OCCUPATIONAL STRESS AND PERFORMANCE OF NURSES IN MULAGO NATIONAL REFERRAL HOSPITAL

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DECLARATION

I, Janet Nyakamadi, hereby declare that this is my original work and has never been submitted to any university or institution of Higher Learning for any academic award.

Signature: ……. Date: ……..

APPROVAL

This is to certify that this dissertation entitled "*Effect of Occupational Stress on the Performance of Nurses in Mulago National Referral Hospital*" has been accomplished under our guidance as supervisors.

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DEDICATION

This piece of work is dedicated to my dear father Mr. Kyaligonza Atwooki David, my siblings and my group discussion mates.

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LIST OF ACRONYMS

AHSPR	Annual Health Sector Performance Report
HIV	Human Immuno Virus
HMIS	Health Management Information System
ICT	Information Communication and Technology
ICU	Intensive Care Unit
KATH	Komfo Anokye Teaching Hospital
KII	Key Informant Interviews
MNRH	Mulago National Referral Hospital
MoH	Ministry of Health
OPD	Outpatient Department
Sdv	Standard Deviation
SPSS	Statistical Package for Social Sciences
TB	Tuberculosis
UTG	Uganda Travel Guide
WHO	World Health Organization

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ABSTRACT

The study focused on establishing the effect of occupational stress on the performance of nurses at Mulago National Referral Hospital. Occupational stress was the independent variable whereas nurses' performance was the dependent variable. It was guided by two objectives: To find out the effect of nurses' working environment on their performance at Mulago National Referral Hospital; and, to assess the effort-reward imbalance affects nurses' performance at Mulago National Referral Hospital. The study was carried out at Mulago National Referral Hospital Kampala covering a period of four (4) financials years—2013 to 2016. The study used a descriptive cross-sectional research design. Both qualitative and quantitative approaches were used. The study involved 188 nurses, 10 MoH officials (198) and sampled 159 nurses and 10 MoH officials (169). It was revealed that working conditions at MNRH have a significant effect on nurses' performance. Study findings also established that motivating nurses enhances their output and performance in which incentives are given to them including though not limited to allowances, days off, gifts, etc. It was recommended that hospital managers at MNRH should ensure appropriate documentation of the causes as well as sources of occupational stress in the hospital setting which might be affecting healthcare professionals at an interval to generate an archive of related stress factors that may impede their performance. Also, it was recommended that there should be provisions to ensure allocation of functioning and preferably new equipment to assist nurses in executing their duties. Improving working conditions in the health systems requires utmost attention in order to tap the best potential of health workers. Working conditions including though not limited to accommodation, adequate supplies, functional equipment in place, transport means, etc. should be priority in order to reduce stress among nurses. There is need to monitor and evaluate the effort and input of nurses in their operations so as to assess the appropriate way to appreciate them. It was therefore concluded that occupation stress among nurses has been found to be an impeding factor to their levels of performance with the manifestations of heavy workloads, working beyond schedule due to the limited constrained number of health workers to serve the national population at MNRH. An affirmation that motivating nurses can enhance their performance was made this implies that if incentives were provided to health workers, they significantly improve performance in their designated roles and responsibilities.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Occupational stress can be defined as the perception of a discrepancy between environmental demands and individual capacities to meet these demands (Topper, 2007). Occupational stress has traditionally been a perpetual characteristic of quality of nursing care thus affecting all professions and societies. It is widely assumed that health workers experience occupational stress which is greatly as a result of local forces such as work settings, cultural orientation, and nature of work as well as levels of social support. Hence, occupational stress creates risk factors for patient safety and as result impedes performance (Sveinsdottir, Biering, & Ramel, 2006). With attributions to the different organizational cutures, different health systems, resource availability, education levels, age, job security, experience, and nature of work, (Lindholm, 2006) asserts that occupational stress can be characterized.

The study focused on the effects of occupational stress on the performance of nurses at Mulago National Referral Hospital. In the study, occupational stress was taken as the independent variable whereas nurses' performance acted as the dependent variable. This chapter presents the background to the study, problem statement, objectives, research questions, hypotheses, conceptual framework significance, justification, scope of the study, and the definition of the key terms.

1.2 Background

The study background explored the historical background, theoretical background, conceptual background and contextual background in regards to occupational stress and performance of nurses at Mulago National Referral Hospital as shown below:

1.2.1 Historical Background

Occupational stress has for a long time been a salient factor affecting performance in various fields across the globe. In the mid-20th century, programs like professional counseling, confidential reporting, and employee committees were put in place to create an environment that can reduce stress conditions. In historical times, occupational stress has been used interchangeably in different contexts for instance, job stress or organizational stress have been used to mean the same (Vokic & Bogdanic, 2015). Since olden times, occupational stress has been a dire health challenge in the world. With usual manifestations of hazards and psychosocial events throughout the historical movement, occupational stress escalates which thus affects one's orientation to perform to the best of their ability. Creation of safety and occupational health legislation in the west mainly covers the physical including ventilation, equipment inspection, and machine guarding among others has been the major way of extension of services related to improved performance among workers (Quinlan et al., 2014). Such kind of stress has for a long time led to negative situation including but not limited to cardiac problems, hypertension, abuse of drugs, and generally devastate mental well-being. Occupational stress therefore is a transnational characteristic impeding performance among workers nurses inclusive as it is associated with the working environment (Bhatia et al, 2010). Also coupled with working environment, occupational stress originating from lack of motivation has also had a strong bearing on the performance among the labor force (Nakasis & Ouzouni, 2008).

Historically, work and professional activities in the job setting are normally characterized by occupational stress in all countries across the globe as reported by the International Labor Organization (Orgon, 2001). In USA, at least 40% of workers have in perception that their jobs are extremely stressful. Owing to the fact of working with HIV patients, 16% of health stuff-especially nurses in South Africa were affected with stress related illnesses in which majority sought sick leave often (Shisana et al, 2005). In Nigeria, there has been a substantial bearing on mental and physical health of health staff-nurses in particular which in turn has negatively affected their performance in the long run nurses (Mojoyinola, 2008). Low job satisfaction coupled with organizational commitment have partly been engineered by the high rates of occupational stress since olden times. Perpetuating factors including heavy amount of work resulting from the diverse activities that un-matching staffing levels nurses and the low motivation manifested in low salaries and less or no rewards have been incumbent in increasing occupational stress whose mantle has negatively affected their performance in their profession. Lack of adequate equipment and supplies in the hospital settings has affected nurses' productivity thus increasing occupational stress and resultantly thus negatively affecting their job performance (MacPhee et al, 2017).

1.2.2 Theoretical Background

The study was guided by Schechner's performance theory. Schechner's performance theory states that "*Within the context of performance, the imaginary becomes real, and the 'as if' is equivalent to the 'is'*." According to Schechner, performance is inclusive. The theory assumes that inclusiveness encompasses both human and animal behavior (Taylor, 2003). It is also based on the assumption that emotions are socially constructed (stressors) while feelings are

individually expressed (performance). Occupation stressors impede performance by limiting possibilities and experimentation at the work place. In the structure of the Schechner's performance theory, occupational stress factors in all forms acts as the core driver of poor quality, unreliable, and ineffective performance among nurses at MNRH. Performance as a motto and a process in itself is a means not an end (Schechner, 2002). Key performance principles in nurses' performance hinge on self-presentation, restored behavior and expressive culture in their service delivery which characterizes a change in quality, reliability, effectiveness, and efficiency of nurses' services offered at MNRH. Consequently, developing performance as a journey requires that employees and organizations focus the drive to execute positivity notations in order to enhance their potential to deliver to expectation as deemed necessary by the means available (Case, 2009).

1.2.3 Conceptual Background

The perpetuation of occupational stress entails the perception of a discrepancy between environmental demands and individual capacities to fill these demands. In the workplace, occupation stress is characterized by prevailing factors in the work environment with manifestation of poor work design, poor management and unsatisfactory working conditions (Vokic & Bogdanic, 2015). By implication, occupational stress in the nursing profession manifests through emotional and physical reactions resulting from their ability and available resources not meeting the job requests and demands as per their work roles thus impeding performance. Nurses' experiences of occupational stress results into dysfunctional and unusual behavior which resultantly has a negative bearing on employee performance (Ratnawat & Jha,

2014). Occupational stress is significantly a costly delinquent and thus tasks the organizations to manage it in order to reduce health-care costs and improve productivity among their staff.

Performance comprises the actual output or results of a subject or an organization as measured against its intended outputs—goals and objectives. It is well known that an individual's performance is reliant on the diverse attributes of self and the prevailing environment (Richard et al., 2009). Occupational stressors are seen to have both direct and indirect effect on job performance among nurses. The bid to enhance performance is entirely evident in quality of service provided by the nurses, how reliable, effective and efficient they render them to the patients. The level of performance of nurses at MNRH is determined by the operational environment in which they work coupled with individual capacity so as to achieve the hospital objectives. Stressors in the hospital including have a direct barring effect on nurses' performance (Nabirye, 2010).

1.2.4 Contextual Background

Mulago hospital's official capacity of 1790 beds but it normally escalates to double the figure to accommodate up to 3000 patients (UTG, 2014). The facility has a mix of medical personnel with different backgrounds and abilities to perform. Serving the big daily population at the facility is hinged on the number of medical professionals in place to offer the diverse services as required by the patients (Nabirye et al, 2011). Nurses in particular stand at the forefront of service delivery as they interact more with the patients throughout their period of visit and or stay. Given the high numbers of patients, nurses are often overwhelmed to offer an excellent service to them as they have to serve at a ratio of 1:500. This by implication triggers increased amount of work given the high patient to nurse ratio due to low staffing levels. Given its status as a public facility, its catchment is big and there are rampant manifestations of shortage of equipment and

supplies. Financial year 2014/15 found MNRH with 67% (1,880) staff with a 581 gap to fill among which majority are nurses. With an approximate population of 1,800,000 annually, MNRH is unable to deliver to the best of its ability and potential (MoH, 2015).

The rampant characterization of insufficient staff at unit level, lack of drugs and equipment required for nursing care and unpredictable scheduling and staffing have led to an increase of occupational stress among nurses at MNRH. Such pressures have impeded nurses' performance at MNRH with manifestations of poor service quality, unreliable service, and inefficiency in the long run (MoH, 2007). Among other stressing factors that nurses at MNRH face is the inadequate supplies and equipment to perform their assigned duties including but not limited to drugs, intravenous fluids, beds, blood pressure machines, feto-scopes, stationery, and gloves among others which are meant to make their work easy (Nabirye et al, 2011). Additionally, with the major rehabilitation and renovations works taking place at the facility, majority nurses have been distributed to the different sites including Kiruddu and Kawempe Hospitals. At these facilities, nurses are faced with the mismatching work roles which increase the amount of work even in appendage to such facilities. The hospital policy framework together with the ministry guidelines spell out the duties and responsibilities of a nurse but in real application, nurses' roles at MNRH are doubled in span which causes stress and thus affects their performance both in the short and long run (MoH, 2015). It is upon this background that the researcher sought to establish the relationship between occupational stress and nurses' performance at MNRH.

1.3 Problem Statement

At Mulago National Referral Hospital nurses are at the operation level in providing the essential basic health care professionally. Despite it being a rewarding occupation, nursing is characterized by a wide range of stressful situations caused by several factors including but not limited to the heavy amounts of work, low staffing levels, lack of essential and adequate equipment and supplies less, and low motivation in general (Bhatia et al, 2010). At Mulago NRH, nurses' proficiency in the execution of designated duties in the hospital setting directly determines their output as related to service quality, efficiency and service reliability. Manifestations of heavy amounts of work have been caused by the increased work load geared by the overwhelming number of patients flowing into the hospital versus the staff available; and also low levels of motivation.

Mulago NRH serves a population of about 3 million people in and around Kampala. By 2015, the hospital had in total 1,880 nurses (67%) who are deemed to serve the whole population flowing in from the different parts of the country. This makes the nurse to patient ratio 1:1595 (MoH, 2015). Given the big numbers at the facility, the low numbers of nurses are mismatched to serve the growing clientele effectively thus assignment of multiple roles in different wards. Despite the relocation of some MNRH units to Kiruddu and Kawempe Hospitals during the refurbishment and renovation works, the trend of movements to the two sites is characterized with their own structures which basically leads to uncoordinated work planning and allocation of roles among health personnel nurses inclusive (AHSPR, 2014/15). Nurses often tend to perform non-professional tasks such as transporting patients and performing ancillary services which are out of their jurisdiction but by condition deemed necessary to do them. In the FY 2015/16 staffing levels in central region dropped to 74% from 79% in 2013/14 (AHSPR, 2015/16).

1.4 Purpose

The study aimed at establishing the relationship between occupational stress and performance of nurses at Mulago National Referral Hospital.

1.5 Specific Objectives

i. To find out the effect of nurses' working environment on their performance at Mulago National Referral Hospital.

ii. To assess the effort-reward imbalance affects nurses' performance at Mulago National Referral Hospital.

1.6 Research Questions

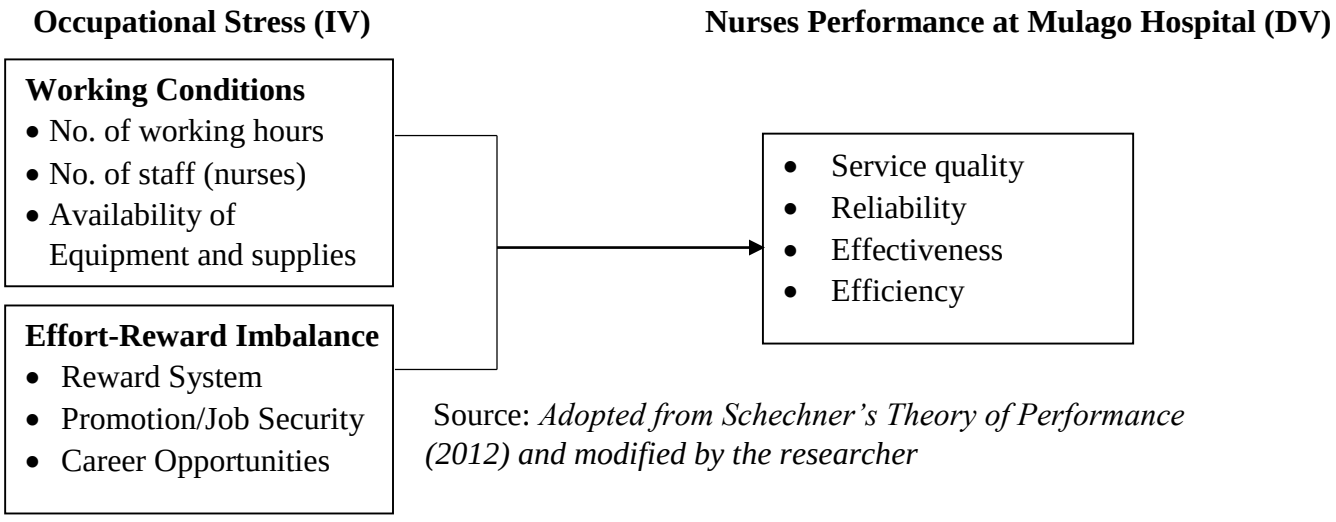
1. How has nurses' working environment affected their performance at MNRH?
2. To what extent has effort-reward imbalance influences nurses' performance at MNRH?

1.7 Hypotheses

H1. Hospital working environment greatly influences nurses' performance.

H2. There is a significant relationship between the effort-reward imbalance and nurses' performance.

1.8 Conceptual Framework



Source: *Adopted from Schechner's Theory of Performance (2012) and modified by the researcher*

As shown in the figure above, occupational stress as the independent variable is being operationalized by work environment (number of working hours, number of staff (nurses), availability of equipment and supplies) and effort-reward imbalance (reward system, promotion/job security and career opportunities) which has a bearing on the nurses' performance being operationalized by their service quality, reliability, effectiveness and efficiency. Mulago National Referral Hospital being a national referral hospital, it employs a big number of nurses whose orientation is based on their activeness and pro-activeness in providing diverse health services to the national population. The study applied a many-to-one approach which illustrates that all dimensions under occupation stress are seen to have an influence on the performance of nurses at MNRH as shown in the figure above.

1.9 Significance of the Study

The study aimed at helping the hospital stakeholders and community to demonstrate a commitment to curbing occupational stress in bid to enhance nurses' performance.

The study aimed at helping the hospital regulatory framework and the ministry of health at large to make special provisions for the needs of nurses so as to curb occupational and thus boost their performance thereof in the long run.

The results were aimed at acting as a bench mark for future research in areas of occupational stress and nurses' performance. Many other researchers could use the findings as contribution to their body of knowledge.

The study aimed at helping MNRH to develop better means of curbing occupational stress in its programs, activities, and events so as to step up its intended goals as set for purposes of improving nurses' performance at the national referral hospital.

1.10 Justification of the Study

Occupational stress being a phenomenon issue, it had a couple of indicators including, work load, low remuneration as faced by the nurses at MNRH. All these have had a direct influence on the nurses' performance. Through investigating the relationship between occupational stress and nurses' performance, the study provided information on the ways in which each of the dimensions under occupational stress affected nurses' performance at the facility. Upon successful completion of this study, the findings were publicised and if usefully applied, they would enhance and improve nurses' performance at the national referral hospital in terms of ensuring service quality, reliability, effectiveness and efficiency among the nurses. For the purpose of documenting and disseminating research information, the findings was made available for the general public, policy makers, civil society organizations as well as academicians.

1.11 Scope of the Study

1.11.1Geographical Scope

The study was carried out at Mulago National Referral Hospital Kampala, Uganda which is located on Mulago Hill in the northern part of Kampala city. It lies approximately 3km at 0°20'16.0"N, 32°34'32.0"E (Latitude: 0.337786; Longitude: 32.575550)

1.11.2 Time Scope

The study to covered a period of four (4) financials years—2013 to 2016. This was the period when the facility was set to undergo renovation works.

1.11.3 Content Scope

The study focused on establishing the relationship between occupational stress and nurses' performance at Mulago Hospital and examining the impact of work load, remuneration and hospital policy guidelines on nurses' performance.

1.12 Definitions of Key Operational Terms

Occupational Stress referred to the amount of work or of working time expected or assigned to a particular individual or machine within a specific period of time.

Nurses' performance referred to the level of effectiveness of a nurse in carrying out his or her roles and responsibilities related to direct nursing care and quality of healthcare services.

In the study context, **work environment** involved the safe, empowering, and satisfying physical geographical location as well as the immediate surroundings that promotes professionalism, accountability, transparency.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presented the literature written about the relationship between occupational stress and nurses' performance as presented by other authors, scholars and publications. Literature was obtained from journals, magazines, text books, internet, newspapers, and others to mention. It was presented chronologically as per the research objectives as shown in chapter one.

2.2 Theoretical Review

Soyini & Hamera (2006) asserted that performance is a multi-dimensional concept at the most basic level. Given Schechner's illustration of performance, it suggests that the nurses' proficiency with which they execute nursing activities is found to be directly/indirectly contributing to the hospital's technical core signified by the quality of service, efficiency and reliability of services provided. It was suggested by Mokono et al (2015) that the magnitude of stress as experienced by nurses is proportional to the degree of misfit between them and their occupational activities hampering service quality. It is evident that, despite MNRH's strength of having a range of human sources with specialized skills and competencies, nurses still stand a further gap the lowest cadres in the hierarchy with an imbalance in the remuneration accorded to all. MNRH needs highly performing nurses to meet their goals and objectives. Signs of service effectiveness and efficiency derive satisfaction and reduce stress with demonstrable feelings of pride and mastery. In perspective, Schechner encompassed performance into two philosophies; task and contextual performance (Case, 2009).

2.3 Working Environment and Performance

MacPhee, Dahinten, and Havaei (2017) found out that working conditions perpetuating stress among health workers immensely affect the quality of care. Such conditions are associated with employees involvement in the decision making process to make changes in service delivery. Regulation guidelines also affect their day to day performance (Gordon & Schnall, 2009). Although, employers are supposed to provide appropriate working conditions, that provided by some does not match the required standards and thus affects employee performance. Environment in which health workers operate is influenced by the work load, equipment and supplies, available stuff, remuneration and others which contributing to their performance in their duties (WHO, 2003). Precarious working conditions strongly contribute to health worker attrition in the health facilities. In reflection on an individual's perception of working conditions, the nurse's workload and availability of adequate resources affect their work and hence leading to poor performance. Supportive work environments provide conditions that enable health workers to perform effectively, making best use of their knowledge, skills and competences and the available resources in order to provide high-quality health services (LaMontagne et al, 2007).

2.3.1 Amount of work and performance

Given the increasing numbers of patients visiting health facilities, the amount of work increases un-proportionately. The work overload affects nurses' orientation as thus affecting their effectiveness in service delivery. This is coupled with the usual time of service provision of 6 to 7 days a week is depression and its associated somatization. With traces of rampant heavy amounts of work facilities with few nurses due to shortage, the turnover is a common phenomenon due to emotional exhaustion and burnout caused by the heavy and multiple work roles assigned to them. Also, the demanding schedules lead to occupational stress as witnessed in

the periodical shift work programs (Brown, Zijlstra, & Lyons, 2006). These trends affect the nurses' performance in their day to day roles. The turnover is a clear turning point that signifies worse situations in one's career. Additionally, occupational stress has direct negative effect on an individual's health and wellbeing thus affecting the quality of services provided by them in the process. In German, Baker et al (2000) revealed in the study of burnout that, nurses' feelings of personal accomplishment were lowest amongst those who had a mismatch between work demands and rewards as well as those who had high inherent effort in their work roles.

Griffi and Swan (2006) revealed that stress as a result of heavy amounts of work among nurses immensely affects their performance. By this, nurses responsibilities related to patient care are fundamentally stressful as reported by Lindholm (2006). Similarly, one of the most frequent stressors among health care professionals is the scheduled workload (Houdmont, Kerr, & Addley, 2012). For example, excessive amount of work was reported to be the most frequently cited source causing workplace stress that impedes performance among nurses in China. Causing this was the severe shortage of health care professionals, nurses inclusive who are charged with heavy amounts of work due to the mismatched ratio of nurse-patient (Li & Lambert, 2008). Also, Begat, Ellefsen, & Severinsson, (2005) found out that shift work, work load, and working overtime were identified as stressors among nurses as investigated per perceived occupational stress. Given the big population to serve, organizational pressures mount due to shortage of nurses to adequately serve. Related factors including little competence and experience trigger lack of confidence among nurses and this implicates their level of performance in their roles (Sveinsdottir, et al., 2006).

In the hospital setting, the divergent and multiple activities necessitate a wide range of roles to be undertaken by the health care professionals. This kind of trend has always increased the amount of work allocated to nurses causing conflict among roles nurses play which enormously affects their effectiveness and efficiency in performing their designated duties. As a profession, nursing is characterized by many roles in executing their day to day duties (McGrath, Reid, & Boore, 2003). Wherefore, majority nurses seek to earn higher incomes and therefore tend to work multiple jobs which resultantly leads to fatigue hence affecting their productivity Pang et al (2004) asserted that with multiple roles, amount of work increases which resultantly perpetuates occupational stress among nurses thus affecting the quality of output. On assumption that nurses are taken as coordinators, teachers, and caretaker in the course of their work. Such attribution increases their scope of attention and lessens their time to concentrate on their basic role in the health setting. The diverse roles nurses have imitated an increased workload which significantly increases occupational stress among them. Attributes including shift work and role overload have been other factors affecting their reliability and quality of services provided by health workers (Tourigny *et al.*, 2010).

2.3.2 Staffing levels and Performance

Rothmann, van der Colf, & Rothmann (2006) reported that certain nurse staffing levels are required to provide quality health care expected by patients in any health facility setting in South Africa. Staffing plans of health facilities depict a success of failure in the service delivery based on their levels of staffing which is handy with the performance of health care professionals, nurses inclusive (Griffi and Swan (2006). Nurse staffing levels clearly and proportionally determine the efficiency of services provided and the degree of effectiveness of such services.

With a justification of nurse staffing levels, it is expedient to link administrative monitors with the outcomes in reflection of workload and performance indicators for each staff in the health facility (Oginska-Bulik, 2006). Notably, stress factors at the work place pose detrimental effects on the wellbeing and health of employees and in turn negatively impact on one's performance in their work roles. Therefore, without reasonable workloads, stress remains at rampant among staff which continually compromises their levels of performance. In the common place, nursing workload is typically measured by patient-nurse ratios and or staffing levels which in consideration includes skill mix concerns as it reflects nurses' perceptions of daily routine work to be done in general (Swan & Griffin, 2005).

According to Li and Lambert (2008), emotional exhaustion as caused by perceptions of frequent heavy workloads and interruptions accounts for nurse staffing levels and patient acuity. By case, unit level patient acuity systems and staffing adequacy are determinants of nurses workloads. Evidently, shortage of nurses affects the nursing care industry negatively. Aiken et al (2002) revealed in a study on hospital nurse staffing and patient mortality that nurse burnout due to understaffing in Pennsylvania affected their performance negatively due to the mismatched high patient-to-nurse ratio. They further revealed that patients were more at risk of dying in 30-day period because due to understaffing, nurses could not rescue them in the hospital units. With the fluctuating nature and wide range of health care services in the multiple settings and levels, it is saliently quite hard to identify a valid and reliable indicator for acceptable staffing levels and this remains a key challenge to performance (Swan & Griffin, 2005). Lack of assistive mechanisms including computers, printers, scanners also suppress nursing staffing levels to fully put to use the electronic medical resources. Failure to implement the staffing models by health facilities is a

justification of inadequate staffing which in turn affects the performance of the existing ones (Nakasis & Ouzouni, 2008).

2.3.3 Equipment and Supplies and Performance

Failure to have adequate and functional equipment in the hospital setting, increases the work load. Most referral health facilities in Uganda are lacking diagnostic equipment whereas the existing ones are poorly maintained due to the lack of technical capacity and funds. Coupled with low staffing levels, inadequate resources—equipment is deemed a potential cause of stress among health workers (Charlotta, 2013). This affects their way of works as it demotivates them and creates an uncomfortable and unpleasant work environment for them to deliver quality service. The medical supplies in most public hospitals do not match the growing number of patients. This is attributed to the health care systems and supply chain as used to procure and allocate equipment and supplies countrywide (Oginska-Bulik, 2006). With adequate resources such equipment, supplies, skills, and training among others, nurses can be geared to perform efficiently and reliably. Occupational stress stimulated by inability to meet work demands can lead to illness, injury, and psychological distress. Amidst acute shortage of other supporting resources, hospitals cannot meet their esteemed organizational goals (Alvesson & Sveningsoon, 2008).

Soilkki et al (2014) found out that stress-related problems faced by professional nurses to include inadequate supplies and equipment to perform specialized medical tasks. Investment in the health infrastructure and set-up entails procurement of adequate equipment and ensuring supplies are available to perform the core tasks in the health facilities. Additionally, provision of medical

equipment and hospital furniture is consistent with the level of stress accumulated by health workers in performing their job roles (African Health Workforce Observatory, 2009). It is also necessary to ensure maintenance of health equipment and improve operations to provide quality services. In the current world, Information Communication and Technology (ICT) equipment have become essential ingredients that can lead to improved performance among health workers. Most private health providers in Uganda lack equipment, supplies and infrastructure to perform their duties effectively (MoH, 2015). It was reported that a number of health facilities lack functional basic equipment such as ophthalmoscopes, otoscopes, adult weighing scales, etc to perform basic medical tasks. This affects the health workers especially the nurses who interact with the clients at the most basic level. Nurses are also stressed by the non-functionality of critical medical equipment.

2.4 Effort-Reward Imbalance and Performance

In Uganda for example, setting up reward systems to motivate employees is a form of commitment and compensation that increases commitment and level of productivity among workers nurses inclusive (Mokono et al, 2015). This situation is contrary to MNRH where majority of nurses are not given staff accommodation, no payment increase despite upgrade of skill levels, and limited or no allowance (lunch/transport). This has perpetuated occupational stress among nurses as their services are being substituted for interns since MNRH is a teaching hospital. The rampant absenteeism among nurses at MNRH was mainly attributed to effort-reward imbalances in attribution to their remuneration not matching their specialized and advanced training.

Introduction of the effort-reward system gradually cultivates high competitive working climate and a sense of job security among health workers which is contributory factor to high performance. In Japan, the high effort-reward imbalance seems specific to mainly hospital staff especially managerial nurses who reported lower reward levels (Kuvaas, 2006). In terms of esteem reward specific to low support from supervisors and peers, poor promotion prospects, and mutual orientation. On a higher note, low education attainment was heavily tagged to effort reward imbalance among health professionals and more prevalent in lower socioeconomic status.

2.4.1 Reward System and Performance

Taking a look at the monetary rewards system requires to set standards allowances to cater for the various specific tasks are deemed fit by the health workers to ensure effectiveness and efficiency in their job roles (Yousaf et al, 2014). Allowances are fringe benefits which are instrumental in gratifying some of the basic necessities of workers' lives and needs of authority and belongings in their work places. Such allowances are always appendages to wages or salaries. Company transportation provided in form of fuel is also of great benefit to employees as a form of financial rewards. Task allowances play an important role in boosting employees' morale to perform their job tasks in a dignified and more satisfied and effective way. Boosting employees' morale may entail instituting terminal benefits including mandatory allowances but nevertheless some employees may not seem forthcoming despite the motivation efforts through allowances (Yousaf et al, 2014).

Like any other employees, nurses can be motivated at an individual level by offering them services including but not limited to free meals, free accommodation, study leave, free credits,

fuel allowance, comfortable restrooms, annual bonuses, car maintenance allowance. For example, in the Komfo Anokye Teaching Hospital (KATH) survey in South Africa, it was revealed that 64% of clinical staff reported inadequate and unsatisfactory motivational packages to enhance their performance thus ineffectiveness of the KATH strategy (Appiah, 2011). Still, in South Africa, to ensure retention and good performance among rural workers, it was thought wise to introduce the rural allowance which demonstrated an eventual impact on their output. Professional allowances and rural location are good ingredients in retaining rural based workers. Additionally, employees with automobiles can be compensated with a car or an automotive allowance in form of maintenance or fuel (Reid, 2004).

McCourt & Awases (2005) found out that taking on heavy workloads by nurses should be motivated by some sort of allowances. Also, working in tasking areas like intensive care units, maternity, OPD among others requires specialized allowances in order to boost motivation and thus improve on their performance (Kekana, Rand, & Wya. (2007). Allowances are seen as an outstanding factor as benefits especially in the public health facilities including medical, transport, and food allowances so as to enhance their job satisfaction and resultantly depict an improvement in their performance. Besides the mandatory salaries and wages, specific task allowances are a good reward to improve on one's job efficiency and proficiency. Direct financial benefits including dependent allowance, clothing, housing, transport, meals and childcare are other ways of ensuring that nurses exhibit the highest levels of performance in their job roles (Swan & Griffin, 2005).

Roberts (2005) found out that short term compensation for specialized tasks go a long way in creating an enabling environment for quality services delivered by health workers thus contributing to the positive impact on their performance thereof. Apart from the rampant financial rewards, employees do expect appreciation and recognition for their efforts and contribution by extending some form of allowances. In general, unavailability of satisfying financial or non-financial rewards generally leads to poor performance and high employee turnover (Roberts, 2005). Therefore, as per the literature, it clearly set out that rewarding employees can have a positive bearing on their job performance.

As a tangible reward, salary is a cash compensation in the short run and long run which motivates staff to perform to the best of their ability. By way of health workers seeking financial incentives, they tend to focus beyond salary increments but stressed with other financial needs. To curb stress among staff, good salary packages and working conditions present satisfactory notations looking to motivate them and thus enhance their performance in their job roles (Iipinge et al., 2009). Increasing salaries especially in the developing countries would positively impact staff performance and productivity. There is a depiction of a relationship between nurses' salaries, their job satisfaction and level of performance. But though, salary can never work in isolation of other financial benefits. Absence of rewarding mechanisms creates a lot of stress among staff and thus lead to situations of poor performance (Porath & Bateman, 2006). The low salaries earned by majority nurses in Uganda in the profession cannot meet the increasing financial responsibilities upheld to their families. This situation creates burden among nurses which heightens their stress thus affecting their performance in their job roles in an economic point of view (Martocchio, 2006).

2.4.2 Promotion/Job Security and Nurse Performance

It was revealed by Khamisa et al (2015) that satisfaction with a promotion is best associated with patient care in the hospital setting. Lack of promotion contributes to stress among nurses due to job insecurity perception. Nurses' levels of expertise are also directly proportionate to promotion opportunities normally with a salary increase which influences performance. Usman & Ahmad (2010) found out that pay and promotion opportunities are strongly correlated with job satisfaction at Khyber Teaching Hospital. Prytherch et al. (2012) highlighted that opportunity for promotion and advancement, growth, greater responsibility and interesting work are good motivating factors. Motivators include such things as opportunity for advancement and promotion, greater responsibility, opportunity for growth, and interesting work. It has been rampant to recognize and appreciate good work among nurses in the American health systems through creation of opportunities for growth and development which has immensely contributed to the levels of motivation. Limited or no motivation enhances dissatisfaction among workers as they feel not part of the hospital setting and this tantamount to increased stress levels. This kind of attribution affects the quality of health care provided by nurses. As such therefore, opportunities for promotion as enjoyed by employees may seem rewarding to the employee and hence positively affect their levels of performance. Introduction of a mechanism for a reward system to recognize work well done affects South African nurses' performance given absence of criteria for promotion. He further stated that motivated nurses are able to accomplish their tasks and provide quality health care thus contributing to the development of the nursing profession (Engin & Com, 2006).

Malfunctioning of the promotion system at Muhimbili National Hospotal discourages nurses overwhelmingly to execute their esteemed duties at full potential. Intrinsically, job promotion promotes commitment to work activities at the work place and improves patient care in the hospital environment (Mbarouk, 2013). Coupled with other factors such as adequate staffing and optimum workload, promotion systems promote a sense of ownership and belonging among nurses which resultantly perpetuates quality and efficiency of services provided. As a motivation factors, Abushaikha and Saca (2009) found out that promotion is a form of assuring job security that intrinsically rewards the individual to perform to their very best. Without effort rewarding mechanisms in health care service it appears that the basic steps to improve nurses' performance are being overlooked. Enhancing job satisfaction in varying ways affects performance positively; promotion opportunities, payment, and benefits accrued to an individual within the organization play part in influencing performance among workers. Khamisa et al (2015) found out that nurses like any other employees are satisfied with promotions, social security schemes and other growth opportunities put in place. This improves their effectiveness in service delivery. Formulating and instituting promotion policy would help to enhance satisfaction of nurses and this is proportionate to their level of performance in their day-to-day activities. As a form of career advancement, promotions necessitate managerial and leadership skills improvement among workers which in turn reduces the levels of stress. In essence, a promotion is a positive personal stressor with attribution of increasing commitment to one's tasks in the workplace. Promotion is critical to an employees' output (Kuvaas, 2006).

2.4.3 Career Opportunities and Nurse Performance

Adoption and adherence to continuous professional and self-development is a route-path to improved performance through training on equipment operation, repair and troubleshooting. Handy with career development, professional development enhances competence levels to meet the needs of the patients as an ethical obligation. Investment in an employee is a discretionary practice in which perceptions are contrasted to the reality (Armstrong, 2009). Career development among health workers can lead adequate utilization of resources and skills available. Pawar & Rathod (2007) reported that prevention to undertake training to acquire new skills is detrimental to one's career path and thus affects his/her wellbeing and health. Through appraisals, skill gaps and deficiencies are identified and therefore realizing good performance requires providing opportunities for career development so as to render a quality, reliable and effective service to the clientele. Similarly, this creates a healthy and positive working environment in which employees are enabled to perform to their potential. Health workers can fulfill their responsibilities through continuous education programs so as to prevent professional obsolescence but rather competence (Marumbu, 2014).

It is expedient to consider capacity development as a way of motivating the human resource base. In the health sector, career development plays an important role in resolving issues related to health workforce capacity deficiencies and thus reduce on the stress levels (Jamal, 2011). Liyana and Mansor (2009) reported that career development contributes 70% of human development tasks through training and specialization. Through extra training, employees gain skills and hands on experience to provide quality and effective services. He further asserted that career growth and promotion are significant to one's commitment, satisfaction and eventually

enhance performance. Opportunities of career development attract, retain and motivate individuals towards higher performance in the organizational setting (Beckeri *et al.,* 2011). Organizational programs related to career development and training create an environment of individual commitment which resultantly leads to reduction in employee turnover, increased attendance and participation in decision making. This is a precondition to improved performance which contributes to organizational success (Marumbu, 2014).

2.6 Summary of Literature Review

The major relationship between occupational stress and the nurses' performance is incumbent to the working atmosphere. With the wholesomely known work schedules of health workers especially nurses, it is evident that occupational stress is a significant issue of concern. Furthermore, the levels of motivation among health workers especially nurses is one other perpetuating factor of occupational stress among them which creates a performance gap. The institutionalization of the hospital guidelines as prescribed by the ministry of health and other customized guidelines has been found to be another phenomenon affecting the performance of nurses at Mulago National Referral Hospital. With the various activities carried out at the national referral, serving the big population tends to be a demanding task to fulfill all duties as deemed fit per individual. As a government facility, the compensation plan and incentives are based on the public service standards thereof. Therefore, the reviewed literature suggests that upholding the standards role playing and financial benefits can serve as turning point to improve nurses' performance. Insomuch doing, the study gap has been identified and efforts to investigate it are sought evidently to ensure compliance and commitment to the set standards.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter dealt with the methodology used in conducting the study on the relationship between occupational stress and nurses' performance at MNRH. It presents the study design, study population, sample size, sampling techniques, data collection methods, data collection instruments, validity and reliability, data collection procedure, data analysis and measurement of variables.

3.2 Research Design

A descriptive cross-sectional research design was conducted to describe the relationship between occupational stress and nurses' performance at MNRH. A cross- sectional survey design was adopted in this study because according to Babbie (2007), cross sectional survey involves observation of a sample of a population or phenomena that are made at one point in time. Both qualitative and quantitative approaches were used to allow for collection of detailed information. The quantitative approach was used to quantify the number of respondents with a given opinion on all research questions while qualitative was used to get in-depth understanding.

3.3 Study Population

A population is a complete set of individuals, cases or objects within some common observable characteristics (Saunders, Lewis & Thornhill, 2012). The study population was composed of the MNRH nurses and MoH officials. Nurses were the main target because they were the major

contenders. The study involved 188 nurses, 10 MoH officials. Therefore, the study examined a total of 198 respondents.

3.4 Determination of Sample Size

A sample consists of a subset of a given population (Fraenkel & Wallen, 2009). It was not feasible to gather detailed information about all the persons involved for all the times they are involved (Robson, 2007). The study required principled sampling to determine who and how many respondents would take part in the study. Krejcie and Morgan Sampling Table (1970) was used.

Table 3.1: Composition of the respondents

Category of respondent		**Population**	**Sample size**	**Sampling Technique**
Nurses	Enrolled nurses	82	66	Simple Random Sampling
	Registered nurses	62	52	Simple Random Sampling
	Senior nursing officers	31	28	Simple Random Sampling
	Principle nursing officers	13	13	Simple Random Sampling
Uganda nurses and midwives council officials		10	10	Purposive Sampling
Total		**198**	**169**	

Source: Primary Data

3.5 Sampling Techniques and Procedure

Kothari (2009) defined a sampling technique as a plan for obtaining a sample from a given population. The study employed both simple random sampling and purposive sampling.

3.5.1 Simple Random Sampling

Fraenkel and Wallen (2009) stated that simple random sampling is where every member of the population presumably has an equal independent chance of being selected. Simple random sampling was used since it ensured that each member of the targeted population had an equal and independent chance of being included in the sample and also offered the most

generalizability as recommended by (Saunders, Lewis & Thornhill, 2012). The researcher used a table of random numbers and randomly selected a row or column at the starting point. The researcher obtained the staff list from the administrator and used the lottery method to assign numbers against each name and put the papers in a container from which the researcher then randomly picked the papers and for each number that was picked, the corresponding name was included in the study.

3.5.2 Purposive Sampling

Purposive sampling was applied to gather data from MoH officials. It was proposed because it allowed a researcher to use cases that had the required information with respect to the objectives of the study (Fraenkel & Wallen, 2009).

3.6 Data Collection Methods

The researcher used several data collection methods and upon proper use, the methods greatly enhanced the value of research study.

3.6.1 Data Sources

The study employed both primary and secondary data collection approaches. Secondary data referred to that kind of data that was readily available, already reported by some other scholars (Roston, 2008). Secondary data for this study was got during documentary review from archived records found at MNRH. This was because it was available and easier to understand, as it comprised of evident researched work. Roston (2008) also defined primary data as that kind of data that has been gathered for the first time, it had never been reported anywhere.

Questionnaires and Key Informant Interviews (KII) were used as they enabled the researcher to cover a large population quickly and at a reasonably fair cost.

3.7 Data Collection Instruments

3.7.1 Interview

The researcher administered interviews using an interview guide to gather data from respondents. This tool enabled the researcher to get in-depth information about the study in question, in addition to being flexible. It also allowed the researcher to adjust the questions so as to tap the required information from the respondents by way of probing (Saunders, Lewis & Thornhill, 2012). The researcher interviewed 10 MoH officials. The researcher set up appointments with the various respondents on scheduled dates on which she conducted the interviews. Notes were taken during the interview. Upon scheduling appointment the researcher had to assure the interviewee of confidentiality. The interviews took between 30—40 minutes which time appropriate to the schedules of the busy respondents.

3.7.2 Questionnaire

Questionnaires containing close-ended questions were used. Close ended questions were opted for because of their high response rate. Questionnaires were administered to 159 respondents (nurses). The researcher chose the questionnaire as an instrument because the study was virtually descriptive and the tool was an easy method of data collection. It was also time saving and cost effective (Fraenkel & Wallen, 2009).

3.7.3 Documentary Sources

Document analysis referred to a critical examination of public or private recorded information related to the issue under investigation (Yuko et al, 2005). It was used to obtain unremarkable information at the pleasure of the researcher and without interrupting the research process.

Archived records at the organization offices were used to guide the researcher to capture the existing data about the occupational stress and nurses' performance. Sources such as organizational journals, annual reports, strategic plans, and magazines etc. were viewed.

3.8. Validity and Reliability of the data collection instrument

3.8.2 Validity of the Instrument

Validity refers the appropriateness of the instrument (Amin, 2005). Validity meant the degree to which results obtained from the analysis of the data actually represent the subject under investigation. Content validity was used to ensure data collection instruments were valid. An assessment of what concepts the instrument is trying to measure was done to determine whether the set of items accurately represents the concept under study (Saunders, Lewis & Thornhill, 2012). A validity index test of the data collection instruments was carried out thereafter.

$$CVI = \frac{\text{Number of items declared relevant/ valid}}{\text{Total number of items}}$$

CVI of an instrument greater than 0.7 is sufficient according to Amin (2005)

Table 3.2: Validity Test

Study Variable	**Number of questions**	**Percentage**
Working Environment	10	100%
Effort-reward Imbalance	10	100%
Nurses' performance	10	100%
Total	**30**	**100%**

3.8.2 Reliability of the instrument

Reliability meant the consistency of the instrument in measuring whatever it was intended to measure (Amin, 2005). Data collection instruments were pre-tested on a group of people who were not selected to participate in this study in order to assess the reliability of the instruments. The researcher piloted the instrument on a small group of ten (5) individuals. Thereafter, a reliability coefficient was computed to indicate how reliable data was. A 0.80 coefficient or more implies a high degree of reliability of data as revealed by (Fraenkel & Wallen, 2009). The study adopted the Cronbach's coefficient Alpha to determine correlation of items. The questionnaire was amended to remove mistakes and then made a final copy for approval by the supervisor.

Table 3.3: Reliability Scores

Variable	**Alpha**	**Number of items**
Working Environment	.848	10
Effort-Reward Imbalance	.889	10
Nurses' Performance	.893	10
Total	**2.63**	**30**

***Source**: Primary Data*

As shown in the table above, findings revealed high reliability scores for all variables. The alpha score is totaled up (£alpha/3) = (2.63/3) with 0.877. Study findings therefore revealed a high reliability score with implications of significance to the study. The coefficient being above .80 depicted a high degree of reliability of the research instruments as suggested by Fraenkel and Wallen (2009).

3.9 Procedure for Data Collection

A letter of introduction from, Uganda Management Institute was obtained. A pilot study of data collection instruments was conducted in the area of study to establish their validity and reliability. The researcher then administered the questionnaires to respondents and conduct interviews.

3.10 Data Analysis and Data Processing

Fraenkel and Wallen (2009) maintained that data obtained from the field in raw form tends to be difficult to interpret and therefore it required to be cleaned, coded, entered into a computer system and analyzed thereafter. From the analysis results, the researcher was able to make sense of the data. Both quantitative and qualitative approaches were used in analysis.

3.10.1 Quantitative data Analysis

After data collection, descriptive statistics were used to summarise quantitative data as shared by the key informants. The researcher meaningfully described a distribution of scores using descriptive statistics and verification of hypotheses was done by use of inferential statistics as suggested by (Fraenkel & Wallen, 2009). Statistical Package for Social Sciences (SPSS) was used to analyse the data. Data was then arranged using tables, frequencies, graphs, and charts. Regression analysis was used to determine the relationships which helped the researcher determine whether occupational stress influences nurses' performance at MNHR.

3.10.2 Qualitative data Analysis

Qualitative data analysis sought to make general statements on how categories or themes of data are related (Fraenkel & Wallen, 2009). Field notes from interviews were edited and cleaned up to obtain organised data, categories, themes and patterns were created and codes assigned by the

use of the SPSS Text editor. Data was then evaluated and analysed to determine the adequacy of information and the credibility, usefulness, consistency and validation of hypothesis.

3.11. Measurement of Variables

The researcher used the nominal scale to categorize study variables whereas the ordinal scale was used for non-categorical variables. Age was measured using the interval scale. The Likert scale was applied on the 1-5-point scale (Agree-4 or Strongly Agree-5, Not Sure-3, Strongly Disagree-1 or Disagree-2). The Likert scale determined the degree to which respondents agreed or disagreed with the pre-set statements on a 5-point scale (Saunders et al, 2012).

CHAPTER FOUR

PRESENTATION, ANALYSIS, AND INTERPRETATION OF RESULTS

4.0 Introduction

Chapter four presents findings and data analysis on the Effect of Occupational Stress on the Performance of Nurses in Mulago National Referral Hospital. Main emphasis was on the three independent variables namely; Working Environment and Effort-Reward Imbalance which were envisaged to impact nurses' performance at Mulago National Referral Hospital. Chapter presents the reliability scores, study response rate, descriptive findings, inferential statistics and hypotheses testing as per the specific objectives.

4.1 Response rate

As conducted by the researcher, it was expedient to establish the response rate by respondents. Through the course of data collection, the researcher had programmed to collect data from 169 respondents. Together with research assistants, the researcher managed to meet 167 respondents. All nurses including enrolled nurses, registered nurses, senior nursing officers, and principle nursing officers were reached. Also, of the 10 key informants 8 were interviewed. Therefore, the overall response rate stands at as indicated in the table below;

Table 4.1: Response Rate

Category of respondent		**Sample Size**	**Number reached**	**Response Rate**
Nurses	Enrolled nurses	66	66	100%
	Registered nurses	52	52	100%
	Senior nursing officers	28	28	100%
	Principle nursing officers	13	13	100%
Uganda nurses and midwives council officials		10	8	80%
Total		**169**	**167**	**(480/5) = 96%**

***Source**: Primary data, 2017*

As shown in Table 2 above, the response rate stands at 96% in which all nurses planned to be interviewed were met as compared to the key informants of which 2 individuals the researcher failed to meet for interviews. This response rate is sufficient and can be relied on for generalization. In other words, it was above 70% the depiction of an excellent response rate in any study as suggested by Mugenda and Mugenda (2009).

4.3 Study findings

Findings from the study are presented both quantitatively and qualitative in a descriptive as well as inferential manner so as to establish the typical relationship between occupational stress and performance nurses at Mulago National Referral Hospital. Triangulation was adopted to ensure both qualitative and quantitative perspectives are inherently represented as per the study findings. In this section also, hypothesis testing is presented. Findings are organized as follows: Bio-data, nurses' performance, working environment, and effort-reward imbalance. Regression analyses were presented to illustrate the magnitude of effect of the independent variables on dependent variables. Grouped coefficients summarized the typical effect of each variable to determine which variable has a higher level of significance as per the field data.

4.3.1 Demographic Setup

The researcher set out to establish the demographic setup of the sample size by seeking to find out the respondents age, sex, marital status, educational level, and period of service or attendance at the hospital. This was meant to find out how demographic orientation relates to the effect of capacity building on employee performance at MNRH. Findings are laid down in the table below.

Table 4.2: Demographic Setup

Category	Frequency	Valid Percent
Age		
18—30	96	60.4
30—40	44	27.7
41—50	13	8.2
51 above	6	3.8
Total	**159**	**100.0**
Sex		
Male	39	24.5
Female	120	75.5
Total	**159**	**100.0**
Marital Status		
Single	70	44.0
Married	77	48.4
Divorced	9	5.7
Widowed	3	1.9
Total	**159**	**100.0**
Educational Level		
Undergraduate	57	35.8
Postgraduate	4	2.5
Certificate	98	61.6
Total	**159**	**100.0**
Department/Ward		
Maternity	13	8.2
TB Clinic	14	8.8
General OPD	70	44.0
Pediatrics	26	16.4
ICU	21	13.2
Other (specify)	15	9.4
Total	**159**	**100.0**

Source: Primary data, 2017

Study findings as shown in the table illustrate the respondents' demographic characteristics of the sample population reached by the researcher. According to the findings, majority (60.4%)

were between 18—30 years, 27.7% were between 31—40 years, 8.2% constituted those between 41—50 years, and 3.8% were those of 51 years and above. The distribution dropped with an increment in age. The study involved more female (75.5%) compared to males (24.5%). Majority (48.4%) of the respondents were reportedly married, 44% were single, 5.7% were divorced, while only 1.9% were widowed. Majority (61.6%) were certificate holders, 35.8% were undergraduates, and the least—2.5% were postgraduates. Majority of nurses had completed at least a certificate in nursing in the various categories thereof. Findings also further revealed that majority of respondents (44%) were serving in the OPD section, 16.4% were under pediatrics, 13.2% belonged to ICU, 9.4% were from other units e.g. cancer department, theatre, etc., 8.8% were from the TB clinic and then 8.2% came from the maternity section.

4.4 Descriptive Findings

4.4.1 Nurses' Performance

Assessment of the dependent variable (nurses' performance) was based on the indicators including service quality, effectiveness, reliability and efficiency as portrayed among nurses at MNRH. To assess the level agreement, the researcher employed the likert scale to depict the relationship between the nurses' performance and the three independent variables—working environment and effort-reward imbalance at MNRH. The table below illustrates the level of agreement based on the 5-point scale on responses about performance among nurses in the national facility.

Table 4.3: Responses on Nurses' Performance

This section presents responses on nurses' performance as provided by respondents:

Nurses' Performance	Percentage of Respondents who agree, undecided, and disagree with the Nurses' Performance					
	Disagree	Undecided	Agree	Mean	Std. Deviation	N
Nurses complete tasks efficiently	6.3%	0%	93.7%	4.03	.636	159
Nurses complete tasks effectively	6.3%	10.1%	83.6%	3.87	.657	159
Nurses demonstrate initiative as appropriate	6.3%	3.1%	90.6%	3.96	.688	159
Nurses meet work deadlines as deemed necessary	21.4%	8.8%	69.8%	3.57	.997	159
Nurses meet formal performance requirements of the job	10.7%	3.8%	85.5%	3.84	.784	159
Nurses often work beyond office hours	7.5%	3.8%	88.7%	3.93	.730	159
Nurses read and follow all announcements, memos, and others given out to staff	6.3%	3.1%	91.6%	3.92	.656	159
Nurses keep up to date with changes introduced	18.9%	18.2%	62.8%	3.44	.925	159
Nurses help colleagues who have problems/challenges with their work	35.8%	13.2%	50.9%	3.09	1.166	159
Nurses help colleagues with a heavy workload	11.3%	0%	88.7%	4.04	.849	159

Source: Primary data, 2017

Illustrated in Table 4 above, findings show that majority (93.7%) agreed with the statement that nurses complete tasks efficiently and 6.3% disagreed. With a mean of 4.03, it is an implication of agreement and the low Sdv. <1 (.636) denotes wide commonalities in the response distribution.

Study findings revealed that majority—83.6% were in agreement with the notion that nurses complete their assigned tasks effectively, 10.1% were undecided while 6.3% disagreed. The mean value of 3.87 signifies agreement by majority whereas .657 shows high commonalities of the response distribution. In tandem with the findings, the **HMIS Focal Person** affirmed in the key informant interview that:

> *"Majority of the nurses have ensured they do all their assigned tasks, attend to their patients both in-patients and outpatients, and also in other clinics across the hospital. They are seen spending nights in the wards, even working overtime to ensure they finish their assignments."*
>
> *"Oh... Nurses have been able to attend to all the patients who come in daily. They endeavor to serve even beyond their hours assigned to work."...***Director Nursing Department** Uganda Nurses' and Midwives Council, Ministry of Health.

90.6% of respondents were in affirmed in agreement that nurses demonstrate initiative as appropriate in their daily activities, 6.3% disagreed, and 3.1% were undecided. A mean score of 3.96 shows agreement among majority and the low Sdv (.688) was associated to the commonalities in the responses given.

Table 4 illustrates that majority (69.8%) asserted agreeing to the notion that nurses meet work deadlines as deemed necessary in their designated duties, 21.4% were in disagreement and 8.8% neither agreed nor disagreed. A 3.57 mean implied agreement with the notion while .997 Sdv confirms commonalities in responses.

Findings show that majority—85.5% agreed that nurses meet formal performance requirements of their job, 10.7% were in disagreement while 3.8% were undecided. Given the 3.84 mean

score, it is evident that majority of respondents agreed and the Sdv <1 shows common agreement.

It was also revealed that 88.7% supported that nurses often work beyond office hours, 7.5% were in disagreement while 3.8% neither agreed nor disagreed with the notion. The mean of 3.98 lies within the range of agreement the low standard deviation (.730) signifies consensus in respondents' responses.

91.6% of respondents confirmed in agreement that nurses read and follow all announcements, memos, and others given out to staff across the respective departments, 6.3% disagreed and 3.1% were undecided. The 3.92 mean value denoted agreement by majority while the Sdv (.656) shows the degree of commonalities among responses. It was further revealed from the qualitative interviews that:

> *They promptly respond to the information as communicated. They also tend to ask around if they seem not to understand. By the way, nurses are very pro-active people because they are at the grass-root of health care. They also keep time if there is any emergency. They come to hospital on time and they respond to care cases as communicated. They tend to respect the orders of their bosses—senior nursing officers, etc.* **HMIS Focal Person** Uganda Nurses and Midwives Council.

> *"If nurses are responding well to their duties it is clear sign. Precisely nurses will be punctual, efficient, reliable, responsive etc. They'll act according to the set standards and pieces of information given by management."*… **Director Nursing Department** Uganda Nursing and Midwives Council.

From the table, majority of respondents (62.8%) revealed that nurses at MNRH keep up to date with changes introduced in their particular departments and almost equal proportions (18.9% and 18.2%) disagreed and were undecided respectively. The mean of 3.44 depicts agreement with the notion while the Sdv score of .925 shows that there commonalities in the response distribution.

According to the study findings, results revealed that half of the sample population (50.9%) were in agreement with the notion that nurses help their fellows who have problems/challenges in executing their work activities, 35.8% disagreed and the least 13.2% neither agreed nor disagreed. With a mean value of 3.09, the findings show that majority of the respondents were in agreement although the 1.166 Sdv score denotes a divergences in the response distribution.

In the table, majority of respondents (88.7%) agreed that nurses help colleagues with a heavy workload to meet hospital needs while 11.3% disagreed. Given that the mean value is >3 (4.04), it denotes agreement with the notion by respondents and the low Sdv score (.849) implies typical commonalties in the responses provided. This was confirmed by the sentiments from the key informants: Director Nursing Department asserted that:

> *"Nurses can't work alone they always work in teams Majority of nurses at Mulago Hospital are engaged in team activities and this implores them to help others to accomplish the tasks given to them."*
>
> *"This is common among nurses because they are trained to act in teams. Nurses cannot execute much without others' input. They have to work in teams. The numbers of patients at Mulago require team work in order to provide a holistic kind of care to the big incoming numbers of patients from all directions of the country."...***HMIS Focal Person** Uganda Nurses and Midwives Council.

The biggest majority were in agreement with the statements as relayed under investigation but supreme among all were (93.7%) who asserted that nurses complete tasks efficiently, 90.6% of respondents supported that nurses demonstrate initiative as appropriate in their daily activities, and 91.6% who affirmed that nurses read and follow all announcements, memos, and others given out to staff across the respective departments. However, a considerable proportion of 35.8% disagreed that nurses help their fellows who have problems/challenges in executing their work activities. With majority of the mean scores being greater than three (<3), it is a confirmation of agreement with the notions under investigation. Except 1.166 value of Sdv, the rest of the values were significant with a score less than one an implication of commonalities within the distribution.

4.4.2 Working Environment and Nurses' Performance

This section presents responses on Working Environment and nurses' performance as provided by respondents:

Table 4.4: Perception of Respondents on Working Environment

Working Environment	Percentage of Respondents who agree, undecided, and disagree with the Nurses' Performance					
	Disagree	**Undecided**	**Agree**	**Mean**	**Std. Deviation**	**N**
Working conditions affect employee performance	13.2%	1.9%	84.9%	3.87	.877	159
Health workers' environment can be affected by the work load	9.4%	3.8%	86.8%	4.03	.907	159
Equipment and supplies affect the nurses' morale to work	10.1%	6.3%	81.7%	3.99	.917	159
Inadequate resources affect nurses' performance	11.9%	8.2%	79.8%	3.86	.870	159
Heavy amounts of work increase stress among nurses	11.9%	3.8%	84.3%	3.89	.846	159
Working overtime affects nurses' effective service delivery	11.7%	3.1%	90.5%	4.04	.719	159
Number of nurses in departments leads to heavy work load	13.2%	5%	81.7%	3.82	.831	159
Mismatched work roles affect nurses' effectiveness	15.1%	3.8%	81.3%	3.82	.999	159
Low staffing levels lead to burnout among nurses	12.6%	4.4%	83.1%	3.87	.922	159
Non-functional equipment in the hospital setting increases workload	13.9%	3.1%	83%	3.83	.982	159

Source: Primary data, 2017

In the table above, findings revealed that majority (84.9%) were in agreement with the assertion that working conditions at MNRH affect nurses' performance, 13.2% disagreed while 1.9% were undecided. The mean score of 3.87 depicts agreement by majority whereas the .877 score being <1 is a clear sign of commonalities the responses provided by respondents. Further, key informants revealed that:

> *It's obvious that in any working environment people are motivated by the conditions they operate in. Actually here at Mulago majority of nurses just work because it is in Kampala but the conditions are worse because they have to attend to a lot of patients in a day because they are few in number. In fact let me say Mulago as a national referral hospital is way understaffed."* **Director Nursing Department** Uganda Nursing and Midwives Council.

From the study findings illustrated that majority 86.8% of respondents supported in agreement that the health workers' environment can be affected by the work load, 9.4% disagreed while 3.8% neither agreed nor disagreed. The 4.03 mean score denoted responses falling with the agreement range while .907 value proved that there were commonalities within the responses.

It was revealed by majority (81.7%) that equipment and supplies affect nurses' morale to work at MNRH, 10.1% disagreed, and only 6.3% were undecided. The distribution came up with a 3.99 mean with implications of majority agreeing with the item while the .917 Sdv score proved that there were commonalities in the response.

79.8% asserted in support that inadequate resources affect nurses' performance at MNRH, 11.9% were in disagreement while the 8.2% neither agreed nor disagreed. A 3.86 mean score is a clear

depiction of agreement with the item by majority of respondents and the Sdv of .870 signified commonalities across the distribution.

Majority (84.3%) agreed that heavy amounts of work increases stress among nurses at MNRH, 11.9% disagreed with the notion, and 3.8% were undecided. Given the 3.89 mean score, responses were centred around the mean and .846 denoted commonalities in the responses. It was also revealed by key informants that:

> *"It is evident that if the nurses are not enough they'll have to overwork in order to attend to all the patients who have cone that day Also nurses sometimes work as administrators in their department because of few numbers and this increases stress levels Because they are few they have to bridge the gap and ensure to serve all patients who flock in. The fewer the nurses the more work to do by the available nurses."...* **HMIS Focal Person** Uganda Nursing and Midwives Council.

In the table, 90.5% of respondents were in agreement with the notion that working overtime affects nurses' effective service delivery at MNRH with 11.7% disagreeing and 3.1% of then undecided. With a high mean score of 4.04, it is a clear depiction agreement with the item while the .719 Sdv value represents commonalities in the response distribution.

From the study findings, it was revealed by majority (81.7%) that number of nurses in departments leads to heavy work load if not proportionate to the population catchment, 13.2% were in agreement while only 5% neither agreed nor disagreed with the notion. Given the 3.82 mean vale being greater than three, the majority of respondents were in agreement whereas the .831 Sdv value shows commonalities in the responses provided by respondents.

The majority—81.3% affirmed that mismatched work roles affect nurses' effectiveness at MNRH, 15.1% disagreed and 3.8% neither agreed nor disagreed. 3.82 mean score being >3 proves that majority of respondents were in agreement with the notion while .999 being <1 depicted response commonalities as provided by respondents.

83.1% supported in agreement that low staffing levels have led to burnout among nurses at MNRH, 12.6% of them disagreed while only 4.4% neither agreed nor disagreed. With a 3.87 mean score, it is evident that majority of respondents agreed with the notion while the .922 Sdv value signifies commonalities in the responses provided. Confirmation of this finding was found among key informant who stressed that:

> *"…. the lower the number of nurses the more the activities one has to do. If you take an example of OPD the staffing levels are not sufficient to serve the whole population. Although Mulago has been divided into Kiruddu and Kawempe it still has a gap in those units which increases stress among them."*…**Director Nursing Department** Uganda Nursing and Midwives Council.
>
> *"Mulago being a big hospital but they have not paid attention to recruiting more nurses to help to cover the big population. They can't also perform all their duties to the best because they have to ensure they attend to all at least who have come. This is very dangerous to the way they have to do their work of health care."*…**HMIS Focal Person** Uganda Nursing and Midwives Council.

83% of respondents revealed in agreement that non-functional equipment in at MNRH has increased workload, 13.9% of them were in disagreement while the least (3.1%) were undecided. The mean value of 3.83 shows that majority of respondents were in agreement with the notion

and the .982 Sdv demonstrates commonalities in the response distribution. It was also revealed that:

> *"As a result of non-functional equipment, there is much working overtime by nurses beyond the normal time in order to cover up. In most nurses are forced to refer patients to other private health centres."*…**Secretary Planning Unit,** Uganda Nursing and Midwives Council.
>
> *"This has been an outcry in all departments whereby the equipment in place has worn out or even obsolete e.g. the cancer machine. Such incidences have left nurses with nothing to do but just give up. It amounts to pressure to give service over-fetched. Nurses are heavily affected in their operations. Without functioning machines in the hospital all health workers get stressed and this affects their operations."*…**Director Nursing Department** Uganda Nursing and Midwives Council.
>
> *"It has led to a slowdown in the work they perform because they cannot do some activities. Some of the machines in our national hospital are obsolete and some of them are not functioning. You can even take an example of the cancer machine that went viral."...* **HMIS Focal Person** Uganda Nursing and Midwives Council.

On working environment, the largest majority revealed in agreement with all the indicators which is an indication that it is to a great extent that they influence nurses' performance at MNRH. Specific to working environment, it was proved by majority—90.5% of respondents supported that working overtime affects nurses' effective service delivery at MNRH; 86.8% of them put it that health workers' environment can ably be affected by the work load; 84.9% proved that working conditions at MNRH have an effect on nurses' performance; and 84.3% affirmed that heavy amounts of work increases stress among nurses at MNRH.

Comprehensively, the biggest majority were in agreement with the notions being investigated which clearly indicated the significance of a good working environment at MNRH. Additionally, it was revealed that all mean scores were greater than (>3) implying that majority of the respondents supported in agreement that working environment has an influence on nurses' performance at MNRH.

Table 4.5: Regression results for Working Environment and Nurses' Performance at MNRH

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.758[a]	.575	.572	3.85467
a. Predictors: (Constant), Nurses' Working Environment				

Source: Primary Data, 2017

The table above demonstrates that the Pearson Correlation (R=.758**), R^2 =.575, Adjusted R^2 = .572), Sig (2 tailed, P<0.05, 000). This is an indication that working environment positively influence nurses' performance implying that that establishment of a conducive working environment by way of optimizing working hours, having adequate numbers of staff, and availing necessary equipment and supplies to nurses can enhance service quality, reliability, efficiency and effectiveness in the services they provide to the patients. Wholesomely, such an environment will motivate the nurses and other health workers to perform to the best of their abilities and potential to achieve hospital objectives.

Given that the adjusted R square gives a better estimate measure for a bigger sample population, it can be ably be applied where there is more than one independent variable to determine the magnitude of effect it has on the dependent variable. From the study findings, the Adjusted R^2 obtained (.572) implies that working environment affect nurses' performance by 57.2% (.572 *

100%) at MNRH. Notably, the 42.85% can therefore be explained by other elements. By implication therefore, nurses' working environment are a key significant element in influencing nurses' performance at MNRH.

Table 4.6: Coefficients of Working Environment and Nurses' Performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.578	2.089		3.628	.000
	NWC	.771	.053	.758	14.565	.000
a. Dependent Variable: Nurses' Performance						

Source: Primary data, 2017

Illustrated above are the coefficient results confirming the significant bearing that working environment have on nurses' performance at MNRH. According to the findings, results show the p-value of the unstandardized coefficient (0.771) being significant at ($p>0.05$) with a positive Beta value of .758 at 95% level of significance. By implication therefore, that working environment affect nurses' performance by 14.565 (t-test). Implicitly, any improvement in the working environment at MNRH significantly led to a positive change in nurses' performance. By way of improving working environment, it would help reduce the levels of stress among nurses and thus enhance their potential to performance their duties as obliged by jurisdiction.

Hypothesis Testing

With the regression analysis performed, it worked to illustrate the level of significance and magnitude of influence working environment at MNRH have on nurses' performance. Given the positive results obtained (.572), findings there lead to a conclusion that the alternative hypothesis was accepted while the null was rejected.

4.4.3 Effort Reward Imbalance and Nurses' Performance

Table 4.7: Perception of Respondents on Effort Reward Imbalance

Effort Reward Imbalance	Percentage of Respondents who agree, undecided, and disagree with the Nurses' Performance					
	Disagree	**Undecided**	**Agree**	**Mean**	**Std. Deviation**	**N**
Poor motivation affects nurses' output and performance	13.8%	5%	81.1%	3.78	.985	159
Fringe incentives motivate nurses to perform their roles	12%	5%	83%	3.82	.848	159
Cash rewards are the most noticeable motivational factors	7.3%	9.4%	84.3%	3.99	.771	159
Job promotion motivates nurses to effectively perform their roles	9.4%	6.3%	84.3%	3.89	.779	159
Recognition for achievement motivates nurses to appreciate their work	12.6%	11.9%	75.5%	3.70	.875	159
Career opportunities reduces stress among nurses	15.7%	6.4%	77.9%	3.84	.965	159
Retention of workers also motivates to perform effectively	11.3%	7.5%	81.2%	3.82	.792	159
Rewards creates a healthy working environment for nurses	12.6%	3.8%	83.6%	3.87	.898	159
Allowances boost nurses' performance	14.5%	10.1%	75.4%	3.69	.948	159
Rewards improve one's job efficiency and proficiency	6.9%	6.3%	86.8%	3.91	.669	159

Source: Primary data, 2017

As shown in Table 8 above, findings revealed that majority (81.1%) agreed with the notion that poor motivation affects nurses' output and performance, 13.8% were in disagreement while only 5% were undecided. The mean score being >3 (3.78) reveals that majority of respondents were in

agreement with the item while the .985 depicted commonalities in the response distribution. This notion was confirmed by the opinions as advanced by key informants as follows:

> *"Fixed pays stagnate nurses without any progression in their performance. A person who will have gone earlier for advancement, will take much more years to achieve that."* **Secretary Planning Unit,** Uganda Nursing and Midwives Council.

> *"Nurses are like other workers in any setting, they need to be motivated in order to tap their best of performance. Motivation is very important to enhance performance with things like allowances, gifts, recognition etc. this is not practiced at Mulago."*…**HMIS Focal Person,** Uganda Nursing and Midwives Council.

> *"Just like in any government setting there's no motivation apart from the salaries given to them. At Mulago health workers are not motivated properly because even there are no fringe benefits like lunch allowance, transport, lunch is not provided regularly. So this kind of environment doesn't energize one to perform best. I think the government should think of motivating nurses in various ways because these people are the ones giving the primary health care to our population. Not only at Mulago but across all government health facilities."...* **Director Nurses Department,** Uganda Nursing and Midwives Council.

83% of respondents proved that fringe incentives motivate nurses to perform their roles at MNRH whereby 12% disagreed and 5% neither agreed nor disagreed with the notion. 3.82 being >3, it signifies a great level of agreement by majority. Sdv—.848 being <1 denotes commonalities in responses provided.

In the table above, majority (84.3%) proved that cash rewards were the most noticeable motivational factors among nurses at MNRH whereas 7.3% disagreed and 9.5% were undecided. Given the 3.99 mean score, it is evident that majority of respondents demonstrated agreement with notion where the Sdv <1 (.771) was an indication of common responses provided.

The majority—84.3% supported in agreement that job promotion motivates nurses to effectively perform their roles in the hospital setting at MNRH, 9.4% disagreed while 6.3% neither agreed nor disagreed with the notion. Given the mean score being greater than three (3.89), majority of respondents supported in agreement whereas the .779 Sdv value indicated response commonalities. Job promotion was further affirmed by key informants that:

> *"Promoting health workers is like a carrot to entice them to work hard. If one is promoted he or she feels worthy and try to perform to the best of their potential. Promoting health workers of course increases productivity and effectiveness in their roles because they feel valued. It also shows that they're adding value to the hospital. From nursing assistants to senior nursing officers or even principal nursing officers. This works best if the human resource policies are favourable."…* **Director Nurses Department,** Uganda Nursing and Midwives Council.

75.5% of respondents were in agreement with the notion that recognition for achievement motivates nurses to appreciate their work at MNRH, 12.6% disagreed and 11.9% were undecided. The 3.70 mean score is representative of the level of agreement among respondents while .875 Sdv being <1 denotes common responses provided by respondents.

According to the study findings, it was revealed by majority (77.9%) that career opportunities can reduce stress among nurses at MNRH in the various knowledge areas in pursuit, 15.7% were

in disagreement while only 6.4% neither agreed nor disagreed. Given the 3.84, by implication majority of respondents were in agreement and .965 mean score depicted typical commonalities in the responses distribution.

As revealed by majority (81.2%), it was clarified that retention of workers also motivates nurses to perform effectively in their assigned roles in the hospital setting at MNRH, 11.3% disagreed and 7.5% were undecided. The mean score of 3.82 comes with implications that majority of responses were in agreement with the notion whereas the lower Sdv (<1) denoted response commonalities.

83.6% asserted in agreement that rewards create a healthy working environment for nurses, 12.6% were in disagreement and only 3.8% neither agreed nor disagreed with the notion. With the mean score of 3.87%, it is clearly noted that majority respondents were in agreement with the item whereas the Sdv value (.898) being <1 signifies that there are commonalities in the response distribution. It was also found out that key informants also affirmed in support of the notion that:

> *"This motivates nurses to focus on fulfilling their duties as given by their superiors. They work to reflect satisfaction to their bosses. Such rewards in the various forms like allowances and leave days have made them committed to work best."…* **Secretary Planning Unit,** Uganda Nursing and Midwives Council.
>
> *"Rewards are an ingredient for commitment to perform. They are results of good performance as done by an individual. Workers get to perform their duties with seriousness and love since they expect to be rewarded"…* **Director Nurses Department,** Uganda Nursing and Midwives Council.

It was revealed by majority (75.4%) that allowances can boost nurses' performance at MNRH to do their roles better, 14.5% disagreed while 10.1% were undecided. Therefore, majority of respondents were in agreement with the notion given the 3.69 mean score. Also, the Sdv <1 (.948) represents common responses as provided by respondents in the study.

86.8% of respondents were in agreement with the notion that rewards improve one's job efficiency and proficiency if well packaged to suit orientation, 6.9% disagreed while 6.3% neither agreed nor disagreed with the notion. Given that the mean score is >3 (3.91), it is evident that the responses were centred around agreement while the Sdv value of .669 depict commonalities in the response distribution.

The greatest majority as per the effect of effort-reward imbalance on nurses' performance were in agreement with the items presented for investigation. Ironically, a few anomalies selected whose magnitude of effect was outstanding with high percentages including; 86.8% of respondents proved that rewards improve one's job efficiency and proficiency given the way it is packaged to suit their placement in service; equal proportions of 84.3% supported that cash rewards were the most perceptible motivational factors among nurses at MNRH and as well as job promotion being a motivating factors for nurses to effectively perform their roles respectively; and then 83.6% affirmed that rewards create a healthy working environment for nurses at MNRH. As such, it is expedient to note that effort reward imbalance has a great influence on the performance of nurses as well as other health workers in the hospital setting. Therefore, ensuring a contrite balance in the reward system requires salient attention to device mechanisms to enhance motivation among nurses to perform to the best of their ability to meet the objectives of MNRH.

Table 4.8: Regression results for Effort-Reward Imbalance and Employee Performance

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.794[a]	.631	.629	3.59047
a. Predictors: (Constant), Effort-Reward Imbalance				

Source: Primary data, 2017

In Table 9 above, it is illustrated that the Pearson Correlation (R=.794**), R^2 =.631, Adjusted R^2 = .629), Sig (2 tailed, P<0.05, 000). It presents a typical positive relationship between Effort-Reward Imbalance and nurses' performance at MNRH. This is in tandem with the notion of instituting a sound reward system, ensuring job security through promotion, and creating as well as promoting career development among nurses to enhance their potential. This if applied would significantly lead to a positive twist quality of services, reliability of nurses, and the level of efficiency and effectiveness at which they execute their duties in the hospital setting. Such orientation is seen to be a yard stick to motivate health workers in an intrinsic way to enhance their level performance in pursuit to achieve hospital objectives.

While using the R square as a better estimate measure for the study sample population, its application in measuring the relationship between variables is significant where there is more than one independent variable. Therefore, given the Adjusted R^2 (.629), it is evident that Effort-Reward Imbalance influences nurses' performance by 62.9% (.629 * 100%) at MNRH. Remarkably, the 37.1% can be explained by other factors. This signifies that Effort-Reward Imbalance is also another key ingredient in reducing occupational stress thus enhancing nurses' performance at MNRH.

Table 4.9: Coefficients of Effort-Reward Imbalance and employee performance

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.139	1.825		4.460	.000
	ERI	.771	.047	.794	16.385	.000
a. Dependent Variable: Nurses' Performance						

Source: Primary data, 2017

Results in Table 10 above further confirm a significant effect of Effort-Reward Imbalance on nurses' performance at MNRH. The results show that the p-value of the unstandardized coefficient of .771 is significant at 0.05 with a positive Beta score of .794 at 95% level of significance. This by implication indicates that Effort-Reward Imbalance has got a positive bearing on nurses' performance of 16.385. Therefore, any bit of change in the reward system, nurses' promotion and career development would significantly influence nurses to perform well in their hospital duties so as to help the hospital achieve its goals.

Hypothesis test two

The hypothesis test was; "*There is a significant relationship between the effort-reward imbalance and nurses' performance*". Given the positive results obtained from the regression (.629), it can be concluded that the alternative hypothesis was accepted while the null was rejected. This is a clear indication that with an improvement in the Effort-Reward Imbalance, occupational stress would reduce by a significant margin which would then lead to better performance among nurses and also help the hospital achieve its set objectives thereof.

4.4.4 Grouped Coefficient

In consideration of all variables, the researcher found it expedient to run a grouped coefficient in a combined regression analysis. It involved assessment of the combined but specific magnitude of effect that independent variables (Working Environment and Effort-Reward Imbalance) had on nurses' performance at MNRH. Assessment of effect was by ranking to the comparative contribution of each independent variable to the dependent variable.

Table 4.10: Grouped Coefficients Occupational Stress and Nurses' Performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.964	1.788		1.099	.274
	Nurses' Working Environment	.419	.057	.412	7.344	.000
	Effort-Reward Imbalance	.505	.054	.520	9.271	.000
a. Dependent Variable: Nurses' Performance						

Source: Primary data, 2017

Table 11 above illustrates that both independent variables are significant to the dependent variable. This therefore denotes that both variables have got a bearing on nurses' performance at MNRH. Results in the table show that Effort-Reward Imbalance has the utmost significance (P-v=0.00) and the highest positive coefficient (0.505) whereas Working Environment (p-v=0.000) has the lowest positive coefficient of 0.419. Therefore, findings depict that Effort-Reward Imbalance affects nurses' performance more as compared to Working Environment. This basically implies that main focus should be laid on enhancing a balance in the effort-reward mechanisms but also giving ensuring to create a conducive working environment. This would reduce on the levels of stress among nurses at MNRH which would in turn improve their levels of performance.

CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSIONS, RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of findings about the study, conclusions linked to existing literature, recommendations, and limitations faced and proposed areas for further research.

5.2 Summary of Results

The study aimed at establishing the relationship between occupational stress and nurses' performance at MNRH. A cross-sectional research design was adopted using both qualitative and quantitative approaches of data management. The study engaged a total sample of 167 respondents who contributed their responses. 159 attempted the survey questionnaire while 8 of 10 key informants were reached to provide qualitative data using the interview guide.

Nurses' Working Environment and Nurses' Performance.

Findings from the study revealed that working conditions at MNRH have a significant effect on nurses' performance. The work environment at the national facility has got a strong bearing on work load with the big influx of patients from the different directions of the country. With the limited equipment and supplies in the government facility, nurses' morale has been affected wholesomely as a result of inadequate resources thus negatively affecting their performance. findings have revealed that heavy amounts of work as a result of the big population has increased stress among nurses at MNRH which also causes health workers to work overtime thus affecting their quality of service provided to the patients. The unproportionate number of nurses versus

patients has led to heavy workload at MNRH and this has been apparent to the mismatch in the work roles which resultantly affects nurses' effectiveness at the national facility. As a result of low staffing levels at MNRH, nurses have experienced burnout and thus increasing the levels of stress felt. The rampant non-functional equipment at MNRH has resulted into increased work load which manifests stressful situations among the nurses. Findings established that nurses ensure completion of their tasks efficiently and effectively while demonstrating initiative appropriate in their daily activities. In bid therefore, respondents demonstrated that nurses meet their work deadlines as well as formal performance requirements as set in their jurisdiction.

Effort-Reward Imbalance and Nurses' Performance

Study findings established that motivating nurses enhances their output and performance in which incentives are given to them including though not limited to allowances, days off, gifts, etc. Fringe benefits were found to be key in reducing stress among nurses at MNRH and stir them to perform well their roles and responsibilities. In view, cash rewards were the most pronounced means of motivation that nurses preferred at MNRH in order to increase effectiveness and efficiency in the way they execute their duties. It was revealed that job promotion is paramount in motivating nurses to effectively perform their roles well at MNRH. Recognition for achievement was realized to be an ingredient for nurses' performance as it reduces the level of stress as they feel their work is appreciated. It was found out that career opportunities are means by which stress can be reduced among nurses at MNRH because they gain new competences. Further, it was confirmed that retention of health workers works to motivate nurses to effectively perform their assigned roles at the national facility. Findings also established that rewards given to nurses create a healthy working environment which reduces the

stress levels among them by way of advancing things like allowances and other amenities. Rewards were confirmed to be key in improving nurses' job efficiency and proficiency given the way they are packaged. As a result of rewards, it was affirmed that nurses work beyond office hours and thus tend to read and follow all announcements, memos, and other information as provided by the top management in the respective departments. This has therefore helped to keep abreast with the incoming changes and developments in their departments and the hospital in general. Teamwork was revealed to be a major attribute of nurses' orientation in executing hospital activities although a relative proportion of respondents declined to it. This has been apparent to helping peers with the heavy workload so as to meet hospital needs and objectives therefore.

5.3 Discussion

Study Results were further were discussed as per objective as explained below:

Hypothesis 1: **Hospital working environment greatly influences nurses' performance**

Findings affirm assertions of MacPhee, Dahinten, and Havaei (2017) that working conditions are perpetuating stress factors affecting health workers at MNRH whose bearing is hinged on the quality of care. As revealed by LaMontagne et al (2007), it was established that supportive work conditions provides an enabling environment for health workers to perform effectively as they are ably facilitated to appropriately use their knowledge, skills and competences. As revealed from the study, findings established that limited equipment and supplies at Mulago affects nurses' morale wholesomely because of the rampant inadequacy of resources and thus necessitating stressful situations among nurses in their endeavor to provide care to the population

as supported by the African Health Workforce Observatory Report (2009). The shortage of beds was rampantly mentioned as an impediment to nurses' workers as they provide care to patients lying on the floor and corridors of the national referral hospital. At MNRH, there were manifestations of heavy amounts of work due to the low staffing levels whereby the nurses-to-patient ratio does not match which affects the efficiency as well as effectiveness of services provided which justifies views as revealed by Oginska-Bulik (2006). Also, the low staffing levels have led to a mismatch of roles and responsibilities among nurses with manifestations of engaging in other work such as administrative activities not aligned to their jurisdiction. Findings by Li and Lambert (2008) were confirmed in the sense that the low numbers of staff have caused emotional exhaustion and burnout by virtue of the frequent heavy workloads which has been a breeding ground for occupational stress among nurses. As reported by the MoH in 2015, nurses at MNRH were found to be stressed by the non-functionality of critical medical equipment with fervent mentions of the cancer machine that affected by operations at the cancer institute.

Hypothesis 2: **There is a significant relationship between the effort-reward imbalance and nurses' performance**

Study findings revealed that motivating nurses can enhance their performance levels which is in tandem with their commitment and level of productivity as revealed by Mokono et al (2015). The various incentives as provided to health workers at MNRH were cited as motivating factors to appreciate which manifest in various forms such as gifts, differentiated allowances, increased salary, etc. As such, such rewards have played a significant role in reducing stress among nurses as reported by Swan and Griffin (2005). There are different financial benefits that tend to motivate nurses including though not limited to; housing, transport, meals, insurance, and

clothing among others and this is directly tagged to high levels of performance in their respective job roles as affirmed by Yousaf et al (2014). More pronounced were the cash rewards that nurses are interested in much more than other forms of rewards in order to increase their levels of performance. Through financial incentives like salary increments have impacted on nurses' performance at MNRH as per findings which is in line with the assertions of Iipinge et al (2009). Provision of financial incentives reduces the levels of stress among nurses and thus motivates them to feel satisfied to perform their roles as deemed necessary. It was established that stress among nurses can reduce by level of recognition for achievement because they feel appreciated and value for the services they provide as suggested by Engin and Com (2006). Findings further revealed that career opportunities were other avenues of motivating nurses because they help them to gain knowledge and also improve on competence levels which is line with their retention in the health facility as revealed by Rathod (2007). As revealed by Reid (2004), findings revealed that retention of health workers was another motivating factor whose orientation aims to reduce stress and thus stimulate effective service provision among nurses at MNRH. Further, the reward systems were reportedly confirmed to create a healthy working environment with intentions to reduce stress levels among nurses through the various means in which they are provided such as allowances. This contributes to nurses' job efficiency and proficiency as asserted by Roberts (2005). It was expediently affirmed that nurses at MNRH were found of working beyond usual working hours. Findings also revealed that lack of promotions at MNRH has contributed to increased stress among nurses since they feel a sense of job insecurity as confirmed by Khamisa et al (2015). Also, findings acknowledged affirmations by Baker et al (2000) in that nurses' feelings of personal accomplishment are directly affected due the mismatch between work demands and rewards thus causing stress.

5.4 Conclusion

Objective One: Working Environment

Occupation stress among nurses has been found to be an impeding factor to their levels of performance with the manifestations of heavy workloads, working beyond schedule due to the limited constrained number of health workers to serve the national population at MNRH. As such, nurses have been engaged to serve in a stressful condition characterized by inadequate equipment and supplies which has made it hard for nurses to offer reliable health care services efficiently to the patients at MNRH. Service quality has been affected by the non-functioning equipment and low staffing levels. This has immensely affected nurses' morale and thus require immediate attention so as to achieve good output. To provide effective health services, MNRH needs to create favorable working environment in which nurses are facilitated to perform their duties diligently with less or no stress. As a national referral facility, nurses serving are subjected to large number of activities as demanded by their respective departments and as such they end up being overwhelmed resulting into stress due to the limited resources in place to serve the whole influx of patients from the different directions of the country. Given the various interventions aimed at curbing stress, barriers to performance among nurses would thus be removed to help nurses enrich their potential in service provision at the national referral.

Objective Two: Effort-reward Imbalance

With the findings, it was therefore affirmed that motivating nurses can enhance their performance. incentives provided to health workers are significant elements to improved performance as they act as motivators for nurses to perform well in their designated roles and

responsibilities. It was apparent that differentiated rewards should be provided to nurses so as to tap into their best output. Rewards cited included financial and non-financial rewards but with specific emphasis on intrinsic which are internal to the work activities executed by nurses. Rewards in their various forms have played a great role in enhancing effectiveness and efficiency among healthcare workers nurses inclusive. Striking a balance between efforts and the rewarding system was inevitably vital to ensure nurses' needs are fulfilled to enable them offer quality healthcare service. Incentivizing work activities both financial and non-financial motivates health workers to perform to their best. The various ways in which healthcare workers could been motivated included provision of meals, insurance, transport, accommodation, and clothing among others. Notably, nurses reportedly stated preference to cash rewards as the most celebrated form of motivation most embraced among healthcare workers. Stress reduces as motivation increases. Recognition was another form of reward that if well embraced would yield good performance among health workers at MNRH. It increases employee satisfaction and makes them feel appreciated and valued. Given the acknowledgement of excelling and performing health workers, individuals feel a sense of accomplishment and contentment. Career opportunities help to bridge the gap of imbalance (incompetence) and thus motivate not only nurses but all other employees in the hospital setting. Job promotions among nurses have effectively led to satisfaction and job security which has reduced stress levels among nurses at MNRH. With a sound reward system in place, a healthy working environment is created that supports effective and reliable healthcare service provision among nurses. A good reward system enhances job efficiency among nurses in an organization.

5.5 Recommendations

Objective One: Working environment

Hospital managers at MNRH should ensure appropriate documentation of the causes as well as sources of occupational stress in the hospital setting which might be affecting healthcare professionals at an interval to generate an archive of related stress factors that may impede their performance. It is expedient to give make record of such factors in the occupational realm that affect the performance of workers so as to device means and ensure sustainability. This may also entail intermittent evaluation of stress factors as well as interventions to check on reduction of the phenomenon.

It is important for health unit managers and supervisors to ensure that they aggregate workloads to nurses which are within their capabilities, skill sets, and resources. Allocation of work activities to health workers as appropriate to fit within their professional category of practice should be given utmost priority to ensure they effectively and efficiently deliver services to the national population.

There should be provisions to ensure allocation of functioning and preferably new equipment to assist nurses in executing their duties. Functional medical equipment is an important component in delivering healthcare services as it relieves health workers of stressful situations. It is required that all medical equipment on-hand should be functional and practically user-friendly. Training of health workers in the use of medical equipment is significant to their appropriate application in the operations executed by nurses at MNRH.

It was found important to give health workers an opportunity to take part in decisions making especially on issues pertaining to their jobs and departments. This would help in devising

strategies to reduce stress as exhibited among them. Participation by nurses in decision making acts to instill ownership of actions and remedies to be taken to curb stressful situations so as to improve on the efficiency and effectiveness of service delivery. Through participating in decision making, health workers would be facilitated to devise coping strategies that would help to minimize the negative effects of occupational stress.

It is important for MNRH to ensure recruitment and sufficient allocation of health workers to serve the growing population at the national referral. There is need for MNRH to increase the number of staff (nurses) working at the hospital so as to leverage the diverse work demands as necessitated by the in-flow of patients. The national referral should endeavor to utilize the decentralized centers i.e. Kiruddu and Kawempe Hospitals in order meet the growing demand for health services. In tandem with decentralization, adequate staffing is required at the two sites for comprehensive and prompt service provision. A sizable number of nurses should be hired to cater for the three units i.e. Mulago main hospital and the two sub-units so as to lighten on the work load nurses serve on a daily basis. The higher the number of nurses the lower the number of working hours.

It should be noted that improving working conditions in the health systems requires utmost attention in order to tap the best potential of health workers. This should be reflected in the increment of autonomy of health specialists and also offering training courses to formulate strategies aimed at reducing skill gaps among health workers. This would create an enabling environment which would in turn check on stress levels in the hospital environment. It would also help them to try to cope with the prevailing stress situations.

Working conditions including though not limited to accommodation, adequate supplies, functional equipment in place, transport means, etc. should be priority in order to reduce stress

among nurses. It is also required that nurses are facilitated with tools required to perform their work such as reporting and data collection tools e.g. Health Management Information System forms, registers, tally sheets, and cards among others. Good working conditions would call for commitment by the nurses to perform well in their designated roles and responsibilities.

Objective Two: Effort-reward Imbalance

It was found imperative to ensure creation and promotion of career opportunities for health workers to engage in refresher training courses to assist them keep updated with the changing environment in terms of knowledge and service provision. Training courses should be aimed at ensuring that nurses' capacities are built to deal with the present challenges in their work environments that might be perpetuating stress and thus impede their performance. Career opportunities would enhance nurses' competences to deal with the stress factors and thus ensure efficient and effective service delivery to the population at the national referral health facility.

There is need to instate a reward scheme to ensure that nurses' efforts are appreciated. Rewards both intrinsic and extrinsic should be put in place for energize nurses to perform well. Laying focus on motivation, the reward scheme should be developed by the human resource department in form of policy to guide the process of rewarding health workers nurses inclusive.

There is need to monitor and evaluate the effort and input of nurses in their operations so as to assess the appropriate way to appreciate them. This would call for a combination of engagements that address both living and working conditions as well as payments and the level of accountability. Additionally, it is significant to ensure that all processes and outputs that geared

to nurses are monitored and evaluated to establish the gaps therein and thus devise means to curb them.

It was found ideal to incentivize health service provision targeting operational workers (nurses) with an aim of enhancing their morale to give an excellent and committed service to the national population. Incentives may include though not limited to allowances (lunch, transport, insurance, etc.) day-offs, paid leave, childcare, housing/accommodation, etc. These incentives was found to be stirring factors for performance among healthcare workers especially the financial ones. Incentives do not work in isolation of the working conditions and therefore this entails that both should be prioritized.

It was established that acknowledging employees' effort and contribution could impact on them positively and thus stir up their performance outcomes in the workplace. This is in form of recognition such as certificates, artistic pieces, gifts, prizes, etc. This mainly should apply in instances where there is limited funding that forces not to provide financial incentives. Recognition is a very important in creating ownership among healthcare workers which in an ingredient of improved performance thereof.

Promoting nurses who have served for a relatively long period was found to be an important anomaly that encourages them to work hard. Promotions are also a form of job security that assures health workers of long-stay on job. This envisages reputation and appreciation of long-term service. Promotion enhances health workers' commitment and boosts morale for one to perform to the best of their potential. It is also a platform to exercise some level of autonomy in making decisions that affect one's respective department.

It was thus recognized that career and professional development could serve to motivate health workers. It gives them confidence to perform their roles and responsibilities effectively and efficiently. MNRH should design a career development program that targets nurses to further their professional standards in providing health services to the national population at Mulago. This could be a reward scheme if scholarships programs are included to assist financially constrained individuals. More training is required to deliver more effective healthcare services to patients. Training should be designed to enable nurses meet individual and hospital goals in a realistic but practical manner. This should be best on individuals interested in learning and demonstrate real intent to undergo career development programs.

5.6 Areas for further research

It was expedient to launch an investigation into the effect of team work exhibited among health workers on job performance. This would help to find out how individual input can help in a group setting in the provision of health care services. Team work being a strong bearing factor, health workers need to find out its impact and thus ensure to apply in in their job setting as to the enhancing their output and also achieve hospital objectives.

It was also established that it was beneficial to specifically find out how incentives influence performance among health workers in a holistic manner. Incentivizing service delivery in the health sector would help the workers to realize their value in the service provision chain. Also, this could help in establishing the appropriate reward systems that can be instated in order to motivate health workers to deliver an excellent service to the population.

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APPENDIX I: QUESTIONNAIRE

Dear respondent,

I am a student of Uganda Management Institute pursuing a Master's Degree in Public Administration. I am conducting a study on "*Effect of Occupational Stress on the Performance of Nurses in Mulago National Referral Hospital*". Given your experience, you have been chosen to participate in this study. Your response is therefore very instrumental to the success of this research project. I would like you to be part of this study by responding to the questions herein. Your co-operation will be highly appreciated and the data given is strictly for academic purposes and it will be treated with utmost confidentiality.

Instruction: Please tick where appropriate

SECTION A: BIO DATA

1. Age

18—30	☐	31—40	☐
41—50	☐	51 above	☐

2. Sex

Male	☐	Female	☐

3. Marital status

Single	☐	Married	☐
Divorced	☐	Widowed	☐

4. Educational level

Undergraduate	☐	Postgraduate	☐	Certificate	☐

5. Department/Ward

Maternity	☐	TB Clinic	☐	
General OPD	☐	Pediatrics	☐	
ICU	☐	Other	☐	Specify ……..

Nurses' Working Conditions and Performance

#	Question	SD	D	NR	A	SA
1.	Working conditions affect employee performance					
2.	Health workers' environment can be affected by the work load					
3.	Equipment and supplies affect the nurses' morale to work					
4.	Inadequate resources affect nurses' performance					
5.	Heavy amounts of work increases stress among nurses					
6.	Working overtime affects nurses' effective service delivery					
7.	Number of nurses in departments leads to heavy work load					
8.	Mismatched work roles affect nurses' effectiveness					
9.	Low staffing levels lead to burnout among nurses					
10.	Non-functional equipment in the hospital setting increases workload					

Effort Reward Imbalance and Nurses' Performance

#	Question	SD	D	NR	A	SA
11.	Poor motivation affects nurses' output and performance					
12.	Fringe incentives motivate nurses to perform their roles					
13.	Cash rewards are the most noticeable motivational factors					
14.	Job promotion motivates nurses to effectively perform their roles					
15.	Recognition for achievement motivates nurses to appreciate their work					
16.	Career opportunities reduces stress among nurses					
17.	Retention of workers also motivates to perform effectively					
18.	Rewards creates a healthy working environment for nurses					
19.	Allowances boost nurses' performance					
20.	Rewards improve one's job efficiency and proficiency					

Nurses' Performance

#	Question	SD	D	NR	A	SA
21.	Nurses complete tasks efficiently					
22.	Nurses complete tasks effectively					
23.	Nurses demonstrate initiative as appropriate					
24.	Nurses meet work deadlines as deemed necessary					
25.	Nurses meet formal performance requirements of the job					
26.	Nurses often work beyond office hours					
27.	Nurses read and follow all announcements, memos, and others given out to staff					
28.	Nurses keep up to date with changes introduced					
29.	Nurses help colleagues who have problems/challenges with their work					
30.	Nurses help colleagues with a heavy workload					

Thank You

APPENDIX II: INTERVIEW GUIDE

1. How do working conditions affect employee performance?
2. Describe how heavy amounts of work increases stress among nurses?
3. To what extent do low staffing levels affect nurses' performance?
4. How have non-functional equipment in the hospital setting increased nurses' workload?
5. How has poor motivation affected nurses' output and performance?
6. Explain how promotion/job security motivates nurses to perform their roles effectively?
7. Describe how rewards create a healthy working environment for nurses?
8. How do policy guidelines affect work place culture in the hospital setting?
9. How have hospital policy guidelines set direction of the day to day work activities?
10. What shows that nurses have read and followed all announcements, memos, and other information or communication given to them?
11. What signs show that nurses help their peers with heavy workload in your department?
12. How effective have nurses completed their tasks?

APPENDIX III: KREJCIE AND MORGAN (1970) MATHEMATICAL TABLE

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note:

N=Population

S=Sample

APPENDIX IV: LETTER OF INTRODUCTION

APPENDIX V: PLAGIARISM TEST REPORT