

**EFFECT OF SELF-EFFICACY AND COLLECTIVE EFFICACY
ON NURSE JOB PERFORMANCE IN THE TERTIARY CARE
HOSPITAL, INDIRA GANDHI MEMORIAL HOSPITAL (IGMH),
MALDIVES**

JEEZA HASSAN

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF
PRIMARY HEALTH CARE MANAGEMENT
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2015**

COPYRIGHT OF MAHIDOL UNIVERSITY

Thesis
entitled
**EFFECT OF SELF-EFFICACY AND COLLECTIVE EFFICACY
ON NURSE JOB PERFORMANCE IN THE TERTIARY CARE
HOSPITAL, INDIRA GANDHI MEMORIAL HOSPITAL (IGMH),
MALDIVES**

.....
Mrs. Jeeza Hassan
Candidate

.....
Asst. Prof. (Special) Nate Hongkraitert,
Ph.D. (Educational Technology)
Major advisor

.....
Asst. Prof. Jutatip Sillabuttra,
Ph.D. (Mathematic)
Co-advisor

.....
Prof. Patcharee Lertrit,
M.D., Ph.D. (Biochemistry)
Dean
Faculty of Graduate Studies
Mahidol University

.....
Lect. Dr. Aroonsri Mongkolchati,
Ph.D. (Public Health)
Program Director
Master of Primary Health Care
Management
ASEAN Institute for Health Development
Mahidol University

Thesis
entitled
**EFFECT OF SELF-EFFICACY AND COLLECTIVE EFFICACY
ON NURSE JOB PERFORMANCE IN THE TERTIARY CARE
HOSPITAL, INDIRA GANDHI MEMORIAL HOSPITAL (IGMH),
MALDIVES**

was submitted to the Faculty of Graduate Studies, Mahidol University
for the degree of Masters of Primary Health Care Management
on
July 3, 2015

.....
Mrs. Jeeza Hassan
Candidate

.....
Asst. Prof. Nimmuan Srichad,
Ph.D (Nursing)
Chair

.....
Asst. Prof. Jutatip Sillabutra,
Ph.D. (Mathematic)
Member

.....
Asst. Prof. (Special) Nate Hongkraitert,
Ph.D. (Educational Technology)
Member

.....
Prof. Patcharee Lertrit,
M.D., Ph.D. (Biochemistry)
Dean
Faculty of Graduate Studies
Mahidol University

.....
Prof. Supa Pengpid,
Dr. P.H
Director
ASEAN Institute for Health Development
Mahidol University

ACKNOWLEDGEMENTS

First of all I thank Almighty Allah, the most Gracious and the Most Merciful, for granting me with intelligence, courage and patience in completing this program and thesis work.

The success of this thesis would not have been possible without the tremendous help and support of many people. Your constant words of inspiration, prayers and expertise always will be remembered. Firstly, I would like to express my deepest gratitude and appreciation to my Major advisor Dr. Nate Hongkraitert for providing continuous support, encouragement, and guidance throughout the thesis work. Thank you for your generosity.

I am deeply grateful to my co-advisor Dr. Jutatip Sillabutra for providing her constructive comments, suggestions, and encouragement during the course of thesis work. Indeed she was the best guider in analysis section of my thesis. I am sure your valuable comments and advice helped me immensely.

I would like to express my sincere appreciation to all the respected professors, and staff of AIHD, MPH office, ASEAN house, and all my colleagues, especial thanks goes to my dear colleague Sheeza Ibrahim, Egi and Miko for their endless support during the entire program. I am grateful to my friend Ikram Hamid and my younger sister, Naadhira Hassan for being there as good friends and their tremendous support and continuous help lend for my thesis work and in entire program. And a warm appreciation to Soliha Fathmath for her help.

I am sincerely thankful to TICA for funding my complete study program and giving me this opportunity to study at AIHD, Mahidol University. I would like to express my appreciation to the Ministry of Health, Maldives for granting permission to conduct the study in Maldives. I extend my appreciation and special thanks to IGMH management for giving me permission to conduct the survey, and nursing administration, research assistants and participants for their support provided during data collection process.

I am very much indebted to my beloved husband Mohamed Zahir and my son Yoosuf Yukeen Nasrulla for their patience, and having faith in my abilities and keeping my spirits boosted up while I complete this program and thesis. I thank my loving sister, Zifleena Hassan for instilling in me a love for books and knowledge. Also I extend my thankfulness to all my family members for giving full support to fulfill my dreams. My heartfelt gratitude to my Uncle and family for looking after my son during my study period and for supporting me to complete my study and thesis work.

Last but not the least I dedicate this thesis to my beloved parents, Aishath Habeeba and Hassan Didi, whose love and support have been priceless throughout my life. Thank you MOM and DAD, I LOVE YOU.

Jeeza Hassan

EFFECT OF SELF-EFFICACY AND COLLECTIVE EFFICACY ON NURSEING PERFORMANCE IN THE TERTIARY CARE HOSPITAL, INDIRA GANDHI MEMORIAL HOSPITAL (IGMH), MALDIVES

JEEZA HASSAN 5738592 ADPM/M

M.P.H.M.

THESIS ADVISORY COMMITTEE: NATE HONGKRILERT, Ph.D, JUTATIP SILLABUTRA , Ph.D

ABSTRACT

This cross-sectional descriptive study was conducted at Indira Gandhi Memorial Hospital, Maldives in order to investigate the level of nursing performance. The main objective of this study was to ascertain the relationship between independent variables and nursing performance and to identify the factors which may predict nursing performance. Data was collected from 238 nurses using a self-administered questionnaire. Descriptive statistics, t-test, one-way ANOVA, Pearson correlation, and stepwise multiple regression were used for data analysis.

The results show that overall task performance as perceived by nurses was at higher level and overall contextual performance was at moderate level. There were correlations between nursing performance and self-efficacy ($p < .01$), and collective efficacy ($p < .01$). The optimism and competency significantly predicted nurse job performance ($p < .01$), as did commitment ($p < .05$), social support ($p < .01$) and job autonomy and decision making ($p < .05$).

It is recommended that hospital administration and nursing administration formulate interventions to improve nurses' optimism and competency, commitment, social support, job autonomy and decision making. Subsequently, further research on organizational level factors and nurse job performance will facilitate hospital administration more on improving nursing care quality and performance.

KEY WORDS: CONTEXTUAL PERFORMANCE / COLLECTIVE EFFICACY / MALDIVES / SELF-EFFICACY / TASK PERFORMANCE

133 pages

CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
LIST OF TABLES	ix
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS	xii
CHAPTER I INTRODUCTION	1
1.1 Rational and justification of the stud	1
1.2 Research Questions	7
1.3 Research objectives	7
1.3.1 General objectives	7
1.3.2 Specific objective	7
1.4 Conceptual framework	8
1.5 Operational definition of study	9
1.5.1 Dependent variables	9
1.5.2 Independent variables	10
1.6 Limitation of the study	12
CHAPTER II LITERATURE REVIEW	13
2.1 Maldives health care system	13
2.2 Nursing situation in Maldives	15
2.2.1 Nursing shortage in Maldives	15
2.3 Nursing situations in the tertiary care hospital, Maldives	16
2.4 Nurse Job performance	18
2.4.1 Conceptual models and theories of job performance	19
2.4.2 Measurement of job performance	22
2.5 Theoretical model	26

CONTENTS (cont.)

	Page
2.6 Related studies	30
2.6.1 Job performance	30
2.6.2 Socio-demographic factors	31
2.6.3 Self-efficacy	33
2.6.4 Collective efficacy	35
CHAPTER III RESEARCH METHODOLOGY	39
3.1 Research Design	39
3.2 Study site	39
3.3 Target population	40
3.3.1 Inclusion criteria	41
3.3.2 Exclusion Criteria	41
3.4 Sample size and determinants	41
3.5 Sample technique	42
3.6 Sampling frame	43
3.7 Data Collection Procedure	44
3.8 Research instruments	45
3.9 Validity and Reliability	51
3.10 Data Analysis	51
3.11 Ethical consideration	52
CHAPTER IV RESULTS	53
4.1 Socio-demographic characteristics of nurse	53
4.2 Self-efficacy	57
4.3 Collective efficacy	61

CONTENTS (cont.)

	Page
4.4 Nurse Job performance	67
4.4.1 Task performance of the respondents	67
4.4.2 Contextual performance of the respondents	68
4.5 The association between independent variables and nurse job Performance	69
4.5.1 Socio-demographic factors and task performance, contextual performance and overall performance	69
4.5.2 Relationship between overall and each variables of self-efficacy and overall performance, task performance and contextual performance	79
4.5.3 Relationship between overall and each variables of collective efficacy and overall performance, task performance and contextual performance	81
4.5.4 Predicting factors for overall nurse job performance and independent variables	83
CHAPTER V DISCUSSION	85
5.1 Job performance among registered nurses in IGMH	85
5.1.1 Task performance	85
5.1.2 Contextual performance	89
5.2 Association between Independent variables and nurse job performance	92
5.2.1 Socio-demographic factors	92
5.2.2 Self-efficacy	95
5.2.3 Collective efficacy	96

CONTENTS (cont.)

	Page
5.3 Methodological concerns	98
CHAPTER VI CONCLUSION AND RECOMMENDATIONS	99
6.1 Conclusion	99
6.2 Recommendations	100
6.2.1 Recommendation for hospital administration	100
6.2.2 Recommendation for nursing administration	101
6.2.3 Recommendation for further research	102
REFERENCES	103
APPENDICES	112
Appendix A Research Questionnaires	113
Appendix B Ethical Approval Documents	127
Appendix C Population and Sample Proportion	129
Appendix D Percentage of Performance Scale Rating By Each Items	130
BIOGRAPHY	133

LIST OF TABLES

Table	Page
2.1 Distribution of medical personal by local and expatriates, Maldives	16
3.1 Categorization of level of overall and each dimension of task performance	50
3.2 Categorization of level of overall and each dimension of contextual performance	50
4.1 Frequency and percentage of nurses by socio-demographic characteristics	54
4.2 Mean, standard deviation of overall self-efficacy and each variable of self-efficacy as perceived by the nurses	57
4.3 Mean, standard deviation, frequency and percentage of overall self-efficacy by each items	59
4.4 Mean, standard deviation of overall collective efficacy and each variable of collective efficacy as perceived by the nurses	62
4.5 Mean, standard deviation, and percentage of overall collective efficacy by each items	64
4.6 Mean, Standard Deviation and level of overall Task Performance and each Dimensions of Task Performance as perceived by Nurses	68
4.7 Mean, Standard Deviation and level of overall Contextual Performance and each Dimensions of Contextual Performance as perceived by Nurses	68
4.8 Association between socio-demographic factors and mean overall Performance as perceived by the nurses	70
4.9 Association between socio-demographic characteristics and Task Performance as perceived by the nurses	73

LIST OF TABLES (cont.)

Table		Page
4.10	Association between socio-demographic characteristics and Contextual Performance as perceived by the nurses	76
4.11	Correlation analysis between socio-demographic factor and overall performance, task performance and contextual performance as perceived by the nurses	79
4.12	Association between overall and each variables of self-efficacy and overall performance, task performance and contextual performance	80
4.13	Association between overall and each variables of collective efficacy and overall performance, task performance and contextual performance	82
4.14	Final model multiple regression analysis	84

LIST OF FIGURES

Figure		Page
1.1	Conceptual framework	8
2.1	Casual model of Social Cognitive Theory	26
3.1	Indira Gandhi Memorial hospital and its Logo	40
3.2	Sample Frame	43

LIST OF ABBREVIATIONS

IGMH	Indira Gandhi Memorial Hospital
IPD	Inpatient department
ICU	Intensive Care Unit
NICU	Neonatal Care Units NICU
OPD	Outpatient department
CD	Communicable Disease
NCD	Non-Communicable Disease
MOH	Ministry of Health
NHRC	National Health Research Committee
HHR	Health Human Resource
HR	Human Resource
SCT	Social Cognatic Theory
SPSS	Statistical Package of Social science
STO	State Trading Organization
FHS	Faculty of health Sciences
MNU	Maldives National University
DNP	Department of National Planning

CHAPTER I

INTRODUCTION

1.1 Rational and justification of the study

Healthcare systems worldwide are undergoing significant structural changes in order to meet the scientific advancements demand of healthcare needs. Similarly remarkable changes are brought to the healthcare financing that limits service delivery, infrastructures, and workforce to achieve the goal of healthcare system by providing cost effective and quality health care (1, 2). In addition, this remarkable changes are also influenced by growing high technology and public demand. Meanwhile as a result of development in communication technologies, increased in international mobility of service providers and growing participation of private sectors, lots of countries especially developed and developing countries are shifting health care from a social good perspective to health care as an economical good (3) (4). Change in health service delivery system makes the patient and quality of health care service as center focus for any health care organization (2). Nevertheless in this challenging health care environment nurses are the single largest serving group of health services (5). Nurses often work in crisis environment and are faced with every day challenges, such as excessive workload, poor working environment, high staff turnover rate, shortage of staff (3, 6). Therefore, to provide quality health care service, it's critical to know the performance of nurses and factors effecting nursing performance (7), so that healthcare organization can change its intervention to improve service quality through better performance.

Indeed in today's health care setting, nursing performance is a highly debated area. In fact nursing performance is been recognize as an important factor for delivery of quality care (7, 8). However, due to lack or insufficient professional nurses, most of the health care organizations are lacking in providing highest level of service (8). Shortage of nurses are a global phenomenon, and the situation are worse in developing countries. According to world bank report, Caribbean Nations alone are

suffering the shortage of nurses with 3 in every 10 position being unfilled, moreover it predicts that the countries will have shortage of 10,000 nurses by the year 2025 (9). According to a critical review done in 2010, Malaysia is also facing the crisis of nursing shortage and the demand is been increased in the country due to its aging population(10). In the study of Yun (2010), China having world's largest population is also having high demand for nurses and is facing of around 5 million shortage and United States holds the world's largest professional nursing workforce, but instate of having the largest nurse workforce, unites state is also predicted to have 1 million nurse shortage by year 2020 (11).

The situation in the Maldives nearly similar, shortage of nurses are one of the challenging issue for Maldives health sector. In the Maldives more than 50% of nurse workforce are recruited nurses from other countries. Most of nurses are from India and few from the Philippines works in private sectors. Therefore turnover rate is very high in the Maldives. In 2010, there are 61% of expatriate nurses in both public and private sectors (12) In addition there are limited nursing care opportunities for carrier development and as a result it has decreased people's attraction towards the profession (9). Faculty of health sciences (FHS) is trying to produce more local nurse, in 2013, 133 diploma and 12 bachelor's nursing students graduated from FHS (13). However the country is still not able to produce enough local nurses to deliver quality health service to community. Therefore insufficient of nurses is one of the concerning area in Maldives health sector (14).

Indira Gandhi Memorial Hospital (IGMH), where this study was conducted is the only government tertiary care hospital in whole country situated in the capital island Male' city. IGMH was a gifted by the Indian government in 1994. IGMH, operates with a capacity of 297 beds for inpatient services and with 20 outpatient departments. There are total of 612 nurses currently working (Sujaau M 2015, oral communication, 7th April). However, still majority of nursing workforce in IGMH are expatriate nurses from India(14). Expatriate nurses working in the Maldives are registered under the Maldives nursing council and they have yearly contract, upon their request contacts are renewed at the end of every year based on their performance. The Maldives health sector is under civil service and follow civil service rules and regulations. And according to civil service regulations, in every year performance of

each civil servant are evaluated in two different time period (15). Being the only government referral hospital, situated in Male' were nearly 42% of total country population lives, undoubtedly workload are very high in IGMH. Especially with shortage of nurses, workload of nurses are noticed to very high and challenging (6).

The world is in a period of critical shortage of professional and skilled health care workforce. Even though the main causes of shortage are unique to each country, there are similar characteristics in many countries such as, aging population and aging of nurse population(16), increased population, lack of training facilities, nursing turnover, migration and shifting of communicable diseases (CD) to non-communicable diseases (NCD) etc. Therefore, it's important to monitor health human resource (HHR) shortage and develop strategies to increase the pool of HHR around the world. Lack of adequate nurses are one of the major contributing factor for increased workload, dissatisfaction and turnover etc of nurses and moreover it result in decreased nurse job performance (10). Human resource (HR) planning process in every country need to take intervention to improve nurse job performance by organizing HHR, working environment, motivation etc. In this regards maintaining an acceptable nurse to patient ratio as an HR approach can reduce nurse workload and promote delivery of quality of care. There are countries that has developed legislations to have minimum nurse to patient ratio. However rather than having a fix nurse patient ratio, American Nurse Association encourages and supports the registered nurse safe staffing act and emphasizes that the staffing plan should have certain focus, such as attention to intensity of patient need in each ward, experience of nursing staff, layout of each unit and level of extra support and technology in each ward (17). Furthermore the association advocates for empowering nurses in specific area or health care organization to have their own safe staffing strategies. Usually nurse patient ratio in critical units such as Intensive Care Unit (ICU), Neonatal Care Units (NICU) etc, are considered to be 2:1 (two patient per one nurse) (18).

Nevertheless, quality of care mainly depends on job performance of nurses, and nursing performance directly or indirectly contributes to the organizational out-put (5). In fact nursing performance directly affects the well- being of patient and it plays a vital role in patient's prognosis towards a positive side of health. Indeed the performance of each individual healthcare worker is directly linked to the

organizational performance. Therefore it's crucial to identify the factors influencing to nursing performance. Individual nursing performance can be defined as the interaction between individual nurse and patient or either group characteristics. Working environment or the working ward/unit is the main social context for any nurse working in hospital and it is one of the major contributing factor for nurse job satisfaction (19). Numerous research have shown a strong relationship of working environment and nurse satisfaction and increase performance. In addition motivation and professional development are one of the key factors to improve job performance among nurse (16, 20). Most importantly nurse job performance depends on the nurse perception or believe that she/he can do that work or task, (self-efficacy) and whether she/he is willing to do that task and have additional needed things such as resources, support and trust from coworker's and positive environment etc (collective efficacy) (21-23). However, most of the studies conducted in relation to nurse job performance have mainly focused on individual characteristics. Furthermore, studies on psychological perspective of nurse job performance focused mainly on self-efficacy agency. Nevertheless, individual behaviour of nurses influence the performance of group and similarly group behavior affect the performance of each individual in group. Therefore it's important to explore the effects of both self-efficacy and collective efficacy on nurse job performance.

Self-efficacy and collective efficacy agency of human behavior are a cognitive approach proposed by Bandura (24). Bandura stated that self-efficacy and has an important function on human action and performance. Furthermore, in an organizational level it is not only the self-efficacy (25) but its combination of both self-and collective efficacy that influences and improves performance of individual and group (24). One of the main challenging area for health care system is human resource management, and in today's changing world, positive psychology is been recognized as a useful tool for human resource management. Indeed there are numerous researchers showing the effect of positive psychology in terms of job performance, job satisfaction, organization commitment etc. There are lots of factors related to positive psychology including, hope, resilience, optimism, self-efficacy and collective efficacy(26).

Self-efficacy has a greatest influence on individual job performance. According to Bandura (1977,1986), self-efficacy has a vital impact on the human behaviours and performance(25). In addition the author expressed that self-efficacy is an ongoing leaning process in person's life indeed there are four main areas involved in developing self-efficacy: 1. Enactive mastery or performance accomplishments; 2. vicarious experience; 3. Verbal persuasion and 4. Physiological arousal (25, 27, 28). Some of the researchers has revealed a strong relation between psychological capitation such as self-efficacy and job performance among nurses (26). Self- efficacy represents the individual's belief that the job/task will be completed on time and it's the likelihood that a particular action will be taken to complete that given task. And it is believed that those with higher self-efficacy have the high tendency to tackle with negative effect of work stressors. Similarly self-efficacy acts as the buffer against those stressors around the individual. When a nurse self-efficacy is enhanced ultimately it reflects on her performance or the quality of nursing care provided and this ultimately increase both individual and organizational performance. According to literature among the factors effecting job performance of nurses, self-efficacy may be rated as one of the most influencing factor. Moreover it's evident from literature that enhanced self-efficacy can lead to improve nurse job performance and thereby improving performance of both individual and organization(29)

Nursing performance at the organizational level cannot be limited to individual level. Healthcare system is a complex tightly coupled system, where one component interacts with other. Especially nursing care is very crucial and needs to work as a team in order to deliver quality care to patients. Therefore if the self-efficacy is not converted in to collective efficacy, level of performance in ward/unit may not be improve. Collective efficacy is essential for improving nursing performance as a team. According Lee (2010), hospitals arrange staff in to ward and try to improve nursing performance through collective efficacy and performance of the ward will determine the level of collective efficacy(29). Collective efficacy plays a vital role in improving both individual and organizational goal. Collective efficacy is the belief shared by a group member that the group can organize and perform in a way that the team as a whole will meet the organizational goal(24, 30). Nursing care can be put in to both individual and group level performance, hence both self-efficacy and

collective efficacy is vital in improving and maintaining a better performance. Collective efficacy is essential in managing nursing care and nursing performance. In hospitals nurses are divided as teams in to separate wards/units and the goal of each unit is same. Nevertheless the team improves their performance through collective activities such as team building. Indeed depending on the level of collective efficacy the team will perform in a more collaborative manner than as individual (29).

Researchers have identified collective efficacy as a meaningful tool that can be used to measure the group effectiveness. Nevertheless collective efficacy are not always equal in similar characteristic groups, it may vary among groups with equal skill, ability and resources(24). The level of collective efficacy is related to what the group think it can do and how much effort the group expands to complete its given task. Furthermore collective efficacy is devoted from group interaction and level of information that the group share about task, context, process and prior performance(31).

There are several studies focused on self-efficacy and nurse job performance. However limited study have focused on both self-efficacy and collective efficacy on nursing performance(32). Positive psychology is a new approach to human resource management and in terms of performance, self-efficacy and collective efficacy agency are one of the major factors that may affect nurse job performance at individual and in group level. In the literature review conducted, it's not identified that such a study is done in Maldives. Overall in the Maldives there are few published studies on nursing job performance. Hence in order to better understand nurse's professional development and how psychological aspect of human behavior effects the nurse performance in their working environment or in hospital, it is vital to study the joint effect self-efficacy and collective efficacy on nurse job performance in tertiary care hospital, Maldives. Therefore this study aims to study the effect of self-efficacy and collective efficacy on nurse job performance and as well as to examine the relationship between self-efficacy, collective efficacy and nurse job performance in tertiary care hospital, IGMH, Maldives.

1.2 Research Questions

- 1) What is the mean score of job performance among nurses in the tertiary care hospital, Indira Gandhi Memorial Hospital (IGMH), Maldives?
- 2) What is the level of self-efficacy and collective efficacy among nurses in the tertiary care hospital, (IGMH), Maldives?
- 3) Is there any relationship between self-efficacy, collective efficacy and over all nurse job performance among nurses in the tertiary care hospital, (IGMH), Maldives?
- 4) What are the factors that influence on nurse job performance in tertiary care hospital, (IGMH), Maldives?

1.3 Research objectives

1.3.1 General objectives

- 1) To assess the mean score of job performance among registered nurses in the tertiary care hospital Indira Gandhi Memorial Hospital (IGMH), Maldives?
- 2) To determine the factors influencing to nurse job performance in the tertiary care hospital Indira Gandhi Memorial Hospital (IGMH), Maldives?

1.3.2 Specific objective

- 1) To describe job performance among registered nurses in the tertiary care hospital Indira Gandhi Memorial Hospital (IGMH), Maldives
- 2) To describe socio-demographic factors, self-efficacy and collective efficacy
- 3) To identify the relationship between socio-demographic factors, self-efficacy, collective efficacy and job performance
- 4) To determine the factors influencing job performance among registered nurses in the tertiary care hospital Indira Gandhi Memorial Hospital (IGMH), Maldives.

1.4 Conceptual framework

Independent variables

Dependent

Variable

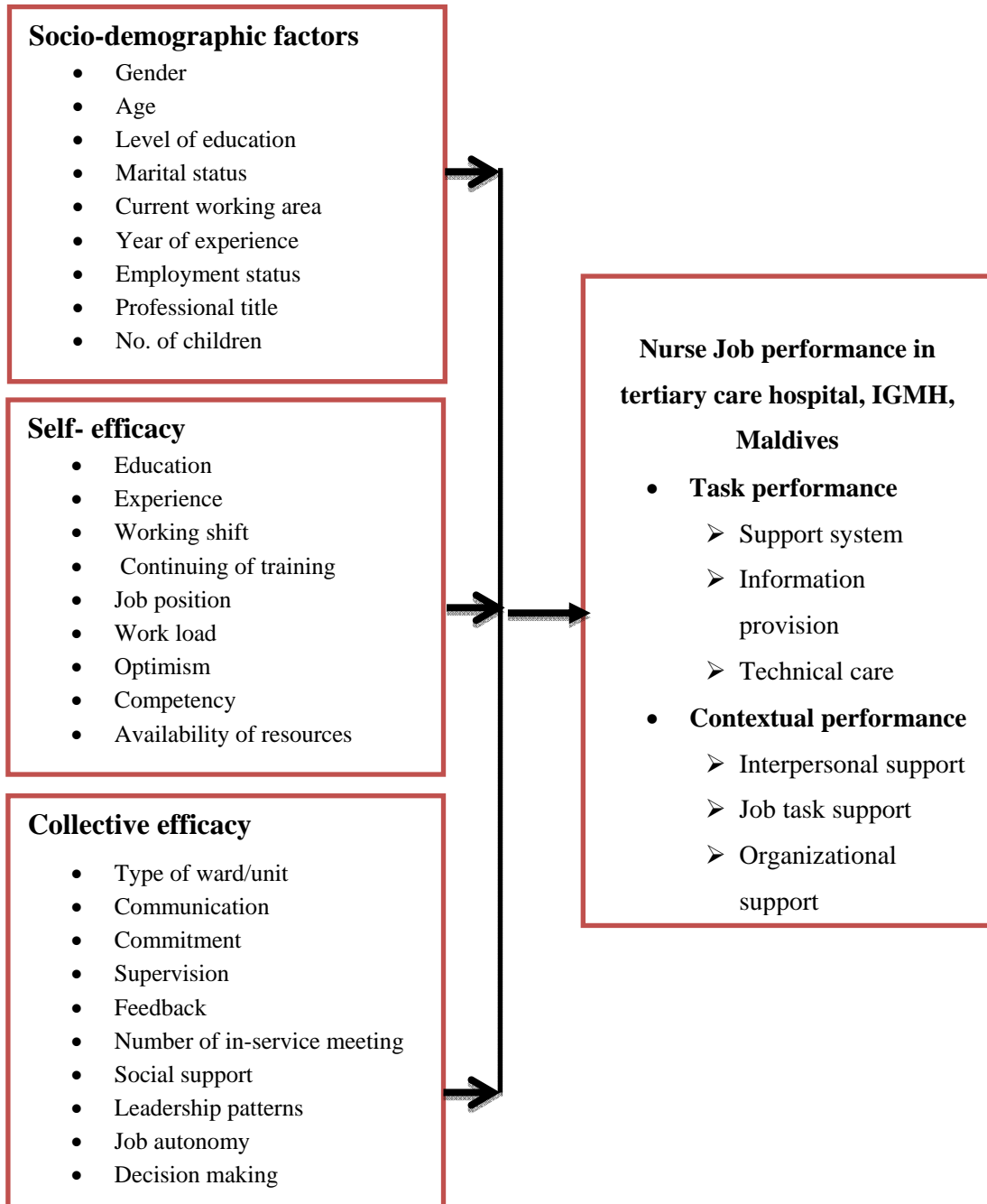


Figure 1.1 Conceptual Framework

1.5 Operational definition of study

1.5.1 Dependent variables

Job performance: refer to those behaviors performed by the nurses in order to complete her/his daily task. And those behavior that contribute to patient satisfaction and organizational productivity that are performed by nurses beyond their work schedule or duty which includes both task performance and contextual performance (7, 33, 34).

Task Performance: refer to behaviours performed by nurses towards meeting the physical needs of patients, such as assisting patients with the activities of daily living; showering, toileting and feeding, doing ward rounds with doctors and providing treatments, medication according to doctors order. And giving emotional support and giving health education related to patient conditions.

Contextual performance: refer to behaviours performed by nurses beyond the technical care, maintaining good interpersonal relationship, maintaining positive working environment, good interpersonal communication, role modelling for newly joined nurses and students, sharing knowledge with coworkers, patients and relatives, staying in hospital in off hours and willing to do extra duties, participate in hospital recreational activities, give innovative ideas to improve working environment and hospital and improve professional development and continue training.

Support system refers to nurses' perception on their support to patient and family, such as letting patients/families to talk about any concerns or fears and providing comfort to both patients and their families

Information provision is nurse giving health education and other needed information to the patients/families about the patient's condition and treatment

Technical care refers to the behaviours performed by nurses towards meeting the physical needs of patients, such as assisting patients with the activities of daily living; showering, toileting and feeding, and providing treatments and medication

Interpersonal support refers to the behaviours performed by nurses that support the organization as a whole, such as maintaining good interpersonal relationship and cooperating with co-workers to help patients and families.

Job-task support refers to behaviours that go beyond job requirements and these actions reflect nurse's determination and enthusiasm towards work. Such as willing to do extra duties and staying off duties to assist patient.

Organizational support refers to behaviours that demonstrate commitment to the organization through compliance with organizational rules as well as allegiance, loyalty, and commitment to organizational objectives and give innovative ideas and professional development by continuing training.

Nurse: refer to those nurses who have graduated from an accredited nursing program and are licensed under the Maldives nursing council as a registered nurse, senior registered nurse or deputy ward manager and are working in shift duties and also involve in both task and contextual performances.

Temporary registered nurse: expatriate nurses working on contract basis, licensed and registered under the Maldives nursing council.

Registered nurse: refer to nurse having diploma and above education in nursing.

Senior registered nurse: refer to nurse having diploma and above education in nursing with 4 years working experience and having scored above 85% in performance appraisal.

Deputy ward manager: refer to nurse having diploma and above education in nursing with 8 years working experience and having scored above 85% in performance appraisal.

1.5.2 Independent variables

1) **Age:** refers to the age of the registered nurse at the time of survey/interview.

2) **Gender:** refers to the sex characteristics of the nurses (male or female).

3) **Marital status:** refers to whether the nurse is married, single, divorced or widow.

4) **Employment status:** refer to permanent nurse, (Maldivian citizens) and temporary nurse (expatriate nurses) working in tertiary care hospital, Maldives.

5) **Self-efficacy:** refers to the nurse belief, that he /she is competent and confidence of completing any given task.

6) Educational level: refers to nurse having diploma and above level of education in nursing.

7) Year of experience: refer to the number of years that the nurse is been working in the hospital as a nurse

8) Working shift: refers to the time duration of a day that the nurse works in hospital. (Morning duty from 7:30 – 15:30, evening duty from 15:30 – 23:30 and night duty from 23:30 – 8:00).

9) Continuity of training: refer to the nurse behavior towards improving his/her professional development and participating in higher education programs and short trainings, workshops and seminars.

10) Job position: refer to the job designation of the respondent nurse such as registered nurse, senior registered nurse and deputy ward manager.

11) Work load: refer to nurses' perception on the level of their everyday work load and how much heavy it were.

12) Optimism and Competency: refer to the nurse positive thinking towards work, environment and coworkers and ability to deal and complete with given work.

13) Availability of resources: refer to the available resources in the working area, including no. of nurses, medical supply and equipment's.

14) Collective efficacy: refers to the ward/unit nurse's belief that they have the ability to completed the given task on time

15) Type of ward/Unit: refers to the ward/unit that the nurse works currently.

16) Communication: refer to the level of communication between nursing management and nurses working in word/unit. Also amount of information shared between management and nurses and number and frequency of meeting with hospital, nursing management and nurses in different work area.

17) Commitment: refers to the nurse's behavior towards completing his/her given task on time, and willingness to spend extra time for the working unit and organizational needs

18) Supervision: refers to the level of overseeing nurses work by nursing management and hospital management

19) Feedback (positive and negative): refers to the suggestion both positive and negative from nursing department and hospital management.

20) Number of in-service meeting: refers to the frequency of staff meeting held in ward/unit.

21) Social support: refer to the nurses' perception on the level of support given by the working colleagues, supervisors and organization.

22) Leadership pattern: refer to nurse taking initiation in both task and contextual performance, and level of support from senior nurses towards junior nurses and improving working environment and towards building team work.

23) Job autonomy and Decision making: nurses right in carrying out her duties and making decisions and whether decision about the working ward/unit are been taken after discussion with nurses working in that particular ward/unit or without discussion with nurses working in that ward/unit.

1.6 Limitation of the study

The present study cannot be used as a representative of nursing performance at national level, as only nurses working at tertiary care were the focused population. The research employed a cross-sectional study, however performance of nurses is a continuous process and it improves with time, and therefore it cannot observe the performance growth due to time constraints and study design. Another limitation was the self-reported questionnaire and there was no way to verify the information provided by the nurses. And there were possibility that nurses may not have revealed the accurate information.

CHAPTER II

LITERATURE REVIEW

This research aim to study the effect of self-efficacy and collective efficacy on nurse job performance, in tertiary care hospital, IGMH, Maldives. Therefore the researcher reviewed the literature as followed:

- 2.1 Maldives health care system
- 2.2 Nursing situation in Maldives
 - 2.2.1 Nursing shortage in Maldives
- 2.3 Nursing situations in the tertiary care hospital, Maldives
- 2.4 Nurse Job performance
 - 2.4.1 Conceptual models and theories of job performance
 - 2.4.2 Measurement of job performance
- 2.5 Theoretical model
- 2.6 Related studies

2.1 Maldives health care system

The health care delivery system of Maldives is currently organized into a four-tier referral system with the island level health facilities referring patients to higher level health facilities in the atolls, regions and to central level. Health care is fully funded by government and practice universal health coverage and government is the major provider for health service. However private health care providers are also increasing day by day and they corporate with ministry of health, the government in providing quality care for its community. In addition there are volunteer non-governmental organization working with community in specific health issues like diabetes, hypertension etc (35-37).

Indira Gandhi Memorial Hospital in capital Male' is the only government hospital in the country that provides tertiary level service and at the central level of

referral system. There are six regional hospitals located at different locations around the country. Each regional hospital serves as the referral center for two to four atolls. Atoll hospitals are located in all the atolls except those with regional hospitals. The lowest level of health system consists of island level health centers. Currently the Maldives has 21 hospitals (Tertiary level IGMH, 6 regional hospitals, 14 atoll hospitals), and 169 primary healthcare centers (39 health post and 139 health centers)(35, 37). In addition, there is one private tertiary level hospital, 1 military based hospital 62 private clinics located in capital Male'. Except for the pharmacy run by the state trading organization all the pharmacies in the country is run by the private parties (14)

In the year 2009, the Health care system has undergone a reform process of decentralization, corporatization and privatization. The entire health system was reformed in order to deliver health care services through public private partnerships, managed by corporate bodies. Therefore for nearly 2 years the delivery of health service was the responsibility of that particular health corporation. And the Ministry of health was responsible for developing national health care policies. Nevertheless the present government has again changed whole health system was again brought back to the previous gesture and now at present the government is committed to improving the health services in the country and improving the accessibility of services at the peripheral levels, which due to the dispersed nature of the population in very small islands exerts diseconomies of scale (35, 36). Having experienced several fall backs of the divided and corporatized health care delivery initiated in the year 2009 in six separate system (14), is been redesigned in to one health care delivery system in 2012. And in 2014 number of changes are being brought to health care delivery system, general practice service was started and referral system was established with a link to secondary and tertiary care and social health insurance system's information system. In addition management of national referral hospital IGMH along with Villimale' and Hulhumale' health facilities has been delegated to be managed independently by a corporate management board. Furthermore the government entered into a partnership with State Trading Organization (STO), in outsourcing the management and supply of all medical equipment's and supplies(35).

2.2 Nursing situation in Maldives

2.2.1 Nursing shortage in Maldives

The Maldives is an archipelago in the Indian Ocean located 600 km south of Indian sub-continent. It consists of 1192 tiny coral islands. The islands form 26 natural clusters (atolls) are administratively grouped into 20 administrative atolls. Currently total 187 islands are officially inhabited and 107(2014) islands designated as tourist resorts and around 14 islands used for industrial purposes (14). According to Census 2014 population of Maldives has increased to 341,256 with males and females representing 50.7% and 49.3% respectively (38). According to Department of National Planning (DNP), republic of Maldives, preliminary results the Maldives population has grown by 14.1% (including foreigners), compare to the last census in 2006, and total population of 298,968 with males and females representing 50.7% and 49.3% respectively. Surprisingly the percentage of both male and female remaining same in last 8 years, with males and females representing 50.7% and 49.3% respectively (38).

Lack of trained health care professionals especially nurses are one of the major concerning human resource challenge in the Maldives (14). There is large expatriate nurse workforce in both public and private sector contributing to delivery of health services to population. Furthermore health sector is faced with high staff turnover thus impacting on quality of services. The population for every practicing doctor was 609 in 2010, and the population per practicing nurse was 171 in 2010. In 2010, for every 10,000 of the population there were 6 specialists available (14).

Distribution of medical personnel by locals and expatriates, Maldives in 2010

Table 2.1 Distribution of medical personnel by locals and expatriates, Maldives in 2010(14)

TYPE OF HEALTH PROFESSIONAL	PUBLIC SECTOR				TOTAL PUBLIC SECTOR		TOTAL PRIVATE SECTOR		GRAND TOTAL
	MALE'		ATOLLS		Expat	Local	Expat	Local	
	Expat	Local	Expat	Local					
<i>General Practitioners</i>	58	39	218	6	276	45	4	5	330
<i>Doctors (Specialists)</i>	44	45	82	0	126	45	22	2	195
<i>Nurse</i>	342	264	639	569	981	833	44	10	1868
<i>Lab. Technicians¹</i>	28	109	94	41	122	150	3	1	276
<i>Physiotherapists</i>	11	0	8	0	19	0	3	0	22
<i>Radiographers</i>	14	9	21	0	35	9	6	2	52
<i>Dentists²</i>	1	18	4	1	5	19	1	7	32
<i>Pharmacists / Pharmacy Asst *</i>	0	0	0	0	0	0	177	70	247
<i>Community Health Workers</i>	0	2	0	276	0	278	NA	NA	278
<i>Family Health Workers</i>	0	0	0	313	0	313	NA	NA	313
<i>Traditional Birth Attendant</i>	0	0	0	214	0	214	NA	NA	214
TOTAL	498	486	1066	1420	1564	1906	260	97	3827

2.3 Nursing situations in the tertiary care hospital, Maldives

Nursing is one of the most challenging profession in the Maldives. Especially nurses working in IGMH, works in a very challenging environment. IGMH being only government referral center, and delivery of services has increased burden for nurses. Like any other developing counties, peoples demand for better quality service is increasing in the Maldives. And often nurses are subjected to verbal harassments by patients and even by their relatives for not acceding their expectations (39).

Majority of nurses working in IGMH are female and more than 50% of nurses are expatriate nurses mainly from India. Under civil service working hour's policy, the Maldivian nurse work eight hours per day and 40 per week. But expatriate nurses works 48hours per week. Meaning that a local nurse gets two off per week,

were expatriate gets only one off per week. Nurses work in three shifts, morning evening and night. In IGMH nurses salary based on their basic educational background, either advance or diploma and depending on job performance in every four there is a slight increase in salary with each promotion. There is no increment in salary with education, either having bachelor or masters. Along with basic salary nurses receives service allowance and shift duty allowances. In addition if they work for overtime, than according to civil service overtime policy they receive overtime pay (40).

In working environment or units nurses have to face challenges due to lack of nurse, resources, including medical supplies and equipment's. However the amount of difficulties varies from one unit to another ward/unit. For example nurses working in medical and general wards are faced with more difficulties, while nurses working in private wards face less challenges. In Maldives there is no old age care home or center, therefore lots of old age care patients stay in medical ward for prolonged period. And nurses are forced to provide all daily living activities. Quite often relatives refuse to take patient back home, and make it as an obligation for nurses to meet their every needs and mostly nurse patient ratio ranges from 1/6 to 1/12 (6). Comparatively, due to which workload is much higher in general and medical ward. Nevertheless, nurse work as a group to complete their work. Mainly nurses work in task level and carry out doctors' orders. Furthermore nurses are obligated to maintain ward stock and supplies. However nurses face difficulty in completing these task as they have to complete technical task and at the end of the shift they feel exhausted an wanted to go back home soon (40). Nurses working in IGMH mainly does task related activities such as giving medication, meeting patient's physiological needs, doing rounds with doctors and carrying out doctors' orders. In fact nurses do not take any decision for patents, and only carryout doctors' orders (6).

In every nursing ward/unit there is an allocated ward manager, who oversees the performance and manage ward/unit supplies and stock with the help of ward staff. Ward manager is responsible to make weekly duty rota and manage staff and work environment. In order to manage working environment some of the ward managers work very closely with the team nurses. They conduct meetings and discuss work related issues and give feedback for improvement. In addition there is a

coordination duty nurse working in every shift, and supervises the overall work of very department (6)

Nursing career development is very limited in Maldives. According to MOH, 2010, within last 15 years (from 1995-2010), there were only three nurses trained for masters level under government sponsorship (41). And after completing bachelor or masters nurses have no opportunity to get a higher level position in IGMH. They may have to join in the last working level and wait for the promotion in next 4 years. Therefore this can be a reason that less nurses are interested to go for further studies. However recent implementation of block mode nursing courses at FHS have facilitated nurses to study while working in their current job and this can be a golden chance for nurses to improve their career development. At present there is ongoing one block mode bachelor of nursing batch and part time masters of nursing batch (13). However still nurses are faced with challenges in studying while working, as the level of workload in IGMH is high.

2.4 Nurse Job performance

Job performance is defined in a variety of forms by different scholars, according to (Schwirian, 1978), job performance is the level of effectiveness and the level of productivity portrayed by the nurse when carrying out his/her defined role and responsibilities. Murphy (1989) defines job performance as the behavior towards the completion of specific duty according to the organizational goal (42). On the other hand, Campbell (1990) defined job performance as the behavior portrayed by the employee in the working environment which helps in achieving organizational goal (43). The author further elaborated that one factor or thing cannot be labeled as job performance similarly job performance is not one outcome factor rather it is an outcome of multidimensional factors.(44) Fitzpatrick, While, and Roberts (1997) defined job performance as the level of effectiveness in giving direct patient care (44). Whereas McConnell (2003) defined job performance as how the job or work is done in accordance to the organizational standards. Motowidlo (2003), defines performance in two types behavior; task performance is defined as the behavior or the activity that the

employee perform which directly which contributes to the organizational technical core by directly performing in its technical process, or providing it with material or services. Second is the contextual performance which is define as the other social and core activities that support the overall performance of the organization and shape the organizational, social, and psychological context (45). Overall the author describe performance as a behavior of individual job that contributes to the organizational core value (Borman & Motowidlo, 1993). Similarly the most recent job performance definition by Greenslade (2008) defined job performance separately as task performance which is define as those behavior that have direct input on the technical core and contextual performance as those behavior that contributes to the organizational, social or psychological environment in which the technical core must function (7, 46).

2.4.1 Conceptual models and theories of job performance

There are several models and concepts developed to assess the job performance of nurses during nursing training and after qualification. Nevertheless it is a multidimensional concept and the identified dimensions of job performance varies significantly between the scholars. Some theories and models related to job performances are as follow:

1) Model of job performance developed by Schwirian (1978)

Schwirian (1978) was the first scholar who developed a model for nurse's job performance. This model was an added milestone for nurses' job performance. The scholar proposed 6 aspects of nursing performance which could be used to for both self-appraisals of performance or employer appraisals of performance. Schwirian's proposed six dimensions are: (1) leadership: which refers to the leadership behaviors that an individual shows and perform regardless of his or her designation; (2) critical Care: which refers to the nursing care performed towards the critically ill patients and possible outcome of death; (3) teaching/collaboration refers to the activities and behaviors in which the nurse provides information's, instructions and demonstrations by means of knowledge, resources and methodology, to all those who contributes to the well-being of the patient. (4) Planning/evaluation refers to the ability

of the nurse to plan holistic care and evaluate the nursing care and holistically. (5) Interpersonal relationship/ communication refers as the nurse behavior towards maintaining better interpersonal relationship by effective communication skills with patients, relatives and other healthcare professionals. And last aspects was professional development which refers to the nurse behavior towards professional growth by means of improving knowledge, maintaining high working standards and involving in all aspects and activities related to professional development.

The development of six aspects of Schwirian's model (1978) of nursing performance has contributed to improve nursing performance and achieve organizational goal (47). However, this model was developed in 1970s and since this time, the scope of the nursing role has expanded largely in healthcare system and also this model mainly focuses on the task performance behaviours (48).

2) Model of job performance developed by Fitzpatrick, While & Roberts (1997)

Based on the concept of Wandelt and Stewart (1975), expert opinion and literature support (44, 49), Fitzpatrick, While, and Roberts (1997) proposed five dimensions of job performance. (1) physical dimension - these are the nursing actions towards meeting patients physical needs; (2) psychosocial dimension (individual) – these are the actions nurses perform toward meeting psychosocial needs of individual patients; (3) psychosocial dimension (Group) - these are the actions direct towards meeting psychosocial needs of the patients as members of group; (4) professional dimension - these are the actions direct towards fulfilling the professional role; (5) communication dimension - these are the actions direct upon the ability of nurses to communicate effectively with patients/relatives and others; and (6) care management dimension - these are the actions direct towards meeting either psychosocial or physical needs of patients or both at the same time.

This scale is able to measure performance in the different domains of nursing practice, though, its particular strength lies in its ability to measure over all nurse performance in the clinical setting as revealed by Cronbach's alpha coefficient ($r = 0.93$). Moreover, it was highlighted that further refinement is necessary to

improve the strength of the instrument as a tool for the measurement of performance in different domains of practice (44).

3) Theory of job performance developed by Borman & Motowidlo's (1993):

Borman and Motowidlo (1993) is one of the theory that describe performance more accurately in two separate dimensions. The first dimension is task performance/or in-role behaviors; and second dimension is contextual performance/or extra-role behaviors. The theory defines task performance as the activities that contribute directly to the organization's technical core furthermore these activities are recognized as part of an employee's job. In addition any activity that contribute indirectly to the organizational core value are also considered as task performance. On the other hand contextual performance is define as those activities or the behavior that the employee perform in order to maintain the overall social environment in which the technical core must function. This includes the activities beyond the employee's assigned task or job that contributes to the organizational core value (48). Borman and Motowidlo's (1993) model is not applied in the healthcare setting. Nevertheless recently a new model is developed by Greenslade, 2008 based on this model and it's been used to assess performance in nursing (48).

4) Nursing performance framework model developed by Greenslade (2008)

Greenslade (2008) developed a framework of job performance based on job performance theory of Borman and Motowidlo's (1993), Jimmieson's (2007) proposed conceptual framework and literature on performance. Borman and Motowidlo's (1993) model of job performance is not applied in healthcare setting, even though Greenslade 2007, 2008, emphasized that previous researches has shown that nurses engage in both task and contextual performance behaviours (46, 48). Nurses performs task behaviors such as giving treatment as per doctors' orders and evaluation of treatment for patients. And meanwhile nurses also perform contextual behaviors such as spend time with their patients/clients that go above and beyond the call of duty to improve their satisfaction such as staying late to help patients and

providing additional assistance to patients and their families further than requires by the job (7, 48).

Greenslade (2008) developed six dimension of job performance framework include three task performance dimensions: (1) social support; (2) information provision; and (3) technical care; and three contextual performance dimensions include: (1) interpersonal support; (2) job-Task support; and (3) organizational support(46).

Individual theories and models, each has a different point of view on the components of job performance of employees and nursing staff. However, all the models included components of task performance only or limited contextual performances such as no model include components of organizational support or job task behaviors nurses perform beyond their job requirements. But Greenslade (2008) proposed model composed of both task and contextual performance(46). Therefore, in this study the researcher used the model of Greenslade (2008) to assess the job performance of nurses working in tertiary care hospital, IGMH, Maldives.

2.4.2 Measurement of job performance

There are a number valid and reliable instruments and criteria developed for the measuring of nursing care such as: the Slater Nursing Competency Rating Scale (Wandelt & Stewart, 1975), and Schwirian's Six Dimension Scale of Nursing Performance (Schwirian, 1978). Most of these scales are been developed in 1970s, and is expected to have certain limitations which may reduce the effectiveness of the tool. Meanwhile nursing is been growing and continuously expanding its scope, therefore several researchers have used self-rating to measure nursing performance (7, 50), in order to measure nursing performance. The available scales can be applied as either self-appraisal of performance (self-report) or employer appraisals of performance (observation) (48). Some of the job performance scales are:

1) Six dimensions of nursing performance scale (6-D Scale) developed by Schwirian (1978):

The Schwirian's Six Dimensions of nursing performance scale is the most suitable commonly used scale for measuring nursing performance. The Six

Dimensions Nursing performance Scale (Six-D Scale) consists of total 52 items which are sub-grouped into six performance sub-scales. Greenslade and Jimmieson (2007) developed this nursing performance scale in order to have a valid measure to assess nursing quality. This performance scale for nurses was developed based on Borman and Motowidlo's (1993) job performance theory and extensive literature. In order to develop this scale two set of investigation were conducted. In phase 1, from both behaviors gathered by focus group and literature review provided the initial 108 items. And at the end of the expert review 47 items were removed, some two items were included and some of the items were reworded. The result was 63 items (36 task performance and 27 contextual performance). In phase 2 this 63 items were subjected to pilot testing. Thirty-six items examined task performance behaviours and required nurses to rate how well nurses in the unit compete their activities. Ratings were made on 7-point Likert scales ranging from much below average (1) to much above average (7). Twenty-seven items examined contextual performance behaviours and required nurses to rate how often nurses in their ward completed the activities. And it was rated also on 7-point Likert scales ranging from not at all (1) to a great deal (7). Previously developed task and contextual measures are incorporated in this scale, such as critical care and interpersonal relationship dimension of Schwirian (1978) Six-D scale, and Slater rating scale's (Wandelt & Phaneuf, 1974) dimension of communication and psycho-social action directed towards patients. However coordination dimension and four contextual dimension are new to measure of job performance. The final performance taxonomy consists of 41 items across eight dimension of job performance reflecting both task and contextual performance. Four dimensions of task performance behaviors namely technical care, information provision, coordination of care and emotional support. And four dimensions of contextual performance behaviors namely interpersonal support, job task support, compliance to organizational rules and volunteering for additional duties. To assess content validity, a pilot study was conducted and overall job performance was measured by 7-point Likert scale which scored at the high, medium, and low ranges. For example, one was anchored high (6–7) = exceeds standards for job performance, moderate (3–5) = meets standards for job performance, and low (1–2) = does not meet standards for job performance. This scale was reliable with ($\alpha = .88$)(48).

The result of preliminary investigation reveals that this scale is a reliable and valid measure of job performance. However Greenslade and Jimmieson's (2007) concluded by emphasized on further examination of this newly developed job performance measure(48).

2) Nurse performance scale (KNPS) developed by King (1997):

King's Nurse Performance Scale (KNPS) was developed based on Slater Nursing Competencies Rating Scale (1975) together with key literature and expert opinion by Fitzpatrick, While, and Roberts (1997). This is an empirically based generic tool and was originally designed to evaluate clinical performance of senior student nurses and was specific to nurse performance in United Kingdom. In addition the scale permits the detailed examination of nurse performance in care delivery. Fitzpatrick et al. (1997) stated that the scale enables to examine and identifies the strengths and weaknesses in nurses' clinical performance and it could be helpful in the professional development of newly registered nurses. The Slater Nursing Competencies Rating Scale (1975) consists of 84 items arranged in to six subsections. And the original instrument consisted of 53 items with seven subscales' and again refined to 28 items with five subscales: (1) physical; (2) psychosocial; (3) profession; (4) communication; and (5) care management. The scoring was rated as: 1 = dependent; 2 = marginal; 3 = assisted; 4 = independent. The instrument was highly reliable with Cronbach's alpha ($r = .93$) of the total instrument and content validity was examined through expert panel in three different sessions (44).

3) Job performance scale developed by Greenslade & Jimmieson's (2007)

Majority of the job performance scales are developed in 1960s and 1970s, therefore Greenslade and Jimmieson (2007) developed this nursing performance scale in order to have a valid measure to assess nursing quality. This performance scale for nurses was developed based on Borman and Motowidlo's (1993) job performance theory and extensive literature. In order to develop this scale two set of investigation were conducted. In phase 1, from both behaviors gathered by focus group and literature review provided the initial 108 items. And at the end of the expert review 47

items were removed, some two items were included and some of the items were reworded. The result was 63 items (36 task performance and 27 contextual performance). In phase 2 this 63 items were subjected to pilot testing. Thirty-six items examined task performance behaviours and required nurses to rate how well nurses in the unit compete their activities. Ratings were made on 7-point Likert scales ranging from much below average (1) to much above average (7). Twenty-seven items examined contextual performance behaviours and required nurses to rate how often nurses in their ward completed the activities. And it was rated also on 7-point Likert scales ranging from not at all (1) to a great deal (7). Previously developed task and contextual measures are incorporated in this scale, such as critical care and interpersonal relationship dimension of Schwirian (1978) Six-D scale, and Slater rating scale's, dimension of communication and psycho-social action directed towards patients. However coordination dimension and four contextual dimension are new to measure of job performance.

The final performance taxonomy consists of 41 items across eight dimension of job performance reflecting both task and contextual performance. Four dimensions of task performance behaviors namely technical care, information provision, coordination of care and emotional support. And four dimensions of contextual performance behaviors namely interpersonal support, job task support, compliance to organizational rules and volunteering for additional duties. To assess content validity, a pilot study was conducted and overall job performance was measured by 7-point Likert scale which scored at the high, medium, and low ranges. For example, one was anchored high (6–7) = exceeds standards for job performance, moderate (3–5) = meets standards for job performance, and low (1–2) = does not meet standards for job performance. This scale was reliable with ($\alpha = .88$)(48).

The result of preliminary investigation reveals that this scale is a reliable and valid measure of job performance. However Greenslade and Jimmieson's (2007) concluded by emphasized on further examination of this newly developed job performance measure(48).

4) Short nursing performance scale developed by Greenslade (2008)

The eight dimension of nursing performance scale which incorporated 41 items, developed by Greenslade and Jimmieson (2007) (48) was further refined and reduced to six dimensions with 25 items (11 task and 14 contextual performance) by Greenslade (2008). The new scale included three dimension of task performance with 11 items, 1. Social support - 4 items; (2) information provision - 4 items; and (3) technical care - 3 items. A 7-point Likert scales ranging from poor (1) to excellent (7) were used for the rating to describe how effective nurses are at each of the tasks. And three dimensions of contextual performance with 14 items: (1) job-task support - 4 items; (2) interpersonal support – 5 items; and (3) organizational support - 5 items. These items were rated on 7-point Likert scales ranging from not at all (1) to a great deal (7) was used to describe how often nurses perform these activities.

The results of preliminary investigations displayed that measures of task and contextual performance is a reliable ($\alpha = .90$ and $.90$ respectively), and valid measure of nursing performance. Cronbach's alpha coefficients were high for all scales for social support ($\alpha = .94$), technical care ($\alpha = .85$), information ($\alpha = .84$), interpersonal support ($\alpha = .93$), job-task support ($\alpha = .90$), and organizational support ($\alpha = .86$)(46).

In summary there are a highly reliable instrument that can be used to obtain self-appraisals of nurses' job performance, such as job performance scale of Schwirian (1978) Six-D scale and King's Nurse Performance (1997). But, these scales focus on limited domain of task-specific behaviours (Greenslade & Jimmieson, 2007) (48). Performance scale by Greenslade (2008) focuses on both task and contextual performance, therefore this study used the Greenslade (2008) Nursing Performance scale to assess nurse's job performance.

2.5 Theoretical model

This study used self-efficacy theory and extension of collective efficacy agency perspective of social cognitive theory and model to developing its conceptual

framework. In addition use Greenslade (2008) six dimension of job performance framework model to assess the job performance of nurse's.

Self-efficacy theory is a behavioral theory developed by Bandura in 1977. This theory was developed from the social cognitive approach, which describe how the level of confidence improves once performance. According to this theory each and every individual has certain level of self-confidence and ability and believe that they can perform a given task (51). According to bandura the primary reason for human behavioral changes are outcome expectancies and efficacy expectancies. He further describes outcome expectancy as the chance or probability that certain behavior will lead to specific out come and efficacy expectation as the individual believe that he/she can perform that behavior(52).

Self-efficacy theory is one of the commonly used model to evaluate performance in terms of efficacy believe (27, 31, 51). Nevertheless, Bandura's self-efficacy belief has extended conception of human agency to collective efficacy (24, 53), and stated that collective efficacy is not only sum of efficacy belief of individual but rather it is the group level effort(54). Especially numerous study used self-efficacy belief focus to task specific performance (55). Nevertheless is evident from literature that nurses work both in task and contextual performance (46, 48). Therefore this study use the both efficacy agency of human behavior.

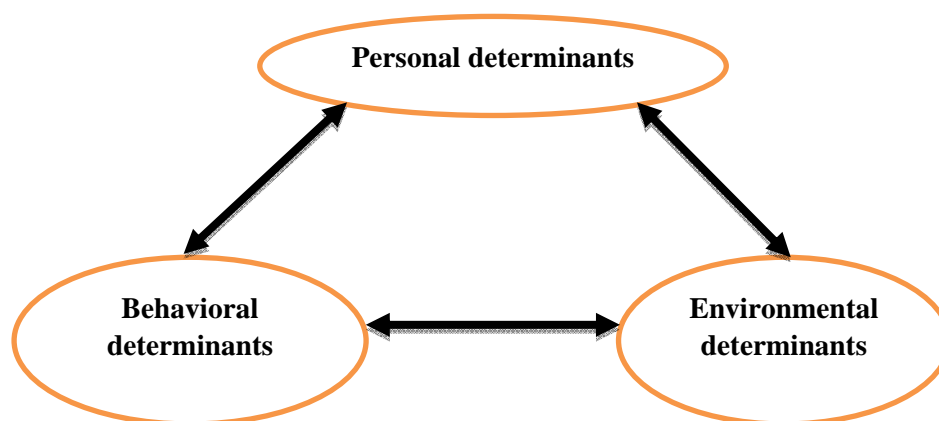


Figure 2.1 Casual model of Social cognitive theory (56)

The most fundamental concept of social cognitive theory involves individual or self-efficacy (57) and collective efficacy (27). According to social cognitive theory both individual and organizations actions are influenced and strengthened by their efficacy beliefs. Furthermore Bandura stated that both self-efficacy and collective efficacy different only in terms of its unit agency but both holds same sources, functions and operation process (58). Bandura (1986, 1977) suggested four sources of efficacy shaping information's that are critical for self – efficacy development (25, 27, 28, 58), similarly these four sources are vital to develop collective efficacy belief.

1) Enactive mastery: According to self-efficacy theory enactive mastery is the most powerful source to improve once performance. It's based on mastery experience, or those behaviours that the individual perform directly (28). Nevertheless through this various opportunities which may lead an individual to success or failure. Moreover the more successful an individual is in his/her mastery experience the stronger is his/her self-efficacy development (27, 28).

2) Vicarious experience: an individual gain vicarious experience by observing others and learning. Bandura explains this process in terms of modelling (27, 28).

3) Verbal persuasion: it is the encouragement from other subordinates, especially from supervisors or managers. Individual gain verbal persuasion when their work is praised and suggestions are given. In addition when others, especially the supervisors or manager believe that he/she can perform the given task (27, 28).

4) Physiological arousal: this is about once emotional arousal level. According to self-efficacy theory high emotional arousal decreases the level of performance. Therefore individual are more likely to achieve success when they are not highly aroused emotionally (27, 28, 51)

Greenslade (2008), six dimension of job performance framework include three task performance dimensions: (1) social support; (2) information provision; and

(3) technical care; and three contextual performance dimensions include: (1) interpersonal support; (2) job-Task support; and (3) organizational support(46).

The Six dimensions are described as follows:

Social support refers to the behaviours nurses perform to meet emotional needs of patients such as letting patients/families to talk about any concerns or fears and providing comfort to both patients and their families. The nurses listen to patients/families, recognizing their anxiety and taking appropriate actions to reduce anxiety and fears, consider them as a member of family and the society and assist them to communicate with significant others and frequently communicate with them (46).

Information provision is nurse giving health education and other needed information to the patients/families about the patient's condition and treatment. In addition before patient is discharged to home nurse information regarding home care and how to take medication and also demonstrates any needed procedure (46).

Technical care refers to the behaviours performed by nurses towards meeting the physical needs of patients, such as assisting patients with the activities of daily living; showering, toileting and feeding, and providing treatments and medication(46).

Interpersonal support refers to the behaviours performed by nurses that support the organization as a whole, such as maintaining good interpersonal relationship and cooperating with co-workers to help patients and families. Nurses work to maintain a positive work environment by interpersonal communication and modelling for newly joined nurses and student nurses. Furthermore nurses share their knowledge with other coworkers, patient and families (46).

Job-task support refers to behaviours that go beyond job requirements and these actions reflect nurse's determination and enthusiasm towards work. For

example staying in hospital in off duty hours and late after duty in order to assist patients/families and making special arrangements when necessary to meet the needs of patients and families (46).

Organizational support refers to behaviours that demonstrate commitment to the organization through compliance with organizational rules as well as allegiance, loyalty, and commitment to organizational objectives. Nurses participates in other organizational activities and give innovative ideas to improve working environments (46).

As a summary the self-efficacy theory stated that individual's level of self-efficacy is determined by the level of cognitive approach and the integration of identified four self-efficacy development source of information's(27, 28). Self-efficacy and extension of collective efficacy belief are a widely used theory and model in assessing job performance(27, 56). Meanwhile to assess performance, unlike most of other theories and models of job performance, Greenslade (2008) proposed model composed of both task and contextual performance(46). Therefore, in this study the researcher used the model of Greenslade (2008) to assess the job performance of nurses as it is the most applicable concept to the researcher's setting due to the reason that nurses not always engage in task behaviors but also perform activities that support the organization to improve overall quality of the hospital. Therefore the conceptual framework of this study was based on both self-efficacy theory and collective efficacy agency of social cognitive theory and Greenslade (2008) performance model.

2.6 Related studies

2.6.1 Job performance

Job performance of nurses is investigated by several researchers using different frameworks and different instruments. Some of the recent studies are below;

To examine the relationship between service climate, nurse effort, nurse performance and patient satisfaction, in 2011 Greenslade and Jimmieson conducted a

study conducted in Australia using the scale of Greenslade and Jimmieson (2007), a total of 156 nurses, 28 supervisors, and 171 patients was involved as sample size, and the study revealed the level of nurse performance was predicated by their effort to perform and crevice climate was associated with nurse effort to perform both technical and task activities, in addition patient satisfaction was associated with task performance (7). In the same year Wang examined the nurse's job performance using King's Nurse Performance Scale among 375 nurses in university hospitals in Harbin, People's Republic of China. The finding revealed that the overall job performance of nurses was at moderate level with mean score 2.22 (SD=0.30). In addition from the different dimensions, the highest mean score of job performance was professional dimension with mean score 2.81, while the lowest score, physical performance had the mean score 0.30 (59). In the year 2010, Yuxiu conducted a study to study nurse's job performance based using Six-D Nursing Performance Scale of Schwirian (1978) among 355 professional nurses in the university hospitals of Yunnan province, People's Republic of China. The result revealed that the overall job performance of professional nurses was at moderate level with the mean score 2.82 (SD=0.42), and each dimensions of job performance, leadership (Mean=2.81, SD=0.53); critical care (Mean=2.87, SD=0.57); teaching/collaboration (Mean=2.56, SD=0.51); planning/evaluation (Mean=2.67, SD=0.53), and interpersonal relationship/communication (Mean=2.84, SD=0.46) were at a moderate level (60). Similarly to study nursing performance of nurses, Beauvais (2011) conducted a study among sample of 231 undergraduate and 102 graduate student nurses of USA using Schwirian (1978) Six-D Scale of Nursing Performance. The finding revealed a moderate nursing performance level. The 6-D subscales were as follows: leadership (Mean=3.16, SD=0.55), critical care (Mean=2.89, SD=0.64) teaching/collaboration (Mean = 2.93, SD=0.57), planning/evaluation (Mean =3.10, SD=0.60), interpersonal relations and communication (Mean = 3.43, SD=0.40), and professional development (Mean = 3.39, SD=0.38)(61).

2.6.2 Socio-demographic factors

Variable included in social-demographic are gender(26, 62), age(26, 62), level of education(62), marital status(62), type of ward/unit(29, 62), years of

experience(29), employment status(60), number of children(62) and income. All of the variables are selected from previous studies. And these variables are often studied socio-demographic factors in relation nurse job performances.

Age

Age is a commonly studied socio-demographic variable in every nursing job performance related studies. In Maldives, the majority of nurses working in tertiary care hospital is between 21 to 30 years old (2, 6). In terms of nurse job performance it is perceived fact by lots of scholars that with more experience, which means with more aged, nurse job performance increases. In addition their competency and indeed self-efficacy increases, as a result nurse job performance increases. However nursing in a challenging profession with high level of occupational stress, and in terms of occupational stress studies have revealed that with increase in age level of stress increases. Nevertheless stress may lead to decreased nurse job performance. A study done by Nabirye, 2011 revealed that younger nurses experience less stress than older aged group nurses (62).

Gender

It is one of the commonly studied socio-demographic variable in terms of nursing performance. Since its beginning nursing care have been labeled as a female dominated profession. Until now the majority of nursing professions are occupied by female nurses (60, 62). Situation is same in the Maldives with 91.20% female nurses and 8.80% male nurses (6) Nevertheless nursing performance varies between genders in some of the aspects, such as when it comes to handle a difficult situation female nurses tend to control their emotion more maturely than a male nurse. But like wise when it is to deal with emotional situations male nurses tend to deal the situation better.

Marital status

Marital status is also one of the factor that may affect nurse job performance. It's evident from the literature that single nurses perform their job better than those nurses who are married and having children. A study done in IGMH

revealed that marital status influence nurse job performance, the study found a positive relationship between quality of work life and nurse job performance (6). It mainly because majority of the professional nurses are female and after married they have to balance work and family life. Moreover with shift duties and higher work load may be a factor that may influence the nurse performance.

Employment status

Employment status is also one of the factor that may influence nurse job performance. In this study employment status means either permanent or temporary. Permanent nurses are local nurses licensed under the Maldives nursing council and temporary nurses are expatriate nurses also licensed under the Maldives nursing council. In Maldives majority of the nurses are temporary nurses. But in work setting most of the leadership roles are allocated to permanent nurses and temporary nurses are not given opportunities to attend carrier development programs. Different in employment status and human resource management approach of nursing and hospital management can influence their performance (2, 6).

No. of children

Number of children that a nurse is having may be a predictive factor that can influence the nurse job performance. Study done by Nabirye at el, 2011 found association between number of children and job performance, he study revealed that nurses without children had higher mean score for job performance than those with five or more children (62). Similarly a study done in IGMH, Maldives also revealed that number of children is associated with nurse job performance. In the Maldives there is no day care or any kind of child care facilities available, as a result nurses have to leave their children with their parents or either with a babysitter. Unlike other professions nurses do shift duties and especially doing night duties leaving their small children at home is a burden for nurses. And burden increases if there is no support from husband. Furthermore nurses are always hurry to leave to house after duties and are not able to participate in most of contextual performances(6).

2.6.3 Self-efficacy

Bandura defines self-efficacy as the individual's believe about their ability to produce preferred levels of performance and is able to perform a given task. He also added that self-efficacy acts as a shield to negative effects of work environment(27, 57).Prussia 1996, defines self-efficacy as an individual's believes and extension to which he/she is capable of completing the task (63). Since its foundation in 35 years ago self-efficacy has become one of the most studied area in self-regulation domain. Indeed the majorities of these studied have shown positive relationship of self-efficacy and performance. According to literature more than 93% of the study have found positive relationship between self-efficacy and performance at personal level analysis (64).

Nursing is a highly technical profession, therefore with higher education the nurse acquire more knowledge and become more competent in performing their activities. Several studies have revealed a significant relationship between level of education and increase nurse job performance. In Maldives majority of the nurse held diploma level education. A study done in 2012 in IGMH revealed 87.04% nurses held diploma level education, 1.38% with associated degree, 10.65% with bachelor's degree and only 0.93% held masters level educations. In addition to this this study also stated that nurses are not given any carrier improvement with higher education (6). However this may lead to negative relation that nurses with higher education may not feel satisfied with job because of job allocation and ultimately it will lead to decrease nurse job performance and carrier commitment (65). Literature has demonstrated that without carrier advancement and opportunities nurses are likely to report dissatisfaction (62, 65). Similarly Laphalala, 2008, revealed that nurses were not satisfied with their job advancement and recognized them self as in dead ended jobs(66)

Self-efficacy is a component of social cognitive theory which governs human thought, motivation and action and it is a key factor in operating competency(24). Nursing care is a skill based profession, thus the more you practice the better you become or in other words with more practice the nurse competency increases, depending on the nurse self-efficacy beliefs. It's evident from the literature that year of work experience have a strong influence on nurse job performance(67).

Similarly Yuxiu, 2011 found that job performance of nurses as a moderate level and stated that it could be related to lack of working experience as the majority of the professional nurse has one to five years' work experience. Furthermore the author added that nurse job performance is based on work experience(60).

As mentioned before nursing care is a technical profession which deals with life of people, it's important for nurses to have adequate level of training in nursing. And advancement of technology and medical care treatment is improving continuously, therefore nurses must keep their knowledge up to date. Nurses need to give importance on professional development and participate in in-service ongoing training. With experience nurse becomes more skill full and competent in work. And having definite position and task identification clear the role and responsibilities (29) enhance self-efficacy and improves performance. Nevertheless nurse performance are altered by unidentified task and workload. Researchers have identified nurses dealing with high workload delivers low quality care, meaning that they have low performance rate (68, 69). Optimism is once positive thinking, that the outcome of certain behavior good. (25, 26) competency of nurses are increased through the process of learning involving four source of information; enactive mastery, vicarious experience, verbal persuasion and physiological arousal (25, 50). Improving competency and having optimism allows nurse to face challenging tasks. And by involving in complex task opportunities further opens the door for nurse/nurses gain skill and knowledge thus it serve as a source of experiences for self-efficacy and in return improves their performance(25).

Even though a nurse is educated, and have adequate skills to perform, inability of resources makes it impossible for the nurses to perform well and giver quality care. It's evident from the literature that nursing performance can be improved by managing availability of resources (6, 8). Being a nurse it's natural that he/she works in shift duties, however, in order to have a healthy performing workforce, managing shift duties and working hours is crucial. Nurses working in evening and night duties often face difficulty in their social functions. Previous studies have highlighted that shift duty nurses often do not participate hospital extra role performances (70).

2.6.4 Collective efficacy

Collective efficacy is defined as beliefs that are shared by the group about its group members' ability to carry out certain actions in order to meet organizational goals (54). Goddard (2000) defines collective efficacy as the group-level characteristics which indicate that the group-level characteristics are greater than the individual characteristics (58). The author also added that the group-level characteristics are built from group interaction. Gibson (1999) defines collective efficacy in terms of group efficacy, according to the author, it's the group's belief that it can perform effectively (31).

Working ward/unit is the most important social context for a nurse. It's the immediate working environment of the nurse and their performance directly or indirectly will be affected by this atmosphere. In any hospital ward/unit will differ noticeably depending on the type of ward and even with its leadership patterns (29). Similarly in IGMH, Maldives wards/units are separated according to the specialties such as intensive care unit, surgical ward, medical ward etc. And according to workload, nurses are allocated to different ward/units. In each ward/unit, nurses are obligated to follow its standard procedures and maintain consistency in their performance. Furthermore, in ward/units, nurses work as a team to deliver nursing care and maintain a good working environment in terms of collective efficacy. However, due to lack of capacity, some time critical cases are treated in wards with no facilities and nurses with less or no special trainings. As a result, nurses fail to deliver quality service to patients and their performance is noticed as at a lower level (2). Efficacy beliefs state that due to certain circumstances, a person may fail to perform optimally even though they have the knowledge that requires to do that action (24).

Communication is a tool in nursing performance and especially in the working environment, communication plays a vital role in building good rapport between team members and ultimately improves team performance through collective efficacy (71). According to literature, group performance is a product of dynamic group interaction, communication, and coordination (54). Commitment and job performance are two concepts that have been extensively studied, and these studies have displayed a positive link between commitment and job performance (33, 67, 72, 73). Nurses who are able to build a strong relationship with their coworkers are more likely to increase their commitment to work and the working environment, moreover, nurses are a strong

relationship between commitment and job satisfaction of nurses, and job satisfaction is a leading factor to increase performance(74). Research have identified that impaired relationship among nurses in ward/unit leads to error, accidents and poor performance(65). In addition conflicts among working environment leads to decreased job satisfaction and job performance. Nurses revealed that egression from coworkers are more upsetting than patient abuse and also this is one of the main reason for nurse turnover (65, 75).

Nurses need regular supervision by the leaders and timely feedback (63, 71, 76), in order to improve their performance. According to WHO, Supportive supervision that health to solve problems can influence to improve job performance, job satisfaction and motivation (23) Receiving recognition and feedback improves their performance, especially the task performance (71) . A study done by AbuAlRub, 2008, found that nurses performance and achievement are been recognized experiences less work-related stress (77). Similarly Willis-Shattuck has also stated that recognition and appreciation in work is one of the theme for staff motivation (78). In addition, keeping regular in-service meeting and identifying issues related to work environment and discussing issues and solution together enhance group participation and enables to address the issues in a timely manner. In service meeting need to be held in a constant manner in order to give feedback for nurses. A study done by Lee, 2009 found collective efficacy was statistically significant with regular in service meeting (29). Social support from coworkers are also an added factor that can accelerate performance of individuals and the group. According to Gandhi, 2011 lack of social support lead to decrease nurse and patient relationship (79). Nevertheless nurses with high social support from the coworker's experiences less stress in his/her work and as a result level of performance increases (80).

Leadership is one of the numerous studies variable influencing performance of nurses. It's evident from the literature that nurse managers who prioritize their work environment and appreciate their subordinates and rewarded with high nurse performance (7, 8, 81). In order to improve nurse performance, it's essential to build interpersonal relationships between nurses and their leaders. According to several studies nurses are motivated to perform, when their leaders express their confidence in their subordinate's ability to perform (8, 82). Several study

has found autonomy as an influential factor for nurse job satisfaction (19) and similarly increased autonomy improves nurse motivation, and motivation is very crucial in health care setting as it directly influence nurse job performance (83). Leadership is an important influencing factor of self-efficacy and collective efficacy. Leaders can influence the follower self-efficacy and collective efficacy by vicarious experience and verbal persuasion (55). Furthermore nurses are empowered to perform when they have freedom of making decision. Similarly nurses who can practice autonomously and participate in decision making, feels they are a valued part of the organization and as a result they are motivated to perform (19, 84, 85).

CHAPTER III

RESEARCH METHODOLOGY

This chapter describes the methodology of this study. The chapter includes research design, study site, target population, under target population its gives the study exclusion and inclusion criteria. In addition this chapter includes sample determination, sampling technique, and sampling frame, data collection procedure, research instrument, validity and reliability, data analysis and ethical considerations.

3.1 Research Design

A descriptive cross sectional study was conducted among registered nurses working, in order to evaluate the effect of socio-demographic factors, self-efficacy, collective efficacy on nurse job performance in tertiary care hospital, IGMH, Maldives.

3.2 Study site

This study was carried out at the tertiary care hospital, Hospital (IGMH) in the Maldives. IGMH hospital is the only government tertiary care hospital, it serves whole country with the capacity of 297 beds, 22 ward/units and 20 outpatient departments. There are 612 nurses currently working in IGMH, including 542 registered nurses and 70 enrolled nurses and out of these 542 registered nurses, 250 nurse's ae expatriate nurse (Sujaau M 2015, oral communication, 7th April).



Figure 3.1 IGMH

Data was collected from registered nurses working currently in 14 wards/units, however in IGMH there are 22 different nursing ward/units, some of the wards/units such as blood bank, reproductive health unit, clinical support service division (CSSD) and Labour induction unit are not included as the nurse cannot meet the inclusion criteria. Nurses in these ward/units only do morning duties. As mentioned before IGMH is the only government tertiary hospital, therefore pretesting of research instrument is done in the same hospital, hence by simple random sampling four ward/unit is been selected for pre-testing the research instrument. And these ward/unit are been excluded (private ward 1, private ward 4, Paediatric ward and outpatient department) to maintain reliability and validity of the instrument.

3.3 Target population

The target population of this study are both permanent and temporary registered nurses, senior registered nurses and deputy nurse managers working in shift duties in tertiary care hospital in the Maldives.

3.3.1 Inclusion criteria

- 1) Registered nurse licensed under Maldives nursing council practicing fulltime currently in tertiary hospital (IGMH).
- 2) Both male and female nurses working under Maldives nursing council practicing fulltime in tertiary hospital (IGMH).
- 3) Nurses working in shift duty

3.3.2 Exclusion Criteria

- 1) Nurses who has less than 3 month working experience
- 2) Nurse Managers and nurses in administrative position working in nursing department.
- 3) Instrument pretesting ward/units

3.4 Sample size and determinants

The following formula was used to determine the sample size:

$$n = \frac{Z^2 N \sigma^2}{Z^2 \sigma^2 + (N-1)E^2}$$

$$n = \frac{(1.96)^2 (358)(9.39)^2}{(1.96)^2 (9.39)^2 + (358 - 1)(0.88)^2}$$

$$n = 198$$

n = estimated sample size

N = the number of registered nurses', senior registered nurses' and deputy nurse managers in IGMH

Z = fixed alpha at 0.05 level, which is 1.96

E = Acceptable sampling error (0.88)

σ = population variance = $(9.39)^2$ (Fathmath, 2012)

The sample estimated for this study was at least 198 nurses, keeping in consideration for incomplete and missing data an attrition rate about 20% was added, therefore the required sample size for this study was 238 nurses.

3.5 Sample technique

Proportionate stratified random sampling was used to determine the number of permanent and temporary nurses in each unit/ward. In this type of sampling technique the researcher identifies stratum which are subsets of representative population sharing at least one common characteristics. Population was stratified into 14 units/wards as shown in figure3.1. Random sampling was used to determine sufficient number of subjects from each stratum. Nurses both permanent and temporary, who are willing to participate in this study will be selected from the nurses name list in each ward/unit. Proportionate sample size was used to represent the nurses from each unit/ward (stratum). And incase if any subject refuse to participate, simple random sampling was used until required amount of nursed are attained. The distribution of population and sample size proportion of both permanent and temporary nurse are attached in Table A (Appendix B).

3.6 Sampling frame

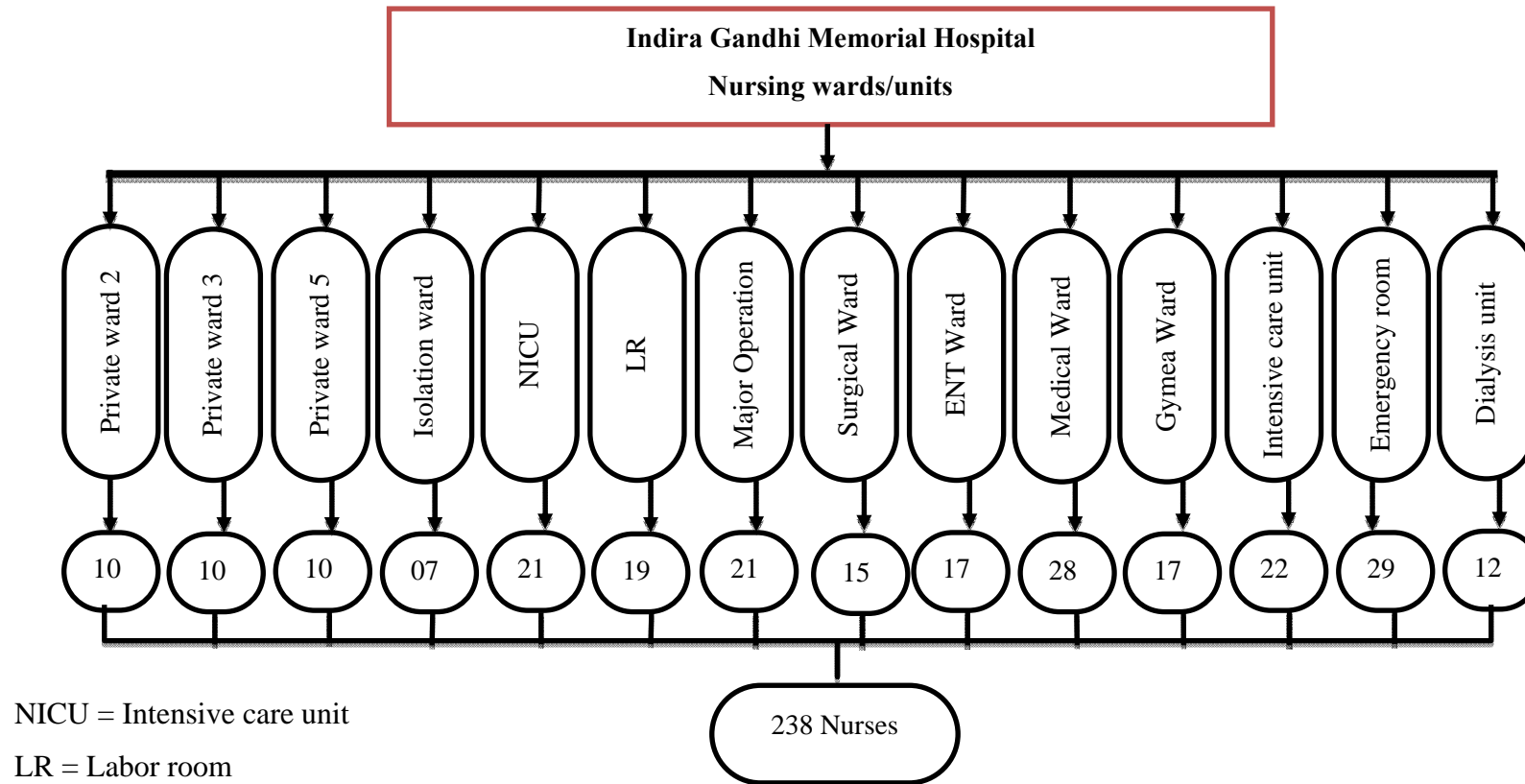


Figure 3.2 Sample Frame

3.7 Data Collection Procedure

Data collection will be carried out in one month period. The data will be collected following these steps:

1) The researcher submitted the research proposal and instrument to the ethics committee of Mahidol University

2) After obtaining approval from the ethics committee of Mahidol University and the researcher wrote to National Health Research Committee (NHRC) of Ministry of Health, Maldives, and a letter of permission was send to IGMH to obtain permission for data collection.

3) After getting letter of permission from the Chief executive of IGMH. The objective of the study was explained in detail with the nursing administration and the researcher requested the nursing director to inform all the ward managers and deputy ward managers officially about the study.

4) The researcher personally had meeting with all ward managers, and they were given the information about the study including its aim, benefits, and process of data collection. In addition the researcher requested the ward managers to inform all nurses officially about this study and give then an overview of the process and to arrange a coordinator to assist the researcher, and it could be a nurse in exclusion criteria or a ward clerk.

5) The researcher selected subject from the nurses list in each ward/area using proportionate random sampling technique.

6) The researcher met all the coordinators and gave information about the study and researched and coordinators distributed the questioners attached with an inform consent form and information sheet regarding the study.

7) The coordinators kept a box to collect questionnaires completed by respondents in each department. After filling in questionnaire subject can put their completed questionnaire into a box whenever they can. Every week a coordinator goes around to collect questionnaires completed by respondents. During the term of collecting data, respondents can submit questionnaire anytime. The box was kept under the supervision of coordinators and shift in-charge.

8) All the questionnaire was collected by the researcher with in three weeks. And all the incomplete questionnaire was excluded to find the actual responded rate.

3.8 Research instruments

The research instrument or the questionnaires were in English language because majority of the participants are expatriate, who speak English language and English language is most commonly used language by both permanent (local) and temporary (expatriate) nurses in their working environment. In IGMH, all the nursing related documents are written in English.

The research instrument of this study consists of four parts in English language as follows;

Part1: Demographic data form

This part consists of basic information about the nurses working in IGMH, including their gender, age, marital status, and employment status, and current working area, year of experience, professional tile and number of children. The age, number of children, and year of experience was classified into categories after data collection. And sex will be classified into male and female. Similarly marital status will be classified into single, married, divorce and widowed and Employment status will be categorized as Local nurse, expatriate nurse and others.

Part2: Self-efficacy

A Self-efficacy Scale was developed based Bandura's guide to construct a efficacy scale (86) and personal efficacy belief Scale by Riggs and Knight (1994)(29). The scale consists of items such as education and continuity of training, job position and work load, optimism and competency, and working shift and availability of resources. It consists of total 24 statements such as (e.g. I can express my view freely on work related issues in my ward/unit, the unit where I work has above-average ability, the members of this department have excellent job skills, and this department

is not very effective) etc. The scale were scored using a 6-point Likert scale ranging from 1 (Strongly agree) to 6 (Strongly disagree), with total scores ranging from 24 to 144. A higher score indicates a higher level of collective efficacy(29, 87).

Rating were given as of strongly agree to agree somewhat (6, 5, 4) and disagree somewhat and strongly disagree (3, 2, 1) for all positive statements and strongly agree to agree somewhat (1, 2, 3) and disagree somewhat and strongly disagree (4, 5, 6) to each negative statements.

Overall Self-efficacy

For overall self-efficacy the maximum score was 144 and minimum score was 24 and based on best's rating criteria the total score for self-efficacy was categorized into three levels as follows:

High	105 to 144
Moderate	65 to 104
Low	24 to 64

Education and continuity of training:

Maximum score was 30 and minimum score was 5 and based on best's rating criteria the total score for education and continuity of training was categorized into three levels as follows:

High	22 to 30
Moderate	14 to 21
Low	5 to 13

Job position and workload:

The maximum score was 30 and minimum score was 5 and based on best's rating criteria the total score was categorized into three levels as follows:

Heavy workload	22 to 30
Moderate	14 to 21
Light	5 to 13

Optimism and competency:

The maximum score was 48 and minimum score was 8 and based on best's rating criteria the total score was categorized into three levels as follows:

High	35 to 48
Moderate	22 to 34
Low	8 to 21

Working shifts and availability of resources:

The maximum score was 30 and minimum score was 5 and based on best's rating criteria the total score was categorized into three levels as follows:

Happy	22 to 30
Satisfactory	14 to 21
Not happy	5 to 13

Part3: collective efficacy

A collective efficacy Scale was developed based Bandura's guide to construct a efficacy scale(86) and collective efficacy Scale belief by Riggs and Knight (1994)(29). The scale consists of 27 statements (e.g. I can express my view freely on work related issues in my ward/unit, the unit where I work has above-average ability, the members of this department have excellent job skills, and this department is not very effective) etc. The scale is scored using a 6-point Likert scale ranging from 1 (Strongly agree) to 6 (Strongly disagree), with total scores ranging from 27 to 162. A higher score indicates a higher level of collective efficacy(29, 87).

Rating were given as of strongly agree to agree somewhat (6, 5, 4) and disagree somewhat and strongly disagree (3, 2, 1) for all positive statements and strongly agree to agree somewhat (1, 2, 3) and disagree somewhat and strongly disagree (4, 5, 6) to each negative statements.

Overall Collective Efficacy

For overall collective efficacy the maximum score was 162 and minimum score was 27 and based on best's rating criteria the total score for collective efficacy was categorized into three levels as follows:

High	118 to 162
Moderate	73 to 117
Low	27 to 72

Communication:

Maximum score was 18 and minimum score was 3 and based on best's rating criteria the total score for communication was categorized into three levels as follows:

Excellent	14 to 18
Effective	9 to 13
Not effective	3 to 8

Type of ward and commitment:

The maximum score was 36 and minimum score was 6 and based on best's rating criteria the total score was categorized into four levels as follows:

Very high	29 to 36
High	22 to 28
Low	14 to 21
Very low	6 to 13

Supervision, feedback, in-service meeting and leadership patterns:

The maximum score was 42 and minimum score was 7 and based on best's rating criteria the total score was categorized into three levels as follows:

Very good	32 to 42
Good	20 to 31
Not good	7 to 19

Social support:

The maximum score was 30 and minimum score was 5 and based on best's rating criteria the total score was categorized into three levels as follows:

Good social support	22 to 30
---------------------	----------

Moderate social support	14 to 21
Poor social support	5 to 13

Job autonomy and decision making:

The maximum score was 36 and minimum score was 6 and based on best's rating criteria the total score was categorized into three levels as follows:

Very good	27 to 36
Good	17 to 26
Poor	6 to 16

Part4: performance

The nursing performance scale of Greenslade (2008) was used to measure nurse job performance. The instrument consists of 25 items; 11 items in three dimension of task performance; social support (4 items), information provision (4 items), and technical care (3items). And to measure the performance and in order to describe nurses effectiveness in doing task performance, a 7 scale Likert scale was used; 1= poor, 2=below good; 3= Fairley good; 4= good; 5=somewhat above good; 6= very good; 7= excellent. In the three dimension of contextual performance consists of 14 items. Job task support (4 items); interpersonal support (5items); and organizational support (5 items). Similar to the task performance, a 7 scale Likert scale was used; 1= poor, 2=below good; 3= Fairley good; 4= good; 5=somewhat above good; 6= very good; 7= excellent, was used to measure the extra role performance(7, 48).

Total score of overall and each dimension of task performance:

Based on best's rating criteria the total score was categorized into three levels as follows:

Table 3.1 Categorization of level of overall and each dimension of task performance.

Task performance subscales	Level of task performance		
	Low	Moderate	High
Total score	11 – 33	34 – 55	56 - 77
Social support	4 - 12	13 – 20	21 - 28
Information provision	4 - 12	13 – 20	21 - 28
Technical care	3 - 9	10 – 15	16 – 21

Total score of overall and each dimension of contextual performance:

Based on best's rating criteria the total score was categorized into three levels as follows:

Table 3.2 Categorization of level of overall and each dimension of Contextual Performance

Task performance subscales	Level of task performance		
	Low	Moderate	High
Total score	14 - 42	43 – 70	71 – 98
Job-task support	4 - 12	13 – 20	21 - 28
Interpersonal support	5 - 15	16 – 25	26 – 35
Organizational support	5 - 15	16 – 25	26 – 35

3.9 Validity and Reliability

The research instrument was tested for content validity by experts during construction of this instrument, also the standard nursing performance scale was send to expert and checked for language clarity. Furthermore in order to test for internal consistency reliability of the whole research instrument, it was pretested for reliability at the same hospital, as it was the only government tertiary care hospital in the

country. For pretesting randomly three wards were selected and randomly 30 sample was selected with the same characteristics of the study sample and were asked to fill the self-reported questionnaire. And reliability was assessed using Cronbach's alpha. Reliability of questionnaire self-efficacy, collective efficacy, task performance, contextual performance were .65, .75, .96, .94 respectively.

With appropriate referencing, the researcher used three scales; a standard Nursing Performance scale developed by Greenslade (2008), and developed self-efficacy and collective efficacy scale based on Bandura's efficacy scale constructing guide (86) and reference with Personal Efficacy Beliefs Scale and Collective Efficacy Belief Scale developed by Riggs and Knight (1994). The research instrument was not converted to local language, as more than 50% of the sample population were expatriate and both local and expatriate nurses can communicate well in English language. All the expatriate nurses are recruited and licensed under Maldives nursing association must have International English Language Testing System (IELTS) score of at least 5.5 and permanent local nurses are selected for nursing training based on their educational qualification including English as a compulsory requirement either having Cambridge University 'O' level English pass or Maldives National University, entrance English exam pass.

3.10 Data Analysis

Data was coded using Epi data and analysis was conducted using the Statistical Package for the Social Science (SPSS). The descriptive statistics was used to describe job performance of nurses working in IGMH and effect of self-efficacy and collective efficacy on nursing performance.

Pearson's correlation was used to see the relationship between independent variables and dependent variables. In addition multiple regression analysis was used to determine the factors influencing on the nurse job performance in tertiary care hospital (IGMH), Maldives.

3.11 Ethical consideration

Before data collection, the research proposal was approved by the ethics committee of Mahidol University and also from National health research committee (NHRC) of Ministry of Health, Maldives. In addition a letter of permission was send to IGMH, for data collection process. As soon as the proposal was approved and letter of permission form IGMH, data collection was started. Before starting the process, the responded, nurses was informed that the study participation is voluntary and in addition from each participant who are willing to participate gave informed consent, after knowing the purpose, process of study and benefits. And after informed consent, the self-administered questionnaire was given to the participant. Even though the participant have already given consent, at any time of the process, if the participant wants to withdraw, he/she has the right to withdraw from the study. In addition to maintain confidentiality no responded have to mention their name in the questionnaire.

CHAPTER IV

RESULTS

This cross-sectional analytical study was conducted to examine and describe the effect of self-efficacy and collective efficacy on nurse job performance in tertiary care hospital, IGMH, Maldives. The data were collected in April 8 – 24, 2015. A self-administered questionnaire were used to collected data. A total of 238 nurses participated in this study. A total of 229 (96%) questionnaire were returned.

The results are presented on the following order:

4.1 Socio-demographic characteristics of nurse

4.2 Self-efficacy

4.3 Collective efficacy

4.4 Nurse Job performance

4.4.1 Task performance of nurse

4.4.2 Contextual performance of nurse

4.5 The association between independent variables and nurse job performance

4.1 Socio-demographic characteristics of nurse

Table 4.1 shows the socio-demographic characteristics of nurses working in IMGH. Majority of the nurses (85.6) were female, with an average mean age of 31.10 years old (SD = 5.65). 59.8% of the nurses were between 20 – 30 years old. Most of the nurses were married (82.1%), where 15.3 nurses were single. 35.4% of nurses had one child and 20.5% had two child, however majority (40.2%) had no children.

Regarding the educational level, 87.3% of the nurses had diploma level education and 10.9% had bachelor level education. Most of the nurses work in

inpatient departments/wards. Local nurses inhabits 49.8% of the workforce, however more than half (52.2%) of the nurses were temporary nurses.

Year of working as a nurse range from 3 months to 35 years with an average mean of 8.12 years (SD = 5.67), showing 32.3% nurses had working experience between 6 – 10 years. Considering the working experience in current working area, 42.8% of the nurses had working experience between 1 – 5 years in their present working area.

Looking into leadership positions, 46.6% of the nurses were doing shift in-charge duties and 8.7% were working as team leaders, however 50.7% of the nurses had never taken any such role and responsibilities.

Table 4.1 Frequency and percentage of nurses by socio-demographic characteristics (n = 229).

Socio-demographic factors	Frequency (n)	Percentage (%)
Gender		
Male	33	14.4
Female	196	85.6
Age (Year)		
20 - 30	137	59.9
31 - 40	82	35.8
41 - 50	9	3.9
>51	1	0.4
(Min = 20, Max = 52, Mean = 30.10, SD = 5.65)		
Educational Level		
Diploma	200	87.3
Associate degree	4	1.8
Bachelor degree	25	10.9
Marital status		
Single	35	15.3
Married	188	82.1
Divorce	6	2.6

Table 4.1 Frequency and percentage of nurses by socio-demographic characteristics
(n = 229) (cont.)

Socio-demographic factors	Frequency (n)	Percentage (%)
Year of working in current ward (year)		
< 1 year	58	25.3
1 – 5 years	98	42.8
6 – 10 years	54	23.6
11 – 15 years	15	6.6
16 – 20 years	3	1.3
> 20 years	1	0.4
(Min = .25, Max = 30years, Mean = 4.47, SD = 4.27)		
Year of working as a nurse (year)		
< 1 year	19	8.3
1 – 5 years	72	31.4
6 – 10 years	74	32.3
11– 15 years	46	20.1
16 – 20 years	11	4.8
> 20 years	7	3.1
(Min = .25, Max = 35years, Mean = 8.12, SD = 5.67)		
Current working area		
Inpatient wards (IPD)	157	68.5
Operation theater (OT)	21	9.2
Accident and emergency (ER)	21	9.2
Labour room	18	7.9
Hemodialysis unit (HDU)	12	5.2
Employment status		
Permanent nurse (Local nurse)	114	49.8
Temporary nurse (expatriate nurse)	115	50.2

Table 4.1 Frequency and percentage of nurses by socio-demographic characteristics
(n = 229) (cont.)

Socio-demographic factors	Frequency (n)	Percentage (%)
Professional title		
Registered nurse	170	74.2
Senior registered nurse	41	17.9
Deputy ward manager	15	6.6
Clinical nurse	3	1.3
Being assigned to following position		
Team leader	20	8.7
Shift In-charge nurse	93	40.6
Never	116	50.7
Number of children		
No children	92	40.2
1 child	81	35.4
2 children	47	20.5
3 children	9	3.9
(Median = 1 , QD = 1 , Min = 0, Max = 3)		

4.2 Self-efficacy

This part describes the overall mean score and standard deviation of self-efficacy. In addition mean score and standard deviation of each items under self-efficacy are discussed. Furthermore frequency and percentage of each statement under self-efficacy perceived by the nurses are discussed respectively. The results were displayed as follows:

As shown in table 4.2, the overall mean score of self-efficacy were (mean= 109.48, SD= 10.82). In addition overall self-efficacy as perceived by the nurses was at high level. Similarly optimism and competency and level of education perceived by the nurses was at high level. However Job position and workload was perceived as at moderate level. Meanwhile nurses are happy with their working shifts and availability of resources.

Table 4.2 Mean, standard deviation of overall self-efficacy and each variable of self-efficacy as perceived by the nurses (n = 229)

Self-efficacy	Actual range	Mean	SD	Level
Overall self-efficacy	24 – 144	109.48	10.82	High
Education and continuity of training	6 – 36	24.58	3.21	High
Workload	5 – 35	23.60	3.18	Moderate
Optimism and competency	8 – 48	35.78	5.09	High
Working shift and availability of resources	5 – 25	20.45	3.92	Happy

Table 4.3 showed the mean, standard deviation and percentage of nurses who responded self-efficacy by each statement. In education and continuity of training, almost all the nurses (99.2%) agreed they had adequate qualification to do the job. Similarly majority of nurse (96.5%) believed that they had all the skills needed to perform their job very well. Approximately (93.5%) nurses was proud of their job skill and ability. More than half of nurses (77.3%) disagreed that their future as a nurse was

limited because of their lack of ability. Furthermore majority (80.3%) nurses stated they get equal opportunity to continue their professional development.

In the job position and workload results, majority of the nurses (92.6%) were happy with their job position and (93.4%) nurses agreed their job designation or job position make them more capable of doing their job. However (93.5%) nurses accepted their job position make them to take more responsibilities. Similarly (79.4%) nurses agreed they had heavy work load every day. Even though most of the nurses (78.5%) were happy with their level workload.

When looking into optimism and competency results, majority of the nurses (97.9%) accepted that they had confidence in their job ability to do their job, and (91.7%) believed that they can do difficult task easily. In addition (76.8%) of nurses believed their expert at their job. Majority (83.8%) of the nurses believed that they can take their mind off from upsetting everyday problems. Most of the nurses (81.5%) disagreed that they have doubt on their ability to do their job. Similarly more than half of the nurses (55.9%) disagreed there are some task that required on their job that they cannot do well. Moreover (75.9%) nurses disagreed that they feel threaten when others watch their work, and (64.6%) nurses disagreed most people in their job can do job better than them. When considering working shift and availability of resources result, most of the nurses (81.3%) agreed that they had flexible duty shifts, and (85.2%) nurses were happy with shift duties. similarly (65.9%) nurses agreed that they can change working shift whenever they needed. In terms of availability of resources, (60.7%) nurses disagreed that they get instruments and equipment's whenever they needed in work. Conversely, (58.9%) nurses agreed that they cannot carry out their work effectively due to lack of resources.

Table 4.3 Mean, standard deviation, frequency and percentage of overall self-efficacy by each items (n = 229)

SA = Strongly Agree, A = Agree, AS = Agree Somewhat, DS = Disagree Somewhat, D = Disagree, SD = Strongly Disagree

No.	Statement	\bar{x} (sd)	SA	A	AS	DS	D	SD
Level of Education, continuity of training and year of experience								
1	I have adequate qualification to do my job	5.43 (0.64)	51.1	42.4	5.7	0.9	0	0
2	I have all the skill needed to perform my job very well	4.99 (0.82)	26.2	52.8	17.5	1.3	2.2	0
3	I get the equal opportunity to continue my professional development	4.41 (1.25)	17	41	22.3	7.9	9.6	2.2
4	My future in this job is limited because of my lack of skill *	4.7 (1.36)	3.5	5.7	10.5	11.8	34.5	31.1
5	I am very proud of my job skill and ability	5.03 (0.97)	35.8	41.5	16.2	3.9	2.2	0.4
6	I have adequate experience to perform my job	5.07 (0.85)	34.1	44.5	17.0	3.5	0.9	0
Job position and Workload								
7	My job (position) designation make me more capable of doing my job	4.93 (0.90)	25.3	51.1	17	3.9	2.6	0
8	I am happy with my job position	5.03 (1.01)	35.4	45	12.2	3.5	3.1	0.9
9	My job position make me take more responsibilities	4.98 (0.95)	27.5	54.6	11.4	3.1	2.2	1.3

* Negative statement

Table 4.3 Mean, standard deviation, frequency and percentage of overall self-efficacy by each items (n = 229) (cont.)

SA = Strongly Agree, A = Agree, AS = Agree Somewhat, DS = Disagree Somewhat, D = Disagree, SD = Strongly Disagree

No.	Statement	\bar{x} (sd)	SA	A	AS	DS	D	SD
10	I have a heavy workload everyday	4.31 (1.24)	17	31.4	31	8.7	10	1.7
11	I am happy with the level of my workload	4.34 (1.32)	17	38.4	23.1	9.6	7	4.8
Optimism and competency								
12	I can take my mind off from upsetting everyday problems	4.48 (1.17)	16.6	41.9	25.3	7	7.4	1.7
13	I have confidence in my ability to do my job	5.29(0.70)	40.6	50.7	6.6	1.7	0.4	0
14	I can do difficult task easily	4.64 (0.86)	12.2	49.8	29.7	6.6	1.3	0.4
15	I am an expert at my job	4.21 (1.13)	9.6	36.2	31	14.4	7	1.7
16	I doubt my ability to do my job *	4.67 (1.3)	1.3	9.6	7.4	13.4	38.4	29.7
17	There are some task required by my job that I cannot do well *	3.94 (1.29)	2.2	9.2	32.8	16.6	26.6	12.7
18	I feel threatened when others watch my work *	4.52 (1.38)	3.5	7	13.5	13.5	34.5	27.9
19	Most people in this job can do this job better than I do *	4.01 (1.36)	3.1	13.5	18.8	23.6	26.2	14.8

* Negative statement

Table 4.3 Mean, standard deviation, frequency and percentage of overall self-efficacy by each items (n = 229) (cont.)

SA = Strongly Agree, A = Agree, AS = Agree Somewhat, DS = Disagree Somewhat, D = Disagree, SD = Strongly Disagree

No.	Statement	\bar{x} (sd)	SA	A	AS	DS	D	SD
Working shift and Availability of resources								
20	I have flexible duty shifts	4.58 (1.35)	25.8	40.2	15.3	7.9	6.6	4.4
21	I can change my working shift whenever I need	3.83 (1.47)	12.2	24	29.7	11.8	13.1	9.2
22	I am happy with shift duties	4.72 (1.26)	29.3	40.2	15.7	6.1	6.1	2.6
23	I can get the instrumental materials and equipment's * whenever I need in my work	3.73 (1.40)	6.1	31	23.6	17.9	12.2	9.2
24	I cannot carry out my work effectively due to lack of resources *	3.58 (1.31)	7.4	15.3	36.2	14.8	21.4	4.8

* Negative statement

4.3 Collective efficacy

As shown in table 4.4, the overall mean score of collective efficacy were (mean= 112.24, SD= 12.10). Overall collective efficacy as perceived by the nurses was at moderate level. However communication as perceived by the nurses was effective. Similarly commitment was perceived as high. Additionally Supervision, feedback, in-service meetings, leadership patterns and Job autonomy, decision making

was perceived by nurses as good. Similarly nurses perceived having good social support.

Table 4.4 Mean, standard deviation of overall collective efficacy and each variable of collective efficacy as perceived by the nurses (n = 229).

Collective efficacy	Actual range	\bar{x}	sd	Level
Overall collective efficacy	27 – 162	112.24	12.10	Moderate
Communication	3 – 18	12.72	2.98	Effective
Commitment	6 – 36	24.42	3.24	High
Supervision, feedback, in-service meetings and leadership patterns	7 – 42	29.06	6.32	Good
Social support	5 – 30	23.28	3.97	Good social support
Job autonomy and decision making	6 – 36	22.72	3.07	Good

Table 4.5 showed the mean, standard deviation and percentage of nurses who responded collective efficacy by each statement.

In the communication results, majority (83.0%) nurses believed the ward/unit they work had excellent interpersonal relationship between coworkers. Similarly most of the nurses (79.5%) agreed that they can express their view freely on work related issues in their work/unit. Nevertheless (60.8%) nurses disagreed that the ward/unit they work is not effective in communication.

Considering the type of ward and commitment, approximately (79%) nurses considered their ward/unit had above average ability, and more than half (58.5%) of the nurses disagreed that their ward/unit is not able to perform as well as it should. In addition, majority (82.1%) of nurses disagreed their ward/unit is poor compared to other ward/unit doing similar work. Majority (84.7%) of nurses agreed that the member of their ward/unit had excellent job skills. However more than half (55%), of nurses believed that some of their ward/unit nurses cannot do their job well.

Nonetheless, more than half (50.7%) of nurses disagreed that some members of their ward/unit should be changed due to lack of their ability.

When looking in to supervision, feedback, in-service meetings and leadership pattern results, (71.3%) of nurses agreed regular supervision and feedback were given, and (67.7%) believed that the leaders recognized and appreciated their work. Similarly (66.5%) nurses disagreed on the statement that they do not get any feedback for the work, and more than half of the (59.8%) disagreed that the supervision were not effective. Similarly (78.7%) nurses disagreed that the in-service meetings were useless. Majority of nurses (72.1%) agreed regular in-service meetings were conducted, and most of the nurses (79.5%) believed the ward managers were excellent in managing the ward.

In the social support results, approximately (94.3%) of nurses agreed their ward/unit nurses were very friendly, and most of the nurse (92.1%) accepted that nurses help each other in ward/unit to complete work. However (67.7%) believed they can share feelings with any coworkers. Majority of nurses (85.2%) believed they can keep their mind focused on work after had an upsetting experience in work or home. Moreover (94.3%) nurses agreed that the ward nurses can motive student nurses and junior nurses in their work.

In the job autonomy and decision making results, most of the nurses (87.7%) believed in ward/unit they had the autonomy of doing work related activities, and (77.7%) believed that they had autonomy on patient care decisions. Additionally (85.2%) nurses agreed they had permission for work related activities. However most of the nurses (69%) disagreed that nurse's opinion is asked every time before making any decision. and (61.1%) nurses disagreed that they can influence decisions made in their ward/unit. Similarly most of the nurse (64.2%) disagreed they had equal participation in decision making related to ward/unit issues.

Table 4.5 Mean, standard deviation, and percentage of overall collective efficacy by each items (n = 229)

SA = Strongly Agree, A = Agree, AS = Agree Somewhat, DS = Disagree Somewhat, D = Disagree, SD = Strongly Disagree

No	Items	\bar{x} (sd)	SA	A	AS	DS	D	SD
Communication								
1	I can express my view freely on work related issues	4.41 (1.29)	17.5	41.5	20.5	10.0	6.6	3.9
2	The ward/unit I work have excellent interpersonal relation between coworkers	4.44 (1.27)	16.2	44.1	22.7	5.7	7.4	3.9
3	The ward/unit I work is not effective in communication *	3.87 (1.40)	5.2	14.8	19.2	19.7	30.6	10.5
Type of ward/unit and Commitment								
4	The ward/unit I work has above average ability	4.24 (1.26)	10.5	41.9	26.6	6.6	11.4	3.1
5	This ward/unit is not able to perform as well as it should *	3.83 (1.48)	7.4	14.0	20.1	17.0	29.3	12.2
6	This ward/unit t is poor compare to other department doing similar work *	4.72 (1.41)	4.4	6.1	7.4	14.0	31.9	36.2
Type of ward/unit and Commitment								
7	Some member of this department cannot do their job well *	3.61 (1.54)	14.0	17.0	24.0	14.0	22.7	8.3
8	The member of this department has excellent job skills	4.47 (1.08)	13.5	42.8	28.4	9.6	3.9	1.7

* Negative statement

Table 4.5 Mean, standard deviation, and percentage of overall collective efficacy by each items (n = 229) (cont.)

SA = Strongly Agree, A = Agree, AS = Agree Somewhat, DS = Disagree Somewhat, D = Disagree, SD = Strongly Disagree

No	Items	\bar{x} (sd)	SA	A	AS	DS	D	SD
9	Some member of this department should be changed due to lack of ability *	3.55 (1.49)	8.7	21.4	19.2	13.5	30.6	6.6
Supervision, feedback, In-service meeting and leadership pattern								
10	Regular supervision and feedback are given	4.10 (1.41)	12.7	37.6	21.0	11.4	11.4	6.1
11	Leaders recolonize and appreciate our work	3.89 (1.47)	9.6	33.6	24.5	11.4	10.9	10.0
Supervision, feedback, In-service meeting and leadership pattern. cont.								
12	Do not get any feedback for the work *	4.04 (1.36)	6.1	7.4	20.1	19.7	35.4	11.4
13	Supervisions are not effective *	3.86 (1.42)	5.2	15.7	19.2	17.9	31.4	10.5
14	Regular in-service meeting are conducted	4.10 (1.39)	13.5	34.1	24.5	10.5	12.2	5.2
15	In-service meeting are useless *	4.59 (1.29)	3.1	3.9	14.4	14.0	38.9	25.8
16	This ward manager is excellent in managing ward	4.47 (1.48)	27.1	34.1	18.3	6.1	7.9	6.6
Social support								
17	This ward/unit nurses are very friendly	4.95 (0.97)	28.8	47.2	18.3	2.2	2.6	.9

* Negative statement

Table 4.5 Mean, standard deviation, and percentage of overall collective efficacy by each items (n = 229) (cont.)

SA = Strongly Agree, A = Agree, AS = Agree Somewhat, DS = Disagree Somewhat, D = Disagree, SD = Strongly Disagree

No	Items	\bar{x} (sd)	SA	A	AS	DS	D	SD
18	This ward/unit nurses help each other to complete work	4.88 (0.98)	27.9	43.2	21.0	5.2	2.2	.4
19	I can share my feelings with any coworkers	4.01 (1.44)	15.3	28.4	24.0	11.4	16.6	4.4
20	I can keep my mind focus on my work after have had a upsetting experience in my working environment or at home	4.53 (1.19)	16.2	47.2	21.8	6.6	4.8	3.5
21	Nurses in this ward can motivate student nurses and junior nurses in their work	4.91 (0.97)	24.9	52.4	17.0	2.6	.9	2.2
22	This ward/unit nurse has the autonomy of doing any work related activities	4.49 (0.99)	8.3	51.5	27.9	7.0	3.5	1.7
23	This ward/unit nurse has the permission for doing any work related activities	4.20 (1.18)	7.4	42.4	27.9	9.6	10.5	2.2
24	This ward/unit nurse has the autonomy for patient care decisions	4.41 (1.04)	9.2	45.9	30.1	7.9	5.7	1.3

* Negative statement

Table 4.5 Mean, standard deviation, and percentage of overall collective efficacy by each items (n = 229) (cont.)

SA = Strongly Agree, A = Agree, AS = Agree Somewhat, DS = Disagree Somewhat, D = Disagree, SD = Strongly Disagree

No	Items	\bar{x} (sd)	SA	A	AS	DS	D	SD
Job autonomy and decision making								
25	This ward/unit nurse opinion is asked every time before making any decision	3.04 (1.34)	5.2	13.5	12.2	26.6	34.5	7.9
26	I can influence the decision that are made in this ward/unit	3.34 (1.31)	7.9	13.5	17	30.6	27.9	3.1
27	I have equal participation in decision making related to ward/unit issues	3.24 (1.36)	7.0	15.7	13.1	28.4	30.6	5.2

* Negative statement

4.4 Nurse Job performance

4.4.1 Task performance of the respondents

As shown in table 4.6, the overall mean score of task performance were (mean= 59.02, SD= 11.97). Overall task performance as perceived by the nurses were at high level. Similarly information provision and technical care dimension were at high level. However social support was to moderate level.

Table 4.6 Mean, Standard Deviation and level of overall Task Performance and each Dimensions of Task Performance as perceived by Nurses (n = 229)

Task performance	Actual range	Mean	SD	Level
Overall Task performance	77 – 11	59.02	11.97	High
Social support	28 – 4	19.68	5.00	Moderate
Information provision	28 – 4	21.43	5.11	High
Technical care	21 – 3	17.89	3.33	High

4.4.2 Contextual performance of the respondents

As shown in table 4.7, the overall mean score of contextual performance were (mean= 64.62, SD= 14.67). Overall task performance along with all the three dimensions of contextual performance as perceived by the nurses were at moderate level.

Table 4.7 Mean, Standard Deviation and level of overall Contextual Performance and each Dimensions of Contextual Performance as perceived by Nurses (n = 229).

Contextual performance	Actual range	Mean	SD	Level
Overall Contextual performance	98 – 14	64.62	14.67	Moderate
Interpersonal support	53 – 5	23.32	6.1	Moderate
Job-task performance	28 – 4	18.75	4.67	Moderate
Organizational support	35 – 5	22.53	6.06	Moderate

4.5 The association between independent variables and nurse job performance

4.5.1 Socio-demographic factors and task performance, contextual performance and overall performance

Independent one sample t-test and one-way ANOVA were used to compare association between socio demographic factors and mean overall performance (table 4.8), socio demographic factors and mean task performance (table 4.9), socio demographic factors and mean contextual performance (table 4.10). In addition correlation analysis were used to observe association between number of children with mean overall performance, mean task performance and mean contextual performance (table 4.11). P-value less than 0.05 was considered as level of significant.

Table 4.8 showed the association between socio demographic factors and overall performance. It was revealed that none of the factors were significantly associated. Considering the detail of each factor, independent t-test were used compare association between age and mean overall performance. The result revealed that there were no significant association. Moreover mean score was nearly equal in both group, female (mean = 4.94), male (mean = 4.95). One-way ANOVA were used compare association between age and mean overall performance. Results confirmed there was no significant association. However nurse in age between 20-30 years had higher mean (mean = 4.97) and over 50years had lowest mean (mean = 4.32). Similarly, one-way ANOVA were used compare association between level of education and mean overall performance, and there was no significant association found. However nurse with associate degree had higher mean (mean = 5.14). Similarly in marital status, there was no significant association found. Nevertheless it was found that divorced nurses category had higher mean (mean = 5.44) than married (mean = 4.95) and single with lowest mean (mean = 4.83). Considering working as a nurse in current ward and working as a nurse, both factor were not found statistically significant. However in both factor it was found 16 -20 years category had highest mean, working in current ward (mean = 5.26) and working as a nurse with mean (mean = 5.08). When looking in to association between employment status and mean overall performance, again there were no significant association detected. However it was revealed that temporary

nurse had highest mean (mean = 5.01). Similarly in professional title factor, there were no significant association found, nevertheless it was found that nurse with deputy manager title had higher mean (mean = 4.99). Working area had also no significant association with mean overall performance. But it was revealed that nurses in Hemodialysis Unit (HDU) had higher mean (mean = 5.39). Similarly, being assigned to any position did not have any association with overall performance, however nurses assigned as shift-in-charges had higher mean (mean = 5.07).

Table 4.8 Relationship between socio-demographic factors and mean overall Performance as perceived by the nurses (n= 229).

Socio-demographic factors	Mean	SD	t/F (df)	P – value
Gender				
Female	4.94	.95	.074	.941
Male	4.95	1.24	(227)	
Age (Years)				
20 - 30	4.97	.88		.876
31 - 40	4.91	1.18	.230	
41 - 50	4.84	.78	(3)	
>51	4.32			
Educational Level				
Diploma	4.94	.98	.079	.924
Associate degree	5.14	.59	(2)	
Bachelor degree	4.93	1.14		

Table 4.8 Relationship between socio-demographic factors and mean overall Performance as perceived by the nurses (n= 229). (cont.)

Socio-demographic factors	Mean	SD	t/F (df)	P – value
Marital status				
Single	4.83	.88	.948 (2)	.389
Married	4.95	1.02		
Divorce	5.44	.63		
Year of working in current ward				
< 1 year	4.99	.87	.524 (5)	.758
2– 5 years	4.84	1.01		
6– 10 years	5.00	1.10		
11– 15 years	5.14	1.00		
16 – 20 years	5.26	.46		
> 20 years	4.32			
Year of working as a nurse				
< 1 year	4.95	.86	.163 (5)	.976
2– 5 years	4.89	1.02		
6 – 10 years	4.97	.99		
11– 15 years	4.97	.99		
16 – 20 years	5.08	1.24		
> 20 years	4.73	.90		
Employment status				
Permanent nurse (Local nurse)	4.87	.88	-1.106	.270
Temporary nurse (expatriate nurse)	5.01	1.08	(227)	

Table 4.8 Relationship between socio-demographic factors and mean overall Performance as perceived by the nurses (n= 229). (cont.)

Socio-demographic factors	Mean	SD	t/F (df)	P – value
Professional title				
Registered nurse	4.96	1.04		
Senior registered nurse	4.86	0.92	.129	.943
Deputy ward manager	4.99	0.78	(3)	
Others	4.95	0.68		
Current working area				
Inpatient wards (IPD)	4.96	1.01		
Operation theater (OT)	4.79	0.81		
Accident and emergency (ER)	4.88	1.25	.900	.464
Labour room	4.76	0.76	(4)	
Hemodialysis unit (HDU)	5.39	0.86		
Being assigned to following position				
Team leader	4.76	1.08		
Shift In-charge nurse	5.07	1.07	1.258	.286
Never	4.88	0.91	(2)	

Table 4.9 showed the association between socio demographic factors and task performance. Result revealed there were no significant association with any of socio demographic factor and task performance. Looking in to details, the association between age and task performance, there were no significant association found. However female had higher mean (mean = 5.37). One-way ANOVA result revealed no significant association between age and mean task performance. But nurse in age between 20-30 years had higher mean (mean = 5.41). Similarly, no association were found between education and mean task performance. Nevertheless it was found that nurse with associate degree had higher mean (mean = 5.86). Likewise in marital status, there was no significant association found. Nevertheless it was found that divorced nurse category had higher mean (mean = 5.80). Working as a nurse in current ward

and working as a nurse, both factor had no statistically significant association with task performance. However in both factor it was found 16 -20 years category had highest mean, working in current ward (mean = 5.72) and working as a nurse with mean (mean = 5.59). Considering association between employment status and mean task performance, there were no significant association noted. But it was noted that temporary nurse had highest mean (mean = 5.44). Similarly in professional tittle factor, there were no significant association with task performance, however it was found that nurse in other category had higher mean (mean = 5.45). Result also showed working area had also no significant association with task performance. But it was revealed that nurses in HDU had higher mean (mean = 5.73). And being assign to any position had no association with task performance, nevertheless nurses assigned as shift-in-charges had higher mean (mean = 5.43).

Table 4.9 Relationship between socio-demographic characteristics and Task Performance as perceived by the nurses (n = 229).

Variables	Mean	SD	t/F (df)	P – value
Gender				
Female	5.37	1.02	-.231	.818
Male	5.32	1.43	(227)	
Age (Years)				
20 - 30	5.41	.96		
31 - 40	5.30	1.27	.458	.712
41 - 50	5.14	1.04	(3)	
>51	4.63			

Table 4.9 Relationship between socio-demographic characteristics and Task Performance as perceived by the nurses (n = 229) (cont.)

Variables	Mean	SD	t/F (df)	P – value
Educational Level				
Diploma	5.38	1.06	1.071 (2)	.344
Associate degree	5.86	.500		
Bachelor degree	5.12	1.34		
Marital status				
Single	5.35	.97	.495 (2)	.610
Married	5.35	1.12		
Divorce	5.80	.45		
Year of working in current ward				
< 1 year	5.45	.94	.436 (5)	.823
2– 5 years	5.27	1.14		
6– 10 years	5.37	1.17		
11– 15 years	5.54	1.12		
16 – 20 years	5.72	.09		
> 20 years	4.63			
Year of working as a nurse				
< 1 year	5.52	.97	.314 (5)	.904
2– 5 years	5.32	1.14		
6 – 10 years	5.36	1.10		
11– 15 years	5.35	1.02		
16 – 20 years	5.59	1.21		
> 20 years	5.03	1.08		

Table 4.9 Relationship between socio-demographic characteristics and Task Performance as perceived by the nurses (n = 229) (cont.)

Variables	Mean	SD	t/F (df)	P – value
Employment status				
Permanent nurse (Local nurse)	5.28	.99	-1.087	.278
Temporary nurse (expatriate nurse)	5.44	1.17	(227)	
Professional title				
Registered nurse	5.39	1.14		
Senior registered nurse	5.34	0.93	.306	.821
Deputy ward manager	5.12	1.05	(3)	
Others	5.45	0.47		
Being assigned to following position				
Team leader	5.06	1.23		
Shift In-charge nurse	5.43	1.17	.942	.392
Never	5.36	0.99	(2)	
Current working area				
Inpatient wards (IPD)	5.39	1.10		
Operation theater (OT)	5.15	1.04		
Accident and emergency (ER)	5.39	1.39	.706	.589
Labour room	5.16	0.81	(4)	
Hemodialysis unit (HDU)	5.73	0.85		

Table 4.10 showed the association between socio demographic factors and contextual performance. Result revealed that none of the factors were significantly associated. Detail of each factor are explained below:

Independent t-test were used compare association between age and mean contextual performance and it was found that there were no significant association. However it was revealed that male had higher mean (mean = 4.66). One-way ANOVA were used look for the association between age and mean contextual performance, and there was no significant association found. But nurses in age between 20-30 years had

higher mean (mean = 4.62). Similarly, there was no association found between level of education and mean contextual performance. But it was found that nurses with bachelor degree had higher mean (mean = 4.78). Marital status and mean contextual performance also had no significant association. Nevertheless it was found that divorced nurses category had higher mean (mean = 5.15). There was no significant association found between both years of working as a nurse in current ward and year of working as a nurse. However in both factors, 16 -20 years category had highest mean, working in current ward (mean = 4.90) and working as a nurse with mean (mean = 4.68). Similarly employment status and mean contextual performance had no significant association, but it was revealed that temporary nurse had highest mean (mean = 4.68). Professional tittle and mean contextual performance also had no significant associate, nevertheless it was found that nurse with deputy manager title had higher mean (mean = 4.89). Additionally working area and being assigned to any position had also no significant association with mean contextual performance. But it was revealed that nurses in HDU had higher mean (mean = 5.39) and nurses assigned as shift-in-charges had higher mean (mean = 5.07).

Table 4.10 Relationship between socio-demographic characteristics and Contextual Performance as perceived by the nurses (n = 229).

Variables	Mean	SD	t/F(df)	P – value
Gender				
Female	4.60	1.01	.314	.754
Male	4.66	1.22	(227)	
Age (Years)				
20 - 30	4.62	.94		.960
31 - 40	4.60	1.23	.099	
41 - 50	4.61	.78	3	
>51	4.07			

Table 4.10 Relationship between socio-demographic characteristics and Contextual Performance as perceived by the nurses (n = 229) (cont.)

Variables	Mean	SD	t/F (df)	P – value
Educational Level				
Diploma	4.59	1.04	.344 (2)	.710
Associate degree	4.57	.73		
Bachelor degree	4.78	1.12		
Marital status				
Single	4.43	.95	1.369 (2)	.256
Married	4.63	1.06		
Divorce	5.15	.87		
Year of working in current ward				
< 1 year	4.64	.94	.535 (2)	.750
2– 5 years	4.50	1.05		
6– 10 years	4.71	1.15		
11– 15 years	4.83	1.07		
16 – 20 years	4.90	.78		
> 20 years	4.07			
Year of working as a nurse				
< 1 year	4.51	.89	.174 (5)	.972
2– 5 years	4.55	1.05		
6 – 10 years	4.67	1.03		
11– 15 years	4.66	1.08		
16 – 20 years	4.68	1.43		
> 20 years	4.48	.88		

Table 4.10 Relationship between socio-demographic characteristics and Contextual Performance as perceived by the nurses. (cont.)

Variables	Mean	SD	t/F (df)	P – value
Employment status				
Permanent nurse (Local nurse)	4.54	.93	-988 (227)	.324
Temporary nurse (expatriate nurse)	4.68	1.15		
Professional tittle				
Registered nurse	4.63	1.09	.577 (2)	.631
Senior registered nurse	4.48	1.00		
Deputy ward manager	4.89	0.75		
Others	4.55	0.90		
Being assigned to following position				
Team leader	4.53	1.08	1.878 (2)	.155
Shift In-charge nurse	4.78	1.10		
Never	4.50	1.00		
Current working area				
Inpatient wards (IPD)	4.63	1.07	.957 (4)	.432
Operation theater (OT)	4.51	0.76		
Accident and emergency (ER)	4.48	1.26		
Labour room	4.44	0.91		
Hemodialysis unit (HDU)	5.12	0.89		

Table 4.11 showed the correlation between number of children, overall performance, task performance and contextual performance. Considering the number of children and overall performance there was a very weak negative correlation found ($r = -.076$), however there was no significant association detected. Similarly the number of children and task performance there was a very weak negative correlation ($r = -.042$), but there was no significant association found. In the number of children and contextual performance there was a weak negative correlation found ($r = -.106$), nevertheless there was no significant association revealed.

Table 4.11 Correlation analysis between socio-demographic factor and overall performance, task performance and contextual performance as perceived by the nurses (n = 229).

	Overall performance		Task performance		Contextual performance	
	r	P- value	r	P- value	r	P- value
No. of children	-.076	0.251	-.042	0.523	-.106	0.110

**p<0.01, *p<0.05

4.5.2 Relationship between overall and each variables of self-efficacy and overall performance, task performance and contextual performance.

Table 4.12, the result of Pearson correlation showed the relationship between overall self-efficacy and each dimension of self-efficacy and, overall performance, task performance and contextual performance. Overall self-efficacy and each dimension of self-efficacy and overall performance were statistically significant. It was found that there was moderate positive correlation between overall self-efficacy and overall nurse job performance (.343, p<0.01). Considering each dimension, there was a weak positive correlation between education and continuity of training and overall nurse job performance (.164, p<0.05). Similarly there was a weak positive correlation between workload and overall nurse job performance (.149, p<0.05), and there was a weak positive correlation between optimism and competency and overall nurse job performance (.303, p<0.01), and there was a weak positive correlation between Working shift and availability of resources and overall nurse job performance (.187, p<0.01).

Looking in to the result of Pearson correlation on overall self-efficacy and each dimension of self-efficacy and task performance, it was also revealed that self-efficacy and each dimension of self-efficacy and task performance were statistically significant. There was moderate positive correlation between overall self-efficacy and task performance (.327, p<0.01). There was a weak positive correlation between education and continuity of training and task performance (.172, p<0.01), and also there was a weak positive correlation between workload and task performance (.133,

$p < 0.05$), optimism and competency and task performance (.279, $p < 0.01$), availability of resources and task job performance (.174, $p < 0.01$).

The result of Pearson correlation also showed that the relationship between overall self-efficacy and each dimension of self-efficacy and contextual performance were statistically significant. There was moderate positive correlation between overall self-efficacy and contextual performance (.314, $p < 0.01$). There was a weak positive correlation between education and continuity of training and contextual performance (.138, $p < 0.05$), workload and contextual performance (.144, $p < 0.05$). Similarly there was a weak positive correlation between optimism and competency and contextual performance (.287, $p < 0.01$), Working shift and availability of resources and contextual performance (.176, $p < 0.01$).

Table 4.12 Relationship between overall and each variables of self-efficacy and overall performance, task performance and contextual performance (n = 229).

Self- efficacy	Overall performance		Task performance		Contextual performance	
	r	P- value	r	P- value	r	P- value
Overall self-efficacy	.343	0.001**	.327	0.001**	.314	0.001**
Education and continuity of training	.164	0.013*	.172	0.009**	.138	0.037*
Workload	.149	0.024*	.133	0.045*	.144	0.029*
Optimism and competency	.303	0.001**	.279	0.001**	.287	0.001**

Table 4.12 Relationship between overall and each variables of self-efficacy and overall performance, task performance and contextual performance (n = 229). (cont.)

Self- efficacy	Overall		Task		Contextual	
	performance		performance		performance	
	r	P- value	r	P- value	r	P- value
Working shift and availability of resources	.187	0.004**	.174	0.008**	.176	0.008**

**p<0.01, *p<0.05

4.5.3 Relationship between overall and each variables of collective efficacy and overall performance, task performance and contextual performance.

Table 4.13, the result of Pearson correlation showed the relationship between overall collective efficacy and each dimension of collective efficacy and, overall performance, task performance and contextual performance. Overall collective efficacy and each dimension of collective efficacy and overall performance were statistically significant. It was found that there was moderate positive correlation between overall collective efficacy and overall nurse job performance (.425, p<0.01). There was a weak positive correlation between communication and overall nurse job performance (.250, p<0.01). Similarly there was a weak positive correlation between commitment and overall nurse job performance (.281, p<0.01), supervision, feedback, in-service meetings, leadership patterns and overall nurse job performance (.239, p<0.01). But there was moderate positive correlation between social support and overall nurse job performance (.399, p<0.01). There was a weak positive correlation between job autonomy and decision making and overall nurse job performance (.154, p<0.05).

The result of Pearson correlation also revealed that overall collective efficacy and each dimension of collective efficacy and task performance were statistically significant. It was found that there was moderate positive correlation between overall collective efficacy and task performance (.404, p<0.01). There was a weak positive correlation between communication and task performance (.197,

$p < 0.01$). Similarly there was a weak positive correlation between commitment and task performance (.284, $p < 0.01$), supervision, feedback, in-service meetings, leadership patterns and task performance (.254, $p < 0.01$). But there was moderate positive correlation between social support and task performance (.305, $p < 0.01$). There was a weak positive correlation between job autonomy and decision making and task performance (.186, $p < 0.01$).

The result of Pearson correlation also showed that overall collective efficacy and contextual performance were statistically significant. Additionally it was found that there was moderate positive correlation between overall collective efficacy and contextual performance (.392, $p < 0.01$). Considering each dimension, there was a weak positive correlation between communication and contextual performance (.262, $p < 0.01$), commitment and contextual performance (.244, $p < 0.01$), supervision, feedback, in-service meetings, leadership patterns and task performance (.197, $p < 0.01$). But there was moderate positive correlation between social support and task performance (.428, $p < 0.01$). There was no association found between Job autonomy and decision making and contextual performance.

Table 4.13 Association between overall and each variables of collective efficacy and overall performance, task performance and contextual performance (n = 229).

Collective efficacy	Overall performance		Task performance		Contextual performance	
	r	P- value	r	P- value	r	P- value
Overall collective efficacy	.425	0.001**	.404	0.001**	.392	0.001**
Communication	.250	0.001**	.197	0.003**	.262	0.001**
Commitment	.281	0.025**	.284	0.001**	.244	0.001**

Table 4.13 Association between overall and each variables of collective efficacy and overall performance, task performance and contextual performance (n = 229). (cont.)

Collective efficacy	Overall performance		Task performance		Contextual performance	
	r	P- value	r	P- value	r	P- value
Supervision, feedback, in-service meetings and leadership patterns	.239	0.001**	.254	0.001**	.197	0.003**
Social support	.399	0.001**	.305	0.001**	.428	0.001**
Job autonomy and decision making	.154	0.019*	.186	0.005**	.110	0.097

**p<0.01, *p<0.05

4.5.4 Predicting factors for overall nurse job performance and independent variables

Table 4.14 shows the significant predictors for overall nurse job performance. ANOVA was used to test if the model is fit to explain dependent variable. The analysis of final model was conducted by using stepwise method in SPSS. All the significant independent variables were included in the model of multiple regressions analysis. The results suggested that optimism and competency; commitment; social support and Job autonomy and decision making were the factors which strongly predicts overall nurse job performance (p-value < 0.05).

Table 4.14 Final model multiple regression analysis

Independent variables	β	t	P-value
Optimism and competency	.216	3.52	0.001**
Commitment	.158	2.65	0.009*
Social support	.318	5.28	0.001**
Job autonomy and decision making	.143	2.48	0.014*
R² = .521		Adjusted R² = .259	

**p<0.01, *p<0.05

CHAPTER V

DISCUSSION

A cross sectional analytical descriptive study was conducted in the only government tertiary care hospital in Male' Maldives, to identify nurse job performance and to determine the level of self-efficacy and collective efficacy on nurse job performance. Furthermore the main objective of this study was to ascertain the relationship between independent variables and nurse job performance. Additionally to identify the factors which may predict nurse job performance. The data was collected using a self-administered questionnaire from April 8 – 24, 2015. A total of 238 registered nurses including both female and male nurses' age between 20 – 52 years participated in this study.

5.1 Job performance among registered nurses in IGMH

5.1.1 Task performance

According to this study results, task performance as perceived by nurses were at high level (mean = 59.02, SD = 11.97). This result is that of the previous study conducted at IGMH. The study also found that nurse perceived high level of task performance (6). One of the possible explanation to this finding can be the high level of self-efficacy as perceived by nurses (mean = 109.48, SD = 10.82). According to literature self-efficacy is a state of positive psychology and high level of self-efficacy may effectively improve nurse's performance (26). In IGMH most of the time nurses were involved in task related activities. And self-efficacy is one of the important factor in determining task performance. This study also found that there is a positive weak correlation between self-efficacy and task performance ($r = .32, p < 0.01$) (table 4.12). Which explained that as self-efficacy increased nurse job performance also increased.

According to Bandura, high level of efficacy promotes positive thinking and increase performance (88).

Another possible reason can be the year of nursing experience. According to demographic data, 66.4% of the nurses work experience working in current ward was between 1 – 10 years and between and 83.8% of the nurses had working experience as a nurse between 1 – 15 years, therefore with more experience task performance had increased. A study done by Koh (2014) which investigated the level of experience and indices of task management in relation to scrub nurse performance in the operation theater, result revealed that nurses with more experience did better task management, and had better mental model and moreover better task management had higher performance (89). Similarly Chang et. al (2006), stated that nurses who have clinical experience between 2 to 5 years uses their professional techniques to produce best performance outcomes and moreover nurses with 5 to 15 years higher desire to maintain their job position and performance (90).

Likewise nursing department give more attention to maintain quality of care and improve nurse performance can be one possible reason. In the years 2007, IGMH had developed procedure manuals to support delivery of quality nursing care. The guidelines included; 1) standards for nursing practice 2) nursing procedure manual 3) clinical procedures and 4) infection control practices (91). In addition to this most of the local nurses are graduates of faculty of health science (FHS), Maldives national university, and FHS had adopted procedure manual according to IGMH clinical procedures, therefore nurses who have graduated from FHS are already mastered with clinical procedures. However more than half of the nurses (50.2%) participated in the study are expatriate nurses. According to nursing director, these expatriate nurses work under the guidelines and supervision until they have mastery they skill (Sujaau M 2015, oral communication, 7th April). Furthermore expatriate nurse performance are evaluated based on their knowledge, competency in performing procedure, and knowledge and competency in managing patients (Sujaau M 2015, oral communication, 7th April). This explanation supports the social cognitive theory, the central source of self-efficacy agency of SCT is enactive-self-mastery (27). Nurses are allowed to work under the guidance and supervision of senior nurses until they are confident enough to practice and mastery their skill. Furthermore, with increase in

experience nurses can do better task related work (27). Therefore, the above mentioned may have influenced nurses perceived high level of task performance.

The result of three dimension of task performance as perceived by the nurse were discussed as follows:

1) Social support: nurses participated in the study perceived social support at a moderate level (mean = 19.86, SD = 5.00). This result is that of the previous study conducted at IGMH (6). Possible reason for the result can be as mentioned before, nurses working in IGMH mainly does patient related task activities and according to demographic data, 68.6% of nurses participated in the study were working in inpatient departments. According to nurses participated in the study, 55% nurses stated they were excellent in listening to patient concerns and 54.6% stated they were good at listening to patient family concerns. Furthermore 50.2% of nurses agreed they were good at taking time to meet patient's emotional need and 63.3% nurses agreed they were good in taking time to meet emotional need of family. These finding indicates that nurses mainly spends more times with patients and family. However social support was perceived at moderate level can be that the ward nurse have to complete nurse records and other documentation along with patient care. In addition nurses have to answer phone calls and do ward rounds with doctors. Also at the time to this study data collection period, student nurses were posted in every ward, therefore nurses being the mentor for the student had to spare time to teach and evaluate students. In addition to these another reason for this finding can be that nurses having heavy workload as 79.4% of the nurses in this study believed that they had heavy workload and this may be a reason that they did not get adequate time for social support.

2) Information provision: nurses participated in the study perceived information provision at a high level (mean = 21.43, SD = 5.11). This result is that of the previous study conducted at IGMH (6). Possible reason for this result is that nurses need to provide information about each and every procedure before it is been performed to the patient. Every procedure in the clinical procedure manual states that nurse need to inform the possible adverse effect of procedure and further information

to allow patient to make informed decision for each and every procedure. Therefore its clear from the result that nurses provide adequate information regarding procedure, side effect and home care. 96.5% of nurses stated they were good to excellent in communicating purpose of every procedure to patient. 93% of nurses were good to excellent in informing patient purpose and side effect of nursing procedures (appendix). And 96.5% nurses agreed that they were good to excellent in providing appropriate information to patient and family about nursing procedures and in addition 93.9% of nurses agreed that they were good to excellent in providing instruction for home care (appendix). Another reason is that even though more than half of the nurses working in IGMH were expatriate nurses, they are been instructed during their orientation to learn basic Maldivian languages and furthermore every ward manager allocate at least one to two Maldivian nurse in each shift in order to minimize communication barrier (Sujau M 2015, oral communication, 7th April).

3) Technical care: nurse perceived technical care at a high level (mean = 17.89, SD = 3.33). This result is also similar with that of the previous study conducted at IGMH (6). This finding can be the reason that as mentioned in before nurses mainly involve in patient care. A written clinical procedure guideline is provided to each ward which may have facilitated in improving delivery of care. Furthermore nurse are supervised and feedback were given in a regular basis. As a result 71.3% nurses agreed that they were regularly supervised and feedback were given. According to a study done by AbuAlRub (2008) found that nurses who's performance were recognized had higher performance reported than nurses with less recognition (77). Another reason can be the educational qualification of the nurse, 99.2% of nurse agreed that they have adequate qualification to do their job and 96.5% believed that they have all the skill need to perform their job well and in addition 80.3% nurses stated that they get equal opportunity for professional development. Likewise another reason can be the close monitoring of nurse performance by the hospital administration. During the data collection process, in a conversation hospital chief executive officer, he revealed that he does ward round in a regular bias every day (Shaheer F 2015, oral communication, 7th April). Additionally as a civil servant nurses job performance in apprised twice every year and once in four years nurses were given

promotions according to their performance appraisal (15). Therefore all these mentioned reason may influenced nurses perceived high level of technical care.

5.1.2 Contextual performance

Contextual performance as perceived by nurses were at moderate level (mean = 64.67, SD = 14.67). Similar result was revealed by a previous study done at IGMH (6). As mentioned before, a possible explanation for this result can be that nurses working in IGMH mainly involved in patient centered work or task performance. Mainly nurse's work in wards/units were doing task performance. However nurses work extra hours after their regular duties, to facilitate patient and family need. As a result almost 85.6% of nurses stated they take from moderate to great deal of extra time to respond patient and family needs. Another possible explanation can be the moderate level of collective efficacy perceived by nurse. Nurses in IGMH work collectively in completing their work and managing ward. Nurses involve in managing and maintaing ward equipment's and consumable stock and help ward manager in managing ward activities. A study by AbuAlRub (2004), revealed that social support from coworker's enhance delivery of quality care and increase performance and furthermore the study found significant relationship between social support and job performance (80). Similarly nurses work as a team as to maintain good working environment and deliver quality care. In this study 94.7% of nurses agreed that they are happy to share knowledge and expertise with other nurses working in their ward/unit (appendix). Additionally 77.8% nurses agreed from a moderate to a great level that they volunteer to participate in committees that are not compulsory (appendix). According to Borman and Motowidlo (1997), employee need to engaged in activities that may enhance the social environment in which the technical core must function (45).

The result of three dimension of Contextual Performance as perceived by the nurse were discussed as follows:

1) Job-task performance: nurse perceived Job-task performance at a moderate level (mean = 18.75, SD = 4.67). Similar result was revealed by a previous study done at IGMH (6). Reasonable explanation to this result can be that nurses

mainly involve in task related activities which are both mentally complex and physically demanding, therefore basically nurses may focus on giving holistic care to their allocated patients. Nurses may not get time to concentrate on other patients and coworker's. It may be a reason that only 20.1% of nurses agreed that they take a great deal in taking time to meet other nurse's emotional needs. Likewise IGMH, being the only government tertiary care hospital makes it more complex for the nurses to manage work environment. Sometime due to lack resources patients were admitted different wards which are not specific for patient treatment. For example a patient requiring intensive care treatment may be kept in general ward due to lack of bed in intensive care unit. Moreover in this study 58.9% of nurses had revealed that they are not able to perform their work effectively due to lack of resources. Another reason can be lack of specific training. Majority of nurses participated in the study had completed diploma level education and just 10.9% completed bachelor degree. Therefore nurses working in critical areas such as dialysis unit, ICU etc may need to have critical care knowledge to effectively carryout given task. This may be a reason that 44.1% of nurses believed that there are some task required by their job that they cannot perform well. Nevertheless these reason may had influenced nurses to perceive their job task support at a moderate level.

2) Interpersonal support: nurse perceived interpersonal support at a moderate level (mean = 23.32, SD = 6.1). Similar result was revealed by a previous study done at IGMH (6). IGMH nursing department paid high level of attention to develop interpersonal support. In year 2011, team nursing was introduced, in general ward and in each shift an in charge was allocated for every 6-12 patient. Thus this small group can communicate and manage their patient and task effectively. In to this there were a ward manager who oversees all nurses' work and there were a coordinator in evening and night shift who visited every ward to identify if assistance is needed and arrange possible resources. Additionally ward-in charge were allocated to do a special evening duty once in a month or three and they report any identified problems to nursing department. However due to complexity of work environment these interventions may not work effectively.

Likewise senior nurses supervised newly joined nurses (both local and expatriate) and student nurses until they get confident and competency in performing their allocated task. In this study 94.3% stated that they can motivate student nurses and junior nurses in their work. According to a study done by Sahay (2015), revealed that supportive work team reduces the error made by newly graduate nurses (92). However possible explanation that nurse had perceived interpersonal support at a moderate level can the workload. Even though 78.5% agreed that they were happy with the level of workload, 79.4% agreed that they had heavy workload every day. Therefore it can be the reason that nurse may had no time to develop adequate interpersonal relationship. In fact according to hospital CEO, the main concerning issue in between wards/units were the level of interpersonal relationship. The CEO highlighted that within ward interpersonal relationship were observed to be good however with in wards/units it was observed to be very poor (Shaheer F 2015, oral communication, 7th April).

3) Organizational support: in this study nurse perceived organizational support at a moderate level (mean = 22.53, SD = 6.06). Similar result was revealed by a previous study done at IGMH (6). Even though nurses mainly does task related work in ward, nurses also involve in organizational level in order to improve overall performance of the organization. This supports Borman and Motowidlo's performance theory, it stated that job performance is composed of both task and contextual performance (45, 48). In this study 84.7% of nurses stated that from a moderate to a great deal they make innovative suggestions to improve overall quality of ward. Also 77.8% stated that from a moderate to a great deal they represent the hospital favorably outside the hospital. A study done by done by Bakker et al (2005), noted that nurses perform both in role and extra role behavior (93). According to Greenslade (2008) nurses perform behaviours that demonstrates their commitment towards organization and they give innovative ideas to improve work environment (46).

5.2 Association between Independent variables and nurse job performance

5.2.1 Socio-demographic factors

In this study 85.6% of respondents were female nurses and 14.4% were male nurses. There was no significant association between gender and nurse job performance (task performance, contextual performance and overall performance). The possible reason for this result can be the less number of male nurse participation in this study. Nursing is a female dominated profession since long ago. However a study had showed that in overall nursing care or performance there were no gender differences (94)

The age of the nurses ranged from 20 to 51 years with a mean of (30.10). The age group was categorized into four categories, 20 – 30 years, 31 – 40 years, 41 to 50 years and 51 above. Statistical analysis revealed that there were no significant association between age categories and nurse job performance. Distribution of overall performance, task performance and contextual performance were similar across age categories. Possible explanation for this result can be the distribution of number of nurses in different age categories. Majority of nurses (59.8%) were between 20 – 30 years and only (0.4%) nurses were in above 51 years category. Similarly a study done by Nabirye et al. (2011), revealed that there were no significant difference between age group and performance (62).

Nursing care is a technical field, especially for task performance. Nurses need to be qualified enough to do all task related work. Most of the nurse (87.3%) participated in this study were having diploma level education. Result of this study revealed no significant association between education and nurse job performance, either task or contextual performance. Unlike this study result, a study done by Aiken et al. (2011), revealed that nurse education improves overall hospital performance and work environment. Furthermore the study found that 10% increase in BSN educated nurses decreases the odds on patients dying by about 4% (95). Possible explanation for this study result can be most of nurses holding diploma level education and minority had associate degree (1.7%) and bachelor degree (10.9%). Another possible indication can be that, in IGMH nurses are not given any promotion or extra role depending on

their education qualification. And promotions are given based on working experience. Therefore there are some nurse holding diploma nurse in better position than those with bachelor nursing. Nevertheless this can lead to frustration and nurses with higher education not performing up to their maximum.

There was no significant association between marital status and over all nurse job performance ($p = .389$), task performance ($p = .610$) and either contextual performance ($p = .256$). Same result was revealed by another study done in 2011 (62). The possible explanation for this study finding can be that, majority (82.1%) were married and only (2.6%) nurses were in divorced category. And another possible reason can be that majority of the respondents were female nurse. Similar finding was notes in another study conducted to investigate the role or marital status and work performance by Kikelomo, 2013, it was found that there were no significant difference between performance and marital status (96). In contrast with this finding, a study conducted by Ji-Yeon, 2014, revealed that nurses who are married have performance (97).

Years of working in current ward as a nurse and years of working as a nurse, both variable had no significant association with nurse job performance (overall performance, task performance or either contextual performance). however there are several studies that have found positive relation of work experience and job performance (29, 97). One possible reason for this finding can be that more than half (50.2%) of the respondent nurses were expatriate, therefore, turnover can be a reasonable justification. Majority (42.8%) nurses have worked between 1 to 5 years, whereas on (6.6%) nurses had worked for more than 11 – 15 years in same ward. This finding highlighted that nurse turnover in ward were higher. Similarly years of working as a nurse ranged from less than one year to 20 years. However majority of nurses had worked for 6 to 10 years (32.3%) and only (20.1%) worked as a nurse for 11 to 15 years and moreover only (3.1%) worked for more than 20 years. A study conducted to investigate individual differences and job performance found that length of employment and experience had a significant association with service quality (98)

Majority of respondent nurses were working in inpatient departments (68.6%). Result revealed that there were no significant association between current working area and nurse job performance (overall performance, task performance or

either contextual performance). Working area is the most important social context for nurses working hospital. Study have shown positive relationship between working environment and nurse job performance. However possible reason for this result can be differences in nature of work, level of nurse work load, working, nurse patient ratio and most importantly ward managers' leadership pattern, with that of other studies. A study done by Berker, (2011) revealed that nurse perceived level of fatigue depending on hour of work and working schedule and it was found that level of fatigue had negative correlation with nurse performance. Furthermore the study added that work environment variables were strongly associated with nurses perceived level of fatigue (99). In terms of leadership pattern, a study conducted by Duffield, (2011) revealed that good ward depends on ward managers' management style, and a good leader consults with ward staff and recognizes their work and this in turn increases nurse satisfaction and maintain a positive work environment (100).

Employment status, professional tittle and being assigned to a following position, none of the variable were not significantly associated with either task performance or contextual performance. Possible reason can be that majority (74.2%) nurses participated in the study were registered nurse. And more than half of the nurses (50.7%) were never assigned to any defied position, in addition most of the nurses (50.2%) were expatriate nurses. In contrast to this study finding, Lee (2010), found job position and employment status was significantly associated with nurse performance (29). Similarly another study done by Ji-Yeon (2014), found that nurses who are being assigned to in charge position have higher performance than others (97).

When investigated the association between number of children and nurse job performance, there were no significant association found. However it was revealed that number of children, task performance, contextual performance and overall performance had a weak negative correlation. One possible reason for this result can be that majority (41%) of nurse had no children and only 24.5% had more than one child. This result is similar with that of another study conducted by Nabirye (2011), the study also found nurses with no children had higher performance than those with more children (62).

5.2.2 Self-efficacy

This study used the social cognitive theory and its central variable self-efficacy to identify its effect on nurse job performance. Voluminous amount of researcher have used self-efficacy in explaining work related performance (25, 27, 28, 57, 58). This study revealed that there were significant moderate positive correlation between overall self-efficacy and overall performance ($r = .34, p < 0.01$). Overall self-efficacy as perceived by nurses were at high level. Similar result was revealed by Lee (2010), it was found that self-efficacy were positively related with nursing performance (29). Similarly another study done by Sun (2011) in order to investigate the impact of psychological capital on job embeddedness and job performance, stated that self-efficacy as one of the positive psychological element and furthermore the study found a strong relation between positive psychological state and nurse performance (26).

The result of this study supports self-efficacy theory and extension of collective efficacy agency perspective of social cognitive theory (SCT). According to Bandura's SCT there are four sources of efficacy shaping information's that are critical for self –efficacy development, including enactive mastery, vicarious experience, verbal persuasion and Physiological arousal (25, 27, 28, 58). Enactive mastery is the most powerful source to improve once performance. It's based on mastery experience, or those behaviours that the individual perform directly (28). In terms of efficacy shaping information, (71.3%) of nurses stated that regular supervision and feedback were given, and (67.7%) believed that the leaders recognized and appreciated their work, 95.5% of nurses believed that they had adequate experience to performed their job, 97.9% had confident in their ability to do job and 85.2% believed they can keep their mind focused on work after had an upsetting experience in work or home.

Considering overall self-efficacy and task performance, this study have found a significant positive correlation between self-efficacy and task performance ($r = .32, p < 0.01$). Bandura defines self-efficacy as the individual's believe about their ability to produce preferred levels of performance and is able to perform a given task (27, 57). This result supports self-efficacy theory perspective of SCT. Possible explanation for this finding can be that, in IGMH mostly nurses involve in task

performances, and in order to maintain better work floor, workload and nurse patient ratio, hospital administration had given priority to increase number of nurses. In 2014, a total of 100 nurse was newly recruited and at present there are 542 registered nurses working. Therefore this study nurses revealed a higher task performance level. Meta-Analytic Investigation by Sitzmann (2013), stated that 93% of the study had found positive relationship between self-efficacy and performance at personal level analysis (64).

In terms of overall self-efficacy and contextual performance, this study have also found a moderate positive correlation between overall self-efficacy and contextual performance ($r = .31$, $p < 0.01$). This result indicated that nurses perceived level of self-efficacy not only influence task performance, indeed it influence contextual performance as well. Even though nurses mainly involve in task activity, they also participate extra activities that will enhance the function of overall nursing department and hospital. Nurses obey organizational rules and regulation and work as a team to improve performance. According to Bell and Mengue (2002) nurses behavior that supports the team and hospital have an impact on clinical outcome. Furthermore it was noted that positive work environment motivate employee in doing both in-role (task) and as well as socializing in organizational values and objectives (contextual)(101).

5.2.3 Collective efficacy

Overall collective efficacy as perceived by nurses were at moderate level, additionally it was revealed that there were significant moderate positive correlation between overall collective efficacy and overall performance ($r = .43$, $p < 0.01$). Finding of this study indicates as the collective efficacy increase, the nurse performance also increases. Collective efficacy is necessary to deliver quality nursing care. In this study 92.1% nurses believed their ward/unit nurses help each other in completing task and also majority nurses believed that senior nurses can motivate junior nurses in their work. When compared the fining of this study with previous study there were consistency with the study of Lee (2010) (29). Similarly a study by Mulvey and Klein (1998) had shown that collective efficacy directly influence job performance (102).

This study had found a significant positive correlation between overall collective efficacy and task performance ($r = .40, p < 0.01$). Possible explanation to this result can be that nurses mainly work in ward and focus on task performance. And in wards nurses maintain group coordination and cohesions. In this study population majority of nurses revealed that they have good coordination and their ward nurses are very friendly and they can share feelings with each other. According to Bandura (1997) collective efficacy is the belief shared by group members about their group members ability to organize and produce actions to meet organizational goal (24). And the result of this study also support SCT extended agency of collective efficacy. Nurses work in wards as a team and indeed it is the group effort that increase the group performance. Bandura stated that individual's share their belief in order to produce collective effort to achieve desired goal it was also added that group attainments were built by shared intentions, knowledge, and skills of its members, interactive, coordinated etc (53). Therefore interpersonal relation plays a vital role in enhancing collective efficacy, nevertheless 83% of nurses in this study believed that their ward/unit had excellent interpersonal relation between coworkers. Sun (2011) noted that nurses with high positive psychology have better relationship with their coworkers and as a result it improve their performance (26). Similarly communication plays vital role in building good rapport between team members and ultimately improves team performance through collective efficacy (71).

This study have also found a moderate positive correlation between overall collective efficacy and contextual performance ($r = .39, p < 0.01$). This revealed that the higher the collective efficacy the higher the contextual performance. Collective efficacy agency operates same as self-efficacy, difference is it's the group belief that they can perform the given task. In this study most of the nurses believe that their ward/unit have above average ability and even 84.7% believed that some members of their ward/unit had excellent job skills. Competency in work is an important factor leading to commitment and better performance (72). Nevertheless leadership pattern can be one of the factor influencing collective efficacy, and in turn influence contextual performance. In this study 79.5% nurses stated that their ward manager were excellent in managing ward. previous studies have noted that nurses were motivated to perform, when their leaders express their confidence in their

subordinate's ability to perform (8, 82). Moreover feedback, regular supervision and recognition can lead to improve individual and group level efficacy believe and performance as well. 71.3% nurses agreed that they were given regular feedback and supervision, 76.7% believed leaders recognized and appreciated their work and 72.1% stated regular in service meetings were conducted. A study done by AbuAlRub (2008), revealed that nurses whose performance were recognized experiences less work-related stress (77). Similarly Willis-Shattuck has also stated that recognition and appreciation in work an improve staff motivation (78). Another possible explanation can be nurses perceived level of autonomy, majority of nurses believed that they have autonomy in doing work related activities. According to previous studies, nurses who can practice autonomously and participate in decision making, feels they are a valued part of the organization and as a result they are motivated to perform (19, 84, 85). However nurses in this study did not agree that they have equal participation in decision making and may be this can be an added reason that nurses had moderate level of contextual performance.

5.3 Methodological concerns

The study population were nurses and self-administered questionnaire were used and mostly nurse have very heavy working condition and in such situation they may have not concentrated on proper options while answering questionnaire. Moreover some questions may be too easy to guess the answer. Additionally they may have filled questionnaire in a group.

As this was the only government tertiary care hospital, pre testing of questionnaire was done in the same hospital. However to reduce bias pretesting wards were randomly selected and whole ward were excluded from study population.

Research assistance were given information about the study and how to carry out data gathering process and to maintain the consistency of data gathered researcher visited hospital every day and worked along with research assistants.

CHAPTER VI

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The purpose of this descriptive cross sectional study was to identify the mean score of nurse job performance (task and contextual performance) and to determine the effect of self-efficacy and collective efficacy on nurse job performance. Furthermore the main objective of this study was to ascertain the relationship between independent variables and nurse job performance. Additionally to identify the factors which may predict nurse job performance.

Proportionate random sampling was used to select nurses from each ward/unit. A total of 238 registered nurses including both female and male nurse's age between 20 – 52 years participated in this study and a total of 229 (96%) questionnaire returned were used in data analysis. Instruments used in this study consisted of four parts: Demographic characteristic form developed self-efficacy scale and collective efficacy scale and Nursing Performance Scale developed by Greenslade (2008). The data was collected using a self-administered questionnaire from April 8 – 24, 2015. Questionnaire was pre-tested before data collection and reliability of questionnaire were established using Cronbach's Alpha. Reliability of questionnaire self-efficacy, collective efficacy, task performance, contextual performance were .65, .75, .96, .94 respectively.

Descriptive statistics, t-test, one-way ANOVA, Pearson correlation coefficient, and stepwise multiple regression were used for data analysis. Overall task performance as perceived by nurses were at higher level (mean= 59.02, SD = 11.97) and overall contextual performance were at moderate level (mean= 64.62, SD= 11.97). Overall self-efficacy as perceived by nurses were at high level (mean= 109.48, SD= 10.82). This study found a statistically significant relation between self-efficacy and overall performance (.343, $p < 0.01$). Furthermore it was found overall self-efficacy and task performance were statistically significant (.327, $p < 0.01$) and similarly overall

self-efficacy and contextual performance were statistically significant (.314, $p < 0.01$). Collective efficacy as perceived by nurses were at moderate level (mean= 112.24, SD= 12.10). Additionally there were a statistically significant relation between overall collective efficacy and overall performance (.425, $p < 0.01$). Moreover there were a statistically significant relation between overall collective efficacy and task performance (.404, $p < 0.01$). Additionally it was found that there was moderate positive correlation between overall collective efficacy and contextual performance (.392, $p < 0.01$).

All the significant independent variables were included in the model of multiple regressions. The results suggested that optimism and competency, commitment, social support and Job autonomy and decision making were used to explain overall nurse job performance (p -value < 0.05).

6.2 Recommendations

6.2.1 Recommendation for hospital administration

1) Hospital administration need to formulate strategies to improve social support within wards/units and between ward/units, as this will enhance in improving overall nursing performance, including both task and contextual performance.

2) Hospital administration should make sure that nurses are provided with needed equipment's and supplies in order to deliver quality care in a timely manner.

3) It is the responsibility of the healthcare organization to observe and screen leadership application in terms of their skill, educational qualification and leadership patterns, this may enhance to maintain a better leadership team.

4) It is recommended that hospital administration to train nurse managers and administrators in the field of human resource management. As this may increase their knowledge and skill in managing nursing workforce in terms of human resource issues.

6.2.2 Recommendation for nursing administration

1) The result of this study had provide information for hospital administration and nursing administration regarding job performance of the nurses and effect of self-efficacy and collective efficacy on nursing performance. Hence nursing administration can take the finding into consideration when designing interventions to improve nursing performance. Especially in collaborations with hospital human resource department in creating a positive thinking with in nurses and need to identify and implement interventions to improve individual nurse self-efficacy and group level collective efficacy in order to improve nurse performance and organizational outcome.

2) It is recommended that nursing administration to observe and screen nurse managers in terms of their skill and leadership patterns. Nevertheless it will influence delivery of care through strong nurse performance.

3) Nursing administration should implement recognition strategies in work place, this may influence performance by reducing workplace stress. And also regularly feedback and supervision strategy may enhance nursing performance further. Timely feedback and supervision allow nurses to identify their weakness and strength and enhance 1) their performance.

4) Along with hospital administration, nursing administration also should make sure that good working environment is provided and identify motivational strategies like good social support and good communication is maintained with in each ward/unit and moreover interdepartmentally.

5) Nurse administration should make sure that nurse managers are given authority for decision making and nurse managers should make sure that nurses working under their supervision have job autonomy and decision making power accordingly. Moreover nursing administration need to accumulate interventions to incorporate nurses saying in decision making process accordingly.

6) Nursing administration should encourages and supports the registered nurse safe staffing act and emphasizes that the staffing plan should have certain focus, such as attention to intensity of patient need in each ward, experience of nursing staff, layout of each unit and level of extra support and technology in each ward. Furthermore empower nurses in specific area or health care organization to have their own safe staffing strategies (17).

6.2.3 Recommendation for further research

1) This study have focused on few number of factors that may influence nursing performance. Hence it is indicated that this topic need further research with more factors.

2) Further qualitative study can add more clarity to current study.

3) Replication of this study using different research design is recommended.

REFERENCES

1. Ahmad N, Oranye NO. Empowerment, job satisfaction and organizational commitment: a comparative analysis of nurses working in Malaysia and England. *Journal of nursing management*. 2010;18(5):582-91.
2. Nashrath M, Akkadechanunt T, Chontawan R. Perceived nursing service quality in a tertiary care hospital, Maldives. *Nursing & health sciences*. 2011;13(4):495-501.
3. Yavas U, Karatepe OM, Babakus E. Exploring the Role of Organizational and Personal Resources in Explaining Nurse Performance in Public Hospitals in the Turkish Republic of Northern Cyprus. *Journal of Health Management*. 2014;16(1):1-12.
4. Smith RD, Chanda R, Tangcharoensathien V. Trade in health-related services. *The Lancet*. 2009;373(9663):593-601.
5. Zarea K, Negarandeh R, Dehghan-Nayeri N, Rezaei-Adaryani M. Nursing staff shortages and job satisfaction in Iran: Issues and challenges. *Nursing & health sciences*. 2009;11(3):326-31.
6. Soliha F. Quality of worklife and Job performance among nurses in the Tertiary care hospital, Maldives [thesis]. The Graduate school of Chiang Mai University Faculty of Nursing, Chiang Mai University 2012.
7. Greenslade J, Jimmieson N. Organizational factors impacting on patient satisfaction: A cross sectional examination of service climate and linkages to nurses' effort and performance. *International journal of nursing studies*. 2011;48(10):1188-98.
8. BRADY GERMAIN P, Cummings GG. The influence of nursing leadership on nurse performance: a systematic literature review. *Journal of Nursing Management*. 2010;18(4):425-39.
9. Saeed A. Wanted: 2.4 million nurses, and that's just in India. *Bull World Health Organ*. 2010;88:327-8.

10. Barnett T, Namasivayam P, Narudin D. A critical review of the nursing shortage in Malaysia. *International nursing review*. 2010;57(1):32-9.
11. Yun H, Jie S, Anli J. Nursing shortage in China: State, causes, and strategy. *Nursing outlook*. 2010;58(3):122-8.
12. Ministry of Health and Family. *Health Statistics 2011*. Maldives: Ministry of Health and Family; 2011.
13. Maldives National University. *Annual Report 2013*. Maldives: The Maldives National University ; 2013.
14. Ministry of Health and Gender. *Maldives health profile 2014*. Maldives: Ministry of Health and Gender; 2014.
15. Civil Service Commission. *Civil Servicege Gavaaidu 2014*. Maldives: Civil Service Commission; 2014.
16. Duvall JJ, Andrews DR. Using a structured review of the literature to identify key factors associated with the current nursing shortage. *Journal of Professional Nursing*. 2010;26(5):309-17.
17. Safe Staffing The Registered Nurse Safe Staffing Act H.R. 1821/ S. 2353, (2013).
18. Linda H. Aiken DMS, Jeannie P. Cimiotti, Sean P. Clarke, Linda Flynn, Jean Ann Seago, Joanne Spetz,, Smith aHL. Implications of the California Nurse Staffing Mandate for Other States. *Health Research and Educational Trust*. 2010:1-18.
19. Cowden TL, Cummings GG. Nursing theory and concept development: a theoretical model of clinical nurses' intentions to stay in their current positions. *Journal of advanced nursing*. 2012;68(7):1646-57.
20. Wang L, Tao H, Ellenbecker C, Liu X. Predictors of hospital nurses' intent to stay: a cross-sectional questionnaire survey in Shanghai, China. *International nursing review*. 2012;59(4):547-54.
21. Nurses ICo. *The Global Nursing Shortage: Priority Areas for Intervention, A Report From ICN/FNIF*. Geneva (Switzerland): 2006.
22. O'Brien P, Gostin LO. *Health worker shortages and global justice*. *Health Worker Shortages and Global Justice*, Millbank Memorial Fund. 2011.
23. World Health Organization. *Working together for health; Report 2006*. Switzerland: World Health Organization; 2006.

24. Bandura A. Self-efficacy: The exercise of control. New York: Freeman; 1997.
25. Speier C, Frese M. Generalized self efficacy as a mediator and moderator between control and complexity at work and personal initiative: A longitudinal field study in East Germany. *Human Performance*. 1997;10(2):171-92.
26. Sun T, Zhao XW, Yang LB, Fan LH. The impact of psychological capital on job embeddedness and job performance among nurses: a structural equation approach. *Journal of advanced nursing*. 2012;68(1):69-79.
27. Stanley M, Pollard D. Relationship Between Knowledge, Attitudes, and Self-Efficacy of Nurses In the Management of Pediatric Pain. *Pediatric nursing*. 2013;39(4):165.
28. Oetker-Black SL, Kreye J, Underwood S, Price A, DeMetro N. Psychometric Evaluation of the Clinical Skills Self-Efficacy Scale. *Nursing Education Perspectives*. 2014.
29. Lee TW, Ko YK. Effects of self-efficacy, affectivity and collective efficacy on nursing performance of hospital nurses. *Journal of advanced nursing*. 2010;66(4):839-48.
30. Bandura A. Exercise of personal and collective efficacy in changing societies 1995. 334 p.
31. Gibson CB. Do they do what they believe they can? Group efficacy and group effectiveness across tasks and cultures. *Academy of Management Journal*. 1999;42(2):138-52.
32. Tsai Y. Relationship between organizational culture, leadership behavior and job satisfaction. *Bmc Health Serv Res*. 2011;11(1):98.
33. Van Scotter JR. Relationships of task performance and contextual performance with turnover, job satisfaction, and affective commitment. *Human resource management review*. 2000;10(1):79-95.
34. Van Scotter JR, Motowidlo SJ. Interpersonal facilitation and job dedication as separate facets of contextual performance. *Journal of applied psychology*. 1996;81(5):525.
35. Maldives Ministry Of Health. "For our Nations Health": Maldives health master plan 2016- 2025. Maldives: Maldives Ministry of Health; 2014.

36. Maldives Ministry of Health. Quality health care: Bridging the gaps: Health master plan 2006 - 2015. Maldives: Maldives Ministry of Health 2006.
37. Zaid M, Sillabutra J, Keiwkarnka B. PATIENT SATISFACTION TOWARDS THE SERVICE QUALITY AT OUTPATIENT DEPARTMENT OF INDIRA GANDHI MEMORIAL HOSPITAL IN MALDIVES. *J Health Res* □ vol. 2013;27(5).
38. Department of National Planning . POPULATION AND HOUSING CENSUS 2014; Maldives: Ministry of Finance & Treasury; 2014.
39. Maldivian nurse Association. Abuse of nurses; Information Report. Maldives. Maldivian nurse Association.; 2010.
40. Indira Gandhi Memorial Hospital. Nursing status, nurses' leave and salary information sheet. Maldives: Indira Gandhi Memorial Hospital; 2011.
41. Ministry of Health and Family. Number of nursing students who has been trained from abroad from 1995 – 2010. Maldives: Ministry of Health & Family; 2010.
42. Murphy KR, Shiarella AH. Implications of the multidimensional nature of job performance for the validity of selection tests: Multivariate frameworks for studying test validity. *Personnel Psychology*. 1997;50(4):823-54.
43. Arvey RD, Murphy KR. Performance evaluation in work settings. *Annual review of psychology*. 1998;49(1):141-68.
44. Fitzpatrick JM, While AE, Roberts JD. Measuring clinical nurse performance: development of the King's Nurse Performance Scale. *International journal of nursing studies*. 1997;34(3):222-30.
45. Borman WC, Motowidlo SJ. Task performance and contextual performance: The meaning for personnel selection research. *Human performance*. 1997;10(2):99-109.
46. Greenslade J. Organisational Factors Impacting on Patient Satisfaction: An Examination of Service Climate, Effort, and Performance 2008.
47. Schwirian PM. Evaluating the performance of nurses: a multidimensional approach. *Nursing research*. 1978;27(6):347-50.

48. Greenslade JH, Jimmieson NL. Distinguishing between task and contextual performance for nurses: development of a job performance scale. *Journal of advanced Nursing*. 2007;58(6):602-11.
49. Robb Y, Dietert C. Measurement of clinical performance of nurses: a literature review. *Nurse Education Today*. 2002;22(4):293-300.
50. Tzeng H-M. Nurses' self-assessment of their nursing competencies, job demands and job performance in the Taiwan hospital system. *International Journal of Nursing Studies*. 2004;41(5):487-96.
51. Yiu TW, Cheung SO, Siu LY. Application of Bandura's self-efficacy theory to examining the choice of tactics in construction dispute negotiation. *Journal of Construction Engineering and Management*. 2011;138(3):331-40.
52. Jacobs B, Prentice-Dunn S, Rogers RW. Understanding persistence: An interface of control theory and self-efficacy theory. *Basic and Applied Social Psychology*. 1984;5(4):333-47.
53. Bandura A. Social cognitive theory: An agentic perspective. *Annual review of psychology*. 2001;52(1):1-26.
54. Salanova M, Llorens S, Cifre E, Martínez IM, Schaufeli WB. Perceived collective efficacy, subjective well-being and task performance among electronic work groups an experimental study. *Small Group Research*. 2003;34(1):43-73.
55. Salanova M, Lorente L, Chambel MJ, Martínez IM. Linking transformational leadership to nurses' extra-role performance: the mediating role of self-efficacy and work engagement. *Journal of Advanced Nursing*. 2011;67(10):2256-66.
56. Bandura A. On the functional properties of perceived self-efficacy revisited. *Journal of Management*. 2012;38(1):9-44.
57. Judge TA, Jackson CL, Shaw JC, Scott BA, Rich BL. Self-efficacy and work-related performance: the integral role of individual differences. *Journal of Applied Psychology*. 2007;92(1):107.
58. Goddard RD, Hoy WK, Hoy AW. Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. *Educational researcher*. 2004;33(3):3-13.

59. Weng R-H, Huang C-Y, Tsai W-C, Chang L-Y, Lin S-E, Lee M-Y. Exploring the impact of mentoring functions on job satisfaction and organizational commitment of new staff nurses. *Bmc Health Serv Res.* 2010;10(1):240.
60. Yuxiu P, Kunaviktikul W, Thungjaroenkul P. Job Characteristics and Job Performance among Professional Nurses in the University Hospitals of People's Republic of China. *CUMJNatSci.* 2011;10(2):171-80.
61. Beauvais AM, Brady N, O'Shea ER, Griffin MTQ. Emotional intelligence and nursing performance among nursing students. *Nurse education today.* 2011;31(4):396-401.
62. Nabirye RC, Brown KC, Pryor ER, Maples EH. Occupational stress, job satisfaction and job performance among hospital nurses in Kampala, Uganda. *Journal of nursing management.* 2011;19(6):760-8.
63. Prussia GE, Kinicki AJ. A motivational investigation of group effectiveness using social-cognitive theory. *Journal of Applied Psychology.* 1996;81(2):187.
64. Sitzmann T, Yeo G. A Meta-Analytic Investigation of the Within-Person Self-Efficacy Domain: Is Self-Efficacy a Product of Past Performance or a Driver of Future Performance? *Personnel Psychology.* 2013;66(3):531-68.
65. SMITH L, Andrusyszyn MA, SPENCE LASCHINGER HK. Effects of workplace incivility and empowerment on newly-graduated nurses' organizational commitment. *Journal of Nursing Management.* 2010;18(8):1004-15.
66. Lephalala R. Factors influencing nurses' job satisfaction in selected private hospitals in England. *Curationis.* 2008;31(3):60-9.
67. Mrayyan MT, AL-FAOURI I. Predictors of career commitment and job performance of Jordanian nurses. *Journal of Nursing Management.* 2008;16(3):246-56.
68. Gurses AP, Carayon P, Wall M. Impact of performance obstacles on intensive care nurses' workload, perceived quality and safety of care, and quality of working life. *Health services research.* 2009;44(2p1):422-43.
69. Reid K, Dawson D. Comparing performance on a simulated 12 hour shift rotation in young and older subjects. *Occupational and environmental medicine.* 2001;58(1):58-62.

70. Fitzpatrick JM, While AE, Roberts JD. Shift work and its impact upon nurse performance: current knowledge and research issues. *Journal of advanced nursing*. 1999;29(1):18-27.
71. Fort AL, Voltero L. Factors affecting the performance of maternal health care providers in Armenia. *Human resources for health*. 2004;2(8):1-11.
72. Mrayyan M, Al-Faouri I. Nurses' career commitment and job performance: Differences across hospitals. *Nursing Leadership*. 2008;21(2):101-17.
73. Somers M, Birnbaum D. Exploring the relationship between commitment profiles and work attitudes, employee withdrawal, and job performance. *Public Personnel Management*. 2000;29(3):353-66.
74. Top M, Gider O. Interaction of organizational commitment and job satisfaction of nurses and medical secretaries in Turkey. *The International Journal of Human Resource Management*. 2013;24(3):667-83.
75. Leape LL, Shore MF, Dienstag JL, Mayer RJ, Edgman-Levitan S, Meyer GS, et al. Perspective: a culture of respect, part 1: the nature and causes of disrespectful behavior by physicians. *Academic medicine*. 2012;87(7):845-52.
76. Brown P, Fraser K, Wong CA, Muise M, Cummings G. Factors influencing intentions to stay and retention of nurse managers: a systematic review. *Journal of nursing management*. 2013;21(3):459-72.
77. AbuAlRub RF, AL-ZARU IM. Job stress, recognition, job performance and intention to stay at work among Jordanian hospital nurses. *Journal of nursing management*. 2008;16(3):227-36.
78. Willis-Shattuck M, Bidwell P, Thomas S, Wyness L, Blaauw D, Ditlopo P. Motivation and retention of health workers in developing countries: a systematic review. *Bmc Health Serv Res*. 2008;8(1):247.
79. Gandi JC, Wai PS, Karick H, Dagona ZK. The role of stress and level of burnout in job performance among nurses. *Mental health in family medicine*. 2011;8(3):181.
80. AbuAlRub RF. Job stress, job performance, and social support among hospital nurses. *Journal of nursing scholarship*. 2004;36(1):73-8.

81. Ulrich B, Lavandero R, Early S. Leadership Competence: Perceptions of Direct Care Nurses. *Nurse Leader*. 2014;12(3):47-50.
82. Greco P, Laschinger HKS, Wong C. Leader empowering behaviours, staff nurse empowerment and work engagement/burnout. *Nursing Leadership*. 2006;19(4):41-56.
83. Bodur S, İnfal S. Nurses' working motivation sources and related factors: A questionnaire survey. *International Journal of Human Sciences*. 2015;12(1):70-9.
84. McLennan M. Nurses' views on work enabling factors. *Journal of Nursing Administration*. 2005;35(6):311-8.
85. Lim J, Bogossian F, Ahern K. Stress and coping in Singaporean nurses: a literature review. *Nursing & health sciences*. 2010;12(2):251-8.
86. Bandura A. Guide for constructing self-efficacy scales. *Self-efficacy beliefs of adolescents*. 2006;5(307-337).
87. Riggs ML, Knight PA. The impact of perceived group success-failure on motivational beliefs and attitudes: a causal model. *Journal of Applied Psychology*. 1994;79(5):755.
88. Bandura A. Perceived self-efficacy in cognitive development and functioning. *Educational psychologist*. 1993;28(2):117-48.
89. Koh RY, Park T, Wickens CD. An investigation of differing levels of experience and indices of task management in relation to scrub nurses' performance in the operating theatre: Analysis of video-taped caesarean section surgeries. *International journal of nursing studies*. 2014;51(9):1230-40.
90. Chang P-L, Chou Y-C, Cheng F-C. Designing Career Development Programs Through Understanding of Nurses' Career Needs. *Journal for Nurses in Staff Development*. 2006;22(5):246-53.
91. Sahay A, Hutchinson M, East L. Exploring the influence of workplace supports and relationships on safe medication practice: A pilot study of Australian graduate nurses. *Nurse education today*. 2015;35(5):e21-e6.
92. Bakker AB, Demerouti E, Euwema MC. Job resources buffer the impact of job demands on burnout. *Journal of occupational health psychology*. 2005;10(2):170.

93. Ekstrom DN. Gender and perceived nurse caring in nurse–patient dyads. *Journal of Advanced Nursing*. 1999;29(6):1393-401.
94. Aiken LH, Cimiotti JP, Sloane DM, Smith HL, Flynn L, Neff DF. The effects of nurse staffing and nurse education on patient deaths in hospitals with different nurse work environments. *Medical care*. 2011;49(12):1047.
95. Evbuoma IK. Women-friendly support services and work performance: the role of marital status. *Gender and Behaviour*. 2013;11(1):5124-34.
96. Choi J-Y, Kim E-K, Kim SY. Effects of Empowerment and Job Satisfaction on Nursing Performance of Clinical Nurses. *Journal of Korean Academy of Nursing Administration*. 2014;20(4):426-36.
97. Kuo T-H, Ho L-A. Individual difference and job performance: The relationships among personal factors, job characteristics, flow experience, and service quality. *Social Behavior and Personality: an international journal*. 2010;38(4):531-52.
98. Barker LM, Nussbaum MA. Fatigue, performance and the work environment: a survey of registered nurses. *Journal of advanced nursing*. 2011;67(6):1370-82.
99. Duffield CM, Roche MA, Blay N, Stasa H. Nursing unit managers, staff retention and the work environment. *Journal of clinical nursing*. 2011;20(1-2):23-33.
100. Bell SJ, Menguc B. The employee-organization relationship, organizational citizenship behaviors, and superior service quality. *Journal of retailing*. 2002;78(2):131-46.
101. Mulvey PW, Klein HJ. The impact of perceived loafing and collective efficacy on group goal processes and group performance. *Organizational behavior and human decision processes*. 1998;74(1):62-87.

APPENDICES

APPENDIX A

RESEARCH QUESTIONNAIRES

ID.....

Research questionnaires

This questioner is constructed to assess the “effect of self-efficacy and collective efficacy on nurse job performance in IGHM, Maldives”. Nurses are the majority group of health care system in Maldives, working in from line of IGMH to deliver quality of health care service to population. This research aim to know effect of positive psychology (both self and group level) on nurse performance. Accuracy of information you provide will help to improve nursing management strategies at nursing administration and hospital administration level. Confidentially of the information that you provide will be maintained. Your corporation and honesty in answering each question is important.

Thank you very much for your participation to the study.

Instructions:

DO NOT write you name. And instead of your name an ID code will be provided to maintain confidentiality.

Name of the researcher: Jeeza Hassan

Student ID: 5738592/ADPM/M

Mobile number: +960 7919538

E-mail: Jeezahassan@gmail.com

Questionnaire for Nurses

Part 1: Demographic Information

Instruction: Please mark your answer for each item by **putting a mark (✓) in the box or circle** that represent the relevant answer. Please mark only one answer unless indicated.

1. Gender Male Female

2. AgeYeas old

3. What is your HIGHEST earned diploma or degree in nursing?
 - Diploma
 - Associate degree
 - BSN
 - Master's degree
 - Doctoral degree
 - Other (specify)_____.

4. What is your marital status?
 - Single
 - Married
 - Divorced
 - Widowed

5. Identify the type of ward/unit where you currently work in your nursing position.

<input type="checkbox"/> Medical ward	<input type="checkbox"/> Surgical Ward	<input type="checkbox"/> ENT/Ortho Ward
<input type="checkbox"/> Pediatric Ward	<input type="checkbox"/> Accident & Emergency	<input type="checkbox"/> Gynecological Ward
<input type="checkbox"/> OPD	<input type="checkbox"/> ICCU	<input type="checkbox"/> NICU
<input type="checkbox"/> MOT	<input type="checkbox"/> Labour Room	<input type="checkbox"/> Labour Induction Unit
<input type="checkbox"/> Isolation Ward	<input type="checkbox"/> Dialysis Unit	<input type="checkbox"/> Private 5
<input type="checkbox"/> Private 1	<input type="checkbox"/> Private 3	<input type="checkbox"/> General Ward
<input type="checkbox"/> Private 2	<input type="checkbox"/> Private 4	

6. Working in the current ward.....years.....months

7. Working as a nurse for.....years.....months

8. Employment status

Local nurse Expatriate nurse Other

9. Professional title

Senior Registered Nurse Registered Nurse
 Ward manager

9. Number of children you have?

.....children/s

12. Do you rotate shifts? No Yes

13. Are you assigning to the following positions

Team Leader Shift In-charge Nurse No

Part 2: Self efficacy scale

Instructions: Please read the statements and answer on the basis of your own personal work skill and ability to perform your job. Please choose one answer that describes best according to your opinion by marking a circle on one number.

1= strongly agree (SA)

4= disagree somewhat (DS)

2= agree (A)

5= disagree (D)

3= agree somewhat (AS)

6= strongly disagree (SD)

	SA	A	AS	DS	D	SD
Level of Education, continuity of training and year of experience						
1..... have adequate qualification to do my job	1	2	3	4	5	6
2..... have all the skill needed to perform my job very well	1	2	3	4	5	6
3..... get the equal opportunity to continue my professional development	1	2	3	4	5	6
4..... my future in this job is limited because of my lack of skill	1	2	3	4	5	6
5..... I am very proud of my job skill and ability	1	2	3	4	5	6
6..... I have adequate experience to perform my job	1	2	3	4	5	6
Job position and Workload						
7..... My job (position) designation make me more capable of doing my job	1	2	3	4	5	6

	SA	A	AS	DS	D	SD
8..... am happy with my job position	1	2	3	4	5	6
9..... y job position make take more responsibilities	1	2	3	4	5	6
10..... have a heavy workload everyday	1	2	3	4	5	6
Optimism and competency						
11..... can take my mind off from upsetting everyday problems	1	2	3	4	5	6
12..... have confidence in my ability to do my job	1	2	3	4	5	6
13..... can do difficult task easily	1	2	3	4	5	6
14..... am an expert at my job	1	2	3	4	5	6
15..... doubt my ability to do my job	1	2	3	4	5	6
16..... here are some task required by my job that I cannot do well	1	2	3	4	5	6
17..... feel threatened when others watch my work	1	2	3	4	5	6
18..... ost people in this job can do this job better than I do	1	2	3	4	5	6
Working shift and Availability of resources						
19..... have flexible duty shifts	1	2	3	4	5	6

	SA	A	AS	DS	D	SD
20..... can change my working shift whenever I need	1	2	3	4	5	6
21..... am happy with shift duties	1	2	3	4	5	6
22..... can get the instrumental materials and equipment's whenever I need in my work	1	2	3	4	5	6
23..... cannot carry out my work effectively due to lack of resources	1	2	3	4	5	6

Part 3: Collective efficacy scale

Instructions: Please read the statements and answer on the basis of your working department (group's) work-related ability. Please choose one answer that describes best according to your opinion by marking a circle on one number.

1= strongly agree (SA)

4= disagree somewhat (DS)

2= agree (A)

5= disagree (D)

3= agree somewhat (AS)

6= strongly disagree (SD)

	SA	A	AS	DS	D	SD
Communication						
1..... can express my view freely on work related issues in my ward/unit	1	2	3	4	5	6
2..... he ward/unit I work have excellent interpersonal relation between coworkers	1	2	3	4	5	6
3..... he ward/unit I work is not effective in communication	1	2	3	4	5	6
Type of ward/unit and Commitment						
4..... he ward/unit I work has above average ability	1	2	3	4	5	6
5..... his ward/unit is not able to perform as well as it should	1	2	3	4	5	6
6..... his ward/unit t is poor compare to other department doing similar work	1	2	3	4	5	6
7..... ome member of this department cannot do their job well	1	2	3	4	5	6

	SA	A	AS	DS	D	SD
8..... he member of this department has excellent job skills	1	2	3	4	5	6
9..... ome member of this department should be changed due to lack of ability	1	2	3	4	5	6
Supervision, feedback, In-service meeting and leadership pattern						
10..... egular supervision and feedback are given	1	2	3	4	5	6
11..... eaders recolonize and appreciate our work	1	2	3	4	5	6
12..... o not get any feedback for the work	1	2	3	4	5	6
13..... upervisions are not effective	1	2	3	4	5	6
14..... egular in-service meeting are conducted	1	2	3	4	5	6
15..... n-service meeting are useless	1	2	3	4	5	6
16..... his ward manager is excellent in managing ward	1	2	3	4	5	6
Social support						
17..... his ward/unit nurses are very friendly	1	2	3	4	5	6

	SA	A	AS	DS	D	SD
18. his ward/unit nurses help each other to complete work	1	2	3	4	5	6
19. can share my feelings with any coworkers	1	2	3	4	5	6
20. can keep my mind focus on my work after have had a upsetting experience in my working environment or at home	1	2	3	4	5	6
21. urses in this ward can motivate student nurses and junior nurses in their work	1	2	3	4	5	6
Job autonomy and decision making						
22. his ward/unit nurse has the autonomy of doing any work related activities	1	2	3	4	5	6
23. his ward/unit nurse has the get permission before doing any work related activities	1	2	3	4	5	6
24. his ward/unit nurse has the autonomy for patient care decisions	1	2	3	4	5	6
25. his ward/unit nurse opinion is asked every time before making any decision	1	2	3	4	5	6

	SA	A	AS	DS	D	SD
26. can influence the decision that are made in this ward/unit	1	2	3	4	5	6
27. have equal participation in decision making related to ward/unit issues	1	2	3	4	5	6

Part 4: Shortened Nursing performance scale

Instructions: Please read the statements and answer on the basis of what you perform in the clinical setting. There is no right or wrong answer. Please choose one answer that describes best according to your situation by **marking a circle on one number**.

(1= poor; 2=below good; 3= Fairley good; 4= good; 5=somewhat above good; 6= very good; 7= excellent)

Please rate how effective you are at each of the tasks							
	Poor		Good			Excellent	
1..... listening to patients' concerns	1	2	3	4	5	6	7
2..... taking time to meet the emotional needs of patients	1	2	3	4	5	6	7
3..... listening to families concerns	1	2	3	4	5	6	7
4..... taking time to meet the emotional needs of families	1	2	3	4	5	6	7
5..... communicating to patients the purpose of nursing procedures	1	2	3	4	5	6	7
6..... informing patients of the purpose and possible side-effects of nursing procedures	1	2	3	4	5	6	7
7..... providing appropriate information to families about nursing procedures	1	2	3	4	5	6	7
8..... providing instructions for care at home	1	2	3	4	5	6	7

Please rate how effective you are at each of the tasks							
	Poor		Good			Excellent	
9.....							
Assisting patients with activities of daily living (e.g., showering, toileting and feeding)	1	2	3	4	5	6	7
10.....							
Taking patient observations (e.g., blood pressure, pulse, temperature)	1	2	3	4	5	6	7
11.....							
Administering medications and treatments	1	2	3	4	5	6	7

Please state how often you perform the activities.							
	Not at all		A moderate amount			A great deal	
12.....							
Taking time to meet other nurses' emotional needs	1	2	3	4	5	6	7
13.....							
Raising morale of other nurses in my unit	1	2	3	4	5	6	7
14.....							
Helping nurses in my unit to resolve work problems	1	2	3	4	5	6	7
15.....							
Consulting amongst each other when actions might affect other nurses in my unit	1	2	3	4	5	6	7

Please state how often you perform the activities.							
	Not at all		A moderate amount			A great deal	
16..... Volunteering to share special knowledge or expertise with other nurses in my unit	1	2	3	4	5	6	7
17..... Taking extra time to respond to a patient's needs	1	2	3	4	5	6	7
18..... Making special arrangements for the patient	1	2	3	4	5	6	7
19..... Taking extra time to respond to a family's needs	1	2	3	4	5	6	7
20..... Making special arrangements for a patient's family	1	2	3	4	5	6	7
21..... Making sure that materials and equipment are not wasted	1	2	3	4	5	6	7
22..... Representing the hospital favorably to individuals outside the hospital	1	2	3	4	5	6	7
23..... Volunteering to participate on committees that are not compulsory	1	2	3	4	5	6	7

Please state how often you perform the activities.							
	Not at all		A moderate amount			A great deal	
24. Making innovative suggestions to improve the overall quality of the hospital	1	2	3	4	5	6	7
25. Attending and participating in meetings regarding the hospital	1	2	3	4	5	6	7

APPENDIX B

ETHICAL APPROVAL DOCUMENT


Certificate of MU-SSIRB Approval
★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Certificate of Approval No.:	2015/110.1803
MU-SSIRB No.:	2015/129 (B2)
Title of Project:	EFFECT OF SELF-EFFICACY AND COLLECTIVE EFFICACY ON NURSE JOB PERFORMANCE IN THE TERTIARY CARE HOSPITAL, INDIRA GANDHI MEMORIAL HOSPITAL (IGMH), MALDIVES
Principal Investigator:	Mrs.Jeeza Hassan
Name of Institution:	ASEAN Institute for Health Development, Mahidol University
Approval includes:	1) MU-SSIRB Submission form version received date 20 February 2015 2) Participant Information sheet for Questionnaire version date 20 February 2015 3) Informed consent form version 20 February 2015 4) Questionnaire Guideline version received date 20 February 2015

The Committee for Research Ethics (Social Sciences) is in full compliance with International Guidelines of Human Research Protection such as Declaration of Helsinki, The Belmont Report, CIOMS Guidelines and the International Conference on Harmonization in Good Clinical Practice (ICH-GCP)

Date of Approval:	March 18, 2015
Date of Expiration:	March 17, 2016

Vice Chairman



(Assoc.Prof.Pichet Kalamkasait)

Head of the Institute



(Assoc.Prof.Dr.Wariya Chinwanno)
Dean of Faculty of Social Sciences and Humanities

Office of The Committee for Research Ethics (Social Sciences), Faculty of Social Sciences and Humanities, Mahidol University
Phuttamonthon 4 Rd., Salaya, Phuttamonthon District, Nakhon Pathom 73170. Tel.(662) 441 9180 Fax.(662) 441 9181
Website: www.mu-ssirb.com ; e-mail: mussirb310@gmail.com

Figure B1 Ethical Approval from Mahidol University Committee for Research Ethics

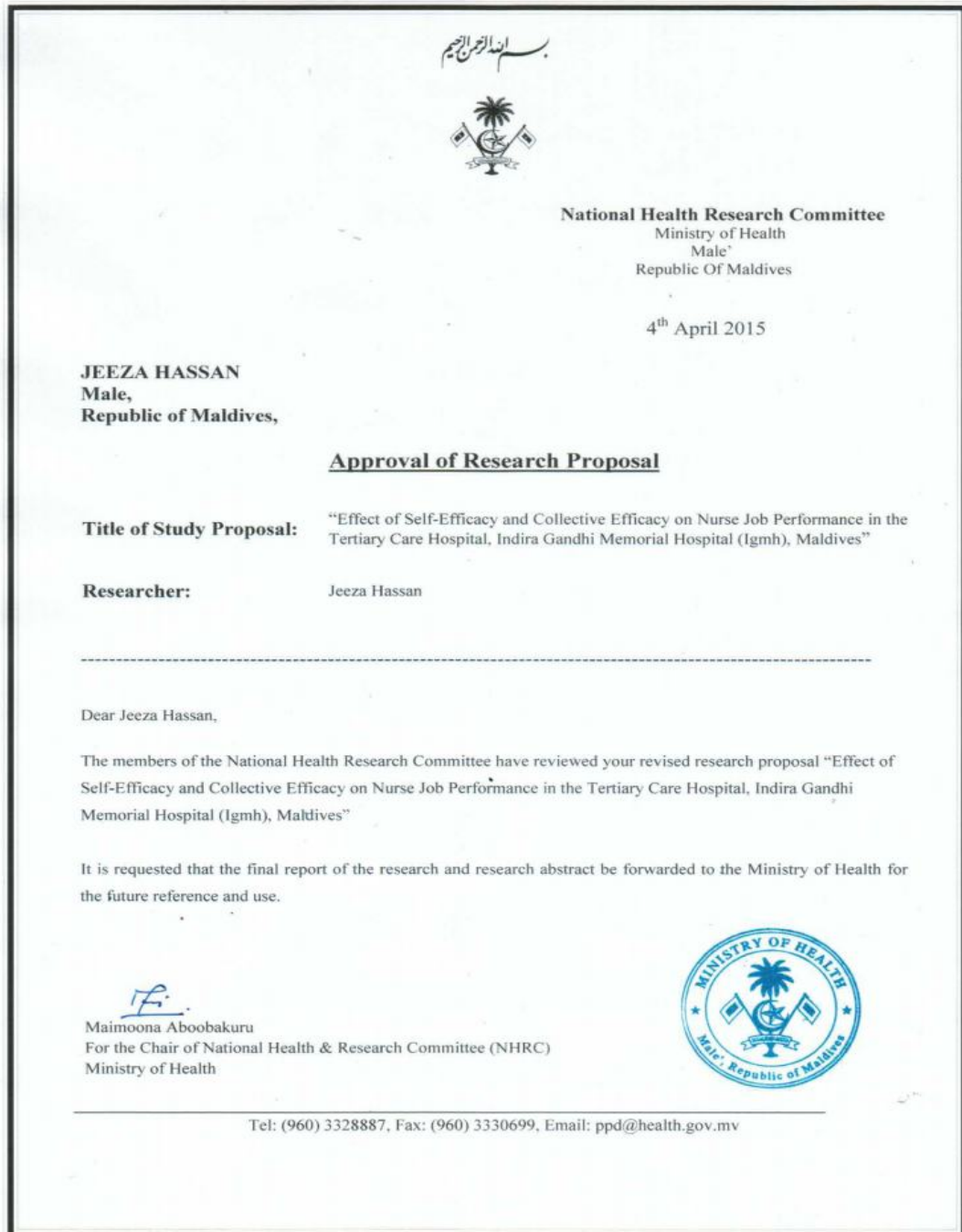


Figure B2: Ethical Approval from Maldives National Health research committee

APPENDIX C

POPULATION AND SAMPLE PROPORTION

Population and sample size proportion (permanent and temporary) nurses in IGMH

Ward/Unit	Total number of nurses			Proportionate sample size		
	Permanent	Temporary	Total	Permanent	Temporary	Total
Private ward 2	5	10	15	3	7	10
Private ward 3	8	7	15	5	5	10
Private ward 5	4	11	15	2	8	10
NICU	21	10	31	14	7	21
LR	24	4	28	16	3	19
MOT	21	11	32	14	7	21
Surgical ward	8	14	22	5	10	15
ENT	6	19	25	4	13	17
Medical ward	16	25	41	11	17	28
Gynea ward	14	12	26	9	8	17
Intensive care unit	17	16	33	11	11	22
Accident and emergency department	18	26	44	12	17	29
Dialysis unit	4	16	20	2	10	12
Isolation ward	6	5	11	4	3	7
Total			358			238

APPENDIX D
PERCENTAGE OF PERFORMANCE SCALE RATING BY EACH
ITEMS

Mean, Standard Deviation and Percentage Of Performance Scale Rating By Each Items

Please rate how effective you are at each of the tasks						
No.	Statement	Mean	SD	Poor	Good	Excellent
1	Listening to patients' concerns	5.34	1.37	3	42	55
2	Taking time to meet the emotional needs of patients	4.90	1.50	6.6	50.2	43.2
3	Listening to families concerns	4.86	1.43	7	54.6	38.4
4	Taking time to meet the emotional needs of families	4.57	1.46	9.6	63.3	27.1
5	Communicating to patients the purpose of nursing procedures	5.61	1.34	3.5	33.2	63.3
6	Informing patients of the purpose and possible side-effects of nursing procedures	5.29	1.51	7	39.3	53.7
7	Providing appropriate information to families about nursing procedures	5.29	1.43	3.5	44.5	52

Mean, Standard Deviation And Percentage Of Performance Scale Rating By Each Items (cont.)

Please rate how effective you are at each of the tasks						
No.	Statement	Mean	SD	Poor	Good	Excellent
8	Providing instructions for care at home	5.25	1.54	6.1	43.2	50.7
9	Assisting patients with activities of daily living (e.g., showering, toileting and feeding)	5.37	1.60	5.7	37.1	57.2
10	Taking patient observations (e.g., blood pressure, pulse, temperature)	6.26	1.15	2.2	13.5	84.3
11	Administering medications and treatments	6.27	1.10	2.2	12.7	85.2
Please state how often you perform the activities.						
12	Taking time to meet other nurses' emotional needs	4.34	1.42	9.2	70.7	20.1
13	Raising morale of other nurses in my unit	4.48	1.32	5.7	70.7	23.6
14	Helping nurses in my unit to resolve work problems	5.19	1.37	4.8	48	47.2
15	Consulting amongst each other when actions might affect other nurses in my unit	4.73	1.44	8.3	59	32.7

Mean, Standard Deviation And Percentage Of Performance Scale Rating By Each Items (cont.)

No.	Statement	Mean	SD	Poor	Good	Excellent
16	Volunteering to share special knowledge or expertise with other nurses in my unit	5.03	1.40	5.3	52.8	41.9
17	Taking extra time to respond to a patient's needs	4.68	1.71	13.5	48.9	37.6
Please rate how effective you are at each of the tasks						
18	Making special arrangements for the patient	4.96	1.36	2.6	59.4	38
19	Taking extra time to respond to a family's needs	4.36	1.65	14.4	56.3	29.3
20	Making special arrangements for a patient's family	4.31	1.55	13.5	62.4	24.1
21	Making sure that materials and equipment are not wasted	5.22	1.43	3.9	45.4	50.7
22	Representing the hospital favorably to individuals outside the hospital	4.40	1.70	14.4	54.6	31
23	Volunteering to participate on committees that are not compulsory	3.95	1.63	22.2	58.1	19.7
24	Making innovative suggestions to improve the overall quality of the hospital	4.26	1.58	15.3	59.8	24.9
25	Attending and participating in meetings regarding the hospital	4.72	1.75	14.4	45	40.6

BIOGRAPHY

NAME	Jeeza Hassan
DATE OF BIRTH	17 th June 1982
INSTITUTIONS ATTENDED	Maldives College of Higher Education Bachelor of Health Sciences(Health services management) 2008 - 2010 Maldives College of Higher Education Male', Republic of Maldives Master of Primary Health Care Management ASEAN Institute for Health Development Mahidol university, Thailand 2014 – 2015
SCHOLARSHIP RECEIVED	Thailand International Development cooperation Agency (TICA)
HOME ADDRESS	Neeluge, G.Dh. Thinadhoo, Republic of Maldives Tel. (+960 7917538) E-mail: jezahassan@gmail.com