INFLUENCE OF GOVERNANCE STRATEGIES, ORGANIZATIONAL CLIMATE AND INDIVIDUAL BEHAVIORS TOWARDS NURSES PERFORMANCE

SUHAILA HARON

UNIVERSITI TEKNOLOGI MALAYSIA

INFLUENCE OF GOVERNANCE STRATEGIES, ORGANIZATIONAL CLIMATE AND INDIVIDUAL BEHAVIORS TOWARDS NURSES PERFORMANCE

SUHAILA HARON

A dissertation submitted in fulfilment of the
requirements for the award of the degree of
Doctor of Philosophy (Policy Studies)

Razak Faculty of Technology and Informatics
Universiti Teknologi Malaysia

OCTOBER 2020

DEDICATION

Alhamdulillah

This thesis is dedicated to:

My beloved husband Mohd Nazri bin Dollah and to all my lovely children;
Nurul'Ain Syuhada, Imran Abrisam and Imran Muqrim.

For their endless encouragement, support and sacrifice which I owe them my all.

ACKNOWLEDGEMENT

First and foremost, all praises are due to Allah, the Most Gracious and the Most Merciful. I am most thankful to Him for His blessing in the completion of this thesis. I would like to express my deepest gratitude to my lovely family especially to my mother, husband, brother and twin sister. Their patient, understanding and support gave me strength and inspiration to finish my thesis.

In preparing this thesis, I was in contact with many people, researchers, academicians, and practitioners. They have contributed towards my understanding and thoughts. In particular, I wish to express my sincere appreciation to my main thesis supervisor, Associate Professor Dr. Aini Suzanna Datuk Ariffin, for her kindness, encouragement, guidance, critics and friendship. I am also very thankful to my co-supervisor Professor Dr Durrishah Idrus for her guidance, advices and motivation. Without their continued support and interest, this thesis would not have been the same as presented here.

I am also indebted to Public Service Department, for given me the scholarship under Hadiah Latihan Persekutuan and granted the study leaves enabling me to focus on the PhD journey. I am also grateful to the Ministry of Health, NMHR Committee, Jabatan Kesihatan Negeri Terengganu and hospital directors for giving the approval for me to conduct the study in their organizations. A special gratitude to all nurses who involve as Liaison and respondents to this study for giving their cooperation.

My fellow postgraduate students and PhD Tag-team should also be recognized for their support. My sincere appreciation also extends to all my colleagues and others who have provided assistance at various occasions. Their views and tips are useful indeed. Unfortunately, it is not possible to list all of them in this limited space.

ABSTRACT

Nursing services have been acknowledged to have direct effects on ensuring the success of initiatives to increase the quality and value of healthcare. Performance-related issues among nurses in the context of Malaysian public hospitals have brought interest to the researcher to examine and assess the constituents of nurses' performance. The objectives of this research are to determine constituents of nurses' performance based on availability, competence, responsiveness, and productivity as well as to examine the influence of contextual factor namely organizational governance strategies, organizational climate, and individual behavior towards nurses' performance. Prior to the field study, Nurse Performance Scale (NPS) was developed, and validation of the questionnaire was done using lay expert review, research expert review and exploratory factor analysis. Using probability and proportionate sampling, a survey was distributed to 938 nurses in three levels of care in public hospitals, namely district hospitals, major specialist hospital, and tertiary hospital in the state of Terengganu. A total of 792 (84.4%) responses was analyzed. The results of ANOVA indicated that the differences in dimensions of performance level among nurses between levels of care were statistically significant. Two types of structural models were established to test the hypothesized relationships. The results showed that six hypothesized direct paths were found to be statistically significant in the district hospitals model. Governance strategies, shared governance, performance management, professional development, organizational climate, and individual behavior were found to be significantly influence the level of nurses' performance. The findings of the study also demonstrated dynamic relationships in different levels of care in relation to organizational governance strategies, organizational climate, and individual nurse behaviors towards their performance. This research proposed a Nursing Workforce Performance Framework (NWPF) which outlined a set of strategies, action plans and policy recommendations to manage key determinants to nurses' performance. This framework is beneficial to Ministry of Health as guidelines in enhancing nursing workforce performance. Nursing practices in public and private sectors may benefit from the research outcomes as guidelines for managing key determinants to nurses' performance.

ABSTRAK

Perkhidmatan kejururawatan diakui mempunyai kesan langsung dalam memastikan kejayaan inisiatif untuk meningkatkan kualiti dan nilai penjagaan kesihatan. Isu-isu berkaitan prestasi di kalangan jururawat dalam konteks hospital awam di Malaysia telah menarik minat penyelidik untuk mengukur dan menilai komponen prestasi jururawat. Objektif penyelidikan ini adalah untuk menentukan komponen prestasi jururawat berdasarkan kebersediaan, kompetensi, responsif, dan produktiviti serta untuk mengkaji pengaruh faktor kontekstual iaitu strategi governan organisasi, iklim organisasi, dan tingkah laku individu terhadap prestasi jururawat. Sebelum kajian lapangan dilaksanakan, Skala Prestasi Jururawat (NPS) dibangunkan, dan pengesahan soal selidik dilakukan dengan menggunakan kaedah tinjauan pakar awam, tinjauan pakar penyelidikan dan analisis faktor eksploratori. Dengan menggunakan persampelan kebarangkalian dan proporsional, soal selidik diedarkan kepada 938 jururawat di tiga tahap perawatan di hospital awam, iaitu hospital daerah, hospital pakar utama, dan hospital tertiari di negeri Terengganu. Sejumlah 792 (84.4%) maklum balas dianalisis. Hasil ANOVA menunjukkan bahawa perbezaan dimensi tahap prestasi di antara jururawat antara tahap perawatan adalah signifikan secara statistik. Dua jenis model struktur dibentuk untuk menguji hubungan yang dihipotesiskan. Hasil kajian menunjukkan bahawa enam laluan regresi yang dihipotesiskan adalah signifikan secara statistik dalam model hospital daerah. Strategi governan, governan bersama, pengurusan prestasi, pembangunan profesional, iklim organisasi, dan tingkah laku individu didapati mempengaruhi tahap prestasi jururawat secara signifikan. Penemuan kajian ini juga menunjukkan hubungan dinamik dalam tahap perawatan yang berbeza berkaitan dengan strategi governan organisasi, iklim organisasi, dan tingkah laku perawat individu terhadap prestasi mereka. Penyelidikan ini mencadangkan Kerangka Prestasi Tenaga Kerja Kejururawatan (NWPF) yang menggariskan satu set strategi, rancangan tindakan dan cadangan dasar untuk menguruskan penentu utama prestasi jururawat. Kerangka ini bermanfaat bagi Kementerian Kesihatan sebagai panduan dalam meningkatkan prestasi tenaga kerja jururawat. Amalan kejururawatan di sektor awam dan swasta boleh memanfaatkan hasil penyelidikan sebagai panduan untuk menguruskan penentu utama prestasi jururawat.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ANOVA	-	Analysis of Variance
APC	-	Annual Practicing Certificate
AVE	-	Average Variance extracted
AWT	-	Annual Work Target
BARS	-	Behaviorally Anchored Rating Scale
BOR	-	Bed Occupancy Rate
CAHMHSR	-	Contextual Analysis of Malaysia Health System Report
CCTDI	-	California Critical Thinking Disposition Inventory
CE	-	Continuous Education
CFA	-	Confirmatory Factor Analysis
CFI	-	Comparative Fit Index
CG	-	Clinical Governance
CHP (2011–2015)	-	Country Health Plan (10^{th} Malaysia Plan) 2011–2015
CME	-	Continuous Medical Education
CNE	-	Continuous Nursing Education
CPB	-	Contextual Performance Behavior
CPE	-	Continuing Professional Education
CPCN	-	Code of Professional Conduct for Nurses
CPD	-	Continuous Professional Development
CPDN	-	Continuing Professional Development (CPD) for Nurses
CPE	-	Continuous Professional Education
CR	-	Construct Reliability
CVI	-	Content Validity Index
CVR	-	Content Validity Ratio
CWB	-	Counterproductive Work Behavior
CWEQ	-	Condition of Work Effectiveness Questionnaire
D^2	-	Mahalanobis Distance
DH	-	District Hospital

EFA	-	Exploratory Factor Analysis
EPU	-	Economic Planning Unit
ETP	-	Economic Transformation Programme
FIQSRM	-	Framework Document and Companion Guide for the Integrated Management of Quality, Safety and Risk in the Malaysian Health Care System
GDP	-	Gross Domestic Products
GFI	-	Goodness Fit Index
GS	-	Governance strategies
GSANP	-	Guidelines and Standard Criteria for Accreditation of Nursing Program
GTP	-	Government Transformation Programme
GWHA	-	Global Health Workforce Alliance
HAP	-	Hospital Accreditation Program
HIMS	-	Hospital Informatics Management System
HPIA	-	Hospital Performance Indicator for Accountability
HR	-	Human Resource
HRD	-	Human Resource Development
HRH	-	Human Resource for Health
HRHCPM	-	Human Resources for Health Country Profiles Malaysia
HRM	-	Human Resource Management
HSTP	-	Healthcare Services Transformation Plan (2016–2020)
IB	-	Individual Behavior
I-CVI	-	Item-level Content Validity Index
IFS	-	Informational Support
IFSB	-	Informational Supportive Behavior
IPNG	-	Index of Professional Nursing Governance
IRR	-	Inter-Rater Reliability
ITS	-	Interpersonal Support
ITSB	-	Interpersonal Supportive Behavior
JCM	-	Job Characteristics Model
JD-R	-	Job Demands-Resources

JKNT	-	Terengganu State Health Department
JPP-NIH	-	NIH Research Review Panel
JTS	-	Job-task Support
KMO	-	Kaiser-Meyer-Olkin
KPIs	-	Key Performance Indicators
KRA	-	Key Results Area
LEP	-	Lay Expert Panel
LLL	-	Life-long Learning
M	-	Mean
Magnet	-	Magnet® Hospital
MCPE	-	Mandatory Continuous Professional Education
MDGs	-	Millennium Development Goals
MHAS4	-	Malaysian Hospital Accreditation Standards (4^{th} Ed.) SO4: Nursing Services
MHAS5	-	Malaysian Hospital Accreditation Standards (5^{th} Ed.) SO4: Nursing Services
MHSR	-	Malaysia Health System Review
MNA	-	Malaysian Nurses Association
MNB	-	Malaysian Nurses Board
MoH	-	Ministry of Health
MoHPA (2016–2020)	-	Ministry of Health Plan of Action (2016–2020)
MoHSP (2006–2010)	-	Ministry of Health Strategic Plan (2006–2010)
MoHSP (2011–2015)	-	Ministry of Health Strategic Plan (2011–2015) 1 Care 1 Malaysia
MoHSP (2016–2020)	-	Ministry of Health Strategic Plan (2016–2020)
MREC	-	Medical Research Ethical Committee
MSA	-	Measure of Sampling Adequacy
MSH	-	Major Specialist Hospital
MSQH	-	Malaysian Society for Quality in Health

M-WHO CCs (2009–2013)	-	Malaysia-WHO Country Cooperation Strategy (2009–2013)
M-WHO CCs (2016–2020)	-	Malaysia-WHO Country Cooperation Strategy (2016–2020)
NCS	-	Nurse Competence scale
NEM	-	New Economic Model
NFI	-	Normed Fit Index
NIH	-	National Institute of Health
NKEAs	-	National Key Economic Areas
NKRAs	-	National Key Result Areas
NMRR	-	National Medical Research Register
NP	-	Nurse Performance
NPD	-	Nursing Professional Development
NWI	-	Nursing Work Index
NWPF	-	Nursing Workforce Performance Framework
OC	-	Organizational Climate
OCB	-	Organizational Citizenship Behavior
OECD	-	Organization for Economic Co-operation and Development
PA	-	Performance Appraisal
PAS	-	Performance Appraisal System
PC	-	Performance consequences
PCA	-	Principle Component Analysis
PD	-	Professional Development
PEMANDU	-	Performance Management and Delivery Unit
PG	-	Public Governance
PM	-	Performance Management
PS	-	Performance Standard
PSD	-	Public Service Department
Q	-	Quality-oriented
RN	-	Registered Nurse
R&R	-	Recruitment and Retention
REP	-	Research Expert Panel

RMSEA	-	Root Mean Square Error of Approximation
S-CVI	-	Scale-level Content Validity Index
SD	-	Standard Deviation
SDGs	-	Sustainable Development Goals
SEM	-	Structural Equation Model
SG	-	Shared Governance
SM	-	Structural Model
SPSS	-	Statistical Package for Social Science
SS	-	Service circular
SSF	-	Specialty and Subspecialty Framework MoH under 11th Malaysia Plan (2016–2020)
SSL	-	Service circular letter
TH	-	Tertiary Hospital
TLI	-	Tucker Lewis Index
TPB	-	Task Performance Behavior
UA	-	Universal Agreement
UN	-	United Nation
WHO	-	World health organization
WP	-	Workforce Planning
%	-	Per cent

LIST OF APPENDICES

CHAPTER 1

INTRODUCTION

1.1 Overview

There is an emerging recognition of the importance of nursing workforce studies since the last two decades. The nursing workforce has been acknowledged to be in central position to ensure the success of initiatives to increase the value of health care (Almalki et al., 2012; Jiang, Li, Ma, and Gu, 2015; Platt, Kwasky, and Spetz, 2016). As the largest cadre of health workforce globally, the nursing practice drives value and has a direct influence on patient care (Pappas and Welton, 2015). The conceptualization of nurses' performance was proposed by Dieleman and Harnmeijer in 2006 which consists of four dimensions namely availability, responsiveness, competence and productivity. However, limited work has been done by previous studies to assess the level of performance among nurses based on these dimensions. The body of literature also provides evidence that the assessment of nurses' performance based on the dimensions of availability, responsiveness, competence and productivity was conducted in segregated manners. Furthermore, concerns about nurse staffing in hospitals, nurses' work environment and how these factors influence the patient outcome lead to an amplified interest in measuring and reporting nurses' performance (Blegen et al., 1992; Needleman, Kurtzman, and Kizer, 2007; Al-Homayan, Shamsudin, Subramaniam, and Islam, 2013; Al-Makhaita, Sabra, and Hafez, 2014).

In view of this, the researcher proposed to explore the context of nurses' performance dimensions based on the perceived level of nurses on their availability, competence, responsiveness and productivity in public hospitals. This research also aimed to empirically examine the influence of factors contributing to nurses' perceived performance with regard to governance strategies, organizational

environment as well as individual nurse behavior. The research also intended to develop a framework pertaining to factors and predictors to nurses' performance in public hospital settings. In addition, this framework can be integrated with the best practices in order to maintain nurses' performance specifically in public hospital settings.

This chapter provides the background of the research, problem statement, research objectives, research questions and hypothesis of the research. Next, the significance and scope of the research are also presented. Conceptual and operational definitions of key terms are provided at the end of this chapter.

1.2 Background of the Research

Improving health workers' performance and productivity have become the center of interest following the declarations on Millennium Development Goals (MDGs) by United Nations 2006–2015. At the same time, The World health organization (WHO) through the *Health Workforce Decade 2006–2015 Framework*, emphasized the need to develop effective workforce strategies that may improve recruitment and performance of health workers as well as reduce their attrition. The framework explained three (3) levers that may influence the workforce performance, namely:

(a) the job-related lever that focuses on individual occupations;
(b) support-system-related lever; and
(c) levers that create an enabling environment and focus on managerial culture and organizational arrangements.

It is further emphasized on Health Workforce Global Strategy 2030 that attention needed to be focused in order to achieve Sustainable Development Goals (SDG), three (3) strategies on maximizing the quality and performance of health worker through; (i) enabling the environment of education; (ii) proactive surveillance on the quality of practice; and (iii) strengthening the capacity of health

workers at all delivery levels (WHO, 2015b). These strategies are very crucial and the issues need to be addressed in enhancing nurses' performance.

In doing so, managing nurses' performance is vital as they are the major caregivers in providing healthcare services. Nursing practice has a direct and intimate influence on the quality of care and provides value to health services (Pappas and Welton, 2015). Assessing the performance of practicing nurse is crucially important in identifying areas for improvement. Therefore, this research aimed to carry out the assessment by scrutinizing nurses' performance in the context of Malaysian public hospitals.

1.2.1 Performance-Related Issues in Malaysian Public Hospitals

There are various key issues carried out by previous scholars in addressing the performance-related problems in Malaysian public hospitals. Pieces of evidence of these performance-related issues in the context of Malaysian public hospitals have brought interest to the researcher to examine and assess the constituents of nurses' performance based on the four dimensions of performance as suggested by the Board of the Global Health Workforce Alliance (GWHA) for Strategic Management of Human Resource For Health (WHO, 2015).

First, the works of literature exhibit evidence on the issues of nurses' availability in Malaysia (Barnett, Namasivayam and Narudin, 2010; Kanchanachitra et al., 2011; WHO Western Pacific Region, 2013). Geographic distributions of nurses vary between 15.6 nurses/10,000 populations in most developed region (the West Coast of Peninsular Malaysia including Johor, Negeri Sembilan, Melaka, Selangor, Perak, Penang, Kedah, Perlis and federal territories of Kuala Lumpur and Putrajaya) to 8.5 nurses/10,000 populations in less developed region (East Coast of Peninsular Malaysia including Kelantan, Terengganu, Pahang and the states of Sabah and Sarawak) (Atun et al., 2016). Various efforts have been made by the ministry to increase these ratios resulting in an increase to 30.79 nurses/10,000 populations in 2014. However, these supplies are considered low as compared to other Organization

for Economic Cooperation and Development (OECD) countries (Ministry of Health Malaysia, 2015).

Imbalances in the number of nurses between public-private hospitals were 2.3 to 1 in 2014. However, inequality in the workload between public-private has been reported whereby 71% (2,507,151) of inpatient admissions and 51% (8,567,888) outpatient attendances were in public hospitals. There were also disparities on the workload distribution between individual public hospitals whereby a number of 27 public hospitals (20.3%) in Malaysia were categorized as under-utilized with Bed Occupancy Rate (BOR) of less than 40% in 2013 (Planning Division, 2013). Scholars also linked high workload in public hospitals to job stress and resulting in emotional and physical burnout and low job satisfaction among nurses (Ismail et al., 2009a; Muhammad and Jamilha, 2010; Kaur, Sambasivan, and Kumar, 2013; Sang Long et al., 2014; Atefi et al., 2014).

The second dimension of performance is nurses' responsiveness. Previous literature established that low patients' satisfaction is linked to poor responsiveness of health personnel with the potential of suboptimal clinical outcomes (Tsujimoto, and Inoue, 2016; Wu and Hsieh, 2015). Patients' experience to care is established as the outcome indicator of the effectiveness of health worker (Kruk and Freedman, 2008). Kruk and Freedman added that patients' satisfaction is embraced around the way health workers respond including quality of communication, patient-time spent with medical personnel, easiness in patients' administration as well as whether patients being treated with respect.

Assessment of patients' satisfaction using SERVQUAL instrument of 1216 inpatient and outpatient clients of 23 public hospitals by Hazilah Abdul Manaf indicated that patients are generally satisfied with both factors for the clinical dimension and physical dimension provided in the public hospitals across Malaysia (Hazilah Abdul Manaf, 2009). Following this, further studies have been conducted to explore health workers' responsiveness in providing healthcare services. It has been reported that prolonged waiting in 21 public hospitals in Malaysia suggested that patient's perceived long waiting time contributed by employees' attitude i.e. lack of

motivation, commitment and expertise among employees are induced by ineffective management and supervision level (Pillay et al., 2011). Furthermore, Amin and Nasharuddin (2013) in their research on 216 patients in Malaysia elaborated that patients want a hospital that provides timely services, demonstrates a sincere interest in solving patient's problems and offers a wide range of products and services.

The Ministry of Health received a number of 5,416 complaints in 2013 with the majority (31%) of the complaints were related to unsatisfactory quality of services, followed by failure to comply to existing procedures (9%) and delay in service provision (7%) (Unit Komunikasi Korporat, 2014). Of these numbers, nurses were the second-largest cadre to be the focus of the complaints after medical officers. Patients' satisfaction was also reported low in terms of service orientations particularly in 'interpersonal manners' and communications during consultations with patients (Ganasegeran et al., 2015).

The third dimension of performance is nurses' competence which comprises technical knowledge, skills and behaviors of health workers in performing their tasks (WHO, 2006). In recent years, there has been a trend for nurses in Malaysia to acquire specialized skills to meet the changing demands of community expectations and technological advances (WHO of Western Pacific Region, 2013). Nurses in Malaysia are required to participate in continuing professional education (CPE) to develop their skills and competencies as part of their Code of Professional Conduct (Chong, Francis, Cooper, and Abdullah, 2014; Nursing Board Malaysia, 1998). In 2008, the Malaysian Nursing and Midwifery Board introduced Mandatory Continuing Professional Education (MCPE) whereby all registered nurses (RN) need to participate and provide documentary evidence for a minimum of 25 credit points CPE annually for renewal of the annual practicing certificate (APC) (Nursing Board Malaysia, 2008). However, studies show that there is evidence of non-compliance to this regulation among RN in Malaysia (Ahayalimudin and Osman, 2016; Chong et al., 2014).

Non-compliance of achieving the minimum CPE requirements in Malaysia demonstrated the lack of opportunity for training which may lead to adverse effects

on patients' clinical management (Chong et al., 2016). Prevalence of adverse events such as medical negligence due to incompetence and patient's poor flow and delayed access lead to higher investigation and treatment cost as well as the cost for medical compensation (González-Torrente et al., 2012; Krokmyrdal and Andenæs, 2015; Pijl-Zieber, Barton, Konkin, Awosoga, and Caine, 2014; Rowe, De Savigny, Lanata, and Victora, 2005; Rupatharshini, 2014). MOH Malaysia has witnessed a significant increase of medical compensation amount ranging from RM 23,288.00 in 1998 to a compensation exceeding RM1 million in 2008 (Puteri, 2004; Safurah et al., 2013). These medical compensations have been made as ex-gratia payments (voluntary payments out of kindness) in response to a court order when a negligence is established in a public facility (Hambali and Khodapanahandeh, 2014).

The fourth dimension of performance is nurses' productivity. Based on the literature, the productivity of nurses in Malaysia is affected by numerous factors. These include inadequate medical equipment (Atefi, Abdullah and Wong, 2016; Safurah et al., 2013), inadequate knowledge and skills (Achike and Nain, 2005; Chong et al., 2016), nurses' rosters (Hadwan et al., 2013), organization environment (Choi et al., 2016; Siew, Chitpakdee, and Chontawan, 2011; Ying and Kamarul Zaman, 2009) and nurses' individual attributes (Kaur et al., 2013; Siew et al., 2011). Imbalance weightings between hard constraints and general preferences of staff nurses in determining shift rosters have resulted in burnout and dissatisfaction among nurses in Malaysian public hospitals (Hadwan et al., 2013). This leads to depersonalization effect in which nurses cut back their involvement with other co-workers and display negative attitude and behaviors (Kaur et al., 2013). Being exposed to high physical loads among nurses has been linked to back injuries and resulting in nurses taking procedural shortcuts, abandoning more time-consuming safe practices and escalating the risk of needle-stick and sharp injuries (Barnett et al., 2010). Absenteeism of staff is also reported as an added pressure to nurses resulting in reduced patient-time and failure to deliver holistic care (Atefi et al., 2014).

1.3 Problem Statement

In the era of globalization, public healthcare services in Malaysia are facing challenges of increasing demands for a better quality of services. In relation to this, nurses have been identified as the largest group of health professionals globally as well as in Malaysia. Therefore, managing nurses' performance is vital as they are the major caregivers in providing healthcare services. Pieces of evidence on performance-related issues among nurses in the context of Malaysian public hospitals have brought interest to the researcher to examine and assess the constituents of nurses' performance. Issues such as imbalance distributions, failure to comply to existing procedures; and delay in service provision are reported which signaled the need to understand factors that contributing to these issues.

There are two main concerns of this research problem. First is the conceptualization of nurses' performance construct based on four dimensions: availability, competence, responsiveness and productivity. This conceptualization of nurses' performance is focused specifically on health workers, which was proposed by Dieleman and Harnmeijer and WHO in 2006. To date, only one research performed by Lutwama (2011) has made an attempt in measuring health workers' performance using this four-dimensional concept, but he did not provide the empirical evidence of psychometric properties of these dimensions. The literature also provides evidence that the assessment of nurses' performance based on dimensions of availability, productivity, responsiveness, competence and productivity was conducted in segregated manners. Thus, this research attempts to re-align the psychometric properties of nurses' performance construct and prove the validity of this construct to be aligned with specific dimensions as recommended by the World Health Organization. The nurse performance construct is assessed as dependent variable in this study.

Secondly, the Work Performance Theory by Blumberg and Pringle (1982) suggested that employees' performance relies on two important antecedents specifically situational elements and individual elements. Review of the literature indicates that predictors of nurse job performance within organizational context has

been highlighted in the Ministry of Health key documents and human resource policies. Two main organizational determinants were identified from the works of literature as crucial to nurses' performance which are organizational governance strategies and organizational climate. These determinants will be investigated as independent variables.

The first part of organizational determinant to performance is organizational governance. The importance of investigating the effects of organizational-level governance towards health workers' outcome has been highlighted in previous studies. Barbazza, Langins, Kluge and Tello (2015) highlighted that it is critical to bring better alignment between day-to-day functioning of services delivery and the health systems governance. They added that rigorous effort across core processes of governance is imperative to strategically engage tools and mechanisms that are conducive to strengthening health workforce competencies. Nurses working in public hospitals expect and value a specific style of governance that proactively responds to their desire and that these organizations respond to the best interests of patients, ensure evidence drives decisions and establish a clear agenda for improving services (Clark and Beatty, 2016). Hastings et al. (2014) stressed that different approaches of organizational governance mechanisms such as shared governance and professional development have a positive impact on nurses' attitude, professional behavior and teamwork. Despite this, there limited evidence on the effect of governance strategies in enhancing nurses performance in Malaysian public hospitals.

Through literature review, three main approaches of human resource governance were identified to have an impact in facilitating the changes in nursing workforce outcomes in organizational level namely shared governance; performance management; and professional development. The evidence on the assessment of shared governance strategy in Malaysian public hospitals was limited. To date, only two studies were found to have attempted to assess structural empowerment in SG in Malaysian public hospital settings (Ahmad and Oranye, 2010; Choi et al., 2016). In the same vein, the empirical evidence on the effectiveness of PM practices in improving nurses' performance in Malaysian public hospitals remains insufficient. From the literature, only two studies were found to focus on the administrative

applications of PM. The evidence of dissatisfaction on PM practices was identified by Muhammad and Jamilha (2010) which resulted in anticipations of intention to leave the hospital among nurses. Similarly, Rubel and Kee (2014) validated that perceived fairness in performance appraisal and promotion opportunity affects nurses' availability as they increase their turnover intention. There are also limited assessments being done to measure the impact of professional development practices towards nurses' outcome in Malaysia. Research on CPD practices among nurses in Malaysia which was conducted by Marzuki, Hassan, Wichaikhum, and Nantsupawat (2012) indicated that continuous nursing education (CNE) is highly associated with a higher score in Nursing Foundations for Quality of Care and decreases the rate of patient's fall in wards. Chong (2014) identified that Malaysian nurses' participation in CPD was not convincing despite the implementation of mandatory CPD by the Malaysian Nursing Board.

The second part of organizational predictor to nurses' performance is organizational climate. Literature demonstrated that there is still limited empirical evidence on the effects of OC towards nurses' performance in Malaysia. Azimah Abdullah (2010) validated that the roles of supervisors, leadership styles and management commitment in organizational safety climate have significant effects in increasing healthcare workers' proficiency in preventing injuries at the workplace. Noraini (2012) explained that heavy burdens in public hospitals require nurses to emotionally and mentally engage in their task, resulting in greater professionalization which leads nurses to be distant from those whom they care. Samsuri, Pei Lin and Fahrni (2015) confirmed that decreases in teamwork climate of OC have a direct impact on the increase in medication errors reported among pharmacists in Malaysian public hospitals. The focus of these research was much concentrated on organizational safety climate rather than utilization of the five-dimensional concept of OC in healthcare settings as per suggested by Gershon, Stone, Bakken, and Larson (2004). To the knowledge of the researcher, there has been no research conducted on the role of OC comprising leadership; group behavior; communications; structural attributes to quality work-life; and workload dimensions in predicting nurse performance outcomes.

In focusing on the individual elements mentioned in the Work Performance Theory by Blumberg and Pringle (1982), it has been established that individual behavior has become the focus of interest of previous scholars in relation to the assessment of individual performance. Broad dimensions of behaviors were proposed to describe behavioral aspects of performance (W. Borman and Motowidlo, 1997; John Campbell, 1999; Motowidlo et al., 1997; Viswesvaran, 1993). However, Sonnentag et al., (2008) stressed that the notion of individual performance consists of two important concepts; (i) the action (behavior) aspect of performance; and (ii) the outcome aspect of performance. There are limited studies conducted to assess the outcome aspect of behavior in nursing literature. To date, only two studies were conducted in an attempt to investigate the consequences of these behaviors towards nurses' performance which are conducted by Lutwama (2011) and Seren et al., (2017). Thus, this research intends to fulfil these gaps in the literature.

1.4 Research Objectives

The main purpose of this research is to explore the perceptions of nurses regarding what constitutes nurses' performance in terms of availability, competence, responsiveness and productivity. In doing so, the specific research objectives are as follow:

1. To determine the constituent of performance among nurses based on availability, competence, responsiveness and productivity.
2. To assess the level of nurses' performance based on availability, competence, responsiveness and productivity in different levels of care.

The research also intended to investigate the effects of organizational level determinants and individual-level determinants to nurse job performance in the context of Malaysian public hospitals. Thus, the specific research objectives are as follow:

3. To assess the influence of organizational governance strategies towards the performance of nurses in public hospitals.
4. To assess the influence of organizational climate strategies towards the performance of nurses in public hospitals.
5. To assess the influence of individual behavior strategies towards the performance of nurses in public hospitals.
6. To develop a framework in managing priority determinants affecting nurses' performance in public hospitals.

1.5 Research Questions

Thus, the objective to explore the constituent of nurses' performance is set out to address the first issue highlighted in this research. Accordingly, two research questions were identified;

1. Does availability, competence, responsiveness and productivity constitute the measurement of nurses' performance?
2. What is the level of performance among nurses based on availability, competence, responsiveness and productivity at different levels of care of hospital services?
    2.1 Is there a significant different on the level of availability, competence, responsiveness and productivity between level of care?

As noted, this research also intended to reveal the effects of organizational governance strategies, organizational climate and individual behavior towards nurses' performance. Thus, it is necessary to find answers to the following questions:

3. What are the effects of organizational governance strategies towards the performance among nurses in public hospitals?
    3.1 Is there any significant effect of shared governance strategy towards performance of nurses in public hospitals?

3.2 Is there any significant effect of performance management strategy towards performance of nurses in public hospitals?

3.3 Is there any significant effect of professional development strategy towards performance of nurses in public hospitals?

4. Is there any significant effect of organizational climate towards performance of nurses in public hospitals?

5. Is there any significant effect of individual behavior towards performance of nurses in public hospitals?

6. Can a framework be established consisting of strategies, action plans and policy recommendations in managing priority determinants affecting nurses' performance in public hospitals?

1.6 Hypotheses of the Research

Research hypothesis is defined as a conjectural statement that presents the expected relationship between two or more variables (Creswell, 2014). However, inductive studies that are identified as exploratory such as exploratory factor analysis (EFA) do not necessarily have a hypothesis (Newsom 2005, Abareshi and Hossini 2012). Accordingly, there was no hypothesis for Research Question 1 and Research Question 2. However, the research question from the second part of the research examined the relationship between organizational governance strategies, organizational climate and individual behavior. Hence, the following hypotheses were proposed.

H_1 : Governance strategies have positive effects on the performance of nurses.

H_{1a} : Shared governance strategy has positive effects on the performance of nurses.

H_{1b} : Performance management strategy has positive effects on the performance of nurses.

H_{1c} : Professional development strategy has positive effects on the level of nurses' performance.

H_2 : Organizational climate has positive effects on the performance of nurses.

H_3 : Individual behavior has positive effects on the performance of nurses.

Table 1.1: Summary of research problem, research objectives, research questions and hypotheses

Research Problem	**Research Objectives**	**Research Questions**	**Hypotheses**
1. Lack of empirical evidence on the conceptualization of nurses' performance construct based on four dimensions: availability, competence, responsiveness and productivity	1. To determine the constituent of performance among nurses based on availability, competence, responsiveness and productivity.	1. Does availability, competence, responsiveness and productivity constitute the measurement of nurses' performance?	-
	2. To assess the level of nurses' performance based on availability, competence, responsiveness and productivity in different levels of care.	2. What is the level of performance among nurses based on availability, competence, responsiveness and productivity at different levels of care of hospital services?	-
		2.1 Is there a significant different on the level of availability, competence, responsiveness and productivity between level of care?	-
2. There is limited evidence on the effect of governance strategies in enhancing nurses performance in Malaysian public hospitals.	3. To assess the influence of organizational governance strategies towards the performance of nurses in public hospitals.	3. What are the effects of organizational governance strategies towards the performance among nurses in public hospitals?	GS↑NP↑
		3.1 Is there any significant effect of shared governance strategy towards performance of nurses in public hospitals?	SG↑NP↑
		3.2 Is there any significant effect of performance management strategy towards performance of nurses in public hospitals?	PM↑NP↑
		3.2 Is there any significant effect of professional development strategy towards performance of nurses in public hospitals?	PD↑NP↑

Table 1.1: Summary of research problem, research objectives, research questions and hypotheses (cont.)

Research Problem	**Research Objectives**	**Research Questions**	**Hypotheses**
3. Literature demonstrated that there is still limited empirical evidence on the effects of OC towards nurses' performance in Malaysia	4. To assess the influence of organizational climate strategies towards the performance of nurses in public hospitals.	4. Is there any significant effect of organizational climate towards performance of nurses in public hospitals?	OC↑NP↑
4. Limited studies conducted to assess the outcome aspect of behavior in nursing literature	5. To assess the influence of individual behavior strategies towards the performance of nurses in public hospitals.	5. Is there any significant effect of individual behavior towards performance of nurses in public hospitals?	IB↑NP↑
	6. To develop a framework in managing priority determinants affecting nurses' performance in public hospitals.	6. Can a framework be establish consisting of strategies, action plans and policy recommendations in managing priority determinants affecting nurses' performance in public hospitals?	-

1.7 Significance of Research

The present research hopes to provide significant theoretical and practical contributions in the area of nurses' job performance. Specifically, the contributions are;

1.7.1 Theoretical Contributions

Firstly, the research examined the knowledge of the construct of nurse job performance. The findings of the research are expected to validate the four-dimensional concept of performance namely availability, responsiveness, competence and productivity as posited in Dieleman and Harnmeijer's Framework for Health Worker's Performance (2006). Literature provides evidence that the assessments of nurses' performance based on these dimensions were conducted in segregated manners. Previous researches mainly investigated the dimension of performance separately, whereby this research has taken four dimensions or performances altogether to formulate a firmed combination of the nurses' performance. This is a preliminary attempt to evaluate these constituents in collective manners.

Secondly, this research helps to gather evidence to support the body of knowledge by applying the Work Performance Theory by Blumberg and Pringle (1982) who characterized two important antecedents of work performance specifically situational and individual elements to nurses' performance. Two main organizational determinants were identified from the literature as crucial to nurses' performance which are organizational governance strategies (shared governance; performance management and professional development) and organizational climate. Thus, the findings of this research will provide empirical evidence on how these situational elements influence the level of nurses' performance particularly in the context of Malaysian public hospitals.

The research also validated the proposition by Sonnentag et al. (2008) that the concept of individual performance can be segregated into two aspects; (i) the action (behavior) aspect of performance; and (ii) the outcome aspect of performance. By examining the relationship between individual behaviors and nurses' performance, this research is expected to support the individual determinants to performance as posited in the Work Performance Theory.

Finally, this research is expected to have academic implications which expand the body of knowledge through empirical evidence on the measurement of variables involved. In relation to the measurement of investigated constructs, the present research has developed a translated version of NPS in Bahasa Malaysia, which offers its potential to be utilized for research in the context of Malaysia. Moreover, this research also provides empirical evidence of content validation of instruments. Two-stage judgment process (lay expert judgment and research expert judgment) was employed to provide clear utilization of content validity indices at item-level and scale-level validity index. Utilization of multiple content validity and inter-rater reliability indices in this research provides multifaceted criteria for the item reduction process. This research also utilized rigorous exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to provide evidence on the validity and reliability of the investigated constructs.

1.7.2 Practical Contributions

The findings provide several practical implications for the Ministry of Health (MoH) and public hospital administrators. First, the results of this research will provide evidence on the engagement of nurses to all four dimensions of performance namely availability, responsiveness, competence and productivity. The utilization of Nurse Performance Scale established in this research will provide an objective understanding of one's nursing performance level. In addition, nurses can understand the area that needs improvement based on NP scores. It can be used as practical information for the organization, HR and nursing managers in identifying plans for

the integration of knowledge, attitudes and skills which are also decisive in ensuring nursing performance in a hospital.

Secondly, the findings of this will clarify the effects of situational context and individual context towards the level of nurses' performance. The research will explore the relationship between organizational governance strategies (shared governance, performance management and professional development) and nurses' performance. The findings of this research will be explained on how the current practices of shared governance, performance management and professional development influence in the enhancement of nurses' performance. Thus, the research will provide evidence of the current practices and facilitate in proposed future directions of these strategies.

Furthermore, this research also provides evidence on the relationship between organizational climate and nurses' performance. The findings of this research will help in understanding the dynamic relations of organizational climate and identifying areas of improvement for organizational climate in the context of Malaysian public hospitals. The findings of this research are also expected to explain how individual behavior could influence the level of nurses' performance. The results would suggest to public hospital administrators on how to identify and cultivate these behaviors through continuous training and awareness in promoting overall quality care.

1.8 Scope of the Research

As mentioned in Section 1.4, the purpose of this research is to determine the constituent of nurses' performance and to assess how nurses perceive the influence of governance strategies, organizational environment and individual behavior towards their performance in public hospitals. The researcher is motivated to conduct this research to provides better understanding on the perspective of governance because of researcher's personal experience as hospital administrator. During her posting, researcher has faced various challenges in managing healthcare workforce specifically constraint of nursing personnel, the need to improve patient's waiting

time and managing their competencies to be in line with the current needs. Additionally, the researcher was awarded scholarship of Hadiah Latihan Persekutuan by Public Service Department with the recommendation of Ministry of Health to conduct a study that is related to the direction and interest of MOH. The positivist approach is applied in this research in conducting a test for investigating the relationship between variables. Therefore, the quantitative method will be applied to achieve the objectives of this research.

This research is confined to all public hospitals in the state of Terengganu, which include Tertiary Hospital (Hospital Sultanah Nur Zahirah), Major Specialist Hospital (Hospital Kemaman) and District Hospitals (Hospital Dungun, Hospital Setiu, Hospital Besut and Hospital Hulu Terengganu). The researcher proposed three (3) criteria to be included as the basis of selection for the scope of the research;

i. Representativeness in Level of Care: These hospitals represent different Levels of Care of the acute curative hospitals provided in Malaysian public hospitals namely Tertiary Care, Secondary Care and District level. This is to facilitate the researcher in the assessment of different settings of public hospitals based on the complexity of health services they provide.

ii. Utilization and dependency rate of public hospital: The utilization rate for public hospitals in Terengganu based on their Bed Occupancy Rate (BOR%) is between 37.43% to 100.18% (Health Informatic Centre, Planning Division, MOH 2013). However, it is indicated that the state of Terengganu scores **97.6%** of public-hospital-dependency rate in which most of the acute curative care services were solely provided by the public hospitals (MOH, 2015).

iii. Nurses work position: The research covers the nurses that work in public hospitals with the job position of U19 to U42. The grades for the job position for registered nurses under MOH are U19, U24, U29, U32, U36, U38, U41, U42, U44, U48, U52 and U54. Nurses with the

job position Grade U44 and above were not included in this research as these are positions for the managerial level at state and ministry level.

1.9 Conceptual and Operational Definitions

This section elaborates both conceptual and operational definitions of all the terms used in this research.

1.9.1 Nurses' Performance

Boxall (2003) described performance as 'a function of employee ability, motivation and opportunity to participate or contribute'. In this research, nurses' perceived performance refers to perceptions of the level of availability, competence, productivity, and responsiveness. Nurse availability refers to the degree of nurses' perception that they have sufficient supply of nurses, with optimal attendance to perform job activity and availability of patient-time. Nurse competence refers to the degree of nurses' perception of the possession of required skill, knowledge, qualification or capacity in performing their job. Nurse responsiveness refers to the degree of nurses' willingness to provide services in accordance with patients' needs and expectations. Finally, nurse productivity refers to the degree of nurse perceptions on the level of efficiency, effectiveness and presenteeism when performing their tasks.

1.9.2 Governance Strategies

Governance is referred to 'the placement of responsibility in a body that has the ability to act, to remove, reward or replace management based on performance' (Gross, 2013). Another researcher demarcated that governance 'encompasses the whole range of structures and processes through which policies (formal and informal) are enacted to achieve goals, including legislation, regulation and

oversight, accountability structures, incentives, and policies to set and maintain strategic direction' (Hastings, Armitage, Mallinson, Jackson, and Suter, 2014). In this research, three (3) main approaches to governance strategies were evaluated. The operational definitions of governance strategies are as follow;

i. Shared governance: An organizational approach that permits empowerment on nurses with a certain degree of autonomy control over nursing practices, nursing development and decision making.

ii. Performance Management: Organizational activity of measuring, monitoring and developing nurses' individual performance using performance standards, performance review and continuous improvement approach based on the review outcome.

iii. Professional Development: Organizational approach of planning for continuous professional development to nurses based on their job requirements for knowledge and insight to support for nurses' career improvement.

1.9.3 Organizational Climate

Organizational climate refers to 'the perceived quality of an organization's internal environment and is a more superficial concept than organizational culture which describes the current state of an organization' (Gershon et al., 2004). Hanges, Aiken and Chen (2006) added that these shared perceptions of the important imperatives in their organizational climate convey everyone's understanding on their goals, behavior, roles as well as the way they communicate. In this research, organizational climate will be assessed based on five (5) dimensions namely leadership, group behavior, structural attributes to the quality of work-life, communications and workload.

1.9.4 Individual Behavior

Individual behavior to performance refers to ‘a set of interpersonal and volitional behaviors that support the social and motivational context in which organizational work is accomplished’ (Borman and Motowidlo, 1997). In this research, two (2) types of individual behaviors will be assessed namely task performance behavior and contextual performance behavior.

i. Task performance behavior refers to behaviors that contribute directly to the technical core and include those activities that are typically recognized as part of nurses’ task.

ii. Contextual performance behavior refers to behavior that supports social work environment including organizational support, job-task support and interpersonal support.

1.10 Conclusion

This first chapter of this thesis has provided an insight elaboration on the forward of the research that has been carried out. Basically, this research focused on the constituent of nurses’ performance from the aspects of availability, competence, responsiveness and productivity. The research also aimed to assess the perception of nurses on the influence of governance strategies, organizational climate and individual behavior on their performance in Malaysian public hospitals, particularly in Terengganu. Nine (9) sections cover elaboration on the overview; background of the research; the problem statement; research objectives; research questions; hypotheses; the significance of the research; research scope; and conceptual and operational definitions of the research. This study has carried out an extensive literature review and will be elaborated in Chapter 2 of this thesis.

REFERENCES

Abareshi, A., & Hosseini, Y. (2012). *Structural equation modeling*. Tehran: Sociologists.

Manaf, N. H. A., Abdullah, A. H. A., Bakar, A. A., Ali, R., Bidin, N., & Ismail, W. I. (2011). Hospital waiting time: The forgotten premise of healthcare service delivery? *International Journal of Health Care Quality Assurance*, *24*(7), 506–522. doi: 10.1108/09526861111160553

Abdullah, Z. S. (2013). *Hospital information systems implementation framework: Critical success factors for Malaysian public hospitals*. (Doctoral dissertation, Curtin University, Perth, Australia). Retrieved from http://espace.library.curtin.edu.au/R?func=dbin-jump-full&local_base=gen01-era02&object_id=192723

Abimbola, S., Negin, J., Jan, S., & Martiniuk, A. (2014). Towards people-centred health systems: A multi-level framework for analysing primary health care governance in low-and middle-income countries. *Health Policy and Planning*, *29*, ii29–ii39. doi: 10.1093/heapol/czu069

Accreditation Council for Continuing Medical Education (ACCME) and American Medical Association (AMA). (2017). *Glossary of Terms and Definitions*. Retrieved from https://www.accme.org/sites/default/files/2018-04/011_20170421_Glossary_of_Terms.pdf

Achike, F. I., & Nain, N. (2005). Promoting problem-based learning (PBL) in nursing education: A Malaysian experience. *Nurse Education in Practice*, *5*(5), 302–311. doi: 10.1016/j.nepr.2005.04.002

Aguinis, H. (2005). *Performance management*. Upper Saddle River, NJ: Pearson Prentice Hall. doi: 10.1002/9780470172339.ch38

Ahayalimudin, N. A., & Osman, N. N. S. (2016). Disaster management: Emergency nursing and medical personnel's knowledge, attitude and practices of the East Coast region hospitals of Malaysia. *Australasian Emergency Nursing Journal*, *19*(4), 203–209. doi: 10.1016/j.aenj.2016.08.001

Ahmad, N., & Oranye, N. 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. doi: 10.1111/j.1365-2834.2010.01093.x

Aiken, L. H., & Patrician, P. A. (2000). Measuring organizational traits of hospitals: The revised nursing work index. *Nursing Research*. doi: 10.1097/00006199-200005000-00006

Aiken, L. H., Sloane, D. M., Clarke, S., Poghosyan, L., Cho, E., You, L., & Aungsuroch, Y. (2011). Importance of work environments on hospital outcomes in nine countries. *International Journal for Quality in Health Care*, *23*(4), 357–364. doi: 10.1093/intqhc/mzr022

Akamine, I., Uza, M., Shinjo, M., & Nakamori, E. (2013). Development of competence scale for senior clinical nurses. *Japan Journal of Nursing Science*, *10*(1), 55–67. doi: 10.1111/j.1742-7924.2012.00210.x

Akin, S., & Durna, Z. (2013). A comparative descriptive study examining the perceptions of cancer patients, family caregivers, and nurses on patient symptom severity in Turkey. *European Journal of Oncology Nursing*, *17*(1), 30–37. doi: 10.1016/j.ejon.2012.02.002

Al-Dubai, S. A. R., Ganasegeran, K., Perianayagam, W., & Rampal, K. G. (2013). Emotional burnout, perceived sources of job stress, professional fulfillment, and engagement among medical residents in Malaysia. *The Scientific World Journal*, 2013.doi: 10.1155/2013/137620

Al-Homayan, A. M., Shamsudin, F. M., Subramaniam, C., & Islam, R. (2013). Impacts of job performance level on nurses in public sector hospitals. *American Journal of Applied Sciences*, *10*(9), 1115–1123. doi: 10.3844/ajassp.2013.1115.1123

Ali Memon, M., Ting, H., Ramayah, T., Chuah, F., & Cheah, J.-H. (2017). Editorial : A review of the methodological misconceptions and guidelines related to the application of structural equation modelling. *Journal of Applied Structural Equation Modeling*, *1*(1).

Ali, N., Tretiakov, A., & Whiddett, D. (2014). A content validity study for a knowledge management systems success model in healthcare. *Jitta*, *15*(2), 21–36.

Allen-Gilliam, J., Kring, D., Graham, R., Swain, S., Faircloth, G., & Jenkinson, B. (2016). The impact of shared governance over time in a small community hospital. *The Journal of Nursing Administration*, *46*(5), 257–264. doi: 10.1097/NNA.0000000000000340

Al-Makhaita, H. M., Sabra, A. A., & Hafez, A. S. (2014). Job performance among nurses working in two different health care levels, Eastern Saudi Arabia: A comparative study. *International Journal of Medical Science and Public Health*, *3*(7), 832–837.

Almalki, M. J., FitzGerald, G., Clark, M., Hayes, L., O'Brien-Pallas, L., Duffield, C., & Taunton, R. (2012). The relationship between quality of work life and turnover intention of primary health care nurses in Saudi Arabia. *BMC Health Services Research*, *12*(1), 314. doi: 10.1186/1472-6963-12-314

Almalki, M., Fitzgerald, G., & Clark, M. (2012). Quality of work life among primary health care nurses in the Jazan region, Saudi Arabia: A cross-sectional study. *Human Resources for Health*, *10*(10), 30. doi: 10.1186/1478-4491-10-30

American Nurses Credentialing Center. (2015). *2015 ANCC Primary Accreditation Application Manual for Providers and Approvers*. Silver Spring, United States: American Nurses Credentialing Center.

Amin, M., & Nasharuddin, S. Z. (2013). Hospital service quality and its effects on patient satisfaction and behavioral intention. *Clinical Governance*, *18*(3), 238–254. doi: 10.1108/CGIJ-05-2012-0016

Anuar, A., Saad, R., & Yusoff, R. Z. (2018). Operational performance and lean healthcare in the healthcare sector: Review on the dimensions and relationships. *International Journal of Academic Research in Business and Social Sciences*, *8*(4), 276–292. doi: 10.6007/IJARBSS/v8-i4/4014

Aqtash, S., Robb, W. F., Hunter, L. H., Almuhtasib, M., Hamad, A., & Brownie, S. M. (2017). Self-assessed competence of experienced expatriate nurses in a rural and remote setting. *SAGE Open Nursing*, *3*, 237796081770238. doi:10.1177/2377960817702382

Arlene, F. (2014). *Conducting research literature reviews from the internet to paper* (4th ed.). California: SAGE Publications, Inc.

Armstrong, M. (2006). *Human Resource Management Practice* (10th ed.). London: Kogan Page Limited.

Armstrong, M. (2009). *Armstrong's handbook of human-resource management practice. Human Resource Management International Digest* (11th ed.). London: Kogan Page Limited. doi: 10.1108/hrmid.2010.04418dae.001

Ashar, M., Ghafoor, M., Munir, E., & Hafeez, S. (2013). The impact of perceptions of training on employee commitment and turnover intention: Evidence from Pakistan. *International Journal of Human Resource Studies*, *3*(1), 74–88. doi:10.5296/ijhrs.v3i1.2924

Atefi, N., Abdullah, K. L., & Wong, L. P. (2014). Job satisfaction of Malaysian registered nurses: A qualitative study. *Nursing in Critical Care*, *21*(1), 8–17. doi:10.1111/nicc.12100

Atefi, N., Abdullah, K. L., & Wong, L. P. (2016). Job satisfaction of Malaysian registered nurses: A qualitative study. *Nursing in Critical Care*, *21*(1), 8–17. doi:10.1111/nicc.12100

Attree, M. (2005). Nursing agency and governance: Registered nurses' perceptions. *Journal of Nursing Management*, *13*(5), 387–396. doi:10.1111/j.1365-2834.2005.00553.x

Atun, R., Berman, P., Hsiao, W., Myers, E., & Yap, W. A. (2016). *Contextual analysis of the Malaysian health system* (Vol. I).

Ausserhofer, D., Schubert, M., Engberg, S., Blegen, M., S, D. G., & Schwendimann, R. (2012). Nurse-reported patient safety climate in Swiss hospitals. *Swiss Medical Weekly*, (January), 1–9. doi: smw.2012.13501

Awases, M. H., Bezuidenhout, M. C., & Roos, J. H. (2013). Factors affecting the performance of professional nurses in Namibia. *Curationis*, *36*(1), 1–8. doi: 10.4102/curationis.v36i1.108

Azimah Abdullah (2010). *Occupational health and safety management perceptions in Malaysian public hospitals: Implications for the implementation of standardized management systems* (Doctoral dissertation, Curtin University, Perth, Australia). Retrieved from http://espace.library.curtin.edu.au/R?func=dbin-jump-full&local_base=gen01-era02&object_id=149320

Azmi, A.G., Ahmad, A., & Zainuddin, Y. (2009). The effects of competency-based career development and performance management practices on service quality: Some evidence from Malaysian public organizations. *International Review of Business Research Papers*, *5*(1), 97–112.

Bahari, S. F., & Clarke, S. (2013). Cross-validation of an employee safety climate model in Malaysia. *Journal of Safety Research*, 45, 1–6. doi: 10.1016/j.jsr.2012.12.003

Baldacchino, D. R. (2011). Teaching on spiritual care: The perceived impact on qualified nurses. *Nurse Education in Practice*, *11*(1), 47–53. doi: 10.1016/j.nepr.2010.06.008

Barbazza, E., Langins, M., Kluge, H., & Tello, J. (2015). Health workforce governance: Processes, tools and actors towards a competent workforce for integrated health services delivery. *Health Policy*, *119*(12), 1645–1654. doi: 10.1016/j.healthpol.2015.09.009

Barden, A. M., Griffin, M. T. Q., Donahue, M., & Fitzpatrick, J. J. (2011). Shared governance and empowerment in registered nurses working in a hospital setting. Nursing Administration Quarterly, *35*(3), 212–218. doi: 10.1097/NAQ.0b013e3181ff3845

Barnett, T., Namasivayam, P., & Narudin, D. (2010). A critical review of nursing shortage in Malaysia. *International Nursing Review*, *57*, 32–39. doi: 10.1111/j.1466-7657.2009.00784.x

Beavers, A. S., Lounsbury, J. W., Richards, J. K., & Huck, S. W. (2013). Practical considerations for using exploratory factor analysis in educational research. *Practical Assessment, Research, and Evaluation*, *18*(1), 6.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological bulletin*, *107*(2), 238.

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological bulletin*, *88*(3), 588.

Billett, S. (2004). Workplace participatory practices. *Journal of workplace learning*.

Bindon, S. L. (2017). Professional development strategies to enhance nurses' knowledge and maintain safe practice. *AORN Journal*, *106*(2), 99–110. doi: 10.1016/j.aorn.2017.06.002

Blazun, H., Kokol, P., & Vosner, J. (2015). Survey on specific nursing competences: Students' perceptions. *Nurse Education in Practice*, *15*(5), 359–365. doi: 10.1016/j.nepr.2015.02.002

Blegen, M. A., Goode, C. J., Johnson, M., Maas, M. L., McCloskey, J. C., & Moorhead, S. A. (1992). Recognizing staff nurse job performance and achievements. *Research in Nursing & Health*, *15*(1), 57–66. doi: 10.1002/nur.4770150109

Blumberg, M., & Pringle, C. D. (1982). The missing opportunity in organizational research: Some implications for a theory of work performance. *Academy of Management Review*, *7*(4), 560–569. doi: 10.5465/AMR.1982.4285240

Bodolica, V., Spraggon, M., & Tofan, G. (2016). A structuration framework for bridging the macro–micro divide in health-care governance. *Health Expectations, 19*(4), 790–804. doi: 10.1111/hex.12375

Bollen, K. A. (1989). *Structural equations with latent variables.* New York: John Wiley & Sons

Bonell, C. (1999). Evidence-based nursing: A stereotyped view of quantitative and experimental research could work against professional autonomy and authority. *Journal of Advanced Nursing*, *30*(1), 18–23. doi: 10.1046/j.1365-2648.1999.01044.x

Musah, M. B., Ali. H. M., Hussain, S., Tahir, L., Daud, K., Hamdan, S., & Naail, K. (2016). Organizational climate as a predictor of workforce performance in the Malaysian higher education institutions. *Quality Assurance in Education*, *24*(3), 416–438.

Borman, C. W., Penner, A. L., Allen, T. D., & Motowidlo, S. J. (2001). Personality predictors of citizenship performance. *International Journal of Selection and Assessment*, *9*(1/2), 52–69. doi: 10.1111/1468-2389.00163

Borman, W., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, *10*(2), 99–109. doi: 10.1207/s15327043hup1002_3

Bostrom, A. M., Rudman, A., Ehrenberg, A., Gustavsson, J. P., & Wallin, L. (2013). Factors associated with evidence-based practice among registered nurses in Sweden: A national cross-sectional study. *BMC Health Serv Res*, *13*, 165. doi: 10.1186/1472-6963-13-165

Brekelmans, G., Maassen, S., Poell, R. F., & van Wijk, K. (2015). The development and empirical validation of the Q-PDN: A questionnaire measuring continuing professional development of nurses. *Nurse Education Today, 35*(1), 232–238. doi: 10.1016/j.nedt.2014.09.007

Brekelmans, G., Maassen, S., Poell, R. F., Weststrate, J., & Geurdes, E. (2016). Factors influencing nurse participation in continuing professional development

activities: Survey results from the Netherlands. *Nurse Education Today*, *40*, 13–19. doi: 10.1016/j.nedt.2016.01.028

Bressan, V., Tolotti, A., Barisone, M., Bagnasco, A., Sasso, L., Aleo, G., & Timmins, F. (2016). Perceived barriers to the professional development of modern nursing in Italy: A discussion paper. *Nurse Education in Practice*, *17*, 52–57. doi: 10.1016/j.nepr.2016.02.007

Brinkerhoff, D W., & Bossert, T. J. (2008). *Health governance: Concepts, experience, and programming options*. United States: Abt Associates.

Brooten, D., Youngblut, J. M., & Youngblut, J. M. (2006). Nurse dose as a concept. (patient nurses). *Journal of Nursing Scholarship*, *38*(1), 94.

Brown, M., Hyatt, D., & Benson, J. (2010). Consequences of the performance appraisal experience. *Personnel Review*, *39*(3), 375–396. doi: 10.1108/00483481011030557

Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research*, *21*(2), 230-258.

Campbell, J. P. (1999). *Behavior, performance and effectiveness in the twenty-first century*, in Kozlowski (ed.) *The Oxford handbook or organizational psichology*. Oxford Press: pp. 429. doi: 10.1093/oxfordhb/9780199928309.013.0006

Campbell, J. P., Dunnette, M. D., Arvey, R. D., & Hellervik, L. V. (1973). The development and evaluation of behaviorally based rating scales. *Journal of Applied Psychology*, *57*(1), 15–22. doi: 10.1037/h0034185

Campbell, James, Dussault, G., Buchan, J., Pozo-Martin, F., Guerra Arias, M., Leone, C., & Cometto, G. A. (2013). A universal truth: No health without a workforce. *Forum Report on Third Global Forum on Human Resources for Health Global Health Workforce Alliance and World Health Organization*. doi: ISBN 978 92 4 150676 2

Caricati, L., La Sala, R., Marletta, G., Pelosi, G., Ampollini, M., Fabbri, A., & Mancini, T. (2014). Work climate, work values and professional commitment as predictors of job satisfaction in nurses. *Journal of Nursing Management*, *22*(8), 984–994. doi: 10.1111/jonm.12079

Carr, L. T. (1994). The strengths and weaknesses of quantitative and qualitative research: what method for nursing? *Journal of Advanced Nursing*, *20*(4), 716–721.

Casry, D., & Egan, D. (2010). The use of professional portfolios and profiles for career enhancement. *British Journal of Community Nursing*, *15*(11), 547–552.

Cha, E. S., Kim, K. H., & Erlen, J. A. (2007). Translation of scales in cross-cultural research: Issues and techniques. *Journal of Advanced Nursing*, *58*(4), 386–395. doi: 10.1111/j.1365-2648.2007.04242.x

Chan, E. A., Jones, A., Fung, S., & Wu, S. C. (2012). Nurses' perception of time availability in patient communication in Hong Kong. *Journal of Clinical Nursing*, *21*(7–8), 1168–1177. doi: 10.1111/j.1365-2702.2011.03841.x

Chan, J. (2014). *Modelling The gynecologic oncology workforce using system dynamics* (Master's thesis, University of Toronto, Ontario, Canada).

Chandler, G. (1986). *The relationship of nursing work environment to empowerment and powerlessness.* (Master's thesis, University of Utah, Sale Lake City, United States)

Chanturidze, T., & Obermann, K. (2016). Governance in health – The need for exchange and evidence comment on 'governance, government, and the search for new provider models.' *International Journal of Health Policy and Management*, 5(8), 507–510. doi: 10.15171/ijhpm.2016.60

Charland, B. J. (2015). *Organizational context, shared governance structure, and outcomes in veterans' affairs hospitals*. (Open Access Dissertation. University of Rhodes Island, Kingston, United States). Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=psyc13a&NEWS=N&AN=2016-16232-115

Chau, J. P., Lo, S. H., Choi, K. C., Chan, E. L., McHugh, M. D., Tong, D. W., & Lee, D. T. (2015). A longitudinal examination of the association between nurse staffing levels, the practice environment and nurse-sensitive patient outcomes in hospitals. *BMC Health Services Research, 15,* 538. doi: 10.1186/s12913-015-1198-0

Choi, S. L., Goh, C. F., Adam, M. B. H., & Tan, O. K. (2016). Transformational leadership, empowerment, and job satisfaction: the mediating role of employee empowerment. *Human Resources for Health*, *14*(1), 73. doi: 10.1186/s12960-016-0171-2

Chong, M. C. (2013). *Understanding the continuing professional education needs among e-learning*. (Doctoral dissertation, Monash University, Victoria, Australia).

Chong, M. C., Francis, K., Cooper, S., & Abdullah, K. L. (2014). Current continuing professional education practice among Malaysian nurses. *Nursing Research and Practice, 2014*, 126748. doi: 10.1155/2014/126748

Chong, M. C., Francis, K., Cooper, S., Abdullah, K. L., Hmwe, N. T. T., & Sohod, S. (2016). Access to, interest in and attitude toward e-learning for continuous education among Malaysian nurses. *Nurse Education Today*, *36*, 370–374. doi: 10.1016/j.nedt.2015.09.011

Ciconelli, R. M., de Soárez, P. C., Kowalski, C. C. G., & Ferraz, M. B. (2006). The Brazilian Portuguese version of the work productivity and activity impairment - general health (WPAI-GH) questionnaire. *Sao Paulo Medical Journal*, *124*(6), 325–332. doi: 10.1590/S1516-31802006000600005

Cimiotti, J. P., Aiken, L. H., Sloane, D. M., & Wu, E. S. (2012). Nurse staffing, burnout, and health care-associated infection. *American Journal of Infection Control*, *40*(6), 486–490. doi: 10.1038/jid.2014.371

Clark, K., & Beatty, S. (2016). Making hospital governance healthier for nurses. *Asia Pacific Journal of Health Management*, *11*(2), 27–32.

Clark, O. L., Zickar, M. J., & Jex, S. M. (2014). Role definition as a moderator of the relationship between safety climate and organizational citizenship behavior among hospital nurses. *Journal of Business and Psychology*, *29*(1), 101–110. doi: 10.1007/s10869-013-9302-0

Clavelle, J. T., O'Grady, T. P., & Drenkard, K. (2013). Structural empowerment and the nursing practice environment in magnet® organizations. *Journal of Nursing Administration*, *43*(11), 566–573. doi: 10.1097/01.NNA.0000434512.81997.3f

Clavelle, J. T., Porter O'grady, T., Weston, M. J., & Verran, J. A. (2016). Evolution of structural empowerment: Moving from shared to professional governance. *Journal of Nursing Administration*, *46*(6), 308–312. doi: 10.1097/NNA.0000000000000350

Coakes, S. J., Steed, L. G., Coakes, S. J., & Steed, L. G. (2003). *Multiple response and multiple dichotomy analysis*. SPSS: analysis without anguish: Version 11.0 for Windows, 215–224.

Coetzee, S. K., Klopper, H. C., Ellis, S. M., & Aiken, L. H. (2013). A tale of two systems—nurses practice environment, wellbeing, perceived quality of care and patient safety in private and public hospitals in South Africa: A questionnaire survey. *International Journal of Nursing Studies*, *50*(2), 162–173. doi: 10.1016/j.ijnurstu.2012.11.002

Cohen, C. S. (2015). *Leveraging the power of shared governance*. (Doctoral dissertation, Walden University, Minnesota, United States).

Cohen, J. (2013). *Statistical power analysis for the behavioral sciences* (2nd ed.). New York: Lawrence Erlbaum Associates.

Collis, J., & Hussey, R. (2009). *Business research a practical guide for undergraduate and postgraduate students* (3rd, ed.). Palgrave Macmillan.

Comrey, A. L. (1985). A method for removing outliers to improve factor analytic results. *Multivariate Behavioral Research*, *20*(3), 273–281.

Cook, T. J., Vansant, J., Stewart, L., & Adrian, J. (1995). Performance measurement: Lessons learned for development management, *World Development, 23*(8), 1303–1315.

Comer, M. (2013). Deconstructing reflective practice as a model of professional knowledge in nursing education. (Doctoral dissertation, University of London).

Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, and Evaluation*, *10*(1), 7.

Coventry, T. H., Maslin-Prothero, S. E., & Smith, G. (2015). Organizational impact of nurse supply and workload on nurses continuing professional development opportunities: An integrative review. *Journal of Advanced Nursing*, *71*(12), 2715–2727. doi: 10.1111/jan.12724

Creswell, J. W. (2003). *Research design: Qualitative. quantitative, and mixed methods*. United States: SAGE Publication

Creswell, J. W. (2014). Research Design: Qualitative, quantitative, and mixed methods approaches. *Research Design Qualitative Quantitative and Mixed Methods Approaches*, *16*, 189. doi: 10.1016/j.math.2010.09.003

Creswell, J., & Clark, V. (2011). *Designing and conducting mixed-methods research. The SAGE handbook of qualitative research* (2nd ed.). Thousand Oak, Carlifornia: SAGE Publications, Inc.

Poz, M. D., Dreesch, N., Fletcher, S., Gedik, G., Gupta, N., Hornby, P., & Schofield, D. (2010). Models and tools for health workforce planning and projections. *Human Resources for Health Observer*. World Health Organization

Decramer, A., Audenaert, M., Van Waeyenberg, T., Claeys, T., Claes, C., Vandevelde, S., & Crucke, S. (2015). Does performance management affect nurses' well-being? *Evaluation and Program Planning*, *49*, 98–105. doi: 10.1016/j.evalprogplan.2014.12.018 LK

Dehring, T., Von Treuer, K., & Redley, B. (2018). The impact of shift work and organizational climate on nurse health: A cross-sectional study. *BMC Health Services Research*, *18*(1), 586.

DeMaria, L. M., Campero, L., Vidler, M., & Walker, D. (2012). Non-physician providers of obstetric care in Mexico: Perspectives of physicians, obstetric nurses and professional midwives. *Human Resources for Health*, *10*(1), 6. doi: 10.1186/1478-4491-10-6

Demerouti, E., Xanthopoulou, D., Tsaousis, I., & Bakker, A. B. (2014). Disentangling task and contextual performance: A multitrait-multimethod approach. *Journal of Personnel Psychology*, *13*(2), 59–69. doi: 10.1027/1866-5888/a000104

DeNisi, A., & Robert, P. (2006). Performance appraisal, performance management and improving individual performance: A motivational framework. *Management and Organization Review*, *2*(2), 253–277. doi: 10.1111/j.1740-8784.2006.00042.x

DeNisi, A., & Smith, C. E. (2014). Performance appraisal, performance management, and firm-level performance: A review, a proposed model, and new directions for future research. *Academy of Management Annals*, *8*(1), 127–179. doi: 10.1080/19416520.2014.873178

Department of Human Resources for Health. (2008). *Establishing and monitoring benchmarks for human resources for health: The workforce density approach*. World Health Organization. Retrieved from www.who.int/hrh/statistics

Desmedt, M., De Geest, S., Schubert, M., Schwendimann, R., & Ausserhofer, D. (2012). A multi-method study on the quality of the nurse work environment in acute-care hospitals: Positioning Switzerland in the Magnet hospital research. *Swiss Medical Weekly*, 142(December), 1–12. doi: 10.4414/smw.2012.13733

DeVon, H. A., Block, M. E., Moyle-Wright, P., Ernst, D. M., Hayden, S. J., Lazzara, D. J., & Kostas-Polston, E. (2007). A psychometric toolbox for testing validity and reliability. *Journal of Nursing scholarship*, *39*(2), 155–164.

Dickerson, P. S. (2010). Continuing nursing education: Enhancing professional development. *The Journal of Continuing Education in Nursing*, *41*(3), 100–101.

Dieleman, M., & Harnmeijer, J. W. (2006). *Improving health worker performance: in search of promising practices*. Geneva: World health organization..

Director General of Health. (2000). Surat Pekeliling Ketua Pengarah Kesihatan Malaysia Bilangan 6. Ministry of Health Malaysia.

Drey, N., Gould, D., & Allan, T. (2009). The relationship between continuing professional education and commitment to nursing. *Nurse Education Today*, *29*(7), 740–745. doi: 10.1016/j.nedt.2009.03.008

Dubé, V., & Ducharme, F. (2015). Nursing reflective practice: An empirical literature review. *Journal of Nursing Education and Practice*, *5*(7), 91–100. doi: 10.5430/jnep.v5n7p91

Dubois, C.-A., D'Amour, D., Pomey, M.-P., Girard, F., & Brault, I. (2013). Conceptualizing performance of nursing care as a prerequisite for better measurement: A systematic and interpretive review. *BMC Nursing*, *12*(1), 7. doi: 10.1186/1472-6955-12-7

Dussault, G., & Dubois, C.-A. (2004). Human resources for health policies: A critical component in health policies. *Health, Nutrition and Population (HNP) Discussion Paper*. doi: 10.1186/1478-4491-1-1

Dussault, G., & Franceschini, M. C. (2006). Not enough there, too many here: Understanding geographical imbalances in the distribution of the health workforce. *Human Resources for Health*, *4*, 12. doi: 10.1186/1478-4491-4-12

Dusterhoff, C., Cunningham, J. B., & MacGregor, J. N. (2014). The effects of performance rating, leader-member exchange, perceived utility, and organizational justice on performance appraisal satisfaction: Applying a moral judgment perspective. *Journal of Business Ethics*, *119*(2), 265–273. doi: 10.1007/s10551-013-1634-1

Economic Planning Unit (EPU). (2015). *Eleventh Malaysia plan 2016–2020*. Prime Minister's Department, Malaysia. Prime Minister's Department Malaysia. doi: 10.1017/CBO9781107415324.004

Economic Planning Unit (EPU). (2017). *Primer on Malaysia's Experience with National Development Planning*. World Bank Group. doi: 10.1111/fcre.12297

Egger, D., & Adams, O. (2015). *Imbalances in human resources for health: Can policy formulation and planning make difference? Hum Resour Dev J 1999*, 3, 1.

Enns, V., Currie, S., & Wang, J. L. (2015). Professional autonomy and work setting as contributing factors to depression and absenteeism in Canadian nurses. *Nursing Outlook*, *63*(3), 269–277. doi: 10.1016/j.outlook.2014.12.014

Epstein, J., Osborne, R. H., Elsworth, G. R., Beaton, D. E., & Guillemin, F. (2015). Cross-cultural adaptation of the health education impact questionnaire: Experimental study showed expert committee, not back-translation, added value. *Journal of Clinical Epidemiology*, *68*(4), 360–369. doi: 10.1016/j.jclinepi.2013.07.013

Exavery, A., Lutambi, A. M., Wilson, N., Mubyazi, G. M., Pemba, S., & Mbaruku, G. (2013). Gender-based distributional skewness of the United Republic of Tanzania's health workforce cadres: A cross-sectional health facility survey. *Human Resources for Health*, *11*(1), 28. doi: 10.1186/1478-4491-11-28

Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological methods*, *4*(3), 272.

Farokhzadian, J., Khajouei, R., & Ahmadian, L. (2015). Information seeking and retrieval skills of nurses: Nurses readiness for evidence-based practice in hospitals of a medical university in Iran. *International Journal of Medical Informatics*, *84*(8), 570–577. doi: 10.1016/j.ijmedinf.2015.03.008

Ferrer, M., Alonso, J., Prieto, L., Plaza, V., Monsó, E., Marrades, R., & Antó, J. M. (1996). Validity and reliability of the St George's respiratory questionnaire after

adaptation to a different language and culture: The Spanish example. *European Respiratory Journal*, *9*(6), 1160–1166. doi: 10.1183/09031936.96.09061160

Fida, R., Paciello, M., Tramontano, C., Fontaine, R. G., Barbaranelli, C., & Farnese, M. L. (2015). An integrative approach to understanding counterproductive work behavior: The roles of stressors, negative emotions, and moral disengagement. *Journal of Business Ethics*, *130*(1), 131–144. doi: org/10.1007/s10551-014-2209-5

Field, A. (2009). *Discovering Statistics Using SPSS*. London, England: SAGE Publication. doi: 10.1234/12345678

Fisher, M. J., Marshall, A. P., & Kendrick, T. S. (2005). Competency standards for critical care nurses: Do they measure up? *Aust j Adv Nurs*, *22*(4), 32–39.

Fleet, L. J., Kirby, F., Cutler, S., Dunikowski, L., Nasmith, L., & Shaughnessy, R. (2008). Continuing professional development and social accountability: A review of the literature. *Journal of Interprofessional Care*, *22*(SUPPL. 1), 15–29. doi: 10.1080/13561820802028360

Flinkman, M., Leino-Kilpi, H., Numminen, O., Jeon, Y., Kuokkanen, L., & Meretoja, R. (2017). Nurse competence scale: A systematic and psychometric review. *Journal of Advanced Nursing*, *73*(5), 1035–1050. doi: 10.1111/jan.13183

Frances, R., & Wilson, F. R. (2019). *An ethnographic study that explores the policy and cultural influences on the continuing professional development of nurses and their utilization of computer technology in a community hospital in Uganda*. (Doctoral dissertation, University of Chester, United Kingdom).

Friedman, A., Durkin, C., & Phillips, M. (2000). CPD: What are the true costs of continuing professional development? *Continuing Professional Development*, *3*(3), 78–87.

Fritzen, S. A. (2007). Strategic management of the health workforce in developing countries: What have we learned? *Human Resources for Health*, *26*(5), 4. doi: 10.1186/1478-4491-5-4

Gagnon, S., Paquet, M., Courcy, F., & Parker, C. P. (2009, April). *Measurement and management of work climate: Cross-validation of the CRISO psychological climate questionnaire*. In Healthcare Management Forum (Vol. 22, No. 1, pp. 57–65). SAGE CA: Los Angeles, CA: SAGE Publications.

Gallagher, N. (2005). Facilitating the implementation of lifelong learning in nursing. *British Journal of Nursing*, *14*(14), 761–767.

Ganasegeran, K., Perianayagam, W., Manaf, R. A., Ahmed, S., Jadoo, A., & Al-dubai, S. A. R. (2015). Patient Satisfaction in Malaysia's Busiest Outpatient Medical Care. *The Scientific World Journal*, 6. doi: 10.1155/2015/714754

Gardulf, A., Nilsson, J., Florin, J., Leksell, J., Lepp, M., Lindholm, C., & Johansson, E. (2015). The nurse professional competence (NPC) scale: Self-reported competence among nursing students on the point of graduation. *Nurse Education Today*, *36*, 165–171. doi: 10.1016/j.nedt.2015.09.013

Garneau, A. B., & Pepin, J. (2015). A constructivist theoretical proposition of cultural competence development in nursing. *Nurse Education Today*, *35*(11), 1062–1068.

Garson, G. D. (2012). *Testing statistical assumptions*. Statistical Associates Publishing Single.

Gaskin, J. (2012). *SmartPLS factor analysis*. Gaskination's Statistics.

Gavin, M., Ash, D., Wakefield, S., & Wroe, C. (1999). Shared governance: Time to consider the cons as well as the pros. *Journal of Nursing Management*, *7*(4), 193–200. doi: 10.1046/j.1365-2834.1999.00128.x

Gershon, R. R. M., Stone, P. W., Bakken, S., & Larson, E. (2004). Measurement of organizational culture and climate in healthcare. *The Journal of Nursing Administration*, *34*(1), 33–40. doi: 10.1097/00005110-200401000-00008

Gisev, N., Bell, J. S., & Chen, T. F. (2013). Interrater agreement and interrater reliability: Key concepts, approaches, and applications. *Research in Social and Administrative Pharmacy*, *9*(3), 330–338. doi: 10.1016/j.sapharm.2012.04.004

Glenn, L. A., Stocker-Schnieder, J., Mccune, R., Mcclelland, M., & King, D. (2014). Caring nurse practice in the intrapartum setting: Nurses' perspectives on complexity, relationships and safety. *Journal of Advanced Nursing*, *70*(9), 2019–2030. doi: 10.1111/jan.12356

González-Torrente, S., Pericas-Beltrán, J., Bennasar-Veny, M., Adrover-Barceló, R., Morales-Asencio, J. M., & De Pedro-Gómez, J. (2012). Perception of evidence-based practice and the professional environment of primary health care nurses in the Spanish context: A cross-sectional study. *BMC Health Services Research*, *12*, 227. doi: 10.1186/1472-6963-12-227

Gopee, N. (2005). Facilitating the implementation of lifelong learning in nursing. *British Journal of Nursing*, *14*(14), 761–767.

Govranos, M., & Newton, J. M. (2014). Exploring ward nurses' perceptions of continuing education in clinical settings. *Nurse Education Today*, *34*(4), 655–660. doi: 10.1016/j.nedt.2013.07.003

Greenslade, J. H., & Jimmieson, N. L. (2007). Distinguishing between task and contextual performance for nurses: Development of a job performance scale. *Journal of Advanced Nursing*, *58*(6), 602–611. doi: 10.1111/j.1365-2648.2007.04256.x

Griffin, M. A., Neal, A., & Neale, M. (2000). The contribution of task performance and contextual performance to effectiveness: Investigating the role of situational constraints. *Applied Psychology*, *49*(3), 517–533. doi: 10.1111/1464-0597.00029

Griffin, M., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *The Academy of Management Journal*, *50*(2), 327–347. doi: 10.1163/15685403-00003220

Gross, M. (2013). *AIMS commentary-governance in health care*. Retrieved from http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/events-presentations/663.pdf

Gu, X., & Itoh, K. (2016). Performance indicators: Healthcare professionals' views. *International Journal of Health Care Quality Assurance*, *29*(7), 801–815. doi: 10.1108/IJHCQA-12-2015-0142

Gurses, A. P., Carayon, P., & Wall, M. (2009). Impact of performance obstacles on intensive care nurses' workload, perceived quality and safety of care, and quality of working life. *Health Services Research*, *44*(2P1), 422–443. doi: 10.1111/j.1475-6773.2008.00934.x

Habib, N. (2018). *Analysis of linkages among performance management system, employess and organizational performance of the cellular phone companies in Pakistan.*

Habib, N., Hussain, S., & Sahibzada, S. (2017). Is herzberg's two factor theory valid in the context of performance management system? A study of private banks of Pakistan. *Managerial Sciences*, *11*, 14. Retrieved from http://eds.b.ebscohost.com.up.idm.oclc.org/eds/pdfviewer/pdfviewer?vid=8&sid=3d29c267-8390-440a-b8cd-708284fdbd81%40sessionmgr4008

Hadwan, M., Ayob, M., Sabar, N. R., & Qu, R. (2013). A harmony search for nurse rostering problems. *Information Sciences*, *233*, 126–140. doi: 10.1016/j.ins.2012.12.025

Hager, P., Gonzi, A., & Athanasou, J. (1994). General issues about the assessment of competence in assessment and evaluation. *Higher Education*, *19*(1).

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis. *Analysis*. doi: 10.1016/j.ijpharm.2011.02.019

Hambali, S. N., & Khodapanahandeh, S. (2014). A review of medical malpractice issues in malaysia under tort litigation system. *Global Journal of Health Science*, *6*(4), 76–83. doi: 10.5539/gjhs.v6n4p76

Hanges, P. J., Aiken, J., & Chen, X. (2006). Diversity, Organizational Climate and Organizational Culture: The Roles They Play in Influencing organizational Effectiveness.

Haron, S., Suzana Ariffin, A., & Idrus, D. (2019). Validating the development of instrument for measuring nurses' performance scale. *Journal of Management Info*, *6*(1), 31–38. doi: 10.31580/jmi.v6i1.495

Hastings, S. E., Armitage, G. D., Mallinson, S., Jackson, K., & Suter, E. (2014). Exploring the relationship between governance mechanisms in healthcare and health workforce outcomes: A systematic review. *BMC Health Services Research*, *14*, 479. doi: 10.1186/1472-6963-14-479

Hauck, A., Quinn Griffin, M. T., & Fitzpatrick, J. J. (2011). Structural empowerment and anticipated turnover among critical care nurses. *Journal of Nursing Management*, *19*(2), 269–276. doi: 10.1111/j.1365-2834.2011.01205.x

Havaei, F., & Dahinten, S. (2017). How well does the CWEQ II measure structural empowerment? findings from applying item response theory. *Administrative Sciences*, *7*(2), 15. doi: 10.3390/admsci7020015

Havens, D. S., & Vasey, J. (2003). Measuring staff nurse decisional involvement: The decisional involvement scale. *JONA: The Journal of Nursing Administration*, *33*(6), 331–336.

Hazilah, Abdul Manaf (2009). Practice follows structure: QM in Malaysian public hospitals. *Measuring Business Excellence*, *13*(1), 23–33. doi: 10.1108/13683040910943027

Hazilah, Abdul Manaf, & Phang, N. S. (2009). Patient satisfaction as an indicator of service quality in Malaysian public hospitals. *Asian Journal on Quality*, *10*(1), 77–87. doi: 10.1108/15982680980000628

Health Informatic Centre, Planning Division, M. O. H. M. (2013). *Laporan Tahun HMIS 2013 Sub sistem Rawatan Perubatan. Selangor, Malaysia*. Retrieved from http://www.moh.gov.my/moh/images/gallery/publications/Laporan%20Tahunan%202013.pdf

Health Informatic Centre. (2017). *Health Indicators*.

Heinen, M. M., van Achterberg, T., Schwendimann, R., Zander, B., Matthews, A., Kózka, M., & Schoonhoven, L. (2013). Nurses' intention to leave their profession: A cross sectional observational study in 10 European countries. *International Journal of Nursing Studies*, *50*(2), 174–184. doi: 10.1016/j.ijnurstu.2012.09.019

Helfrich, C., Li, Y., Mohr, D., Meterko, M., & Sales, A. (2007). Assessing an organizational culture instrument based on the competing values framework: Exploratory and confirmatory factor analyzes. *Implementation Science: IS*, *2*, 13. doi: 10.1186/1748-5908-2-13

Hellriegel, D., & Slocum, J. W. (1974). Organizational climate: Measures, research and contingencies. *Academy of Management Journal*, *17*(2), 255–280. doi: 10.5465/254979

Hess, J., & Robert, G. (2004). From bedside to boardroom-nursing shared governance. *Online Journal of Issues in Nursing*, *9*(1).

Hill, M., & Hupe, P. (2006). Analyzing policy processes as multiple governance: Accountability in social policy. *Policy and Politics*, *34*(3), 557–573. doi: 10.1332/030557306777695280

Holcomb, B. R., Hoffart, N., & Fox, M. H. (2002). Defining and measuring nursing productivity: A concept analysis and pilot study. *Journal of Advanced Nursing*, *38*(4), 378–386. doi: 10.1046/j.1365-2648.2002.02200.x

Hoque, A. S. M. M., & Zainudin, A (2016, April). *Exploratory factor analysis of entrepreneurial marketing: Scale development and validation in the SME context of Bangladesh*. In Tourism Research Conference (pp. 22).

Hoseini, S. D., Khankeh, H. R., Dalvandi, A., Saberinia, A., Rezasoltani, P., & Mirzaeirad, S. Z. (2018). Comparing the effect of the two educational methods: Competency-based, and lecture, on the knowledge and performance of nurses in the field of Hospital Triage. *Health in Emergencies and Disasters Quarterly*, *3*(2), 77–84. doi: 10.29252/nrip.hdq.3.2.77

Houser, J., ErkenBrack, L., Handberry, L., Ricker, F., & Stroup, L. (2012). Involving nurses in decisions. *JONA: The Journal of Nursing Administration*, *42*(7/8), 375–382. doi: 10.1097/nna.0b013e3182619325

Huck, S. W., Cormier, W. H., & Bounds, W. G. (2012). *Reading statistics and research*. Boston: Pearson.

Huicho, L., Dieleman, M., Campbell, J., Codjia, L., Balabanova, D., Dussault, G., & Dolea, C. (2010). Increasing access to health workers in underserved areas: A conceptual framework for measuring results. *Bulletin of the World Health Organization*, *88*(5), 357–363. doi: 10.2471/BLT.09.070920

Hunter, D., Collins, C., & Green, A. (1999). Health sector reform and the interpretation of policy context. *Health Policy*, *47*(1), 69–83. Retrieved from http://www.sciencedirect.com/science/article/B6V8X-3W78M84-5/1/ad670a2f120ad64afc861b1b0ddf8ee6

Hutcheson, G. D., & Sofroniou, N. (1999). *The multivariate social scientist: Introductory statistics using generalized linear models*. SAGE.

Idris, M. A., Dollard, M. F., & Winefield, A. H. (2011). Integrating psychosocial safety climate in the JD-R model: A study amongst Malaysian workers. *SA Journal of Industrial Psychology*, *37*(2), 1–11. doi: 10.4102/sajip.v37i2.851

Ing, Y. (2017). The effect of continuing professional development from the perspective of nurses and midwives who participated in continuing education programs offered by Global Health Alliance Western Australia: A mixed-method study. (Master's thesis, University of Notre Dame Australia, Australia).

Ismail, A., Suh-suh, Y., & Dollah, N. F. (2009). Relationship between occupational stress, emotional intelligence and job performance: An empirical study in Malaysia. *Theoretical and Applied Economics*, *10*(539), 3–16.

Istomina, N., Suominen, T., Razbadauskas, A., Martinkėnas, A., Meretoja, R., & Leino-Kilpi, H. (2011). Competence of nurses and factors associated with it. *Medicina*, *47*(4), 230–237. doi: 10.3390/medicina47040033

Jacobs, C. D., & Ward, C. W. (2012). Empowering frontline nurses to transform shared governance. *Nursing*, *42*(7), 18–20. doi:10.1097/01.NURSE.0000415321.70217.0d

Jacobs, R., Mannion, R., Davies, H. T. O., Harrison, S., & Konteh, F. (2013). The relationship between organizational culture and performance in acute hospitals. *Social Science & Medicine*, *76*, 115–125. doi: 10.1016/j.socscimed.2012.10.014

Jafree, S. R., Zakar, R., Zakar, M. Z., & Fischer, F. (2016). Nurse perceptions of organizational culture and its association with the culture of error reporting: A case of public sector hospitals in Pakistan. *BMC Health Services Research*, 1–13. doi: 10.1186/s12913-015-1252-y

Jakobsen, M., & Jensen, R. (2015). Common method bias in public management studies. *International Public Management Journal*, *18*(1), 3–30. doi: 10.1080/10967494.2014.997906

Jaradeh, M., & Hamdeh, H. A. (2010). Nurses' experiences of continuous professional development. *Jordan Medical Journal*, *44*(3), 313–322.

Jarrar, M. K. M. (2015). The impact of Hospital nurses staffing, work environment and patient-centeredness on the quality of care and patient safety. *Global Journal of Health Science, 11*(9), 326–332. doi: 10.5539/ass.v11n9p326

Jawahar, I. M., & Ferris, G. R. (2011). A longitudinal investigation of task and contextual performance influences on promotability judgments. *Human Performance, 24*(3), 251-269.

Jehanzeb, K., Rasheed, A., & Rasheed, M. F. (2013). Organizational commitment and turnover intentions: Impact of employee's training in private sector of Saudi Arabia. *International Journal of Business and Management*, *8*(8), 79–90. doi: 10.5539/ijbm.v8n8p79

Jiang, H., Li, H., Ma, L., & Gu, Y. (2015). Nurses' roles in direct nursing care delivery in China. *Applied Nursing Research*, *28*(2), 132–136. doi: 10.1016/j.apnr.2014.09.003

Johnson, J. W. (2003). Toward a better understanding of the relationship between personality and individual job performance. In M. R. Barrick, A. M. Ryan, & N. Schmitt (Eds.), *Personality and work reconsidering the role of personality in organizations*. San Francisco: Jossey-Bass.

Jöreskog, K. G., Sörbom, D., & Lisrel, V. I. (1984). *Analysis of linear structural relationship by maximum likelihood*. Chicago: Scientific Software.

Joseph, M. L., & Bogue, R. J. (2011). New knowledge for shared governance: Nursing practice council effectiveness. *Journal of Nursing Management*, *17*(1), 4–14.

Judge, T. A., Bono, J. E., Erez, A., & Locke, E. A. (2005). The core self-evaluations scale: Development of a measure. *Journal of Applied Psychology*, *90*(2), 257. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1744-6570.2003.tb00152.x/abstract

Kadiresan, V., Selamat, M. H., Selladurai, S., Charles Ramendran, S. P. R., & Mohamed, R. K. M. H. (2015). Performance appraisal and training and development of human resource management practices (HRM) on organizational commitment and turnover intention. *Asian Social Science*, *11*(24), 162–176. doi: 10.5539/ass.v11n24p162

Kahya, E. (2009). The effects of job performance on effectiveness. *International Journal of Industrial Ergonomics*, *39*(1), 96–104. doi: 10.1016/j.ergon.2008.06.006

Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement*, *20*(1), 141–151.

Kalisch, J. B., Lee, H., & Salas, E. (2012). The development and testing of nursing teamwork survey. In F. D. Polit & C. T. Beck (Eds.), *Resource Manual for Nursing Research: Generating and Assessing Evidence for Nursing Practice* (9th ed., pp. 338–351), Lippincott Williams & Wilkins.

Kamali, N. J., & Abbas, M. Y. (2012). Healing environment: Enhancing nurses' performance through proper lighting design. *Procedia - Social and Behavioral Sciences*, *35*(December 2011), 205–212. doi : 10.1016/j.sbspro.2012.02.080

Kämäräinen, V. J., Peltokorpi, A., Torkki, P., & Tallbacka, K. (2016). Measuring healthcare productivity—from unit to system level. *International Journal of Health Care Quality Assurance*, *29*(3), 288–299. doi: 10.1108/IJHCQA-04-2015-0050

Kanchanachitra, C., Lindelow, M., Johnston, T., Hanvoravongchai, P., Lorenzo, F. M., Huong, N. L., & Dela Rosa, J. F. (2011). Human resources for health in southeast Asia: Shortages, distributional challenges, and international trade in health services. *The Lancet*, *377*(9767), 769–781. doi: 10.1016/S0140-6736(10)62035-1

Kanter, R. M. (1993). Men and women of the corporation. *The British Journal of Sociology (2nd ed.)*. doi: 10.2307/590086

Kaplan, A. D., Dominis, S., Palen, J. G., & Quain, E. E. (2013). Human resource governance: What does governance mean for the health workforce in low- and middle-income countries?. *Human Resources for Health*, *11*(1), 6. doi: 10.1186/1478-4491-11-6

Kashif, M., Samsi, S. Z. M., Awang, Z., & Mohamad, M. (2016). EXQ: Measurement of healthcare experience quality in Malaysian settings. *International Journal of Pharmaceutical and Healthcare Marketing*.

Kassa, H., Murugan, R., Zedwu, F., Hailu, M., & Woldeyohannes, D. (2014). Assessment of knowledge, attitude and practice and associated factors towards palliative care among nurses working in selected hospitals , Addis Ababa , Ethiopia. *BMC Palliative Care*, *13*(4), 1–11. doi: 10.1186/1472-684X-13-6

Katsikitis, M., McAllister, M., Sharman, R., Raith, L., Faithfull-Bryne, A., & Prialux, R. (2013). Continuing professional development in nursing in Australia: Current awareness, practice and future directions. *Contemporary Nurse*, *45*(1), 33–45.

Katsikitis, M., McAllister, M., Sharman, R., Raith, L., Faithfull-Bryne, A., & Prialux, R. (2013). Continuing professional development in nursing in Australia: Current awareness, practice and future directions. *Contemporary Nurse*, *45*(1), 33–45.

Kaur, D., Sambasivan, M., & Kumar, N. (2013). Effect of spiritual intelligence, emotional intelligence, psychological ownership and burnout on caring behavior of nurses: A cross-sectional study. *Journal of Clinical Nursing*, *22*(21–22), 3192–3202. doi: 10.1111/jocn.12386

Kelly, L. A., McHugh, M. D., & Aiken, L. H. (2012). Nurse outcomes in Magnet® and non-magnet hospitals. *The Journal of Nursing Administration*, *42*(10 Supp), s44–s49. doi: 10.1097/01.NNA.0000420394.18284.4f.Nurse

Khan, M. M. (2006). *Health policy analysis: The case of Pakistan*. (Doctoral dissertation, University of Groningen, Groningen, Netherlands). Retrieved from https://www.rug.nl/research/portal/publications/health-policy-analysis(b47229d5-77fd-4e5c-960c-7d15e99ab665).html

Kim, C. W., Lee, S. Y., Kang, J. H., Park, B. H., Park, S. C., Park, H. K., & Jeong, B. G. (2013). Application of revised nursing work index to hospital nurses of South Korea. *Asian Nursing Research*, *7*(3), 128–135. doi: 10.1016/j.anr.2013.07.003

Kim, J. S., & Choi, J. S. (2016). Factors influencing emergency nurses' burnout during an outbreak of Middle East respiratory syndrome Coronavirus in Korea. *Asian Nursing Research*, 10(November), 1–5. doi: 10.1016/j.anr.2016.10.002

Kiser, L., Ostrom, E., & Ostrom, E. (1982). *Strategies of political inquiry*. Beverley Hills, CA, and London: SAGE Publications, pp. 179–222.

Kitchenham, B., & Pfleeger, S. L. (2002). Principles of survey research part 3: Constructing a survey instrument. *ACM SIGSOFT Software Engineering Notes*, *27*(2), 20. doi: 10.1145/638574.638580

Kneafsey, R., Clifford, C., & Greenfield, S. (2013). What is the nursing team involvement in maintaining and promoting the mobility of older adults in

hospital? A grounded theory study. *International Journal of Nursing Studies*, *50*(12), 1617–1629. doi: 10.1016/j.ijnurstu.2013.04.007

Köberich, S., Suhonen, R., Feuchtinger, J., & Farin, E. (2015). The German version of the individualized care scale—assessing validity and reliability. *Patient Preference and Adherence*, *9*, 483–494.

Kolade, O. J., Oluseye, O. O., & Osibanjo, O. a. (2014). Organizational citizenship behavior, hospital corporate image and performance. *Journal of Competitiveness*, *6*(1), 36–49. doi: 10.7441/joc.2014.01.03

Koopmans, L. (2014). Measuring individual work performance: Identifying and selecting indicators. *Work*, *48*(2), 229–238.

Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., de Vet Henrica, C. W., & van der Beek, A. J. (2011). Conceptual frameworks of individual work performance. *Journal of Occupational and Environmental Medicine*, *53*(8), 856–866. doi: 10.1097/JOM.0b013e318226a763

Körner, M., Wirtz, M. a, Bengel, J., & Göritz, A. S. (2015). Relationship of organizational culture, teamwork and job satisfaction in interprofessional teams. *BMC Health Services Research*, *15*(1), 243. doi: 10.1186/s12913-015-0888-y

Kothari, C. (2004). *Research methodology: Methods and techniques*. New Delhi, India: New Age International (P) Ltd., Publishers.

Kothari, C., Kumar, R., & Uusitalo, O. (2014). Research Methodology. New Delhi, India: New Age International Publishers.

Kramer, M., & Hafner, L. P. (1989). Shared values: Impact on staff nurse job satisfaction and perceived productivity. *Nursing Research*, *38*(3), 173–177.

Kramer, M., Maguire, P., & Brewer, B. B. (2011). Clinical nurses in Magnet hospitals confirm productive, healthy unit work environments. *Journal of Nursing Management*, *19*(1), 5–17. doi: 10.1111/j.1365-2834.2010.01211.x

Krauss, S. E. (2005). Research paradigms and meaning making: A primer. *The Qualitative Report*, *10*(4), 758–770. doi: 10.1176/appi.ajp.162.10.1985

Krokmyrdal, K. A., & Andenæs, R. (2015). Nurses' competence in pain management in patients with opioid addiction: A cross-sectional survey study. *Nurse Education Today*, *35*(6), 789–794. doi: 10.1016/j.nedt.2015.02.022

Kruk, M. E. M. E., & Freedman, L. P. (2008). Assessing health system performance in developing countries: A review of the literature. *Health Policy*, *85*(3), 263–276. doi: 10.1016/j.healthpol.2007.09.003

Kuhlmann, E., & Larsen, C. (2015). Why we need multi-level health workforce governance: Case studies from nursing and medicine in Germany. *Health Policy*, *119*(12), 1636–1644. doi: 10.1016/j.healthpol.2015.08.004

Kutney-Lee, A., Germack, H., Hatfield, L., Kelly, S., Maguire, P., Dierkes, A., & Aiken, L. H. (2016). Nurse engagement in shared governance and patient and nurse outcomes. *Journal of Nursing Administration*, *46*(11), 605–612. doi: 10.1097/NNA.0000000000000412

Kutney-Lee, A., Wu, E. S., Sloane, D. M., & Aiken, L. H. (2013). Changes in hospital nurse work environments and nurse job outcomes: An analysis of panel data. *International Journal of Nursing Studies*, *50*(2), 195–201. doi: 10.1016/j.ijnurstu.2012.07.014

Laibhen-parkes, N. (2014). Evidence-based practice competence: A concept analysis. *International Journal of Nursing Knowledge*, *25*(3). Retrieved from http://eds.a.ebscohost.com.ezproxy.endeavour.edu.au/eds/pdfviewer/pdfviewer?sid=b851d50c-0723-4f85-a719-9050ca7d5f40@sessionmgr4006&vid=16&hid=4103

Lake, E. T. (2002). Development of the practice environment scale of the nursing work index. *Research in Nursing and Health*, *25*(3), 176–188. doi: 10.1002/nur.10032

Lamba, S., & Choudhary, N. (2013). Impact of HRM practices on organizational commitment of employees. *International Journal of Advancements in Research & Technology*, *2*(4), 407–423. Retrieved from http://www.ijoart.org/docs/impact-of-hrm-practices-on-organizational-commitment-of-employees.pdf

Lambooij, M. S., Koster, F., Sleesman, D., Conlon, D., McNamara, G., Miles, J., & Stafford, E. (2015). How organizational escalation prevention potential affects success of implementation of innovations: Electronic medical records in hospitals. *Implementation Science*, *11*(1), 75. doi: 10.1186/s13012-016-0435-1

Lamoureux, J., Judkins-Cohn, T., Butao, R., McCue, V., & Garcia, F. (2014). Measuring perceptions of shared governance in clinical practice: Psychometric testing of the RN-focused index of professional governance (IPNG). *Journal of Research in Nursing*, *19*(1), 69–87. doi: 10.1177/1744987113504409

Laschinger, H. K. S., & Finegan, J. (2005). Using empowerment to build trust and respect in the workplace: A strategy for addressing the nursing shortage. *Nursing Economics*, *23*(1), 6.

Laschinger, H. K. S., Finegan, J., & Shamian, J. (2001). The impact of workplace empowerment, organizational trust on staff nurses' work satisfaction and organizational commitment. *Health Care Management Review*, *26*(3), 7–23.

Laschinger, H.K.S, & Havens, D. S. (1996). Staff nurse work empowerment and perceived control over nursing practice: Conditions for work effectiveness. *Journal of Nursing Administration*, *26*(9), 27–35.

Laschinger, H.K.S. (2012). *Conditions for work effectiveness questionnaire I and II user manual*. Western University Canada. Retrieved from https://www.uwo.ca/fhs/hkl/cweq.html

Laschinger, Heather K.Spence, Nosko, A., Wilk, P., & Finegan, J. (2014). Effects of unit empowerment and perceived support for professional nursing practice on unit effectiveness and individual nurse well-being: A time-lagged study. *International Journal of Nursing Studies*, *51*(12), 1615–1623. doi: 10.1016/j.ijnurstu.2014.04.010

LaVela, S., & Gallan, A. (2014). Evaluation and measurement of patient experience. *Patient Experience Journal*, *1*(1), 28–36. Retrieved from http://pxjournal.org/journal/vol1/iss1/5

Lawton, S., & Wimpenny, P. (2003). Continuing professional development: A review. *Nursing Standard*, *17*(24), 41–44.

Lee, N. J. (2011). An evaluation of CPD learning and impact upon positive practice change. *Nurse Education Today*, *31*(4), 390–395. doi: 10.1016/j.nedt.2010.07.012

Lejonqvist, G. (2018). *Clinical competence—the core of nursing education*. Åbo Akademi University. https://doi.org/http://urn.fi/URN:ISBN:ISBN 978-952-12-3733-1

Letvak, S., & Buck, R. (2008). Factors influencing work productivity and intent to stay in nursing. *Nursing Economics*, *26*(3), 159–166.

Li, B., Bruyneel, L., Sermeus, W., Van den Heede, K., Matawie, K., Aiken, L., & Lesaffre, E. (2013). Group-level impact of work environment dimensions on burnout experiences among nurses: A multivariate multilevel probit model. *International Journal of Nursing Studies*, *50*(2), 281–291. doi: 10.1016/j.ijnurstu.2012.07.001

Lin, Y.-W., & Lin, Y.-Y. (2014). A multilevel model of organizational health culture and the effectiveness of health promotion. *American Journal of Health Promotion: AJHP*, *29*(1), e53-63. doi: 10.4278/ajhp.121116-QUAN-562

Lindqvist, R., Smeds Alenius, L., Griffiths, P., Runesdotter, S., & Tishelman, C. (2015). Structural characteristics of hospitals and nurse-reported care quality, work environment, burnout and leaving intentions. *Journal of Nursing Management*, *23*(2), 263–274. doi: 10.1111/jonm.12123

Liou, S. R., & Cheng, C. Y. (2010). Organizational climate, organizational commitment and intention to leave amongst hospital nurses in Taiwan. *Journal of Clinical Nursing*, *19*(11–12), 1635–1644. doi: 10.1111/j.1365-2702.2009.03080.x

Liu, N., & D'Aunno, T. (2012). The productivity and cost-efficiency of models for involving nurse practitioners in primary care: A perspective from queueing

analysis. *Health Services Research*, *47*(2), 594–613. doi: 10.1111/j.1475-6773.2011.01343.x

Long, C. S., Kowang, T. O., Ping, T. A., & Muthuveloo, R. (2014). Investigation on the impact of job stressors on nurses in Malaysia. *Asian Social Science*, *10*(4), 67.

Lutwama, G. (2011). *The performance of health workers in decentralized services in Uganda*. Retrieved from http://umkn-dsp01.unisa.ac.za/handle/10500/4866

Lynn, M. R. (1986a). Determination and quantification of content validity. *Nursing Reserach*, *35*(6), 382–385. doi: 10.1097/00006199-198611000-00017

Mackenzie, S. B., & Podsakoff, P. M. (2012). Commentary on 'common method bias: nature, causes, and procedural remedies'. *Journal of Retailing*, *88*(January), 542–555. doi: 10.1016/j.jretai.2012.08.001

Mackenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P. (2011). Construct measurement and validation procedures in MIS and behavioral research: Integrating new and existing techniques. *MIS Quarterly*, *35*(2), 293–334.

Makai, P., Cramm, J. M., van Grotel, M., & Nieboer, A. P. (2014). Labor productivity, perceived effectiveness, and sustainability of innovative projects. *Journal for Healthcare Quality: Official Publication of the National Association for Healthcare Quality*, *36*(2), 14–24. doi: 10.1111/j.1945-1474.2012.00209.x

Makhbul, Z., & Khairuddin, S. H. (2013). Occupational stressors, health and individual productivity links: Evidence from Sobel Test. In Proceedings of 4th International Conference on Education and Information Management (ICEIM-2013) (pp. 283–294).

Malaysia Civil Service Department. Pindaan skim perkhimatan jururawat dengan memperuntukkan perbekalan kenaikan pangkat ke kumpulan pengusan tertinggi, Pub. L. No. 9/2013 (2013). Malaysia. Retrieved from https://www.sgh.com.sg/Patient-Services/Our-Commitment-to-Patients/Pages/clinical-governance.aspx

Malaysian Society for Quality in Health (MSQH). (2013). *Malaysian Hospital Accreditation Service Standards 4*: Nursing Services.

Malaysian Society for Quality in Health (MSQH). (2017). *Malaysian Hospital Accreditation Service Standards 4*: Nursing Services.

Manaf, N. H. A. (2005). Quality management in Malaysian public health care. *International Journal of Health Care Quality Assurance*, *18*(3), 204–216. doi: 10.1108/09526860510594767

Manojlovich, M., & Sidani, S. (2008). Nurse dose: What's in a concept? *Research in Nursing and Health*, *31*(4), 310–319. doi: 10.1002/nur.20265

Mantzoukas, S. (2008). A review of evidence-based practice, nursing research and reflection: Levelling the hierarchy. *Journal of Clinical Nursing*, *17*(2), 214–223. doi: 10.1111/j.1365-2702.2006.01912.x

Maroofi, F., & Navidinya, F. (2011). The measurement of job performance and its impact on effectiveness. *International Journal of Business Performance Management*, *12*(3), 217–227. doi: 10.1504/IJBPM.2011.039887

Marzuki, M. A., Hassan, H., Wichaikhum, O., & Nantsupawat, R. (2012). Continuing nursing education: Best practice initiative in nursing practice environment. *Procedia - Social and Behavioral Sciences*, *60*, 450–455. doi: 10.1016/j.sbspro.2012.09.405

Maskor, N. A., Krauss, S. E., Muhamad, M., & Mahmood, N. H. N. (2013). Communication competencies of oncology nurses in malaysia. *Asian Pacific Journal of Cancer Prevention*, *14*(1), 153–158. doi: 10.7314/apjcp.2013.14.1.153

Maslow, A. H., Stephens, D. C., & Heil, G. (1998). *Maslow on management*. New York: John Wiley.

Maydeu-Olivares, A., Coffman, D. L., García-Forero, C., & Gallardo-Pujol, D. (2010). Hypothesis testing for coefficient alpha: An SEM approach. *Behavior Research Methods*, *42*(2), 618–625. doi: 10.3758/BRM.42.2.618

McClure, M., Poulin, M., Sovie, M., & Wandelt, M. (1983). Magnet Hospitals: Attraction and retention of professional nurses. *AORN Journal, 38*(3). Retrieved from https://doi.org/10.1016/s0001-2092(07)65954-7

McElroy, C., & Esterhuizen, P. (2017). Compassionate communication in acute healthcare: establishing the face and content validity of a questionnaire. *Journal of Research in Nursing*, *22*(1–2), 72–88. doi: 10.1177/1744987116678903

McLean, M., Johnson, P., Sargeant, S., & Green, P. (2015). More than just teaching procedural skills: How RN clinical tutors perceive they contribute to medical students professional identity development. *Australasian Medical Journal*, *8*(4), 122–131. doi: 10.4066/AMJ.2015.2326

Medical Development Division. (2010). *Achieving excellence in clinical governance: Framework document and companion guide for the integrated management of quality, safety and risk in the Malaysian health care system*. Retrieved from http://docshare02.docshare.tips/files/23572/235727888.pdf

Medical Development Division. (2016). *Specialty & subspecialty framework of Ministry of Health hospitals under 11th Malaysia Plan (2016–2020). Ministry of Health Malaysia*. Retrieved from http://www.moh.gov.my/penerbitan/Pelan Strategik Bahagian Perkembangan Perubatan.pdf

Medical Development Division. (2016). *Technical specifications key performance indicators (kpis) clinical services medical programme version 4. 0. Ministry of Health Malaysia.*

Medical Development Division. (2017). *Technical specifications of hospital performance indicators for accountability (HPIA) & specific indicators, Version 5.0, Ministry of Health Malaysia*.

Melnyk, S. A., Bititci, U., Platts, K., Tobias, J., & Andersen, B. (2014). Is performance measurement and management fit for the future? *Management Accounting Research*, *25*(2), 173–186. doi: 10.1016/j.mar.2013.07.007

Meng, L., Liu, Y., Liu, H., Hu, Y., Yang, J., & Liu, J. (2015). Relationships among structural empowerment, psychological empowerment, intent to stay and

burnout in nursing field in mainland China-based on a cross-sectional questionnaire research. *International Journal of Nursing Practice*, *21*(3), 303–312. doi: 10.1111/ijn.12279

Meretoja, R, Isoaho, H., & Leino-Kilpi, H. (2004). Nurse competence scale: Development and psychometric testing. *Journal of Advanced Nursing*, *47*(2), 124–133. doi: 10.1111/j.1365-2648.2004.03071.x

Meretoja, R., & Koponen, L. (2012). A systematic model to compare nurses' optimal and actual competencies in the clinical setting. *Journal of Advanced Nursing*, *68*(2), 414–422. doi: 10.1111/j.1365-2648.2011.05754.x

Meretoja, Riitta, Numminen, O., Isoaho, H., & Leino-Kilpi, H. (2014). Nurse competence between three generational nurse cohorts: A cross-sectional study. *International Journal of Nursing Practice*, *21*(4), 350–358. doi: 10.1111/ijn.12297

Misiran, M., Yusof, Z. M., Mahmuddin, M., Lee, Y. C., Hasan, N. A., & Noor, N. M. (2016). Factors influencing students motivation to learning in University Utara Malaysia (UUM): A structural equation modeling approach. *Math Stat*, *2*(3), 16.

Mohamad, M., Awang, Z., & Ali, N. A. M. (2017). Validating the maqasid shariah prison quality of Life (MSPQoL) among drug-abuse inmates using confirmatory factor analysis. *International Journal of Applied Business and Economic Research*, *15*(24), 91–103.

Mohamed, B., & Azizan, N. A. (2015). Perceived service quality's effect on patient satisfaction and behavioral compliance. *International Journal of Health Care Quality Assurance*, *28*(3), 300–314. doi: 10.1108/IJHCQA-06-2014-0074

Motowidlo, S. J., Borman, W. C., & Schmit, M. J. (1997). Test of theory of individual differences in task and contextual performance. *Human Performance*, *10*(2), 71–83. doi: 10.1080/08959280802137606

Muhammad, M. A., & Jamilha, F. M. (2010). Level of job satisfaction and intent to leave among Malaysian nurses. *Business Intelligence Journal*, *3*(1), 123–137.

Muhammad, Masroor A, & Jamilha, F. M. (2010a). Level of job satisfaction and intend to leave among Malaysian nurses. *Business Intelligence Journal*, *3*(1), 124–137.

Müller, M. (2013). Nursing competence: Psychometric evaluation using Rasch modelling. *Journal of Advanced Nursing*, *69*(6), 1410–1417. doi: 10.1111/jan.12009

Murphy, G. A. V, Gathara, D., Aluvaala, J., Mwachiro, J., Abuya, N., Ouma, P., & English, M. (2016). Nairobi newborn study: A protocol for an observational study to estimate the gaps in provision and quality of inpatient newborn care in Nairobi City County, Kenya. *BMJ Open*, *6*(12), e012448. doi: 10.1136/bmjopen-2016-012448

Musau, P., Nyongesa, P., Shikhule, a., Birech, E., Kirui, D., Njenga, M., & Kiilu, K. (2008). Workload indicators of staffing need method in determining optimal staffing levels at Moi Teaching and Referral Hospital. *East African Medical Journal*, *85*(5), 232–239. doi: 10.4314/eamj.v85i5.9617

Najeemah M Yusof. (2012). School climate and teachers' commitment: A case study of Malaysia. *International Journal of Economics Business and Management Studies*, *1*(2), 65–75.

Namaganda, G., Oketcho, V., Maniple, E., & Viadro, C. (2015). Making the transition to workload-based staffing: Using the workload indicators of staffing need method in Uganda. *Human Resources for Health*, *13*(1), 1–11. doi: 10.1186/s12960-015-0066-7

Nancarrow, S. A., Roots, A., Grace, S., Moran, A. M., & Vanniekerk-Lyons, K. (2013). Implementing large-scale workforce change: Learning from 55 pilot sites of allied health workforce redesign in Queensland, Australia. *Human Resources for Health*, *11*(1), 66. doi: 10.1186/1478-4491-11-66

Nasurdin, A. M., Ramayah, T., & Chee, Y. (2009). The impacts of structure, climate and self-efficacy on stress: A Malaysian Survey. *Asian Academy of Management Journal*, *14*(1), 59–79.

National Institute of Health. (2015). *NIH guidelines for conducting research in Ministry of Health institutions and facilities*.

Nayebi, B. A., Mohebbifar, R., Azimian, J., & Rafiei, S. (2019). Estimating nursing staff requirement in an emergency department of a general training hospital: Application of workload indicators of staffing need (WISN). *International Journal of Healthcare Management*, *12*(1), 54–59. doi: 10.1080/20479700.2017.1390182

Nayeri, N. D., Nazari, A. A., Salsali, M., Ahmadi, F., & Hajbaghery, M. A. (2006). Iranian staff nurses' views of their productivity and management factors improving and impeding it: A qualitative study. *Nursing and Health Sciences*, *8*(1), 51–56. doi: 10.1111/j.1442-2018.2006.00254.x

Nayeri, N. D., Negarandeh, R., Vaismoradi, M., Ahmadi, F., & Faghihzadeh, S. (2009). Burnout and productivity among Iranian nurses. *Nursing and Health Sciences*, *11*(3), 263–270. doi: 0.1111/j.1442-2018.2009.00449.x

Needleman, J., Kurtzman, E. T., & Kizer, K. W. (2007). Performance measurement of nursing care: State of the science and the current consensus. *Medical Care Research and Review*, *64*(2), 10S-43S. doi: 10.1177/1077558707299260

Netemeyer, R., Bearden, W., & Sharma, S. (2003). *Scaling procedures issues and applications*. Thousand Oak, London: SAGE Publications. Retrieved from https://doi.org/10.4135/9781412985772

Newman, I., Lim, J., & Pineda, F. (2013). Content validity using a mixed methods approach: Its application and development through the use of a table of specifications methodology. *Journal of Mixed Methods Research*, *7*(3), 243–260. doi: 10.1177/1558689813476922

Newman, K. P. (2011). Transforming organizational culture through nursing shared governance. *Nursing Clinics*, *46*(1), 45–58.

Newsom, J. (2005). *A quick primer on exploratory factor analysis*. Retrieved from https://web.cortland.edu/andersmd/psy341/efa.pdf

Ni, C., Hua, Y., Shao, P., Wallen, G. R., Xu, S., & Li, L. (2014). Continuing education among Chinese nurses: A general hospital-based study. *Nurse Education Today*, *34*(4), 592–597. doi: 10.1016/j.nedt.2013.07.013

Ni, C., Hua, Y., Shao, P., Wallen, G. R., Xu, S., & Li, L. (2014). Continuing education among Chinese nurses: A general hospital-based study. *Nurse Education Today*, *34*(4), 592–597. doi: 10.1016/j.nedt.2013.07.013

Nikpeyma, N., Abed_Saeedi, Z., Azargashb, E., & Alavi_Majd, H. (2014). Problems of clinical nurse performance appraisal system: A qualitative study. *Asian Nursing Research*, *8*(1), 15-22.

Nilsson, J., Johansson, E., Egmar, A. C., Florin, J., Leksell, J., Lepp, M., & Gardulf, A. (2014). Development and validation of a new tool measuring nurses self-reported professional competence—the nurse professional competence (NPC) scale. *Nurse Education Today*, *34*(4), 574–580. doi: 10.1016/j.nedt.2013.07.016

Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2008). *Human resource management: Gaining a competitive management* (6th ed.). Boston: Irwin Mc Graw-Hill.

Noor Hazilah, A. M., Roslan Johari, D. M. G., Nor Filzatun, M. B., Azura, O., Dinon, M., Abideen Adeyemi, A., & Zabeda, A. H. (2016). Preparedness for hospital practice in assuring quality of care. *The TQM Journal*, *28*(6), 834–846. doi: 10.1108/TQM-06-2014-0053

Noorminuroh, R. (2016). *Job characteristics, emotional intelligence and work engagement among nurses*. (Master's thesis, Universiti Utara Malaysia, Kedah). Retrieved from http://etd.uum.edu.my/5924/

Noraini, Othman (2012). Job performance of public hospital nurses: The role of perdonal resources, job resources and work engagement. (Doctoral dissertation, Universiti Sains Malaysia). Retrtieved from http://eprints.usm.my/42231/1/NORAINI_OTHMAN.pdf

North, N., & Hughes, F. (2012). A systems perspective on nursing productivity. *Journal of Health Organization and Management*, *26*(2), 192–214. doi: 10.1108/14777261211230772

Numminen, O., Leino-Kilpi, H., Isoaho, H., & Meretoja, R. (2015). Newly graduated nurses' competence and individual and organizational factors: A multivariate analysis. *Journal of Nursing Scholarship*, *47*(5), 446–457. doi: 10.1111/jnu.12153

Numminen, O., Meretoja, R., Isoaho, H., & Leino-Kilpi, H. (2013). Professional competence of practising nurses. *Journal of Clinical Nursing*, *22*(9–10), 1411–1423. doi: 10.1111/j.1365-2702.2012.04334.x

Nursing Board Malaysia. (1998). *Code of professional conduct for nurses*. Malaysia.

Nursing Board Malaysia. (2008). *Guidelines for continuous professional (CPD) programme* for nurses / midwives

Nursing Division. (2017). *ASEAN registered nurse workforce*. Retrieved from http://nursing.moh.gov.my/asean/

OECD Health workers statistics. (2017). Retrieved from https://doi.org/doi: 10.1787/283e64de-en

Olsson, C., Forsberg, A., & Bjersa, K. (2016). Safety climate and readiness for implementation of evidence and person-centered practice: A national study of registered nurses in general surgical care at Swedish university hospitals. *BMC Nursing*, *15*(1), 54. doi: 10.1186/s12912-016-0174-2

Onn, L. P. (2015). *What lies ahead for Malaysian healthcare?* Retrieved from https://www.iseas.edu.sg/images/pdf/ISEAS_Economics_Working_Paper_2015-04-01.pdf

Oranye, N. O., Ahmad, C., Ahmad, N., & Bakar, R. A. (2012). Assessing nursing clinical skills competence through objective structured clinical examination (OSCE) for open distance learning students in Open University Malaysia. *Contemporary Nurse*, *41*(2), 233–241. doi: 10.5172/conu.2012.41.2.233

Orton, L. C., Lloyd-Williams, F., Taylor-Robinson, D. C., Moonan, M., O'Flaherty, M., & Capewell, S. (2011). Prioritising public health: A qualitative study of decision making to reduce health inequalities. *BMC Public Health*. doi: 10.1186/1471-2458-11-821

Ositadimma Oranye, N., Ahmad, C. A., Ahmad, N., & Abu Bakar, R. (2012). Assessing nursing clinical skills competence through objective structured clinical examination (OSCE) for open distance learning students in Open University Malaysia. *Contemporary Nurse*, *41*(2), 233–241. doi: 10.5172/conu.2012.41.2.233

Osmond, T. (2003). *Continuing professional development for nurses-an Australian imperative*. Nursing.aust, *4*(2), 18–22.

Pallant, J. (2013). *SPSS survival manual: A step by step guide to data analysis using SPSS. Step by step guide to data analysis using the SPSS program.* Australia: Allen & Unwin.

Panthi, L. P., & Pant, S. S. (2018). Continuous professional development in healthcare lifelong learning for nurses in the workplace. *Arcada Inuversity of Applied Sciences*. doi: 10.2991/ecpe-18.2018.28

Pappas, S., & Welton, J. M. (2015). Nursing: Essential to healthcare value. *Nurse Leader, 13*(3), 26–29,38. doi: 10.1016/j.mnl.2015.03.005

Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology*, *91*(3), 636–652. doi: 10.1037/0021-9010.91.3.636

Parliament of Malaysia. (2012). *Medical (Amendment) Act 2012*

Parmelli, E., Flodgren, G., Beyer, F., Baillie, N., Schaafsma, M. E., & Eccles, M. P. (2011). The effectiveness of strategies to change organizational culture to improve healthcare performance: A systematic review. *Implementation Science: IS*, *6*, 33. doi: 10.1186/1748-5908-6-33

Kampkötter, P. (2014). Performance appraisals and job satisfaction. *SOEP papers on multidisciplinary panel data research*, 672, 1–27. https://doi.org/10.1080/09585192.2015.1109538

Patterson, M., Warr, P., & West, M. (2004). Organizational climate and company productivity: The role of employee affect and employee level. *Journal of Occupational and Organizational Psychology*, *77*(2), 193–216. doi: 10.1348/096317904774202144

Pauline, M. (2013). Devolution and nursing workforce policy and planning in the four countries of the United Kingdom 1997–2009, 376. (Doctoral dissertation, Queen Margaret University, Musselburgh, United Kingdom). Retrieved from https://eresearch.qmu.ac.uk/handle/20.500.12289/7384

Peng, J., Jiang, X., Zhang, J., Xiao, R., Song, Y., Feng, X., & Miao, D. (2013). The impact of psychological capital on job burnout of Chinese nurses: The mediator role of organizational commitment. *PLoS ONE*, *8*(12), 1–7. doi: 10.1371/journal.pone.0084193

Perneger, T. V., Courvoisier, D. S., Hudelson, P. M., & Gayet-Ageron, A. (2015). Sample size for pre-tests of questionnaires. *Quality of Life Research*, *24*(1), 147–151. doi: 10.1007/s11136-014-0752-2

Pett, M. A., Lackey, N. R., & Sullivan, J. J. (2003). *Making sense of factor analysis: The use of factor analysis for instrument development in health care research*. London, United Kingdom: SAGE Publishing.

Pijl-Zieber, E. M., Barton, S., Konkin, J., Awosoga, O., & Caine, V. (2014). Competence and competency-based nursing education: Finding our way through the issues. *Nurse Education Today*, *34*(5), 676–678. doi: 10.1016/j.nedt.2013.09.007

Pillay, M. S., Johari, R., Hazilah, M., Asaari, A., Azman, B., Salikin, F., & Ismefariana, I. W. (2011). Hospital waiting time: The forgotten premise of healthcare service delivery? *International Journal of Healthcare*, *24*(7), 506–522. doi: 10.1108/09526861111160553

Planning and Development Division. (2011). *Pelan Strategik Kementerian Kesihatan Malaysia 2011–2015*. Perpatih Printers.

Planning Division. (2013). *HIMS sub system medical care annual report.*

Planning Division. (2015). *Human resources for health country profiles 2015 Malaysia.*

Planning Division. (2016). *HIMS sub system medical care annual report.*

Platt, M., Kwasky, A., & Spetz, J. (2016). Filling the gap: Developing health economics competencies for baccalaureate nursing programs. *Nursing Outlook*, *64*(1), 49–60. doi: 10.1016/j.outlook.2015.10.004

Podsakoff, N., Podsakoff, P., Mackenzie, S. B., Maynes, T. D., & Spoelma, T. M. (2014). Consequences of unit-level organizational citizenship behaviors: A review and recommendations for future research. *Journal of Organizational Behavior*, *35*, S87–S119. doi: 10.1002/job

Podsakoff, P. M., Ahearne, M., & MacKenzie, S. B. (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology*, *82*(2), 262–270. doi: 10.1037/0021-9010.82.2.262

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, *63*(1), 539–569. doi: 10.1146/annurev-psych-120710-100452

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903. doi: 10.1037/0021-9010.88.5.879

Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and

empirical literature and suggestions for future research. *Journal of Management*, *26*(3), 513–563. doi: 10.1177/014920630002600307

Poghosyan, L., Nannini, A., & Clarke, S. (2013). Organizational climate in primary care settings: Implications for nurse practitioner practice. *Journal of the American Academy of Nurse Practitioners*, *25*(3), 134–140. doi: 10.1111/j.1745-7599.2012.00765.x

Polit, D. F., & Beck, C. T. (2006). The content validity index: Are you sure you know what's being reported? Critique and recommendations. *Research in Nursing & Health*, *29*, 489–497. doi: 10.1002/nur

Polit, D. F., Beck, C. T., & Owen, S. V. (2007). Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. *Research in Nursing & Health*, *30*, 459–467. doi: 10.1002/nur.20199

Poursafar, A., Rajaeepour, S., Seyadat, S. A., & Oreizi, H. R. (2014). The relationship between developmental performance appraisal, organizational support, organizational commitment and task performance: Testing a mediation model. *International Journal of Human Resource Studies*, *4*(2), 50. doi: 10.5296/ijhrs.v4i2.5765

Public Service Department Malaysia. *Sistem penilaian prestasi pegawai perkhidmatan awam di bawah saraan baru perkhidmatan awam*, Pub. L. No. JPA.BK.(S)174/3/2-20(1), 8 Government Gazette (2011). Retrieved from http://docs.jpa.gov.my/docs/pekeliling/pp02/bil04/Lampiran-A2.pdf

Public Service Department. *Kenaikan pangkat secara time-based berasaskan kecemerlangan bagi pegawai kumpulan pelaksana*, Pub. L. No. pp102017, 10 1 (2017). Malaysia.

Public Service Department. *Kenaikan pangkat secara time-based berasaskan kecemerlangan bagi pegawai kumpulan pelaksana*, Pub. L. No. pp102017, 10 1 (2017). Malaysia.

Public Service Department. *Menaiktaraf skim perkhidmatan penolong jururawat kepada skim perkhidmatan jururawat masyarakat*, Pub. L. No. 300 (2008). Malaysia.

Public Service Department. *Pelaksanaan dasar pemisah (exit policy) bagi pegawai yang berprestasi rendah dalam pekhidmatan awam*, Pub. L. No. JPA.BK(S)174/3/13(30) (2015). Malaysia.

Public Service Department. *Penganugerahan pingat perkhidmatan cemerlang dan pemberian anugerah perkhidmatan cemerlang*, Pub. L. No. pp132012, 13 1 (2012). Malaysia. https://doi.org/10.1017/CBO9781107415324.004

Pulakos, E. D. (2009). *Performance management a new approach for driving business results* (1st ed.). John Wiley & Sons, Ltd. Retrieved from http://www.untag-smd.ac.id/files/Perpustakaan_Digital_2/PERFORMANCE MANAGEMENT Performance Management, A New Approach for Driving Business Results.pdf

Pulakos, E. D., & O'Leary, R. S. (2011). Why is performance management broken? *Industrial and Organizational Psychology*, *4*(2), 146–164. doi: 10.1111/j.1754-9434.2011.01315.x

Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, *85*(4), 612–624. doi: 10.1037/0021-9010.85.4.612

Pulakos, E. D., Hanson, R. M., Arad, S., & Moye, N. (2015). Performance management can be fixed: An on-the-job experiential learning approach for complex behavior change. *Industrial and Organizational Psychology*, *8*(1), 51–76. doi: 10.1017/iop.2014.2

Pulakos, E. D., Mueller-Hanson, R., & Arad, S. (2019). The evolution of performance management: Searching for value. *Annual Reviews of Organizational Psychology and Organizational Behavior*, *6*(1), 1–23.

Purohit, B., & Wadhwa, A. (2012). Organizational climate from viewpoint of motivation in district hospital, India. *Health*, *04*(07), 400–406. doi: 10.4236/health.2012.47063

Puteri, N. J. (2004). Medical negligence litigation in Malaysia: Whither should we travel? *Journal of Malaysian Bar*, (1), 14–25.

Putri, N. T., Yusof, S. M., Hasan, A., & Darma, H. S. (2017). A structural equation model for evaluating the relationship between total quality management and employees' productivity. *International Journal of Quality & Reliability Management*.

Pyone, T., Smith, H., & Van Den Broek, N. (2017). Frameworks to assess health systems governance: A systematic review. *Health Policy and Planning*, *32*(5), 710–722. doi: 10.1093/heapol/czx007

Ramoo, V., Abdullah, K. L., & Piaw, C. Y. (2013). The relationship between job satisfaction and intention to leave current employment among registered nurses in a teaching hospital. *Journal of Clinical Nursing*, *22*(21–22), 3141–3152. doi: 10.1111/jocn.12260

Ramos-Vallagrasa, P., Barrada, J., Fernandez-del-Rio, E., & Koopmans, L. (2019). Assessing job performance using brief self-report scales: The case of the individual work performance questionnaire. *Journal of Work and Organizational Psychology*, *35*, 195–205.

Rana, P. S. P. S. S. (2015). The impact of performance appraisal on organizational commitment of bank employees. *International Journal of Science and Research (IJSR)*, *4*(4), 2964–2967. Retrieved from https://www.ijsr.net/archive/v4i4/SUB153899.pdf

Rheingans, J. I. (2012). The alchemy of shared governance: Turning steel (and sweat) into gold. *Nurse Leader*, *10*(1), 40–42. doi: 10.1016/j.mnl.2011.11.007

Roch, G., Dubois, C. A., & Clarke, S. P. (2014). Organizational climate and hospital nurses' caring practices: A mixed-methods study. *Research in Nursing and Health*, *37*(3), 229–240. doi: 10.1002/nur.21596

Rodrigues, A. V. D., Vituri, D. W., Haddad, M. do C. L., Vannuchi, M. T. O., & de Oliveira, W. T. (2012). Nursing care responsiveness from the client's view. *Revista Da Escola de Enfermagem*, *46*(6), 1446–1452. doi: 10.1590/S0080-62342012000600023

Rowe, A. K., De Savigny, D., Lanata, C. F., & Victora, C. G. (2005). How can we achieve and maintain high-quality performance of health workers in low-resource settings? *Lancet*, *366*(9490), 1026–1035. doi: 10.1016/S0140-6736(05)67028-6

Rubel, M. R. B., & Kee, D. M. H. (2015). Perceived fairness of performance appraisal, promotion opportunity and nurse's turnover intention: The role of organizational commitment. *Asian Social Science*, *11*(9), 183–197. doi: 10.5539/ass.v11n9p183

Rupatharshini, C. (2014). *Planning framework for human resources for health for maternal and newborn care*. doi: 10.17037/PUBS.02124342

Rusu, G., Silvia, A., & Huţu, C.-A. (2016). Organizational context factors influencing employee performance appraisal: A research framework. *Procedia - Social and Behavioral Sciences*, *221*, 57–65. doi: 10.1016/j.sbspro.2016.05.090

Safurah, J., Kamaliah, N., Khairiyah, M., Nour, O., & Healy, J. (2013). *Malaysia health system review*. World Health Organization (Vol. 3).

Salleh, M., Amin, A., Muda, S., & Halim, M. A. S. A. (2013). Fairness of performance appraisal and organizational commitment. *Asian Social Science*, *9*(2), 121–128. doi: 10.5539/ass.v9n2p121

Saltman, R., Duran, A., & Dubois, H. (2016). *Governing public hospitals*. The Palgrave International Handbook of Healthcare Policy and Governance. doi: 10.1057/9781137384935_27

Samsuri, S. E., Pei Lin, L., & Fahrni, M. L. (2015). Safety culture perceptions of pharmacists in Malaysian hospitals and health clinics: A multicenter assessment using the safety attitudes questionnaire. *BMJ Open*, *5*(11), e008889. doi: 10.1136/bmjopen-2015-008889

Sand-Jecklin, K., & Sherman, J. (2014). A quantitative assessment of patient and nurse outcomes of bedside nursing report implementation. *Journal of Clinical Nursing*, *23*(19–20), 2854–2863. doi: 10.1111/jocn.12575

Sand-Jecklin, K., & Sherman, J. (2014). A quantitative assessment of patient and nurse outcomes of bedside nursing report implementation. *Journal of Clinical Nursing*, *23*(19–20), 2854–2863. doi: 10.1111/jocn.12575

Santos, J. L. G. dos, Erdmann, A. L., Andrade, S. R. de, Mello, A. L. S. F. de, Lima, S. B. S. de, & Pestana, A. L. (2013). Nursing governance: An integrative review of the literature. *Revista Da Escola de Enfermagem Da USP*, *47*(6), 1414–1421. doi: 10.1590/s0080-623420130000600024

Sarstedt, M., Hair, J. F., Ringle, C. M., Thiele, K. O., & Gudergan, S. P. (2016). Estimation issues with PLS and CBSEM: Where the bias lies?. *Journal of Business Research*, *69*(10), 3998–4010. doi:10.1016/j.jbusres.2016.06.007

Saungweme, R., & Gwandure, C. (2011). Organizational climate and intent to leave among recruitment consultants in Johannesburg, South Africa. *Journal of Human Ecology*, *34*(3), 145–153. doi: 10.1080/09709274.2011.11906379

Scheible, A. C. F., & Bastos, A. V. B. (2013). An examination of human resource management practices' influence on organizational commitment and entrenchment. *Brazilian Administration Review*, *10*(1), 57–76. doi: 10.1590/S1807-76922012005000011

Scherb, C. A., Specht, J. K. P., Loes, J. L., & Reed, D. (2011). Decisional involvement: Staff nurse and nurse manager perceptions. *Western Journal of Nursing Research*, *33*(2), 161–179. doi: 10.1177/0193945910378853

Schmalenberg, C., & Kramer, M. (2008). Essentials of a productive nurse. *Nursing Research - January/February 2008*, *57*(1), 2–13.

Schmidt, S. G., Dichter, M. N., Bartholomeyczik, S., & Hasselhorn, H. M. (2014). The satisfaction with the quality of dementia care and the health, burnout and work ability of nurses: A longitudinal analysis of 50 German nursing homes. *Geriatric Nursing*, *35*(1), 42–46. doi: 10.1016/j.gerinurse.2013.09.006

Schönrock-Adema, J., Heijne-Penninga, M., van Hell, E. A., & Cohen-Schotanus, J. (2009). Necessary steps in factor analysis: Enhancing validation studies of educational instruments. The PHEEM applied to clerks as an example. *Medical Teacher*, *31*(6), e226-e232.

Schumacker, R. L., & Lomax, G. R. (2004). *A beginner's guide to structural equation modeling* (2nd ed.). Washington: Lawrence Erlbaum Associates Publishers.

Scott, T., Mannion, R., Davies, H., & Marshall, M. (2003). Methods the quantitative measurement of organizational culture in health care: A review of the available instruments. *Health Services Research*, *38*(3), 923–945.

Secretary General Ministry of Health. *Bayaran insentif pos basic kepada anggota paramedic Kementerian Kesihatan Malaysia yang memiliki sijil pos basic dan diploma lanjutan*, Pub. L. No. 2/2017 (2017). Malaysia.

Sedgwick, M., & Pijl-Zieber, E. M. (2015). New rural acute care nurses speak up: 'We're it' but we're not ready. *Journal for Nurses in Professional Development*, *31*(5), 278–283. doi: 10.1097/NND.0000000000000188

Sekaran, U. (2003). *Research methods for Business. A skill building approach* (4th ed.). NY: John Wiley & Sons. doi: 10.1017/CBO9781107415324.004

Selvarajan, T. T., & Cloninger, P. A. (2011). Can performance appraisals motivate employees to improve performance? A Mexican study. *The International Journal of Human Resource Management*, *23*(15), 3063–3084.

Seren, A., Tuna, R., & Bacaksiz, F. E. (2017). Reliability and validity of the Turkish version of the job performance scale instrument. *Journal of Nursing Research*, *00*(0), 1–9.

Sheaff, R., Pickard, S., & Smith, K. (2002). Public service responsiveness to users' demands and needs: Theory, practice and primary healthcare in England. *Public Administration*, *80*(3), 435–452. doi: 10.1111/1467-9299.00312

Shearer, J. B. (2016). *Examining content validity of the nurse competence scale in the United States*. (Doctoral dissertation, University of South Florida Major, Florida, United States). Retrieved from https://scholarcommons.usf.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=7782&context=etd

Shipp, P. J. (Who). (1998). *Workload indicators of staffing need (WISN): A manual for implementation*. World health organization. Geneva, Switzerland: WHO, Division of Human Resources Development and Capacity Building. https://doi.org/WHO/HRB/98.2

Shivam, S., Roy, R. N., Dasgupta, S., Bhattacharyya, K. Das, Misra, R. N., Roy, S., & Saha, I. (2014). Nursing personnel planning for rural hospitals in Burdwan District, West Bengal, India, using workload indicators of staffing needs. *Journal of Health, Population and Nutrition*, *32*(4), 658–664.

Siew, P., Chitpakdee, B., & Chontawan, R. (2011). Factors predicting organizational commitment among nurses in state hospitals, Malaysia. *The International Medical Journal Malaysia*, *10*(2), 21–28.

Silva, S., Lima, M. L., & Baptista, C. (2004). OSCI: An organizational and safety climate inventory. *Safety Science*, *42*(3), 205–220. doi: 10.1016/S0925-7535(03)00043-2

Slatyer, S., Williams, A. M., & Michael, R. (2015). Seeking empowerment to comfort patients in severe pain: A grounded theory study of the nurse's perspective. *International Journal of Nursing Studies*, *52*(1), 229–239. doi: 10.1016/j.ijnurstu.2014.06.010

Smith, R., Lagarde, M., Blaauw, D., Goodman, C., English, M., Mullei, K., & Hanson, K. (2013). Appealing to altruism: An alternative strategy to address the health workforce crisis in developing countries? *Journal of Public Health (Oxford, England)*, *35*(1), 164–170. doi: 10.1093/pubmed/fds066

Smith, S. (2012). Nurse competence: A concept analysis. *International Journal of Nursing Knowledge*, *23*(3), 172–182.

Som, R. M., Mustapha, R. M. R., Othman, A. K., Aziz, R. A., & Noranee, S. (2015). Exploratory factor analysis: Conceptualization, reliability and validity of job performance. *International Journal of Social Science and Humanity*, *5*(5), 440–445. doi: 10.7763/IJSSH.2015.V5.496

Sonnentag, S., & Frese, M. (2002). *Performance concepts and performance theory*. In S. Sonnentag (ed.), *Psychological management of individual performance* (pp. 1–24). Wiley & Sons, Ltd. Retrieved from https://doi.org/10.1002/0470013419.ch1

Sonnentag, S., Volmer, J., & Spychala, A. (2008). *Job performance. The SAGE Handbook of Organizational Behavior* (Vol. 1). Retrieved from https://doi.org/10.4135/9781849200448

Sonnetag, S. (Ed.). (2002). *Psychological Management of Individual Performance*. Technical University of Braunchweig, Germany: John Wiley & Sons, Ltd.

Sousa, A., Dal Poz, M. R., & Carvalho, C. L. (2012). Monitoring inequalities in the health workforce: The case study of brazil 1991–2005. *PLoS ONE*, *7*(3). doi: 10.1371/journal.pone.0033399

Sousa, V. D., & Rojjanasrirat, W. (2010). Translation, adaptation and validation of instruments or scales for use in cross-cultural health care research: A clear and user-friendly guideline. *Journal of Evaluation in Clinical Practice*, *17*(2), 268–274. doi: 10.1111/j.1365-2753.2010.01434.x

Steinmetz, S., Vries, D. H., & Tijdens, K. G. (2014). Should I stay or should I go? The impact of working time and wages on retention in the health workforce. *Human Resources for Health*, *12*(1), 23. doi: 10.1186/1478-4491-12-23

Stewart, D., Burton, E., & White, J. (2018). *Health is a human right: Access, investment and economic growth*. International Council of Nurses.

Stone, P. W., Harrison, M. I., Feldman, P., Linzer, M., Peng, T., Roblin, D., & William, E. (2005). Organizational climate of staff working; Conditions and safety—an integrative model. *Advances in Patient Safety*, *2*, 467–481.

Swihart, D. (2011). Shared governance: A practical approach to transform professional nursing practices. *The Journal of Nursing Administration* (2nd ed., Vol. 27). Danvers, United States of America: HCPro, Inc. doi: 10.1097/00005110-199703000-00007

Tanaka, J. S., & Huba, G. J. (1984). Confirmatory hierarchical factor analyzes of psychological distress measures. *Journal of Personality and Social Psychology*, *46*(3), 621.

Tashiro, J., Shimpuku, Y., Naruse, K., Maftuhah, & Matsutani, M. (2013). Concept analysis of reflection in nursing professional development. *Japan Journal of Nursing Science*, *10*(2), 170–179. doi: 10.1111/j.1742-7924.2012.00222.x

Taylor, S. L. (2015). *Pediatric Nurses' Perceptions of Continuing Professional Development Opportunities*. Walden University.

ten Cate, O., & Scheele, F. (2007). Viewpoint: Competency-based postgraduate training: Can we bridge the gap between theory and clinical practice? *Academic Medicine*, *82*(6), 542–547. doi: 10.1097/ACM.0b013e31805559c7

Thabane, L., Ma, J., Chu, R., Cheng, J., Ismaila, A., Rios, L. P., & Goldsmith, C. (2010). A tutorial on pilot studies: The what, why and how. *BMC Medical Research Methodology*, *10*(1), 1–10. doi: 10.1186/1471-2288-10-1

Thomas, W.I. and Thomas, D.S. (1928), *The child in America: Behavior problems and programs*, Alfred A. Knopf, New York, NY.

Thurston, P. W., & McNall, L. (2010). Justice perceptions of performance appraisal practices. *Journal of Managerial Psychology*, *25*(3), 201–228. doi: 10.1108/02683941011023712

TL Beauchamp, & Childress, J. (2001). *Principles of medical ethics*. Oxford University Press, 454.

Top, M. (2013). Organizational variables on nurses' job performance in Turkey: Nursing assessments. *Iranian Journal of Public Health*, *42*(3), 261–271. doi: 10.2337/db06-1182.J.-W.Y.

Umann, J., Guido, L. A. ., & Grazziano, E. S. . (2012). Presenteeism in hospital nurses [Presenteísmo em enfermeiros hospitalares]. *Revista Latino-Americana de Enfermagem*, *20*(1), 159–166. doi: 10.1590/S0104-11692012000100021

Unit Komunikasi Korporat. (2014). *Laporan Pengurusan Aduan Kementerian Kesihatan Malaysia*. Retrieved from www.moh.gov.my/.../554756755a584a696158526862693953645...

United Nations. (2015). *The Millennium Development Goals Report 2015*. United Nations. Retrieved from https://visit.un.org/millenniumgoals/2008highlevel/pdf/MDG_Report_2008_Addendum.pdf

Uno, M., Tsujimoto, T., & Inoue, T. (2016). Perceptions of nurses in Japan toward their patients' expectations of care: A qualitative study. *International Journal of Nursing Sciences*, *4*(1), 58–62. doi: 10.1016/j.ijnss.2016.12.005

Unruh, L. Y., & Fottler, M. D. (2002). Nurse staffing and nursing performance: A review and synthesis of the relevant literature. *Advances in Health Care Management*, *3*, 11–44. Retrieved from https://doi.org/10.1016/S1474-8231(02)03004-5

Van Bogaert, P., Kowalski, C., Weeks, S. M., Van heusden, D., & Clarke, S. P. (2013). The relationship between nurse practice environment, nurse work characteristics, burnout and job outcome and quality of nursing care: A cross-sectional survey. *International Journal of Nursing Studies*, *50*(12), 1667–1677. doi: 10.1016/j.ijnurstu.2013.05.010

Bogaert, P. V., Peremans, L., de Wit, M., Van Heusden, D., Franck, E., Timmermans, O., & Havens, D. S. (2015). Nurse managers' perceptions and experiences regarding staff nurse empowerment: A qualitative study. *Frontiers in Psychology*, *6*(1585), 1–10. doi: 10.3389/fpsyg.2015.01585

Van Bogaert, P., Peremans, L., Diltour, N., Van Heusden, D., Dilles, T., Van Rompaey, B., & Havens, D. S. (2016). Staff nurses' perceptions and experiences about structural empowerment: A qualitative phenomenological study. *PLoS ONE*, *11*(4), 1–14. doi: 10.1371/journal.pone.0152654

Van Bogaert, P., Peremans, L., Heusden, D. Van, Verspuy, M., Kureckova, V., Van De Cruys, Z., & Franck, E. (2017). Predictors of burnout, work engagement and nurse reported job outcomes and quality of care: a mixed method study. *BMC Nursing*, *16*(5), 1–14. doi: 10.1186/s12912-016-0200-4

Van den Heever, A. E., Poggenpoel, M., & Myburgh, C. P. H. (2015). Nurses' perceptions of facilitating genuineness in a nurse-patient relationship. *Health SA Gesondheid*, *20*(1), 109–117. doi: 10.1016/j.hsag.2015.02.003

van Hooft, S. M., Dwarswaard, J., Jedeloo, S., Bal, R., & van Staa, A. L. (2015). Four perspectives on self-management support by nurses for people with chronic conditions: A Q-methodological study. *International Journal of Nursing Studies*, *52*(1), 157–166. doi: 10.1016/j.ijnurstu.2014.07.004

Van Olmen, J., Marchal, B., Van Damme, W., Kegels, G., & Hill, P. S. (2012). Health systems frameworks in their political context: Framing divergent agendas. *BMC Public Health*, *12*(1), 1. doi: 10.1186/1471-2458-12-774

Van Waeyenberg, T., Decramer, A., Desmidt, S., & Audenaert, M. (2017). The relationship between employee performance management and civil servants' turnover intentions: A test of the mediating roles of system satisfaction and affective commitment. *Public Management Review*, *19*(6), 747–764. doi: 10.1080/14719037.2016.1209230

Vanessa, A., Rodrigues, D., Vituri, D. W., Louren, C., Terezinha, M., Vannuchi, O., & Tiago, W. (2012). Nursing responsiveness the client's view. *Rev Esc Enferm USP*, *46*(6), 1446–1452.

Vermeeren, B., Steijn, B., Tummers, L., Lankhaar, M., Poerstamper, R.-J., & van Beek, S. (2014). HRM and its effect on employee, organizational and financial outcomes in health care organizations. *Human Resources for Health*, *12*, 35. doi: 10.1186/1478-4491-12-35

Viswesvaran, C. (1993). Modelling Job Performance: Is there a general factor?

Viswesvaran, C., & Ones, D. S. (2000). Perspectives on models of job performance. *International Journal of Selection and Assessment*, *8*(4), 216–226. doi: 10.1111/1468-2389.00151

Wah, Y. C. (2014). *The mediating effect of job stress on the relationship between job demands, job resources and sickness absence: A study among nurses in Malaysia*. (Doctoral dissertation, Universiti Utara Malaysia, Bukit Kayu Hitam, Kedah).

Wah, Y. C. (2014). *The mediating effect of job stress on the relationship between job demands, job resources and sickness absence: A study among nurses in Malaysia*. (Doctoral dissertation, Universiti Utara Malaysia, Bukit Kayu Hitam, Kedah).

Wangensteen, S. (2010). *Newly graduated nurses' perception of competence, critical thinking and research utilization*. (Doctoral dissertation, Karlstads University, Karlstad, Sweden).

Watkins, M. W. (2018). Exploratory factor analysis: A guide to best practice. *Journal of Black Psychology*, *44*(3), 219–246. doi: 10.1177/0095798418771807

Watson, R., Stimpson, A., & Topping, A. (2002). Competence assessment in nursing: A systematic review of the literature. Journal of Advanced Nursing, 39(5), 421-431.

Watters, C., Reedy, G., Ross, A., Morgan, N. J., Handslip, R., & Jaye, P. (2015). Does interprofessional simulation increase self-efficacy: A comparative study. *BMJ Open*, *5*(1), e005472. doi: 10.1136/bmjopen-2014-005472

Welbourne, T. M., Johnson, D., & Erez, A. (1998). The role-based performance scale: Validity analysis of a theory-based measure. *Academy of Management Journal*, *41*(5), 540–555.

Wienand, U., Cinotti, R., Nicoli, A., & Bisagni, M. (2007). Evaluating the organizational climate in Italian public healthcare institutions by means of a questionnaire. *BMC Health Services Research*, *7*. doi: 10.1186/1472-6963-7-73

Wiig, S., Aase, K., von Plessen, C., Burnett, S., Nunes, F., Weggelaar, A. M., & Fulop, N. (2014). Talking about quality: Exploring how 'quality' is conceptualized in European hospitals and healthcare systems. *BMC Health Services Research*, *14*(1), 478. doi: 10.1186/1472-6963-14-478

Wilson, E. (2013). *Evaluating shared governance for nursing excellence*. (UNLV Theses, Dissertations, Professional Papers, and Capstones. University of Nevada, Las Vegas). Retrieved from http://ezproxy.library.usyd.edu.au/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=109863342&site=ehost-live&scope=site

Wong, B. (2013). *Clinical competency: Experience of new graduated nurses from Bachelor degree of nursing in University Malaysia Sarawak*. University Malaysia Sarawak.

Wong, Y., Wong, Y., & Wong, C. (2015). An integrative model of turnover intention antecedents and their effects on employee performance in Chinese joint ventures. *Journal of Chinese Human Resource Management*, *6*(1), 71–90.

World health organization - Western Pacific Region. (2013). Western Pacific Region Nursing and Midwifery Databank. Retrieved from http://www.wpro.who.int/hrh/about/nursing_midwifery/db_malaysia2013.pdf

World Health Organization (2006). Working together For Health, The WHO Health Report 2006. World Health (Vol. 19). doi: 10.1186/1471-2458-5-67

World Health Organization (2010). *Increasing access to health workers in remote and rural areas through improved retention: global policy recommendations.* WHO. WHO Press.

World Health Organization (2013). *A Universal Truth: No Health Without a Workforce.*

World Health Organization (2015a). Health in 2015: *from MDGs*, Millennium Development Goals to SDGs, Sustainable Development Goals. 1.Global. :WHO Press.

World Health Organization (2015b). *Health workforce 2030 towards a global strategy on human resources for health*.

World Health Organization Western Pacific Region. (2013). *Human resources for health country profiles: Malaysia*.

World Health Organization. (2006). *The World Health Report 2006: Working Together for Health*. Retrieved from https://doi.org/10.1186/1471-2458-5-67

World Health Organization. (2015). *Health workforce 2030 towards a global strategy on human resource for health.*

World Health Organization. (2015). *World health statistics 2015 (Vol. 53)*. Retrieved from https://doi.org/10.1017/CBO9781107415324.004

Wu, I.-L., & Hsieh, P.-J. (2015). Hospital innovation and its impact on customer-perceived quality of care: A process-based evaluation approach. *Total Quality Management & Business Excellence*, *26*(1–2), 46–61. doi: 10.1080/14783363.2013.799332

Wynd, C. A., Schmidt, B., & Schaefer, M. A. (2003). Two quantitative approaches for estimating content validity. *Western Journal of Nursing Research*, *25*(5), 508–518. doi: 10.1177/0193945903252998

Yaghmale, F. (2003). Content validity and its estimation. *Journal of Medical Education*, *3*, 25–27.

Yakusheva, O., & Weiss, M. (2017). Rankings matter: Nurse graduates from higher-ranked institutions have higher productivity. *BMC Health Services Research*, *17*(1), 134. doi: 10.1186/s12913-017-2074-x

Ying, Lee H., & Kamarul Zaman, B. A. (2009). The moderating effects of organizational culture on the relationships between leadership behavior and organizational commitment and between organizational commitment and job satisfaction and performance. *Leadership & Organization Development Journal*, *30*(1), 53–86. doi: 10.1108/JEIM-07-2014-0077

Yumiko, O., Hiroki, F., Mitsunori, M., Miho, N., Fumi, A., Masayo, K., & Toyoko, Y. (2015). Cross-sectional online survey of research productivity in young Japanese nursing faculty. *Japan Journal of Nursing Science*, *12*(3), 198–207. doi: 10.1111/jjns.12060

Zaghini, F., Fida, R., Caruso, R., Kangasniemi, M., Sili, A., & Vergata, P. T. (2016). What is behind counterproductive work behaviors in the nursing profession? A systematic review. *Journal of Clinical Research & Bioethics*, *7*(4), 1000277. doi: 10.4172/2155-9627.1000277

Zainudin, A. (2012). *Research methodology and data analysis*. Malaysia: Penerbit Universiti Teknologi MARA Press.

Zainudin, A. (2012). *Structural equation modeling using AMOS graphic*. Malaysia: Penerbit Universiti Teknologi MARA.

Zainudin, A. (2015). *SEM made simple*. Selangor, Malaysia: MPWS Rich Publication Sdn. Bhd.

Zainudin, A., Afthanorhan, A., & Mamat, M. (2015). The Likert scale analysis using parametric based Structural Equation Modeling (SEM). *Computational Methods in Social Sciences*, *4*(1), 13–21.

Zainudin, A., Afthanorhan, A., Mohamad, M., & Asri, M. A. M. (2015). An evaluation of measurement model for medical tourism research: The confirmatory factor analysis approach. *International Journal of Tourism Policy*, *6*(1), 29–45.

Zamanzadeh, T and Nemati, N. (2014). Details of content validity and objectifying it in instrument development. *Nursing Practice Today*, *1*(3), 163–171.

Zamanzadeh, V., Ghahramanian, A., Rassouli, M., Abbaszadeh, A., Alavi-Majd, H., & Nikanfar, A.-R. (2015). Design and implementation content validity study: Development of an instrument for measuring patient-centered communication. *Journal of Caring Sciences*, *4*(2), 165–178. doi : 10.15171/jcs.2015.017

Zander, B., Dobler, L., & Busse, R. (2013). The introduction of DRG funding and hospital nurses' changing perceptions of their practice environment, quality of care and satisfaction: Comparison of cross-sectional surveys over a 10-year period. *International Journal of Nursing Studies*, *50*(2), 219–229. doi: 10.1016/j.ijnurstu.2012.07.008

Zhang, X., Hu, B., & Qiu, M. (2014). Job satisfaction as a mediator in the relationship between performance appraisal and voice behavior. *Social Behavior and Personality: An International Journal*, *42*(8), 1315–1323. doi: 10.2224/sbp.2014.42.8.1315