents are fully understand the contents of the questionnaire.

The pre-test for this study involved five nurses in Health Centre of Universiti Utara Malaysia. The respondents participated in the pre-test revealed that the items are clear and thus, no amendment was made from the items adapted. The finalized questionnaire is attached in Appendix B.

### **3.8 Statistical Design and Analysis**

There were two type of statistical analysis tools used to analyse the survey data, namely Statistical Package for the Social Science 22.0 (SPSS) and Smart Partial Least Square 2.0 (PLS). SPSS was used to analyse the descriptive data of respondents, while the Smart PLS was used to analyse the proposed relationship of the research model.

### **3.9 Partial Least Squares – Structural Equation Modelling (PLS-SEM)**

Analysis of PLS-SEM consists of two elements, which are the measurement model and the structural model (Hair, Hult, Ringle, & Sarstedt, 2017). Measurement model presents the relationship between the constructs and indicator variables, whilst the structural model estimates the relationship between constructs (Hair et al., 2017).

### 3.10 Evaluation of the Measurement Model

The measurement model enables researchers to ascertain both reliability and validity of the constructs measures (Hair et al., 2017). Hair, Ringle, and Sarstedt (2011) explained that composite reliability should be evaluated to determine the construct reliability of the reflective measurement model. Furthermore, the value of convergent validity and discriminant validity were used to measure the validity of the reflective measurement model (Hair et al., 2017).

Internal consistency reliability is the first criterion to be evaluated. Composite reliability is used to measure internal consistency reliability (Hair et al., 2017). Composite reliability varies between 0 and 1, the higher values indicating higher level of reliability. In exploratory research, composite reliability values of 0.60 to 0.70 are acceptable, where values between 0.70 and 0.90 are considered as satisfactory (Hair et al., 2017).

Indicator reliability refers to the size of the outer loading. Basically, the outer loadings of all indicators should be statistically significant and 0.70 is considered to be acceptable in most cases (Hair et al., 2017). Indicators with outer loadings between 0.40 and 0.70 should remove from the scale in order to increase the composite reliability (Hair et al., 2017).

Convergent validity used to measure correlates positively with alternative measures of the same construct and to ensure items are measuring the same concept (Hair et al., 2017). Average variance extracted (AVE) is the common measure to establish convergent validity. Fornell and Larcker (1981) stated that AVE value

exceed 0.5 explained that more than half of the variance happened because of its indicator, while an AVE less than 0.5 indicates error of the items.

Discriminant validity is the extent of a constructs that differ from other constructs by an empirical standards (Hair et al., 2017). There are two approaches of discriminant validity, which are cross loadings and Fornier-Larcker criterion (Hair et al., 2017). The first approach demonstrated that outer loading of an indicator's associated constructs should greater than any cross-loading on the other constructs. The second approach is to compare the square root of AVE value for each construct, and the square root of each construct's AVE should higher than each latent construct (Fornell & Larcker, 1981). The guidelines for evaluating the measurement model are exhibited in Table 3.8.

Table 3.8  
*Rule of Thumb for Reflective and Formative Model Evaluation*

Measurement Item	Specifications	Authors
Internal Consistency Reliability	Composite reliability value should be > 0.70 (in exploratory research, values of 0.60 to 0.70 are acceptable)	Hair et al. (2017)
Indicator Reliability	The standardized outer loadings should > 0.70	Hair et al. (2017)
Convergent Validity	The value Average Variance Extracted (AVE) should be > 0.50.	Fornell and Larcker (1981)
Discriminant Validity	The square root of each construct's AVE should higher than each latent construct (Fornell-Larcker criterion). The outer loading on the construct should be greater than cross loadings.	Fornell and Larcker (1981)

### 3.11 Evaluation of Structural Model

Hair et al. (2017) stated that structural model explained the relationship between the latent variables. There are two primary issues should be considered in developing structural model, which are the sequence of the constructs and the relationship between the constructs (Hair et al., 2017). Firstly, the sequence of the constructs presented from left to right, where independent constructs on the left side and dependent variable on the right side (Hair et al., 2017). Secondly, the relationship between constructs should establish by drawing arrows once decided the sequence of the constructs (Hair et al., 2017). It indicates that the constructs on the left predicts the construct on the right.

Path coefficient indicates the strength of the relationship between two latent variables (Urbach & Ahlemann, 2010). In particular, bootstrapping procedure is used to test the significant of path coefficient (Hair et al., 2017). With the information obtained from bootstrapping analysis, the significance of path model relationship can be determined (Henseler, Ringle, & Sinkovics, 2009).

This study focuses on examining the indirect relationship between constructs. To examine the significance of indirect relationships, analysis technique proposed by MacKinnon, Fairchild, and Fritz (2007) was used. This analysis technique mentioned that the magnitude of the mediated pathway can be estimated by multiplying the regression coefficient of two segments ( $a * b$ ) (MacKinnon et al., 2007). Next, the product of  $a * b$  is then divided by standard error in order to determine the significance of mediation pathway (MacKinnon et al., 2007). In addition, MacKinnon et al. (2007) also mentioned that a confidence interval (CI) of the product estimated at



95% is considered significant when the range of confidence interval does not include “0”.

### **3.12 Conclusion**

This chapter has discussed the methodology used in this study, which included research design, unit of analysis, sample size, data collection procedure, pre-test, as well as statistical design and analysis.



## CHAPTER FOUR

### DATA ANALYSIS AND RESULTS

#### 4.0 Introduction

This chapter reports the statistical findings of analysis in this study. It commences with an overview of response rate to the research survey, followed by respondents' profile, results of measurement model and results of structural model.

#### 4.1 Response Rate

For data collection purposes, 345 set of questionnaires were distributed to nurses that agreed to participate in the survey. A total of 324 (93.91%) questionnaires were returned and usable questionnaires for further analysis were 318 (92.17%). Table 4.1 indicates the response rate of this study.

Table 4.1  
*Response Rate*

	No. of Questionnaires	Percentage (%)
Distributed	345	100
Collected	324	93.91
Usable	318	92.17

## 4.2 Respondents' Profile

This section describes the background of respondents in this study. In particular, it explained demographic information about respondents' gender, age, race, marital status, highest qualification, current position, work routine and current position tenure. Table 4.2 presents the respondents' profile in details. The output is attached in Appendix C.

Table 4.2  
*Respondents' Profile*

Demographic	Frequency	Percentage (%)
<b><i>Gender</i></b>		
Male	31	9.7
Female	287	90.3
<b><i>Age</i></b>		
Less than 30	129	40.6
31-40	107	33.6
41-50	48	15.1
51-60	34	10.7
<b><i>Race</i></b>		
Malay	209	65.7
Chinese	58	18.2
India	48	15.1
Others	3	0.9
<b><i>Marital Status</i></b>		
Single	96	30.2
Married	215	67.6

<b>Demographic</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Widow	7	2.2
<b><i>Highest Qualification</i></b>		
Certificate	27	8.5
Diploma	193	60.7
Degree	91	28.6
Others	7	2.2
<b><i>Current Position</i></b>		
Clinical Nurse Specialist	27	8.5
Licensed Practical Nurse	17	5.3
Nurse Practitioner	4	1.3
Operating Room Nurse	26	8.2
Registered Nurse	122	38.4
Staff Nurse	99	31.1
Others	23	7.2
<b><i>Work Routine</i></b>		
Normal Routine	128	40.3
Shift	190	59.7
<b><i>Current Position Tenure</i></b>		
More than 6 months, but less than 1 year	23	7.2
1-5 years	103	32.4
6-10 years	87	27.4
11-15 years	40	12.6
16-20 years	39	12.3
More than 20 years	26	8.2

As shown in the table above, among 318 respondents, 90.3% respondents were female and the remaining 9.7% respondents were male. In terms of respondents' age, 40.6% respondents were less than 30 years old, followed by 33.6% respondents were in the age of 31-40. In addition, 15.1% of respondents were in the age bracket of 41-50 and the remaining 10.7% of respondents were in the age of 51-60.

Thereafter, 65.7% of respondents were Malay, followed by 18.2% of Chinese, 15.1% of Indian and the remaining 0.9% of respondents was other races which include Sikh. Besides, the marital status of respondents were: married (67.6%), single (30.2%) and widow (2.2%).

With regards of the highest qualification, more than half of the respondents' highest qualification were diploma (60.7%), followed by 28.6% respondents possess a degree, 8.5% have certificate as their highest qualification and the remaining 2.2% of respondents possess others qualification, such as Sijil Tinggi Persekolahan Malaysia (STPM). In addition, among 318 respondents, 38.4% were registered nurse, followed by 31.1% of staff nurse, 8.5% of clinical nurse specialist, 8.2% operating room nurse, 5.3% of licensed practical nurse, 1.3% nurse practitioner and the remaining 7.2% of respondents were at other positions which include nursing manager, nurse instructor and unit manager.

Regarding the work routine of respondents, more than half (59.7%) of respondents were work on shift and the remaining 40.3% of respondents were work on normal routine. Besides, with regards to the current position tenure, 32.4% of respondents worked at their current position for 1-5 years, 27.4% worked for 6-10

years, 12.6% worked for 11-15 years, 12.3% worked for 16-20 years, 8.2% worked for more than 20 years and the remaining 7.2% worked more than 6 months, but less than 1 year in their current position.

#### **4.3 Assessment of Measurement Model**

At the first stage, the reliability and validity of the measurement model were assessed. Therefore, the items loading, average variance extracted (AVE), composite reliability (CR) and cronbach's alpha were identified. Figure 1 demonstrated the measurement model diagram.



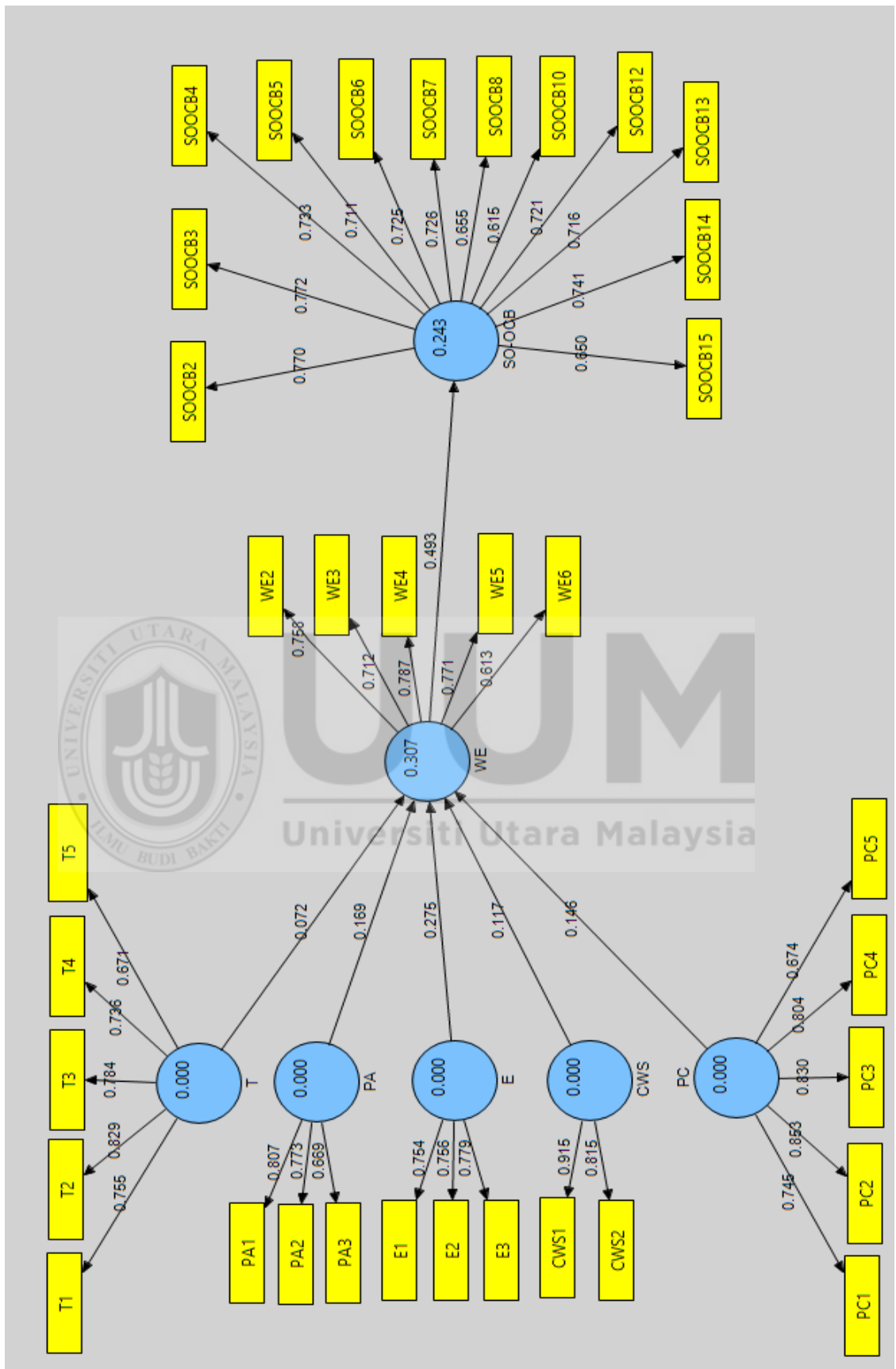


Figure 4.1  
Measurement Model Diagram

As presented in Table 4.3, four items of SO-OCB (SO-OCB 1, SO-OCB9, SO-OCB11 and SO-OCB16), two items of empowerment (E4 and E5), three items of co-worker support (CWS3, CWS4 and CWS5) and four items of work engagement (WE1, WE7, WE8 and WE9) were removed. This is because these items pulled down the AVE value of SO-OCB, empowerment, co-worker support and work engagement, which cause the AVE value of these predictors does not meet the specification of 0.5 as suggested by Fornell and Larcker (1981). Therefore, these items were deleted and not be used in the analysis. The output of items loading, AVE, Composite Reliability and Cronbach's Alpha before delete items is attached in Appendix D.

After removed these items, AVE of constructs are meet the specification of 0.5. In addition, the composite reliability of the measurement model was ranged from 0.795 to 0.925 which meet the specifications and exceeded 0.70 as suggested by Hair et al. (2017). Table 4.3 presents the results of items loading, average variance extracted, composite reliability and cronbach's alpha. The output of items loading, AVE, Composite Reliability and Cronbach's Alpha after deleted items is attached in Appendix E.

Table 4.3  
*Results of Items Loading, Average Variance Extracted (AVE), Composite Reliability (CR) and Cronbach's Alpha*

Construct	Item	Loading	AVE	CR	Cronbach's Alpha	Deleted Items	Loading of Deleted Items
Service-oriented Organizational Citizenship Behavior (SO-OCB)	SO-OCB2	0.770	0.508	0.925	0.911	SO-OCB1	0.597
	SO-OCB3	0.772				SO-OCB9	0.573
	SO-OCB4	0.773				SO-OCB11	0.613
	SO-OCB5	0.711				SO-OCB16	0.550
	SO-OCB6	0.725					



Construct	Item	Loading	AVE	CR	Cronbach's Alpha	Deleted Items	Loading of Deleted Items
	SO-OCB7	0.726					
	SO-OCB8	0.655					
	SO-OCB10	0.615					
	SO-OCB12	0.721					
	SO-OCB13	0.716					
	SO-OCB14	0.741					
	SO-OCB15	0.650					
Training (T)	T1	0.755	0.573	0.870	0.815		
	T2	0.829					
	T3	0.784					
	T4	0.736					
	T5	0.671					
Performance Appraisal (PA)	PA1	0.807	0.565	0.795	0.638		
	PA2	0.773					
	PA3	0.669					
Empowerment (E)	E1	0.754	0.582	0.807	0.643	E4	0.518
	E2	0.756				E5	0.471
	E3	0.779					
Co-worker Support (CWS)	CWS1	0.915	0.751	0.857	0.678	CWS3	0.445
	CWS2	0.815				CWS4	0.501
						CWS5	0.581
Patient Cooperation (PC)	PC1	0.745	0.614	0.888	0.842		
	PC2	0.853					
	PC3	0.830					
	PC4	0.804					
	PC5	0.674					
Work Engagement (WE)	WE2	0.758	0.534	0.850	0.779	WE1	0.504
	WE3	0.712				WE7	0.536

Construct	Item	Loading	AVE	CR	Cronbach's Alpha	Deleted Items	Loading of Deleted Items
	WE4	0.787				WE8	0.630
	WE5	0.771				WE9	0.492
	WE6	0.613					

Note:

- a. Composite reliability (CR) = (square of the summation of the factor loadings) / (square of the summation of the factor loadings) + (square of the summation of the error variances)
- b. Average variance extracted (AVE) = (summation of the square of the factor loadings) / (summation of the square of the factor loading) = (summation of the error variances)

Furthermore, in order to test the validity of the measurement model used in this study, convergent validity and discriminant validity was examined. As presented in Table 4.3, the AVE value of every construct is greater than the benchmark value 0.5, this indicated the convergent validity of the measurement model. Besides, in order to examine the discriminant validity, the square root of AVE should be greater than its correlation with other constructs.

Table 4.4 presents the value of the square root of AVE value of every construct. Based on Table 4.4, the result of square root value of all construct in the diagonal is larger than its correlated presented in off-diagonal. The output is attached in Appendix F.

Table 4.4  
*Latent Variable Correlation*

Construct	SO-OCB	T	PA	E	CWS	PC	WE
<b>SO-OCB</b>	<b>0.713</b>						
T	0.480	<b>0.757</b>					
PA	0.482	0.555	<b>0.752</b>				
E	0.472	0.463	0.412	<b>0.763</b>			
CWS	0.384	0.254	0.275	0.410	<b>0.867</b>		
PC	0.343	0.258	0.253	0.341	0.194	<b>0.784</b>	
WE	0.493	0.360	0.391	0.475	0.322	0.323	<b>0.731</b>

Note:

- a. The value in the diagonal is the square root of AVE
- b. SO-OCB=Service-oriented Organizational Citizenship Behavior, T=Training, PA=Performance Appraisal, E=Empowerment, CWS=Co-worker Support, PC=Patient Cooperation, WE=Work Engagement

Apart from that, it is required to access the values of items loading among construct in order to validate the convergent validity. As presents in Table 4.5, all items loaded higher on their respective constructs evidenced the convergent validity.

The output is attached in Appendix G.

Table 4.5  
*Cross Loading*

Items	SO-OCB	T	PA	E	CWS	PC	WE
SO-OCB2	<b>0.770</b>	0.375	0.398	0.386	0.311	0.266	0.434
SO-OCB3	<b>0.772</b>	0.359	0.360	0.381	0.251	0.306	0.402
SO-OCB4	<b>0.733</b>	0.317	0.345	0.345	0.259	0.316	0.332
SO-OCB5	<b>0.711</b>	0.332	0.292	0.324	0.153	0.358	0.331
SO-OCB6	<b>0.725</b>	0.326	0.295	0.295	0.159	0.234	0.359
SO-OCB7	<b>0.726</b>	0.327	0.309	0.338	0.309	0.242	0.333
SO-OCB8	<b>0.655</b>	0.293	0.327	0.257	0.214	0.247	0.306
SO-OCB10	<b>0.615</b>	0.309	0.253	0.306	0.276	0.167	0.306

Items	SO-OCB	T	PA	E	CWS	PC	WE
SO-OCB12	<b>0.721</b>	0.394	0.360	0.366	0.341	0.139	0.359
SO-OCB13	<b>0.716</b>	0.380	0.383	0.386	0.411	0.184	0.356
SO-OCB14	<b>0.741</b>	0.359	0.398	0.348	0.368	0.237	0.365
SO-OCB15	<b>0.650</b>	0.326	0.386	0.278	0.215	0.242	0.303
T1	0.339	<b>0.755</b>	0.424	0.313	0.143	0.131	0.242
T2	0.442	<b>0.829</b>	0.471	0.431	0.324	0.165	0.369
T3	0.310	<b>0.784</b>	0.420	0.385	0.184	0.239	0.252
T4	0.345	<b>0.736</b>	0.391	0.299	0.171	0.271	0.254
T5	0.364	<b>0.671</b>	0.387	0.292	0.063	0.193	0.202
PA1	0.342	0.458	<b>0.807</b>	0.325	0.112	0.203	0.361
PA2	0.430	0.446	<b>0.773</b>	0.342	0.303	0.166	0.299
PA3	0.321	0.319	<b>0.669</b>	0.250	0.259	0.224	0.168
E1	0.308	0.371	0.301	<b>0.754</b>	0.227	0.261	0.354
E2	0.366	0.346	0.263	<b>0.756</b>	0.423	0.235	0.336
E3	0.402	0.344	0.371	<b>0.779</b>	0.296	0.281	0.394
CWS1	0.322	0.224	0.257	0.380	<b>0.915</b>	0.220	0.322
CWS2	0.356	0.220	0.216	0.327	<b>0.815</b>	0.097	0.224
PC1	0.276	0.228	0.212	0.281	0.188	<b>0.745</b>	0.290
PC2	0.279	0.190	0.196	0.254	0.128	<b>0.853</b>	0.235
PC3	0.273	0.198	0.219	0.276	0.133	<b>0.830</b>	0.297
PC4	0.323	0.207	0.189	0.282	0.249	<b>0.804</b>	0.229
PC5	0.179	0.184	0.162	0.233	0.040	<b>0.674</b>	0.182
WE2	0.372	0.290	0.332	0.389	0.266	0.402	<b>0.758</b>
WE3	0.306	0.184	0.200	0.339	0.110	0.354	<b>0.712</b>
WE4	0.337	0.249	0.296	0.356	0.297	0.175	<b>0.787</b>
WE5	0.435	0.266	0.311	0.351	0.271	0.144	<b>0.771</b>
WE6	0.339	0.323	0.272	0.292	0.214	0.087	<b>0.613</b>

Note: SO-OCB=Service-oriented Organizational Citizenship Behavior, T=Training, PA=Performance Appraisal, E=Empowerment, CWS=Co-worker Support, PC=Patient Cooperation, WE=Work Engagement

#### 4.4 Assessment of Structural Model

After analysing the reliability and validity of the measurement model, the structural model was tested. Analysing the structural model is important to determine the significance of the proposed hypotheses. Figure 4.2 demonstrated the structural model diagram.



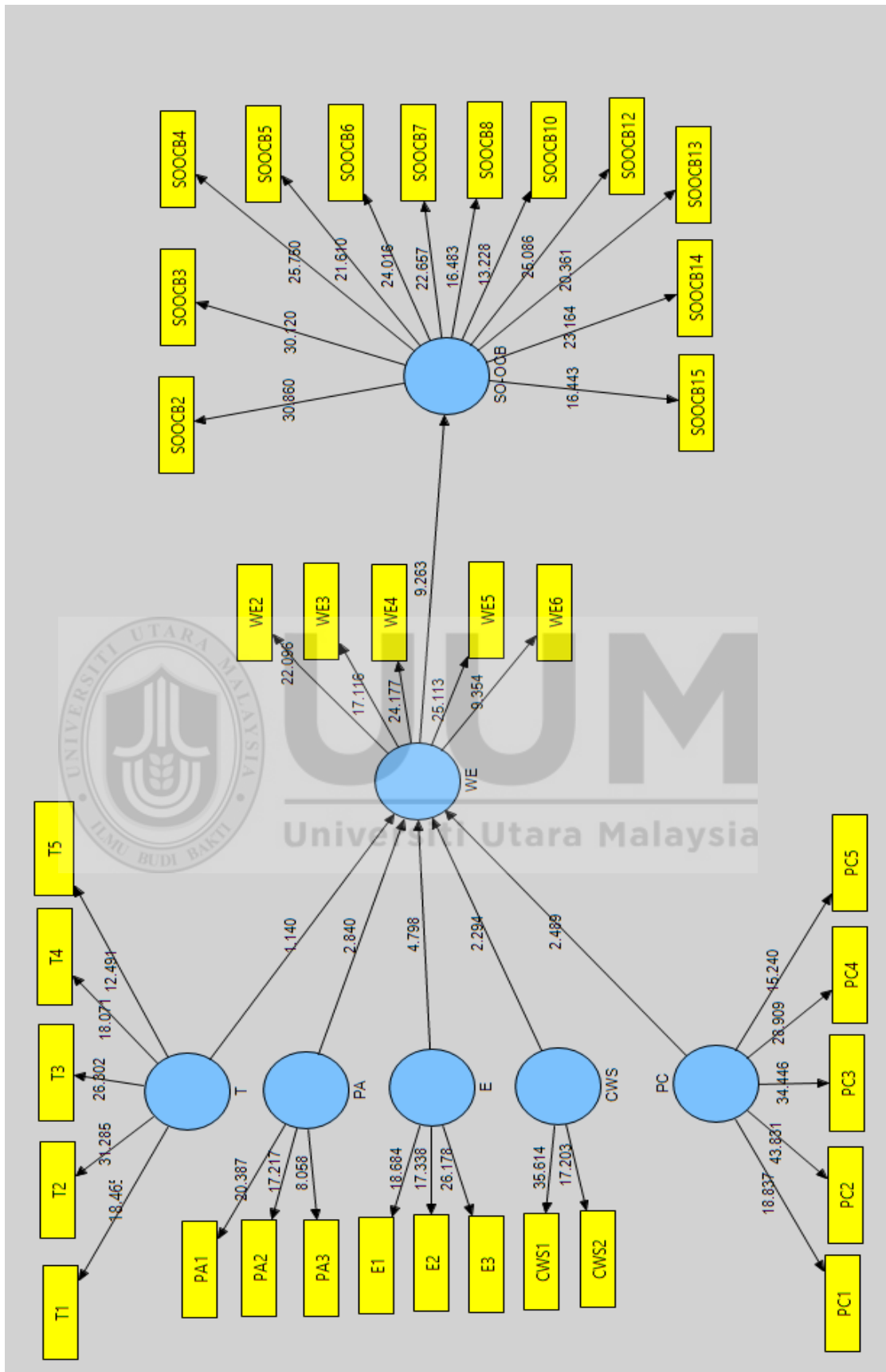


Figure 4.2

Structural Model Diagram

The result of the hypotheses testing for all five relationships is summarized in Table 4.6.

Table 4.6  
*The Result of the Hypotheses Testing*

Hypothesis	Relationship	Indirect Path	Standard Error	t-Value	p-Value	LL	UL	Decision
H1	T-WE-SOOCB	0.035	0.031	1.141	0.254	-0.025	0.096	Not Supported
H2	PA-WE-SOOCB	0.083	0.034	2.481	0.013**	0.017	0.149	Supported
H3	E-WE-SOOCB	0.136	0.030	4.563	0.000***	0.077	0.194	Supported
H4	CWS-WE-SOOCB	0.058	0.026	2.229	0.026**	0.007	0.108	Supported
H5	PC-WE-SOOCB	0.072	0.031	2.327	0.020**	0.011	0.132	Supported

\*\* *t-value* > 1.96; *p* < 0.05

\*\*\**t-value* > 2.58; *p* < 0.01

Table 4.7 showed the summary of the proposed relationships. Hypothesis 1 is estimated to lie between -0.025 and 0.096, it indicates that zero is in 95% confidence interval. In addition, the t-value of Hypothesis 1 is lower than 1.96 (two-tailed) and the p-value is greater than 0.05. Therefore, Hypothesis 1 is not supported, in which work engagement does not mediate the relationship between training and SO-OCB.

The indirect effect of Hypothesis 2 is estimated to lie between 0.017 and 0.149 with 95% confidence interval. In addition, the t-value of Hypothesis 2 is greater than 1.96 (two-tailed) and the p-value is less than 0.05. Therefore, Hypothesis 2 is supported, which indicates that work engagement mediates the relationship between performance appraisal and SO-OCB.

Similarly, Hypothesis 3 is estimated to lie between 0.077 and 0.194 with 95% confidence interval. Besides, the t-value of Hypothesis 3 is greater than 1.96 (two-tailed) and the p-value is less than 0.05. Thus, it can be concluded that Hypothesis 3 is accepted, in which work engagement mediates the relationship between empowerment and SO-OCB.

Likewise, the indirect effect of Hypothesis 4 is estimated to lie between 0.007 and 0.108 with 95% confidence interval. In addition, the t-value of Hypothesis 4 is greater than 1.96 (two-tailed) and the p-value is less than 0.05. Therefore, Hypothesis 4 is supported, which indicates that work engagement mediates the relationship between co-worker support and SO-OCB.

Furthermore, the last hypothesis is estimated to lie between 0.011 and 0.132 with 95% confidence interval, t-value of Hypothesis 5 is greater than 1.96 (two-tailed) and the p-value is less than 0.05. Thus, Hypothesis 5 is supported, in which work engagement mediates the relationship between patient cooperation and SO-OCB.

#### **4.5 Conclusion**

This chapter has presented the results for data analysis from the collected data. Specifically, the response rate, respondent's profile, assessment of the measurement model and structural model were presented.



## CHAPTER FIVE

### DISCUSSIONS

#### 5.0 Introduction

This chapter devotes to discuss the findings of this study. Sections below include the recapitulation of the study findings, discussions of findings, implications of the study, limitations of the study and suggestions for future study. The conclusion of this study is presented in the last section.

#### 5.1 Recapitulation of the Study Findings

This study aims to identify the mediation effect of work engagement between organizational resources (training, performance appraisal and empowerment) and social resources (co-worker support and patient cooperation) towards SO-OCB among nurses in Malaysian private hospitals. This study was aimed to answer the following research questions:

- i. Does work engagement mediate the relationship between training and SO-OCB?
- ii. Does work engagement mediate the relationship between performance appraisal and SO-OCB?
- iii. Does work engagement mediate the relationship between empowerment and SO-OCB?
- iv. Does work engagement mediate the relationship between co-worker support and SO-OCB?

- v. Does work engagement mediate the relationship between patient cooperation and SO-OCB?

Based on the findings presented in chapter four, five research questions are summarized as below:

- i. The result showed that work engagement did not mediate the relationship between training and SO-OCB.
- ii. The result discovered that work engagement mediates the relationship between performance appraisal and SO-OCB.
- iii. The result indicated that work engagement mediates the relationship between empowerment and SO-OCB.
- iv. The result found that work engagement mediates the relationship between co-worker support and SO-OCB.
- v. The result proved that work engagement mediates the relationship between patient cooperation and SO-OCB.

## **5.2 Discussions of Findings**

The sections below discussed the role of work engagement in mediating the relationship between organizational resources (training, performance appraisal and empowerment), social resources (co-worker support and patient cooperation) and SO-OCB.

### **5.2.1 The Role of Work Engagement between Organizational Resources and SO-OCB**

This study proposed to examine the mediating role of work engagement in the relationship between organizational resources and SO-OCB, which are training,

performance appraisal, and empowerment. As shown in Table 4.6, the findings of this study indicated that Hypothesis 1 was not supported where training is found unable to motivate employees' SO-OCB through the mediation of work engagement. A study conducted by Elmadag et al. (2008) among 200 customer-contact employees and managers of service industry in United States indicated that training offered to employees significantly reduce service employees' engagement in continuous improvement in their work. In this study, 59.75% of nurses are work on shift, it is probably that attending training after a long shift is a burden for nurses, which will demotivate them to engage in their work and perform SO-OCB. As the study conducted by Elmadag et al. (2008) was conducted in service industry, it is suitable to explain in the context of nurses.

In contrast, Hypothesis 2 and Hypothesis 3 were supported, which explained that performance appraisal and empowerment can encourage nurses to perform SO-OCB through the mediation of work engagement. This finding is in line with previous studies that proved that organizational resources are an importance resource of work engagement (e.g. Albrecht et al., 2015; Gruman & Saks, 2011; Gupta & Kumar, 2013; Joo et al., 2016; Maden, 2015; Saratun, 2016; Ugwu et al., 2014; Zaabi et al., 2016). Likewise, several previous studies (e.g. Popli & Rizvi, 2015, 2017; Saks, 2006; Simone et al., 2016; Sulea et al., 2012) found that work engagement has a positive and significant relationship with SO-OCB.

### **5.2.2 The Role of Work Engagement between Social Resources and SO-OCB**

This study proposed to examine the mediating role of work engagement in the relationship between social resources and SO-OCB, which are co-worker support and

patient cooperation. The results proved that work engagement mediates the relationship between both co-worker support and patient cooperation towards SO-OCB. Therefore, Hypothesis 4 and Hypothesis 5 were supported. This explained that support among nurses in workplace and the willingness of patients to cooperation throughout the service delivery process motivate nurses to engage in their work and perform SO-OCB. This finding is in line with previous studies which demonstrated that social resources are importance in promoting work engagement (e.g. Anaza & Rutherford, 2012; Anitha, 2014; Bakker & Demerouti, 2008; Bakker et al., 2004; Caesens et al., 2014; Kundu & Lata, 2017; Saks, 2006; Shuck, 2011). Similarly, as mentioned in section 5.2.1, several previous studies found that work engagement has positive and significant relationship with SO-OCB.

### **5.3 Implications of the Study**

In this study, training, performance appraisal and empowerment were categorised as organizational resources. From these three types of organizational resources proposed, training was found unable to enhance nurses SO-OCB through the mediation of work engagement. The insignificant relationship may be due to the fact that nurses attending training after a long shift is a burden for them which will demotivate them to engage in their work and SO-OCB. The findings is concurred with the study conducted by Elmadag et al. (2008) in United States among 200 customer-contact employees and managers of service industry. In his study, Elmadag et al. (2008) showed that training provided to employees significantly reduce service employees' engagement in continuous improvement in their work. As 190 or 59.7% participants in this study were involved in shifted work, thus it is recommend to the management of the hospitals to consider the shift schedule while organizing training for nurses.

Whilst, this study found that performance appraisal positively enhance work engagement of nurses in private hospitals, which in turn motivate nurses to perform SO-OCB. In particular, performance appraisal based on inputs from multiple resources, developmental feedback from superior and co-workers as well as objective and quantitative results are important in enhancing nurses' work engagement, which can motivate nurses to perform SO-OCB.

Besides, the results indicated that empowerment positively enhance nurses' work engagement in private hospitals which in turn, encourage nurses to perform SO-OCB. Specifically, the authority to make decision given to nurses who is responsible in performing the tasks is important and sufficient information provided to nurses during decision making process can ensure nurses make an accurate decision. Therefore, immediate supervisors are encouraged to empower nurses in decision making to encourage nurses engage in their work which in turn motivate nurses to perform SO-OCB.

With regards to social resources, co-worker support and patient cooperation were categorised as social resources in this study. The results indicated that co-worker support can enhance nurses' work engagement which in turn leads to perform SO-OCB. In particular, nurses helping each other in performing their tasks, harmony relationship between nurses and peaceful working environment are important in enhancing nurses' work engagement, which can motivate nurses to perform SO-OCB.

Furthermore, this study found that patient cooperation positively enhances nurses' work engagement in private hospitals and leads to SO-OCB. Specifically,

patients following hospital's rules, respecting nurses and cooperate with nurses throughout the service delivery process can provide pleasant service experiences for patients and nurses. In addition, smooth cooperation between patients and nurses enhance nurses work engagement, which in turn leads to SO-OCB. All in all, sufficient resources provided by management of private hospitals are important in encouraging nurses' work engagement and SO-OCB.

#### **5.4 Limitations of the Study and Suggestions for Future Study**

There are several limitations which have been identified in this study. First, the data in this study was collected solely from private hospitals. This might not be able to generalize in the settings of different service industries, such as transportation, banking, and hospitality. Thus, future study may consider to collect data from two or more industries to confirm the findings.

Second, this study has limited predictors. The predictors used in this study were organizational resources (training, performance appraisal, and empowerment) and social resources (co-worker support and patient cooperation). It is believed that there are others possible predictors could also enhance nurses' SO-OCB among nurses in private hospitals. For instance, personal resources that proposed by (e.g. Chen & Kao, 2012; Jain et al., 2012) and job demands that proposed by (e.g. Schaufeli & Bakker, 2004; Schaufeli et al., 2009). Therefore, future study that conducted in private hospitals may consider to investigate others predictors that can enhance nurses SO-OCB.

Third, the participation rate from nurses was low. There were 30,335 nurses from 137 private hospitals in Malaysia. However, only 15 private hospitals participated in this study with 345 nurses as respondents. Hence, researchers who wish to conduct their study in private hospitals in future may consider to seek assistance from higher authorities to improve the participation rate.

## **5.5 Conclusion**

In sum, the five objectives of this study have been fulfilled. The results showed that two out of three organizational resources proposed in this study vital in encouraging work engagement. In particular, performance appraisal and empowerment are important resources provided by organization to encourage nurses engage in their work. However, training was found unable to enhance nurses' work engagement.

With regards to social resources which included co-worker support and patient cooperation have been proved important in motivating nurses' work engagement. Therefore, it is important for organization to identify the other social resources that require by nurses, provide sufficient and suitable resources to nurses in order to encourage nurses' work engagement, which in turn leads to SO-OCB. Overall, the findings supported the COR theory proposed in this study which indicated that resources are something that individuals appreciate and assist individual in the achievement of work (Hobfoll, 1989). By examining all of these relationships, it is hoped that the findings will benefits both scholars and organizations in promoting SO-OCB among nurses in private hospitals.

## References

- Ahmad, N., & Oranye, O. (2010). Empowerment, job satisfaction and organizational commitment: A comparative analysis of nurses working in Malaysia and England. *Journal of Nursing Management*, 18(5), 582-591.
- AIA Malaysia. (2017). Six things you should know about healthcare in Malaysia. Retrieved from AIA Malaysia website: <https://www.aia.com.my/en/what-matters/health-wellness/healthcare-in-malaysia.html>
- Albrecht, S. L., & Andretta, M. (2011). The influence of empowering leadership, empowerment and engagement on affective commitment and turnover intentions in community health service workers: Test of a model. *Leadership in Health Service*, 24(3), 228-237.
- Albrecht, S. L., Bakker, A. B., Gruman, J. A., Macey, W. H., & Saks, A. M. (2015). Employee engagement, human resource management practices and competitive advantage: An integrated approach. *Journal of Organizational Effectiveness: People and Performance*, 2(1), 7-35.
- Ali, N., Habidin, N. F., Jamaludin, N. H., Khaidir, N. A., & Shazali, N. A. (2013). Customer relationship management and organizational performance in Malaysian healthcare industry. *International Journal of Advancements in Research and Technology*, 2(1), 1-5.
- Anaza, N. A., & Rutherford, B. (2012). How organizational and employee-customer identification, and customer orientation affect job engagement. *Journal of Service Management*, 23(5), 616-639.
- Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, 63(3), 308-323.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209-223.
- Bakker, A. B., Demerouti, E., Boer, E. D., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of vocational behavior*, 62(2), 341-356.
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management* 43(1), 83-104.
- Bendapudi, N., & Leone, R. P. (2003). Psychological implications of customer participation in co-production. *Journal of Marketing*, 67(1), 14-28.



- Bettencourt, L. A., Meuter, M. L., & Gwinner, K. P. (2001). A comparison of attitude, personality, and knowledge predictors of service-oriented organizational citizenship behaviors. *Journal of Applied Psychology*, 86(1), 29-41.
- Caesens, G., Stinglhamber, F., & Luypaert, C. (2014). The impact of work engagement and workaholism on well-being: The role of work-related social support. *Career Development International* 19(7), 813-835.
- Cakar, N. D., & Erturk, A. (2010). Comparing innovation capability of small and medium-sized enterprises: examining the effects of organizational culture and empowerment. *Journal of Small Business management*, 48(3), 325-359.
- Chen, W. J. (2016). The model of service-oriented organizational citizenship behavior among international tourist hotels. *Journal of Hospitality and Tourism Management*, 29, 24-32.
- Chen, C. H. V., & Kao, R. H. (2012). Work values and service-oriented organizational citizenship behaviors: The mediation of psychological contract and professional commitment: A case of students in Taiwan Police College. *Social Indicators Research*, 107(1), 149-169.
- Chiaburu, D. S., & Harrison, D. A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effect on perceptions, attitudes, OCBs, and performance. *Journal of Applied Psychology*, 93(5), 1082-1103.
- Chiu, S. F., Lin, S. T., & Han, T. S. (2015). Employment status and employee service-oriented organizational citizenship behaviour. The mediating roles of internal mobility opportunity and job insecurity. *Career Development International*, 20(2), 133-146.
- Choo, L. S., & Nasurdin, A. M. (2014a). Do human resource management practices affect employees' service-oriented organizational citizenship behavior? Evidence from the Malaysian hotel industry. *World Applied Sciences Journal*, 31(2), 253-266.
- Choo, L. S., & Nasurdin, A. M. (2014b). An empirical investigation into the influence of human resource management practices on work engagement: The case of customer-contact employees in Malaysia. *International Journal of Culture, Tourism and Hospitality Research*, 8(3), 345-360.
- Choo, L. S., & Nasurdin, A. M. (2014c). Is emotional intelligence important in predicting service-oriented organisational citizenship behaviour? *International Journal of Work Organisation and Emotion*, 6(3), 261-280.
- Chou, S. Y., & Lopez-Rodriguez, E. (2013). An empirical examination of service-oriented organizational citizenship behavior. The roles of justice perceptions and manifest needs. *Managing Service Quality*, 23(6), 474-494.
- Choudhary, G. B., & Puranik, S. (2014). A study on employee performance appraisal in health care. *Asian Journal of Management Science*, 2(3), 59-64.

- Clemmer, E. J., & Hayes, E. W. (1979). Patient cooperation in wearing orthodontic headgear. *American Journal of Orthodontics*, 75(5), 517-524.
- Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analysis test. *Journal of Applied Psychology*, 95(5), 834-848.
- Del Val, M., & Llyod, B. (2003). Measuring empowerment. *Leadership & Organizational Development Journal*, 24(2), 102-108.
- Dempsey, C., & Reilly, B. A. (2016). Nurse engagement: What are the contributing factors for success. *The Online Journal of Issues in Nursing*, 21(1).
- Donavan, D. T., Brown, T. J., & Mowen, J. C. (2004). Internal benefits of service-worker customer orientation: Job satisfaction, commitment, and organizational citizenship behavior. *Journal of Marketing* 68, 128-146.
- Dyne, L. V., & Ang, S. (1998). Organizational citizenship behavior of contingent workers in Singapore. *Academy of Management Journal*, 41(6), 692-703.
- Economic Planning Unit. (2016). Eleventh Malaysia Plan, 2016-2020. Retrieved from Economic Planning Unit website: <http://www.epu.gov.my/en/rmk/eleventh-malaysia-plan-2016-2020>
- Elmadag, A. B., Ellinger, A. E., & Franke, G. R. (2008). Antecedents and consequences of frontline service employee commitment to service quality. *Journal of Marketing Theory and Practice*, 16(2), 95-110.
- Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. *Behavior Research Methods, Instruments, & Computers*, 28(1), 11.
- Fletcher, C. (2001). Performance appraisal and management: The developing research agenda. *Journal of Occupational and Organizational Psychology*, 74(4), 473-487.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Franco, M., & Tavares, P. (2013). The influence of professional identity on the process of nurses' training: An empirical study. *Leadership in Health Service*, 26(2), 118-134.
- Frost & Sullivan. (2016). Medical tourism and aged care to drive Malaysian private healthcare industry. Retrieved from Frost & Sullivan website: <https://ww2.frost.com/news/press-releases/frost-sullivan-malaysia-20-2020-inevitability/>

- Goh, J. M. (2017). Malaysia to face a nursing shortage by 2020. Retrieved from MIMS Today website: <http://today.mims.com/malaysia-to-face-a-nursing-shortage-by-2020>
- Goldstein, I. L., & Ford, J. K. (2002). *Training in organization* (4th ed.): Belmont, CA: Wadsworth.
- Gountas, S., Gountas, J., & Mavondo, F. T. (2014). Exploring the associations between standards for service delivery (organisational culture), co-worker support, self-efficacy, job satisfaction and customer orientation in the real estate industry. *Australian Journal of Management*, 39(1), 107-126.
- Gruman, J. A., & Saks, A. M. (2011). Performance management and employee engagement. *Human Resource Management Review*, 21(2), 123-136.
- Gupta, V., & Kumar, S. (2013). Impact of performance appraisal justice on employee engagement: a study of Indian professionals. *Employee Relations* 35(1), 61-78.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (Second ed.). USA: SAGE Publications, Inc.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-151.
- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, 22(3), 224-241.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268-279.
- Health Care Asia. (2015). Good pay attracts Malaysian nurses to work abroad. Retrieved from Health Care Asia website: <http://www.healthcareasia.org/2015/good-pay-attracts-malaysian-nurses-to-work-abroad/>
- Heaven, C. M., & Maguire, P. (1996). Training hospice nurses to elicit patient concern. *Journal of Advanced Nursing*, 23(2), 280-286.
- Henseler, J. R., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least square modeling in international marketing. *Advances in International Marketing*, 20, 277-319.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513.

- Hobfoll, S. E., Freedy, J., Lane, C., & Geller, P. (1990). Conservation of social resources: Social support resource theory. *Journal of Social and Personal Relationships*, 7, 465-477.
- Jain, A. K. (2015). Volunteerism and organisational culture. Relationship to organizational commitment and citizenship behaviors in India. *Cross Cultural Management*, 22(1), 116-144.
- Jain, A. K., Malhotra, N. K., & Guan, C. (2012). Positive and negative affectivity as mediators of volunteerism and service-oriented citizenship behavior and customer loyalty. *Psychology & Marketing*, 29(12), 1004-1017.
- Jiang, J. Y., Sun, L. Y., & Law, K. S. (2011). Job satisfaction and organization structure as moderators of the effects of empowerment on organizational citizenship behavior: A self-consistency and social exchange perspective. *International Journal of Management*, 28(3), 675-693.
- Joiner, T. A. (2007). Total quality management and performance: The role of organizational support and co-worker support. *International Journal of Quality & Reliability Management*, 24(6), 617-627.
- Joo, B.-K., Lim, D. H., & Kim, S. (2016). Enhancing work engagement: The roles of psychological capital, authentic leadership, and work empowerment. *Leadership & Organizational Development Journal*, 37(8), 1117-1134.
- Karatepe, O. M., Yavas, U., & Babakus, E. (2007). The effects of customer orientation and job resources on frontline employees' job outcomes. *Service marketing Quarterly*, 29(1), 61-79.
- Kazan, H., & Gumus, S. (2013). Measurement of employee's performance: A state bank application. *International Review of Management and Business Research*, 2(2), 429-441.
- Kazemipour, F., Amin, S. M., & Pourseidi, B. (2012). Relationship between workplace spirituality and organizational citizenship behavior among nurses through mediation of affective organizational commitment. *Journal of Nursing Scholarship*, 44(3), 302-310.
- Khoo, V. J. (2016). Malaysia's Deputy Health Minister: We cannot afford budget cuts for 2017. Retrieved from MIMS website: <http://today.mims.com/malaysia-s-deputy-health-minister--we-cannot-afford-budget-cuts-for-2017>
- Kiyanzad, M. H., Kandelousi, N. S., & Sardar, S. (2016). Study of the mediating role of organizational citizenship behavior in the relationship of workplace spirituality with customer loyalty and service quality in Saman Bank. *Modern Applied Science*, 10(8), 243-255.
- Knol, J., & Linge, R. V. (2008). Innovative behaviour: The effect of structural and psychological empowerment on nurses. *Journal of Advanced Nursing*, 65(2), 359-370.

- Korczynski, M. (2003). Communities of coping: Collective emotional labour in service work. *Organization*, 10(1), 55-79.
- Kundu, S. C., & Lata, K. (2017). Effects of supportive work environment on employee retention: Mediating role of organizational engagement. *International Journal of Organizational Analysis*, 25(4), 703-722.
- Ladebo, O. J. (2008). Perceived supervisory support and organisational citizenship behaviours: Is job satisfaction a mediator? *South African Journal of Psychology*, 38(3), 479-488.
- Lajiun, J. (2016). Malaysia losing nurses with degree due to low pay. Retrieved from Borneo Post Online website: <http://www.theborneopost.com/2016/10/07/malaysia-losing-nurses-with-degree-due-to-low-pay/>
- Lampert, L. (2015). How to support your nursing colleagues. Retrieved from Ausmed website: <https://www.ausmed.com/articles/support-nursing-colleagues/>
- Larson, J. (2012). The connection between employee satisfaction and patient satisfaction. Retrieved from AMN Healthcare website: <https://www.amnhealthcare.com/latest-healthcare-news/459/1033/>
- Laschinger, H. K. S., Finegan, J., Shamian, J., & Wilk, P. (2001). Impact of structural and psychological empowerment on job strain in nursing work settings: Expanding Kanter's Model. *Journal of Nursing Administration*, 31(5), 260-272.
- Limpanitgul, T., Robson, M. J., Gould-Williams, J., & Lertthairakul, W. (2013). Effects of co-worker support and customer cooperation on service employee attitudes and behaviour: Empirical evidence from the airline industry. *Journal of Hospitality and Tourism Management*, 20(2013), 23-33.
- Lin, J. S. J., & Lin, S. C. (2011). Moderating effect of organizational climate on the relationship of organizational support and service-oriented organizational citizenship behaviors. *African Journal of Business management*, 5(2), 582-595.
- Lomoya, M. G., Pingol, M. B., & Teng-Calleja, M. (2015). Antecedents of job satisfaction and organizational citizenship behaviors among agency-hired blue collar contractual workers in the Philippines. *Philippines Journal of Psychology*, 48(1), 1-27.
- Lu, H., While, A. E., & Barriball, K. L. (2005). Job satisfaction among nurses: A literature review. *International Journal of Nursing Studies*, 42(2), 211-227.
- MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. *Annual Review of psychology*, 58, 593-614.
- Maden, C. (2015). Linking high involvement human resource practices to employee proactivity: The role of work engagement and learning goal orientation. *Personnel Review*, 44(5), 720-738.

- Malaysia Health Travel Council. (2017). Over RM1b medical tourism revenue by year-end. Retrieved from Malaysia Healthcare Travel Council website: <https://www.mhtc.org.my/media-centre/press-release/>
- Memon, M. A., Salleh, R., & Baharom, M. N. R. (2016). The link between training satisfaction, work engagement and turnover intention. *European Journal of Training and Development*, 40(6), 407-429.
- Mills, P. K., & Ungson, G. R. (2003). Reassessing the limits of structural empowerment: organizational constitution and trust as controls. *Academy of Management Review*, 28(1), 143-153.
- Ministry of Health Malaysia. (2016). Health Facts. Retrieved from <http://www.moh.gov.my/images/gallery/publications/KKM%20HEALTH%20FACTS%202016.pdf>
- Muhammad, A. H. (2014). Perceived Organizational Support and Organizational Citizenship Behavior: The Case of Kuwait. *International Journal of Business Administration*, 5(3), 59-72.
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome.*: Lexington Books/ DC health and Com.
- Othman, N., & Nasurdin, A. M. (2012). Social support and work engagement: A study of Malaysian Nurses. *Journal of Nursing Management*, 21(6), 1-18.
- Perrin, T. (2003). Working today: Understanding what drives employee engagement. Retrieved from [http://www.keepem.com/doc\\_files/Towers\\_Perrin\\_Talent\\_2003%28TheFinal%29.pdf](http://www.keepem.com/doc_files/Towers_Perrin_Talent_2003%28TheFinal%29.pdf)
- Popli, S., & Rizvi, I. A. (2015). Exploring the relationship etween service orientation, employee engagement and perceived leadership style: A study of managers in the private service sector organizations in India. *Journal of Service Marketing*, 29(1), 59-70.
- Popli, S., & Rizvi, I. A. (2017). Leadership style and service orientation: The catalytic role of employee engagement. *Journal of Service Theory and Practice*, 27(1), 292-310.
- Rodriguez, C. M., & Gregory, S. (2005). Qualitative study of transfer of training of student employees in a service industry. *Journal of Hospitality and Tourism Research*, 29(1), 42-66.
- Rose, K. (2016). Examining organizational citizenship behavior in the context of human resource development: An integrative review of the literature. *Integrative Literature Review*, 15(3), 295-316.
- Rusli, A., & Ali, N. A. (2004). Performance appraisal decision in Malaysian public service. *The International Journal of Public Sector Management*, 17(1), 48-64.

- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology, 21*(7).
- Salanova, M., Agut, S., & Peiro, J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology, 90*(6), 1217-1227.
- Saratun, M. (2016). Performance management to enhance employee engagement for corporate sustainability. *Asia-Pacific Journal of Business Administration, 8*(1), 84-102.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement, 66*(4), 701-716.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25*(3), 293-315.
- Schaufeli, W. B., Bakker, A. B., & Rhenen, W. V. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior, 30*(7), 893-917.
- Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytical approach. *Journal of Happiness Studies, 3*(1), 71-92.
- Sekaran, U., & Bougie, R. (2009). *Research methods for business: A skill building approach* (Fifth ed.). United Kingdom: John Wiley and Sons Ltd.
- Sharif, M. T., Yaqub, R. M. S., & Baig, F. J. (2015). Does organizational support enhance the organizational citizenship behavior in service industry with moderating role service climate? *Journal of Marketing and Consumer Research, 9*, 102-109.
- Shuck, B. (2011). Four emerging perspectives of employee engagement: An integrative literature review. *Human Resource Development Review, 10*(3), 304-328.
- Shuck, B., Rocco, T. S., & Albornoz, C. A. (2010). Exploring employee engagement from the employee perspective: Implications for HRD. *Journal of European Industrial Training, 35*(4), 300-325.
- Simone, S. D., Cicotto, G., Pinna, R., & Guistiniano, L. (2016). Engaging public servants: Public service motivation, work engagement and work-related stress. *Management Decision, 54*(7), 1569-1594.
- Sulea, C., Virga, D., Maricutoiu, L. P., Schaufeli, W., Dumitru, C. Z., & Sava, F. A. (2012). Work engagement as mediator between job characteristics and positive

- and negative extra-role behaviors. *Career Development International*, 17(3), 188-207.
- Sun, L. Y., Aryee, S., & Law, K. S. (2007). High-performance human resource practices, citizenship behavior, and organizational performance: A relational perspective. *Academy of Management Journal*, 50(3), 558-577.
- Tang, T. W., & Tang, Y. Y. (2012). Promoting service-oriented organizational citizenship behaviors in hotels: The role of high-performance human resource practices and organizational social climates. *International Journal of Hospitality Management*, 31(3), 885-895.
- Tang, Y. Y., & Tsaur, S. H. (2016). Supervisory support climate and service-oriented organizational citizenship behavior in hospitality: The role of positive group affective tone. *International Journal of Contemporary Hospitality*, 28(10), 2331-2349.
- Teh, P. L., & Sun, H. (2012). Knowledge sharing, job attitudes and organisational citizenship behaviour. *Industrial Management and Data*, 112(1), 64-82.
- Teo, R. (2013). Private healthcare sector sees healthy growth. Retrieved from Borneo Post Online website: <http://www.theborneopost.com/2013/05/12/private-healthcare-sector-sees-healthy-growth/>
- Thurston, P. W., & McNall, L. (2010). Justice perceptions of performance appraisal practices. *Journal of Managerial Psychology*, 25(3), 201-228.
- Ugwu, F. O., Onyishi, I. E., & Rodriguez-Sanchez, A. M. (2014). Linking organizational trust with engagement: The role of psychological empowerment. *Personnel Review*, 43(3), 377-400.
- Urbach, N., & Ahlemann, F. (2010). Structural equation modeling in information system research using partial least square. *Journal of Information Technology and Application*, 11(2), 5-40.
- Van Dolen, W., De Ruyter, K., & Lemmink, J. (2004). An empirical assessment of the influence of customer emotions and contact employee performance on encounter and relationship satisfaction. *Journal of Business Research*, 57(4), 437-444.
- Wang, M. L. (2009a). Does organizational support promote citizenship in service setting? The moderating role of service climate. *The Journal of Social Psychology*, 149(6), 648-676.
- Wang, M. L. (2009b). What makes a good citizen in service settings? *The Service Industries Journal*, 29(5), 621-634.
- Wang, M. L. (2010). Does organisational support promote citizenship? The moderating role of market-focused HRM. *The Service Industries Journal*, 30(7), 1077-1095.



- Wen, J., Li, Y., & Hou, P. (2016). Customer mistreatment behavior and hotel employee organizational citizenship behavior. The mediating role of perceived organizational support. *Nankai Business Review* 7(3), 322-344.
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management* 17(3), 601-617.
- Wu, P. H., & Liao, J. F. (2016). Service-oriented organizational citizenship behavior, perceived service quality and customer satisfaction in hospitality industry. *Journal of Applied Sciences*, 16(1), 18-24.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009a). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74(3), 235-244.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009b). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, 82(1), 183-200.
- Yulianti, P. (2014). Building organizational citizenship behavior with creative organizational climate support: A conceptual framework in higher education. *International Journal Research*, 5(3), 98-106.
- Zaabi, M. S. A. S. A., Ahmad, K. Z., & Hossan, C. (2016). Authentic leadership, work engagement and organizational citizenship behaviors in petroleum company. *International Journal of Productivity and Performance Management*, 65(6), 811-830.
- Zeglat, D., Aljaber, M., & Alrawabdeh, W. (2014). Understanding the impact of employee empowerment on customer-oriented behavior. *Journal of Business Studies Quarterly*, 6(1), 55-67.
- Zheng, W., Zhang, M., & Li, H. (2012). Performance appraisal process and organizational citizenship behavior. *Journal of Managerial Psychology*, 27(7), 732-752.
- Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management Journal*, 44(4), 682-696.

**Appendix A: List of 15 Private Hospitals Participated in this Study**

<b>No</b>	<b>Name of Private Hospital</b>	<b>Address</b>	<b>Number of Beds</b>
1	Jesselton Medical Centre	Jalan Metro 2, Metro Town Off Jalan Lintas, Kota Kinabalu, Sabah.	29
2	Columbia Asia Hospital - Miri	Lot 1035-1039, Jalan Bulan Sabit, CDT 155 Miri, Sarawak.	32
3	Columbia Asia Hospital- Bukit Rimau	No. 3, Persiaran Anggerik Eria, Bukit Rimau, Seksyen 32, Shah Alam, Selangor.	41
4	Kota Bharu Medical Centre	PT 179-184, Jalan Sultan Yahya Petra, Lundang, Kota Bharu, Kelantan.	44
5	Pantai Hospital Manjung	Jalan PPMP 1, Pusat Perniagaan Manjung Point, Sri Manjung, Perak.	58
6	Oriental Melaka Straits Medical Centre	Pusat Perubatan Klebang, Melaka.	69
7	Pantai Hospital Sungai Petani	No. 1, Persiaran Cempeka, Bandar Amanjaya, Sungai Petani, Kedah.	80
8	Columbia Asia Hospital - Taiping	No. 5, Jalan Perwira, Taiping, Perak.	82
9	Perak Community Specialist Hospital	277, Jalan Raja Permaisuri bainun (Jalan Kampar), Ipoh, Perak.	84

<b>No</b>	<b>Name of Private Hospital</b>	<b>Address</b>	<b>Number of Beds</b>
10	KPJ Pahang Specialist Hospital	Jalan Tanjung Lumpur, Kuantan, Pahang.	88
11	KPJ Perdana Specialist Hospital	Lot PT 37 & 600, Seksyen 14, Jalan Bayam, Kota Bharu, Kelantan.	117
12	Putra Medical Centre	888, Jalan Sekerat Off Jalan Putra, Alor Setar, Kedah.	143
13	KPJ Penang Specialist Hospital	No. 570, Jalan Perda Utama, Bandar Perda, Bukit Mertajam, Pulau Pinang.	168
14	Pantai Hospital Ipoh	Lot No. 126, Jalan Tambun, Ipoh, Perak.	180
15	Hospital Fatimah	1 Lebuhraya Chew Peng Loon, Off Jalan Dato's Lau Pak Khuan, Ipoh Garden, Ipoh, Perak.	219

## Appendix B: Questionnaire



### **The Role of Work Engagement in Promoting Service-oriented Organizational Citizenship Behavior**

Dear Respondent,

Thank you for your participation in this survey. This survey is to investigate the service-oriented organizational citizenship behavior at your workplace. This questionnaire contains eight sections and will take approximately 15 minutes to complete. Information provided will be kept confidential and will be used purely for academic purpose. I do hope that you will complete all the questions. If you need further clarification regarding this research, please do not hesitate to contact me at below address and phone number.

Yours Sincerely,

Chong Rong Pin  
Master of Science (Management)  
Universiti Utara Malaysia  
Contact Number: 016-5342139  
Email: chongrongpin92@yahoo.com.my

Dr. Choo Ling Suan  
Supervisor  
School Of Business Management  
College of Business  
Universiti Utara Malaysia

## Section A: Training

**Instruction:** Please circle the number corresponding to your level of agreement with each statement below. The numbers range from 1=strongly disagree to 7=strongly agree.

No	Items	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
1	I received extensive formal training before I come into contact with patients.	1	2	3	4	5	6	7
2	I received on-going formal training on how to serve patients better.	1	2	3	4	5	6	7
3	I am formally trained to deal with patients' complaints.	1	2	3	4	5	6	7
4	I received on-going formal training on resolving patients' problems.	1	2	3	4	5	6	7
5	I received on-going formal training on our hospital's services.	1	2	3	4	5	6	7

## Section B: Performance Appraisal

**Instruction:** Please circle the number corresponding to your level of agreement with each statement below. The numbers range from 1=strongly disagree to 5=strongly agree.

No	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My performance appraisal is based on input from multiple sources (superior, peers, myself, patients, etc).	1	2	3	4	5
2	My performance appraisal includes developmental feedback.	1	2	3	4	5
3	My performance appraisal is based on objective, quantitative results.	1	2	3	4	5

### Section C: Empowerment

**Instruction:** Please circle the number corresponding to your level of agreement with each statement below. The numbers range from 1=strongly disagree to 5=strongly agree.

No	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
In this hospital...						
1	the authority to make a decision is delegated to the person who is responsible to perform the task.	1	2	3	4	5
2	decisions are usually made at the level where the best information is available.	1	2	3	4	5
3	information is widely shared so that everyone can get the information he or she needs when it is needed.	1	2	3	4	5
4	everyone believes that he or she can have a positive impact.	1	2	3	4	5
5	every employee in our hospital attends both short and long-term planning processes.	1	2	3	4	5

### Section D: Co-Worker Support

**Instruction:** Please circle the number corresponding to your level of agreement with each statement below. The numbers range from 1=strongly disagree to 5=strongly agree.

No	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
In this hospital...						
1	we are like a family altogether with my colleagues.	1	2	3	4	5
2	teamwork is one places emphasis on rather than personal work.	1	2	3	4	5

No	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
In this hospital...						
3	work environment is quite peaceful.	1	2	3	4	5
4	discrimination among the employees is never made.	1	2	3	4	5
5	there is always someone substituting me when I get medical leave or take a leave.	1	2	3	4	5

### Section E: Patient Cooperation

**Instruction:** Please circle the number corresponding to your level of agreement with each statement below. The numbers range from 1=strongly disagree to 7=strongly agree.

No	Items	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
In this hospital...								
1	patients always treat me with kindness and respect.	1	2	3	4	5	6	7
2	patients try to do things to make my job easier (patients are ready to accept rules and regulations of the hospital).	1	2	3	4	5	6	7
3	patients carefully observe and follow the policies of the hospital.	1	2	3	4	5	6	7
4	patients give me full cooperation when requested.	1	2	3	4	5	6	7
5	patients avoid requesting tasks that are not in my job scope.	1	2	3	4	5	6	7

## Section F: Work Engagement

**Instruction:** Please circle the number corresponding to your level of agreement with each statement below. The numbers range from 0=never to 6=always.

No	Items	Never	Almost Never	Seldom	Sometimes	Often	Almost Always	Always
1	At my work, I feel bursting with energy.	0	1	2	3	4	5	6
2	At my job, I feel strong and vigorous.	0	1	2	3	4	5	6
3	I am enthusiastic about my job.	0	1	2	3	4	5	6
4	My job inspires me.	0	1	2	3	4	5	6
5	When I get up in the morning, I feel like going to work.	0	1	2	3	4	5	6
6	I feel happy when I am working intensely.	0	1	2	3	4	5	6
7	I am proud of the work that I do.	0	1	2	3	4	5	6
8	I am immersed in my work.	0	1	2	3	4	5	6
9	I get carried away when I am working.	0	1	2	3	4	5	6



## Section G: Service-oriented Organizational Citizenship Behavior

**Instruction:** Please circle the number corresponding to your level of agreement with each statement below. The numbers range from 1=strongly disagree to 7=strongly agree.

No	Items	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
As a nurse in this hospital, I...								
1	tell outsiders this is a good place to work.	1	2	3	4	5	6	7
2	say good things about hospital to others.	1	2	3	4	5	6	7
3	generate favorable goodwill for the hospital.	1	2	3	4	5	6	7
4	encourage friends and family to use hospital's products and services.	1	2	3	4	5	6	7
5	actively promote the hospital's products and services.	1	2	3	4	5	6	7
6	follow customer service guidelines with extreme care.	1	2	3	4	5	6	7
7	conscientiously follows guidelines for patient promotions.	1	2	3	4	5	6	7
8	follow up in a timely manner to patient requests and problems.	1	2	3	4	5	6	7
9	perform duties with unusually few mistakes.	1	2	3	4	5	6	7
10	always have a positive attitude at work.	1	2	3	4	5	6	7

No	Items	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
As a nurse in this hospital, I...								
11	deliver exceptionally courteous and respectful to patients regardless of circumstances.	1	2	3	4	5	6	7
12	encourage co-workers to contribute ideas and suggestions for service improvement.	1	2	3	4	5	6	7
13	contribute many ideas for patient promotions and communications.	1	2	3	4	5	6	7
14	make constructive suggestions for service improvement.	1	2	3	4	5	6	7
15	frequently presents to others creative solutions to patient problems.	1	2	3	4	5	6	7
16	take home brochures to read up on products and services.	1	2	3	4	5	6	7

## Section H: Personal Information

**Instruction:** Please tick (✓) or fill in appropriate space.

1. Gender:

Male	
Female	

2. Age:

Less than 30	
31-40	
41-50	
51-60	

3. Race:

Malay	
Chinese	
India	
Others (please specify)	

4. Marital Status:

Single	
Married	
Widow	

5. Highest Qualification:

Certificate	
Diploma	
Degree	
Others (please specify)	

6. Current Position:

Clinical Nurse Specialist	
Licensed Practical Nurse	
Nurse Practitioner	
Operating Room Nurse	
Registered Nurse	
Staff Nurse	
Others (please specify)	

7. Work Routine:

Normal Routine	
Shift	

8. Current Position Tenure:

More than 6 months, but less than 1 year	
1-5 years	
6-10 years	
11-15 years	
16-20 years	
More than 20 years	

*End of questions. Thank you for your cooperation.*

## Appendix C: Respondents' Profile

i) Gender

<b>Gender</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	31	9.7	9.7	9.7
	Female	287	90.3	90.3	100.0
	Total	318	100.0	100.0	

ii) Age

<b>Age</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 30	129	40.6	40.6	40.6
	31-40	107	33.6	33.6	74.2
	41-50	48	15.1	15.1	89.3
	51-60	34	10.7	10.7	100.0
	Total	318	100.0	100.0	

iii) Race

<b>Race</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	209	65.7	65.7	65.7
	Chinese	58	18.2	18.2	84.0
	India	48	15.1	15.1	99.1
	Others	3	.9	.9	100.0
	Total	318	100.0	100.0	

### Appendix C: Respondents' Profile (Continued)

iv) Marital Status

<b>MS</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	96	30.2	30.2	30.2
	Married	215	67.6	67.6	97.8
	Widow	7	2.2	2.2	100.0
	Total	318	100.0	100.0	

v) Highest Qualification

<b>HQ</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Certificate	27	8.5	8.5	8.5
	Diploma	193	60.7	60.7	69.2
	Degree	91	28.6	28.6	97.8
	Others	7	2.2	2.2	100.0
	Total	318	100.0	100.0	

### Appendix C: Respondents' Profile (Continued)

#### vi) Current Position

<b>CP</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Clinical Nurse Specialist	27	8.5	8.5	8.5
	Licensed Practical Nurse	17	5.3	5.3	13.8
	Nurse Practitioner	4	1.3	1.3	15.1
	Operating Room Nurse	26	8.2	8.2	23.3
	Registered Nurse	122	38.4	38.4	61.6
	Staff Nurse	99	31.1	31.1	92.8
	Others	23	7.2	7.2	100.0
	Total	318	100.0	100.0	

#### vii) Work Routine

<b>WR</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal Routine	128	40.3	40.3	40.3
	Shift	190	59.7	59.7	100.0
	Total	318	100.0	100.0	

### Appendix C: Respondents' Profile (Continued)

viii) Current Position Tenure

<b>HLICP</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	More than 6 months, but less than 1 year	23	7.2	7.2	7.2
	1-5 years	103	32.4	32.4	39.6
	6-10 years	87	27.4	27.4	67.0
	11-15 years	40	12.6	12.6	79.6
	16-20 years	39	12.3	12.3	91.8
	More than 20 years	26	8.2	8.2	100.0
	Total	318	100.0	100.0	



**UUM**  
Universiti Utara Malaysia

**Appendix D: Results of Items Loading, Average Variance Extracted (AVE), Composite Reliability (CR), and Cronbach's Alpha Before Delete Items**

i) Items Loading

	CWS	E	PA	PC	SO-OCB	T	WE
CWS1	0.779961						
CWS2	0.618616						
CWS3	0.445161						
CWS4	0.50116						
CWS5	0.580509						
E1		0.705231					
E2		0.69977					
E3		0.737852					
E4		0.517737					
E5		0.470657					
PA1			0.842721				
PA2			0.729364				
PA3			0.660912				
PC1				0.733316			
PC2				0.854033			
PC3				0.822701			
PC4				0.801975			
PC5				0.700247			
SOOCB1					0.597105		
SOOCB10					0.635211		
SOOCB11					0.613239		
SOOCB12					0.685286		
SOOCB13					0.677698		
SOOCB14					0.725586		
SOOCB15					0.672307		
SOOCB16					0.550299		
SOOCB2					0.777386		
SOOCB3					0.775572		
SOOCB4					0.726685		
SOOCB5					0.701461		
SOOCB6					0.70173		
SOOCB7					0.696988		
SOOCB8					0.647237		
SOOCB9					0.572556		
T1						0.749002	
T2						0.815533	



	CWS	E	PA	PC	SO-OCB	T	WE
T3						0.78529	
T4						0.743339	
T5						0.690589	
WE1							0.504097
WE2							0.745539
WE3							0.713642
WE4							0.729639
WE5							0.707266
WE6							0.54001
WE7							0.536365
WE8							0.630455
WE9							0.492058

ii) Average Variance Extracted (AVE), Composite Reliability (CR) and Cronbach's Alpha

	AVE	Composite Reliability	Cronbach's Alpha
CWS	0.355469	0.726445	0.574152
E	0.404204	0.76697	0.629512
PA	0.559652	0.790554	0.637541
PC	0.615494	0.888409	0.842225
SO-OCB	0.456075	0.930043	0.919531
T	0.574449	0.87061	0.815223
WE	0.396746	0.85238	0.80644

**Appendix E: Results of Items Loading, Average Variance Extracted (AVE),  
Composite Reliability (CR), and Cronbach's Alpha After Deleted Items**

i) Items Loading

	CWS	E	PA	PC	SO-OCB	T	WE
CWS1	0.915283						
CWS2	0.815045						
E1		0.754412					
E2		0.755938					
E3		0.778632					
PA1			0.806756				
PA2			0.773294				
PA3			0.66895				
PC1				0.745075			
PC2				0.852935			
PC3				0.829737			
PC4				0.803572			
PC5				0.673531			
SOOCB10					0.614753		
SOOCB12					0.721339		
SOOCB13					0.71554		
SOOCB14					0.741489		
SOOCB15					0.649615		
SOOCB2					0.77013		
SOOCB3					0.771574		
SOOCB4					0.73285		
SOOCB5					0.710708		
SOOCB6					0.724519		
SOOCB7					0.726385		
SOOCB8					0.655313		
T1						0.755037	
T2						0.829413	
T3						0.78379	
T4						0.736055	
T5						0.671363	
WE2							0.757662
WE3							0.712208
WE4							0.786722
WE5							0.770514
WE6							0.612925

ii) Average Variance Extracted (AVE), Composite Reliability (CR) and Cronbach's Alpha

	AVE	Composite Reliability	Cronbach's Alpha
CWS	0.751021	0.8574	0.677781
E	0.582282	0.806987	0.642569
PA	0.565444	0.795075	0.637541
PC	0.614095	0.887671	0.842225
SO-OCB	0.507888	0.925	0.91139
T	0.572968	0.869734	0.815223
WE	0.533919	0.850425	0.779143



**UUM**  
 Universiti Utara Malaysia

### Appendix F: Latent Variable Correlation

	CWS	E	PA	PC	SO-OCB	T	WE
CWS	1						
E	0.410007	1					
PA	0.274638	0.412052	1				
PC	0.194044	0.340671	0.253051	1			
SO-OCB	0.384243	0.47181	0.481711	0.343499	1		
T	0.254245	0.462858	0.554723	0.258411	0.480331	1	
WE	0.322425	0.475275	0.390863	0.323216	0.493364	0.360113	1



**UUM**  
Universiti Utara Malaysia

### Appendix G: Cross Loading

	CWS	E	PA	PC	SO-OCB	T	WE
CWS1	<b>0.91528</b>	0.380389	0.256849	0.22045	0.321731	0.223962	0.322117
CWS2	<b>0.81505</b>	0.326814	0.215963	0.096527	0.35627	0.219798	0.223943
E1	0.227295	<b>0.75441</b>	0.300618	0.260848	0.308497	0.370654	0.353789
E2	0.423217	<b>0.75594</b>	0.262769	0.235194	0.366234	0.346074	0.335657
E3	0.296415	<b>0.77863</b>	0.371477	0.280815	0.401771	0.344389	0.394439
PA1	0.111929	0.324856	<b>0.80676</b>	0.203112	0.341688	0.457679	0.361362
PA2	0.302798	0.342394	<b>0.77329</b>	0.165992	0.429947	0.445772	0.299209
PA3	0.258626	0.24957	<b>0.66895</b>	0.224484	0.320887	0.319223	0.167718
PC1	0.187505	0.281361	0.211642	<b>0.74508</b>	0.276371	0.227697	0.290314
PC2	0.127767	0.253517	0.196223	<b>0.85294</b>	0.279102	0.190016	0.235022
PC3	0.132781	0.276462	0.21864	<b>0.82974</b>	0.272523	0.19826	0.297385
PC4	0.248572	0.281853	0.189336	<b>0.80357</b>	0.32253	0.207197	0.229203
PC5	0.040388	0.233317	0.162382	<b>0.67353</b>	0.178517	0.184177	0.181973
SOOCB10	0.276254	0.305996	0.253335	0.167422	<b>0.61475</b>	0.308813	0.305928
SOOCB12	0.340891	0.365877	0.359673	0.139185	<b>0.72134</b>	0.393623	0.358604
SOOCB13	0.41111	0.385547	0.383106	0.184201	<b>0.71554</b>	0.380439	0.356035
SOOCB14	0.367891	0.347867	0.398089	0.237219	<b>0.74149</b>	0.358963	0.365286
SOOCB15	0.214895	0.277729	0.386029	0.241588	<b>0.64962</b>	0.325888	0.302877
SOOCB2	0.311002	0.386443	0.397832	0.265575	<b>0.77013</b>	0.374541	0.434124
SOOCB3	0.251288	0.380568	0.359685	0.306234	<b>0.77157</b>	0.359105	0.402396
SOOCB4	0.258831	0.345266	0.345294	0.31627	<b>0.73285</b>	0.317104	0.331773
SOOCB5	0.152937	0.323788	0.292042	0.358473	<b>0.71071</b>	0.332372	0.330781
SOOCB6	0.158932	0.294812	0.294577	0.234395	<b>0.72452</b>	0.32586	0.358628
SOOCB7	0.309167	0.338454	0.309432	0.241587	<b>0.72639</b>	0.326508	0.3333
SOOCB8	0.213846	0.256674	0.326581	0.246715	<b>0.65531</b>	0.292708	0.306347
T1	0.142953	0.312523	0.423513	0.130669	0.339224	<b>0.75504</b>	0.241623
T2	0.324021	0.431462	0.470513	0.165323	0.4423	<b>0.82941</b>	0.368568
T3	0.183813	0.385414	0.420415	0.238761	0.309876	<b>0.78379</b>	0.252364
T4	0.170607	0.299133	0.391139	0.271397	0.345068	<b>0.73606</b>	0.25398
T5	0.062801	0.292112	0.387383	0.19268	0.364346	<b>0.67136</b>	0.20168
WE2	0.265866	0.389284	0.332088	0.402341	0.372385	0.289847	<b>0.75766</b>
WE3	0.109804	0.339341	0.199989	0.353729	0.305621	0.184253	<b>0.71221</b>
WE4	0.297493	0.356335	0.296421	0.174908	0.33706	0.249457	<b>0.78672</b>
WE5	0.270855	0.350532	0.311105	0.144418	0.435382	0.266001	<b>0.77051</b>
WE6	0.213873	0.291524	0.271879	0.087432	0.338828	0.322871	<b>0.61293</b>