FLEXIBLE WORK ARRANGEMENTS ON PERFORMANCE OF NURSES IN REGIONAL HOSPITALS IN TANZANIA

ELISIFA EZEKIEL NNKO

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Flexible Work Arrangements on Performance of Nurses in Regional Hospitals in Tanzania

Elisifa Ezekiel Nnko

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DECLARATION

This thesis is my original work and has not been submitted for a degree in any other University.

Signature …… Date ……..

Elisifa Ezekiel Nnko

This thesis has been submitted for examination with our approval as University Supervisors

Signature..... Date ……..

Dr. Samson Nyang'au, PhD

JKUAT, Kenya

Signature……. Date…….

Prof. Romanus Odhiambo, PhD

Meru University, Kenya

DEDICATION

I dedicate this work to my late father, Mr. Ezekiel Nnko who never lived to see the fruits of his labour; to my husband, Richard Mpoki Mwankusye who has been my pillar during this journey; and to my children Faith Blessing and Favour Grant whose young lives have been disrupted during this journey, and who gave me the reason to forge forward and to work very hard all the time, every time, every day.

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LIST OF ABBREVIATIONS AND ACRONYMS

CLRM	Classical Linear Regression model
FWAs	Flexible Work Arrangements
GoT	Government of Tanzania
HIV/AIDS	Human Immune Virus/ Acquired Immune Deficiency Syndrome
HR	Human Resource
HRH	Human Resource for Health
HRM	Human Resource Management
HSSP	Health Sector Strategic Plan
ILO	International Labour Organization
JKUAT	Jomo Kenyatta University of Agriculture and Technology
MDG's	Millennium Development Goals
MoHSW	Ministry of Health and Social Welfare
NBS	National Bureau of Statistics
NIMR	National Institute of Medical Research
NSTGRP	National Strategy for Growth and Reduction of Poverty
RNs	Registered Nurses
SPSS	Statistical Package for Social Sciences
SSA	Sub Saharan Africa
TNMC	Tanzania Nursing and Midwifery Council
TPSA	Tanzania Service Provision Assessment Survey
UK	United Kingdom
URT	United Republic of Tanzania

USA	United States of America
VIF	Variance Inflation Factor
WFB	Work Family Balance
WHO	World Health Organization
WLB	Work Life Balance

DEFINITION OF TERMS

Compressed Work Schedule The compressed work week allows the employee to work full-time hours in less than a five-day workweek or over a two-week period (Belman, 2014).

Compressed Work Week Is a program designed to allow eligible full-time staff members to work longer scheduled days of work with intent of working fewer than 10 work days in each pay period (Songstad *et al.*, 2013).

Flextime Refers to a programme that allows the employee to begin and end work at non-standard times, within approved limits. The employee still works the same number of hours per day or week. (Gillespie, 2011).

Innovative Work Behavior Is defined as "the intentional creation, introduction and application of new ideas within a work role, group, or organization to benefit role performance, the group, or the organization (Rasheed, Khan, & Ramzan, 2013).

Flexible Work Arrangements Flexible work arrangements refer to purposeful workplace options, formal or informal, that provide employees with choices over when, where and how long they work (Berg, Kossek, Misra, & Belman, 2014; Eldridge & Tahir, 2011). In this thesis, flexible work schedules, flexible work arrangements, alternative work schedules were used interchangeably.

Job sharing	Refers to the practice in which two employees share the responsibility of one full-time position by splitting the hours and responsibilities (Allen, 2012).
Leave	Leave is a period of time that one must be away from one's primary job, while maintaining the status of employee (Bosua, *et al.,* 2013).
Midwife	Means a person who is authorized by a license issued under Tanzanian Nursing and Midwifery Act to practice midwifery as an enrolled or registered midwife (Kelliher, & Anderson, 2010).
Nurse	Means a person who is authorised by a license to practice as an enrolled or a registered nurse under TNM Act, (2010).
Nurses' Performance	Refers to how well the clinical jobs assigned to a nurse are fulfilled (Wang, Liu, & Cong, 2012). In In this thesis, Nurses' performance and Perfomance of Nurses were used interchangeably.
Part Time Work	A regular work pattern where an employee work less than full-time and are paid on a pro-rata basis for that work (McCarthy *et al.,* 2012; Clark, 2012).
Productivity	It refers to the work output in the delivery of care. This includes use of efficient processes (Gillespie *et al.,* 2009).
Regional Hospitals	These are regional centers which provide specialized care, including intensive care, life support and specialist consultations and are referral point for

	the District Hospitals (Mackintosh, 2013). In this thesis, both regional hospital and regional health care were used interchangeably.
Supervisor support	The degree to which employees feel their supervisor cares about them and their well-being and values the contributions they bring to the organization (Arakeri, 2013; Bowen, 2011; Eisenberger *et al.*, 2002).

ABSTRACT

Nurses' performance level is cornerstone for better performance of health care organizations. Nurses' performance remains long standing determinates of quality service rendered for patients admitted to hospitals. In similar vein nurses are commonly exposed to fixed shift work and long work hours with limited opportunity to pursue more flexible work options. These demanding schedules can lead to difficulties related health impairment and decreased performance. Therefore, flexible work scheduling is a particularly important issue in nursing, which is characterized by a highly feminized workforce and widespread workforce shortages. This thesis examined the influence of flexible work arrangements and performance of nurses in regional hospitals in Tanzania. The specific objectives were five and included: to examine the influence of work scheduling; to establish the influence of job location; to determine the influence of work load; to evaluate the influence of job continuity and to articulate the moderating effect of supervisor support on the influence of flexible working arrangements on performance of nurses in regional hospitals in Tanzania. The researcher presented a broad literature review including review of Job Demand-Resource theory, Spillover theory, Social Exchange theory, Expectancy theory and Path-Goal Leadership theory. The study adopted explanatory research design using both quantitative and qualitative approaches. A target population of 1347 from 8 regional hospitals which a sample size of 404 was randomly selected. The questionnaire was pilot tested on 40 respondents drawn from two regional hospitals. Reliability of the questions was done by use of Cronbach's alpha. Normality test was done for dependent variable in order to aid subsequent analysis. The study conducted various tests including normality test, multi collinearity, heteroscedasticity and autocorrelation tests. Factor analysis was carried out among corresponding questions to allow formation of factors with the highest Eigen values. The data obtained was analyzed using both qualitative and quantitative analysis. Qualitative data were entered, coded and analyzed using summative content analysis and presented in percentages, in tables, figures and charts. Correlation analysis was used to test the direction of relationship between the independent variables and dependent variable. Multiple regressions were used to test whether work scheduling, workload, job location and work continuity had any influence on nurses' performance. The study established that work scheduling, workload, job location and work continuity contributed positively to nurses' performance. Furthermore, supervisor support was found to have a significant moderating relationship between the influence of flexible work arrangements and performance of nurses in regional hospitals in Tanzania. Based on the findings, the study concluded that work scheduling, job location, workload, job have a positive and significant effect on nurses' performance. Moreover, the study concluded leadership support had a significant moderating effect on the relationship between flexible work arrangements and performance of nurses in regional hospitals in Tanzania. The study recommended that hospital leaders should embrace flexible work arrangements and lead by example to promote nurses' performance. Also, the study recommended that government should enforce labour laws and regulations related to work place flexibility.

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Achieving work life balance and spending quality time with families is the target of every individual worker, especially among these health workers (Watson & Stimpson, 2012; Podner & Colob, 2013; Bangser, 2012). Nicklin and McNall (2013) considered family and work the two most important domains within any individual's life. Therefore, achieving harmony between work and one's personal life is becoming increasingly important from both the employer and employee perspective (Mušura *et al*., 2013). The balance between these two domains is critical to any working person or business owner's life as a strong link exists between work–family balance and overall employee performance (Roberto, Gupta, & Mosca, 2011). High rates of employee job satisfaction are associated with high commitment levels and elevated productivity (Rama Devi & Nagini, 2013 whereas competing work and family commitments have a negative effect on employees in the form of reduced productivity (Ajala, 2013). Work–life balance or quality of life programs pertain to the impact of work on people as well as on organizational effectiveness (Pawar, 2013).

Studies by Sanz-Vegal *et al.*, 2014) indicates that working conditions in health sector have changed increasingly since the 1980s due to the internationalization of investment, production and business, the use of new technologies, the emergence of recent forms of work organization. These factors have changed the forms of working arrangements where the Flexible Working Arrangements (FWAs) is the most significant one (Murriel, 2013; Oswald, 2012). In addition, the growth of female participation in employment in particular women with children is one of the most important developments in the labour market where the change has led to an interest to (FWAs) (Treadway, Duke, Perrewe, Breland, & Goodman, 2011). FWAs serves as a balancing arrangement between work and family responsibilities for working parents especially for child caring, looking after ageing people and career breaks for female employees.

According to Rwat, (2014) the ever-increasing demand for qualitative health care services expands the roles of healthcare managers in the improvement of their health workers performance. It is worth noting however, the performance and efficiency of health workers (which includes nurses) plays an important role for the success of any healthcare system. Based on the literatures (Myers & Kwansas, 2010; Podnar & Colob, 2013) nurses constitute more than half of all health care providers in the health sector and, compared with other providers, spend the most time with patients. Therefore, improvements to patient safety can be achieved by improving nurse performance (Songstad *et al.,* 2011). Globally, the health sector job design is characterized by long working hours, heavy workloads and demanding work activities, which always bring challenges to its employees, thus, causing a critical challenge to employee job performance. In fact, Munir *et al.,* (2012) claims that, most organizations have realized that taking care of their employees' work-life and family issues dilemma can help in the performance improvement among their employees.

Moreover, organizations' wish of increasing positive organizational behavioral outcomes to their employees, must embrace a supportive leadership that is geared towards the attainment of Work-Life Balance initiatives within the respective work organization. Rwat, (2014) asserts that as one of the environments that involve busy work schedules, hospitals are complex and dynamic organizations that provide services 24 h a day and seven days a week; they operate with an open system and matrix structure. Tibandebage (2014) indicates that Tanzanian public hospitals provide extensive healthcare services and many of the healthcare personnel working in public hospitals are nurses (Howard, 2012). However, Songstad (2013) opine that the physical and psychological health of nurses are jeopardized because they spend more time providing direct care to patients than other healthcare professionals. Basing on different perspectives, the World Health Report (WHO, 2012) and a range of other reports find that the performance of health workers in many low-income countries is sub-optimal. In similar vein, (Kotey & Sharma, 2016) asserts that when

health workers performance is poor, an organization may not be able to offer quality healthcare and this will negatively affect its sales, profits and company reputation.

Therefore, effective healthcare services require individuals providing such services to be physically and mentally healthy (Deery, & Jago, 2015), which is only possible in healthy/positive work environments. A positive work environment involves the "creation of a business environment where policies, procedures and systems are designed for the employees to fulfil institutional goals and achieve personal satisfaction in the workplace" (Kattenbach *et al.,* 2010). In other words, a healthy work environment involves practices carried out to increase the health and well-being of nurses, quality of patient care and social outcomes and institutional performance to the maximum level (Mubeen & Rashid, 2012).

Studies have identified a number of ways that can help individual nurses strike a balance between work-related and non-work-related activities without necessarily compromising their work objectives, individual and family happiness, morale and dedication to work) (Duchon & Smith, 2014; Bemelmans *et al.,* 2011; Galinsky *et al.,* 2011). Therefore, many health sectors now consider FWAs to be the most important factors in achieving patient and employee safety, quality care and favorable patient outcomes (DeConinck, 2011). Flexible, non-standard or alternative work arrangements are options that allow work to be accomplished outside of the traditional boundaries of a standard organization of work in terms of different dimensions: amount, distribution of working time and place of work (Kattenbach *et al.,* 2010; Spreitzer *et al.,* 2017). Flexible work arrangements (FWAs) enable flexibility in work design of employees, which could lead to increased flexibility for organizations, better work-life balance and improved organizational performance. Zhang and Liu (2011) contend that flexible work arrangements can improve recruitment and retention efforts, augment organizational diversity efforts, encourage ethical behavior and help the organization's efforts to be socially responsible. This impliedly is stating that, employers can experience cost savings, improved attendance and productivity, and an increase in employee engagement. Previous studies have pointed out the

significance roles of applicable laws in the decision of whether to implement flexible work arrangements (Swere, 2016; Majinja 2013; Kotey & Sharma, 2016).

At the same time, Gunavathy (2011) articulated that over the years, varied forms of working time arrangements have been developed and practiced to contribute to greater efficiency. Not all of these arrangements have worked to promote the overall well-being and productivity of workers. Nonetheless, an organizational leader's perception of whether or not work-life programs have a positive return on investment (ROI) determines his or her commitment to such initiatives (Sarwar & Aftab, 2011). Therefore, flexible work practices should be supported by a human resource (HR) strategy with accompanying policies, practices and procedures. Development, implementation and evaluation of HR strategy require a considerable organizational investment to do it well. Therefore, assessing the influence of FWAs on nurses' performance is imperative in evaluating the benefits of such programs on the overall performance of the healthcare organizations (Wang & Verma, 2012).

1.1.1 Global Perspective on Flexible Work Arrangements and Performance of Nurses

In today's society, workplace pressures continue to mount globally. Work target demands, family pressure and the pressure to balance the two have taken a toll on most employees' health and wellbeing (Parus, 2010). Globally, social, economic, and technological changes in the past 10 years, has forced workers in some industries such as healthcare sector to operate under inflexible hours, irregular shifts and at times, elongated shifts (Twigg, Duffield, Bremner, Rapley, & Finn, 2011). As a result, the report of nurses' performance survey by Gallup (2016) indicated that the global level of nurses' performance (Tanzania inclusive) has been nose-diving since 2010 until 2015. The poor performance of health workers globally has been a cause of worry because of the report that only 26.7% to 30.0% of the nurses reported at least one medication error, and 33.0% to 37.8% reported at least one near-error, over a 28-day period resulting into 23% of hospital related deaths (Balas, 2014). A number of studies identified numerous factors as potentially contributing to medication errors (Duchon & Smith, 2014).

Bemelmans *et al., (*2011) indicates that nurses have been greatly affected by some of the changes in healthcare over the past decade attributed measures to decrease costs, resulting in extended work shifts. Studies by Duchon & Smith, (2014); Bemelmans *et al., (*2011) indicates that extended work schedules, is becoming problematic for the nursing profession. Globally rigid working practices are estimated to affect 350 million health workers and is one of the leading causes of burnout (Aiken *et al.,* 2012). The European Working Conditions Survey (EWCS, 2014) revealed that an estimated 4 million nurses' performance in the EU health settings was affected by irregular working-related factors (EU-OSH, 2012).

Empirical evidence indicates that in Spain, the direct health cost of mental and behavioral disorders attributable to over work was estimated at between €150 and €372 million in 2012. In the same year, 2.78 million days were lost to sick leave caused by work-related mental illness, equivalent to a loss of €170.96 million (EU OSHA, 2014). According to Fu-Jin, Shieh & Tang, (2010), some nurses work just 36 hours a week in Turkey. But those hours are sometimes compressed into three 12-hour shifts, sometimes on consecutive days (Berry & Curry, 2012; Stanton, 2014). Similarly, Trinkoff, (2011) indicates that nurses in Australia and Canada experienced long work hours and extended days, high workload and psychological strain, deprived sleep and work family conflict as a result of work life imbalance. Consequently, different studies have shown that nurses tend to make more errors during work like needle stick injuries and medication errors, which may also cause patient dissatisfaction (Stimpfel *et al.,* 2012; Kunaviktikul *et al.,* 2015; Trinkoff *et al.,* 2011).

Globally, the relationship that exists between work life balance practices and employee's performance in health sector has been studied by different authors (Treadway, Duke, Perrewe, Breland, & Goodman, 2011). Work-life balance policies define how the organization intends to allow employees greater flexibility in their working patterns so that they can balance what they do at work with the responsibilities and interests they have outside work. The policy indicates how flexible work practices can be developed and implemented. For stance a survey of

732 companies conducted in Germany, France, USA, and the UK revealed that the flexible work arrangements were associated with the employee's performance. However, the study also showed a conflict between work life practices and high performance within the companies.

For flexible working arrangements to flourish in health sector and contribute to employee performance different factors must be put in place. Christiensesn and Staines (2013) deduced that individualized consideration (supportive leadership behavior) which includes the leader's support of work and non-working affairs helps to promote nurses' sense of commitment, self-efficacy, and motivation. The study undertaken by Invanovic & Collin (2016) in Finland found that supportive leadership enhances the relationship between superiors and employees and improves levels of employee performance. In this regard, the supportive leader plays an important role in motivating employees by providing them with a friendly and pleasant environment, thus decreasing their job stress and helping them to work in a better way.

Stichting, Arbeidsmarkt & Ziekenhuizen, (2014) points out that the European Working Conditions Survey of 1991 to 2010 showed that in Europe about 20% of the employees had difficulty balancing their paid work and private lives. This leads to high costs for individual employees as well as for organizations (Ahmad, Che & Jamal, 2010). The Netherlands achieved a more positive score compared to Europe since the Netherlands was appointed as the third best country regarding work life balance (Business Culture, 2014). Therefore, employers, faced with skyrocketing healthcare costs, global competition and economic uncertainty, are concerned about attracting and retaining high quality employees and delivering superior organizational performance. As a result, some companies such as Apple in United States, Nokia in China and British Bureau of Statistics in London among others have responded to this business challenge by taking care of their employees work life issues. (Duchon & Smith, 2014; Bemelmans *et al.*, 2011).

Griffins, *et al,* (2014) asserts that the way work is organized and performed is shaped by the structural components of health care institutions. Organizational culture,

administrative capacity, and consultation or negotiation mechanisms impact the working time arrangements and working conditions of nursing personnel. Interviews with nursing personnel and other health professionals from Brazil, South Africa, and the Republic of Korea revealed the presence of rigid hierarchical structures and ineffective lines of communication within institutions. These conditions affected the organization of working hours, and contributed to low motivation and the undervaluing of the nursing profession.

For instance, Regus Global Report (2011) shows that while 53% of Belgian managers believe that flexible working improves employee motivation, only 43% of South African managers share the same opinion. In turn, these differences in attitude will likely result in different levels of acceptance and implementation of flexible practices.

Furthermore, Lawson *et al.,* (2013) examined the work-family spill over among hotel managers in the US. The study revealed that work conditions which demanded employees to work longer hours with higher organizational expectations resulted in engaging a highly intense emotional labour and put employees at risk of experiencing more negative work family spill over. Moreover, the study also found that women, employees with children at home and younger adults reported less stressful work conditions. This suggested that these groups of employees may be choosing work with minimal demands to balance time work and non-work activities. It also suggested that parents with children at home preferred to work in a department with standard working hours and women preferred work with less contact with clients to reduce emotional burden.

1.1.2 Regional Perspective on Flexible Work Arrangements FWAs

The performance and efficiency of health workers play an important role for the success of healthcare system in developing countries. For instance, Berry & Curry, (2012) opined that nurse constitute the largest human resource element in any healthcare sector, and contribute significantly to the overall healthcare of the nation. Their performance therefore, has a great impact on quality and efficiency of

healthcare. Stanton, (2014) reported that since the 1990s, the health care sector in Africa has endured many changes, including restructuring and downsizing. A result of these changes the report by WHO (2011) estimated that 20% to 25% of the general population work outside typical business hours including healthcare providers, and specifically registered nurses.

The report by Songstad, Rekdal, Massay, and Blystad (2011) asserts that in Tanzania, the health care personnel public hospitals work under appalling working conditions limiting their ability to deliver quality services to public. Further the same report indicated that nurses and midwives are said to experience difficulties in meeting the task requirements as delegated by the employer (Gunavathy, 2011). In similar way, Walsh, Ndubani, Simbaya, Dicker, & Brughar, (2011) opined: that as a result of staffing shortages in Zambia, working irregular hours, including nights and shifts, was inherent in the nursing and medical profession despite the fact that shift work has been acknowledged as an occupational health and safety challenge for many years ago.

Furthermore, in countries such as Zimbabwe and Cameroon, it has been found that hospital-based health care providers are expected to work harder and quicker and even do overtime in a non–supportive environment characterized by high prevalence rates of infectious diseases as well as high patient turnover rates. This puts them at a higher risk of committing medical errors (Twigg, Duffield, Bremner, Rapley, & Finn, 2011). A number of studies have revealed that flexible work arrangements is a "cornerstone upon which rests a number of positive business outcomes such as productivity, improved bottom lines, growth, customer satisfaction, employee retention and safety" (Bhowal & Saini, 2015). The increase in in recommendation of utilization of FWAs in public hospitals is probably due to the fact that provision of a positive working environment is crucial for the wellbeing of the employees, the patients as well as the organization (Chipeta, 2011; McNall, Masuda, & Nicklin, 2010; Skinner, & Pocock, 2011). The findings of these studies are supported by (Christensen & Staines (2013) who asserted that the issues of excessive workloads, irregular shifts and long working hours as these have been found to be the major

predictors of job dissatisfaction, high levels of burnout, low morale fatigue and emotional exhaustion among health care workers.

Oloitiptip & Gachuga, 2012; Mukururi & Ngari, 2014) sought to establish the effects of flextime work arrangement on employee performance in Nairobi CBD Commercial Banks. This research adopted a survey descriptive design. From the findings, the study showed that flextime work arrangement influences employee performance in Nairobi central business district commercial banks. The study exhibited the availability of flextime work arrangement across Nairobi central business district commercial banks. The study recommended the need for banks and other sectors to improve the use of flextime work arrangement among their WLB policies as the enhancement of this schedule has been found to positively affect employee performance. Furthermore, a report by Ossioma, (2016); Tower Watson Data Services (2012) indicates that Nigerian banking industry suffered an increase in employee turnover from 11% in 2010 to 15% in 2011, despite a 5.3% increment in salary. Mbaruku *et al.,* (2014) suggests that the rate of acceptance of flexible human resource practices by an organization is intertwined with other organizational factors such as corporate culture and work systems.

Awes (2013) investigated the concept of work-life balance policies and practices in three sectors of the Namibian Economy namely the Banking, Educational and Power Sector. The types of Work Life Balance initiatives available in the three sectors were explored and the barriers to implementation of the Work Life Balance initiatives were identified. The findings reveal that there is diversity in terms of how respondents perceive the concept of Work-Life Balance. Also, there was a wide gap between corporate Work Life Balance practices and employees understanding of the concept; the paper suggests some policy implications which would aid the implementation of Work Life Balance policies in the studied sectors.

An empirical study undertaken by Ahlborg *et al*., (2012) in Ghana found that nurses work in a system of shifts and night duties, and they are subjected to excessive work load, long working periods without breaks, tiring and irregular working hours, role confusion, lack of support from managers, low professional status and distressful

work relationships (violence, weak communication, mean or harassing behaviour), which result in unhealthy work environments for nurses

The study by Shahhosseini, Silong & Ismaill, (2013) found low performance among practicing nurses in Ghana. Many respondents reported low satisfaction influenced by the high workload and difficult working conditions, perception of being 'forgotten' in rural areas by the Ministry of Health (MoH), lack of professional advancement and the lack of formal learning or structured mentoring**.** Studies indicates that although some developing countries such as Kenya, (Mukururi & Ngari, 2014), Tanzania (Munga, Mutalemwa, Kisoka, & Malecela, 2012); Ethiopia (Tenaw and Negash (2012), Malawi (Chipeta, 2014), Namibia (Awes, 2013) et cetera are beginning to embrace flexible working compulsory overtime, poor pay, work overload and understaffing force workers to contend with long hours which leads to frustration, burn out and frequent strikes. This eventually leads to loss of lives in extreme cases, hence the urgent need to address dynamics around flexible work arrangements and performance matters among nurses.

1.1.3 Local Perspective on Flexible Work Arrangements

The health sector organizations and other sectors in Tanzania have realized the importance of work life balance policies and practices in improving employees' performance (Christensen & Staines, 2013; Manzi *et al.*, 2012). Sawere (2014) notes that the most critical factor driving health system performance in Tanzania, the health worker, was neglected and overlooked for long. Paradoxically, in countries of greatest need, the workforce is under "attack" from a combination of unsafe and unsupportive working conditions and workers departing for greener pastures. The study further indicates that while more money and drugs are being mobilized, human resources for health, remains underfunded. This is contributed by the underfunding of the health sector (Bosua *et al.,* 2013).

According to Mbaruku *et al.,* (2014), one of the first steps to achieve the goal of health in Tanzania is to ensure access to health care workers with enough resources and capacity to deliver quality care. However, the flexible work arrangements in

Tanzania have not been what it should be despite structures put in place according to the findings of empirical studies. The ILO (2012) report indicates that there are many other policies aiming at improving the health system and health care provision in Tanzania. However, according to URT, Annual Report, (2015) Tanzania performs relatively low for flexibility of workforce, ranked 12th in the region with a score of 35.1 out of 100. Manzi (2014) asserts that nurses employed in the regional hospitals, especially in the ICU, struggle with different issues such as, job features, workload, high level of physical, mental, and emotional stress in the workplace which may affect their job satisfaction, and they are mostly dissatisfied with their job.

Furthermore, the study by Paula, Tausi & Mackintosh (2016) in Iringa regional hospital indicated that, due to lack of healthcare workers in Tanzania and especially in geographic remote areas nursing staff need to perform beyond their formal education level in the will to provide care affecting nursing staff working morale. The study further found that, nurses have to perform beyond their formal education level in the will to provide care and sometimes to save lives From the study, it can be concluded that a conducive working environment in all aspects of an organization is nessessary to boost output of the nurses. In Tanzania, empirical studies have pointed out that the both social, political and economic problems have been responsible to myriad of FWAs challenges that nursing personnel face in public hospitals (Manzi, *et al.,* 2012; Printz *et al.,* 2013; URT, 2012). According to Howard, (2013), Tanzania health sector is challenged with inadequate fund, shortage of fully trained health staff, poor communication and transport infrastructure among others.

Johannesson & Nystrom (2016) conducted a study in two despensaries to assess staff's experience of working in rural Tanzania. The findings revealed that nursing staff were required to provide nursing services through working beyond their education level due to severe shortage of health workers. Furthermore, inadequate resources, which indicates lack of staff, facilities, equipment and medicine were pointed out as the challenges limiting their efforts towards provision of quality services.

The public health sector in Tanzania has been undergoing a number of reforms with an anticipated improvement in the quality of health care staff. Through a decentralization process starting with a range of parliamentary acts in 1982 (Zondwa & Elsie 2017), their important reforms include a new performance appraisal system implemented in 2005, while the introduction of a results-based payment scheme was planned in 2010 (Shannon & Mchannon (2014). According to Songstad and Masay (2012) several recent Tanzania national documents emphasize the importance of a motivated health workforce. The Health Sector Strategic Plan July 2015 - June 2020 states that the Ministry of Health, Gender and Social Welfare will ensure that "good performance is achieved and better rewarded, and that, our health workers are motivated" (Kaaya, 2014; Kwirijila 2014). Throughout this document the importance of the strategic approaches to enhance health workforce performance is emphasized.

Mhechela, and Jackson (2015) undertook a study on the influence of workplace stress on employee performance at Mbeya regional hospital in Tanzania. The objectives of the study were to assess the employees' performance, to assess the stress levels among employees, and to determine the extent to which employees' performance is related to their stress levels. Using stratified random sampling, the findings reveal that majority of doctors; nurses and medical attendants experience high level of job performance accompanied with moderate level of work stress. Further, the results indicated that workplace stress subscales were insignificantly positively related to employees' performance. The results suggested that work place stress keeps employees on their toes leading to better performance.

The link between FWAs and other organisational outcomes such as nurses perfomance has been found in Tanzania (Mujinja, 2015), in Nigeria (Chionu 2016), in Zambia, (Chipeta (2014), in South Africa (Rosa & Coligan, 2012), in Kenya (Oloitiptip & Kiprotich, 2014), in Uganda, (Angundaru, Lubogoyi, & Bagire, Berry &Curry, 2012) and in Ghana (Ahlborg (2015). However, the studies conducted in Africa in this regard have been limited and narrow. Sectors such as healthcare, hotels and tourism have been unintentionally neglected by the previous studies (San-Vegal

et al., 2011; Onyishi, & Rodriguez-Sanchez, 2014; Orogbu, Onyeizugbe, Onwuzuligbo, & Agu, 2016; Ogboso & Edwinah, 2017; Baltes & Mathews, 2011; Olugbade & Karatepe, 2018).

1.1.4: Tanzanian Health Sector

Tanzania has a hierarchical health system which is in tandem with the political-administrative hierarchy (Msuya, *et al.,* 2017). The sector comprises of 913 dispensaries, 719 health centres, 219 district hospitals, 28 regional hospitals, 8 zonal hospitals and 4 specialized/national hospital (NHSSP, 2014). There are also some specialized hospitals that do not fit directly into this hierarchy and therefore are directly linked to the ministry of health. The government is by far the largest employer of health workers in Tanzania running 64.2% of the health facilities while employing 74% of the health workers (Mujinja, 2013).

Based on literature, the Tanzanian health sector has undergone tremendous changes in the last two decades (1990-2010). It has expanded and at the same time encountered many challenges in terms of poor services and customer disatisfaction (Manzi, *et al.,* 2012; Mbaruku *et al.,* 2014). Ishijima and Eliakimu, (2014) opine that in Tanzania, the human resources for health per population one (1) medical doctor per 20,010 populations while WHO recommends one (1) medical doctor per 4000 population, and one (1) nurse /midwife per 1374 populations while WHO recommends one (1) nurse/midwife per 492 populations. Over the years, public hospitals in Tanzania have myriads of challenges and problems which majorly includes inadequate fund, shortage of fully trained health staff in the hospitals, poor communication and transport infrastructure. (Mussau *et al.,* 2012). This state is worrisome; especially when Tanzanian government's policies, support and incentives on health sector are taken into consideration (Mselle, 2011)

According to Mamdani and Bangser, (2012) the regional hospital is the last referral point at the regional level in Tanzania and comprises of beds ranging from 176 to 450 with 9 or more wards. Table 1.1 shows; there are 6,885 public hospitals in Tanzania whereby among them, 28 are regional hospitals locate in each region.

Studies have reported the increase in patient admissions in regional hospitals probably due to the high costs of private hospitals, rapidly growing urban populations, poverty and the associated diseases, as well as the escalation of Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) (Bamelmans, *et al.*, 2012; URT, 2012; ILO, 2012) leading to irregular work scheduling among healthcare staff. Based on the literature reviewed, it was realized that nurses in regional hospitals are not performing well and that was why the sector was being studied.

Barker, & Nussbaum, (2011) asserts that, irregular working practices and increased workload due to few numbers of staff in public hospitals have been found to be a major complaint among health care leading to physical and cognitive effects on health care personnel. At the same time, concerns about inadequate equipment, such as beds, have been reported, as negatively impacting on service delivery and the quality of patient care. (Munga, Kilima, Mutalemwa, Kisoka, & Malecela, 2012).

Table 1.1 Number of Public Hospitals in Tanzania

Administrative	Level	Number of Hospitals
National Level	Referral/Specialized hospital	4
Zonal Level	Zonal Hospital	8
Regional Level	Regional Referral Hospital	28
District Level	District Hospital Service	219
Divisional Level	Health Centre Service	711
Ward Level	Dispensary	5913
Total		6885

Source: URT, Human Resource for Health & Social Welfare Strategic Plan, 2014–2018.

Despite the fact that, the employee normal working hours in Tanzania are 8 hours per day and 45 hours per week (Answegen, 2017; ILO, 2016; ELRA, 2004; & Mmbaga, 2015) nurses work more than 12 hours in public hospitals, do compulsory overtime, unpaid shifts, and therefore become less productive (Songstad *et al.*,2013; Kayombo & Mahunnah; 2012; Darby, *et al.,* 2014). Also, despite the comprehensive policies and guidelines on flexible working, translation from policy into practice is a

challenge and still, nurses' performance is a common problem in public hospitals (Chimhutu, 2014; Mussauet, 2012; & Printzet, 2013).

Few and very scanty empirical studies have been conducted on the influence of FWAs on performance of nurses in regional hospitals in Tanzania. Tanzania being the largest economy in Africa continent but with dearth and scanty empirical study of the influence of FWAs on the performance of nurses in regional hospitals, made it imperative to fill this seemingly wide knowledge gap. Also, over the years, the performance of nurses has been declining despite all efforts and policies put in place by the government of Tanzania, the latest report of 2015 scores from the global customer satisfaction index are still not impressive and call for concern (Margaret *et al,* 2014).

Therefore, the study filled the gap by assessing the influence of FWAs and nurses' performance in regional hospitals in Tanzania.

1.2 Statement of the Problem

In today's competitive environment, it is imperative that all organizations create a work environment that fosters growth and development (Al-Maskari *et al.*, 2011). Experience has shown that when flexible work arrangements are properly aligned and carefully implemented with the business objectives of the organization, there will high employee satisfaction, high increased productivity, low employee turnover and there will be high employee performance (Zastocky & Holly, 2010). International insights and empirical studies show the importance of balanced, healthy and supportive nurse practice environment and psychosocial work environments to achieve and sustain stable and high performance. The findings of Sulivan and Decker (2011) and Watson and Stipson (2012) corroborate Whyman *et al.,* (2012) when they found out that FWAs improves the level of nurses' performance. Likewise, another study found out that supportive supervision has been demonstrated to be of importance for the FWAS to flourish and steer up the quality of services delivery (Sulivan & Decker, 2011). Therefore, if regional hospitals embrace workplace flexibility there will be increase in performance and productivity among its

workforce. However, when employees are denied the opportunity to work flexibly, these organizations will record losses as a result of employee performance decline.

The performance of nurses in regional hospitals attested to this, because over the past 20 years, Tanzania has witnessed a tremendous decline in performance of nurses in public hospitals despite various government interventions (Shannon & Mchannon, (2011; Mujinja, 2013; Leshambari *et al.,* 2011). Recent studies in Tanzania indicates that nurses are accused of absenteeism, untimely services provision to their clients (Annual health sector performance report, 2012/2013), low productivity (Shanon *et al.,* 2014); poor attitude toward clients (Margaret *et al.,* 2014) and poor quality of health care services provided to clients (Manongi *et al.,* 2012). This situation has been prompted by both shortage funds and human resource for health, high rate of both communicable and non-communicable diseases among others (Songstad, Rekdal, Massay & Blystad, 2011, Shannon *et al.,* 2014). As a result, cases of industrial actions or medical strikes have become a major occurrence in today's medical world and have become a common place by health workers raising grievances about their working conditions. Amidst these actions, the question of nurses' performance come to the fore (Bemelmans, 2011; Munga & Maestad, 2012; Howard, 2013)

Prior studies claim that less performing nurses will affect government revenue in terms of reduced hospital productivity, poor hospitalized patient health outcomes, increase recruitment costs associated with high employee turnover, or industrial unrest (Attia, *et al.,* 2014; Menezes & Kelliher 2011). On the other hand, breadwinners in the society will find it difficult to make ends meet because of the economic hardship that underperforming healthcare employees brings Koivisto & Rice (2016). Meanwhile, full implementation of flexible work arrangements (FWAs) is the solution to the nurses' performance. However, studies (Mijinja, 2013; Howard, 2014; Mbaruku *et al.,* 2014) indicates that healthcare organizations in Tanzania lack policies that support the well-being of employees' families. The regional hospitals are not an exception. Despite the fact that policies have been documented in the staff rules and regulation and the collective bargaining agreement for union staff, the

health sector has not made deliberate efforts to implement the policies and majority of the staff especially nurses work for long hours, irregular and elongated shifts, experience heavy workload and they experience fatigue in the workplace (Yohana & Kahambwa, 2011).

Based on the literature reviewed, the FWAs in regional hospitals is poorly implemented and plagued with myriad of unethical practices which include bias, favoritism, preference by the management, selection discrimination (Ishijima & Eliakimu, 2014; Manongi, 2013; Whyman *et al.,* 2014). Failure to implement FWAs effectively means irregular work practices are having an adverse effect on the health of employees. Most previous studies on influence of FWAs on performance of nurses have been conducted in developed countries and those conducted within Tanzania were not on regional hospitals (Kirwan, Matthews, & Scott, 2013; McDonough, 2013; Howard, 2014; Mselle, 2011). In Tanzania, not much research has been done on the influence of FWAs on nurses' performance in regional hospitals. Therefore, it is against this backdrop that this study intended to assess the influence of FWAs on performance of nurses in regional hospitals in Tanzania.

1.3: General Objective

The general objective of this study was to examine influence of Flexible Work Arrangements on Performance of nurses in regional hospitals in Tanzania.

1.3.1 Specific Objectives

1. To examine the influence of Work scheduling on performance of nurses in regional hospitals in Tanzania,
2. To establish the influence of job location on performance of nurses in regional hospitals in Tanzania,
3. To determine the influence of workload on performance of nurses in regional hospitals in Tanzania,
4. To evaluate the influence of Job continuity on performance of nurses in regional hospitals in Tanzania.

To articulate the moderating effect of supervisor support on the influence of flexible work arrangements and performance of nurses in regional hospitals in Tanzania

1.4 Research Hypotheses

The following alternative hypotheses were tested to determine the influence of each independent variable on the dependent variables.

H_{A1}: Work scheduling had a positive significant influence on performance of nurses in regional hospitals in Tanzania

H_{A2}: Job location had a positive significant influence on performance of nurses in regional hospitals in Tanzania

H_{A3}: Workload had a positive significant influence on performance of nurses in regional hospitals in Tanzania

H_{A4}: Job continuity had a positive significant influence on performance of nurses in regional hospitals in Tanzania

H_{A5}: Leadership support as a moderating factor had a positive significant moderating effect on the relationship between flexible work arrangements and performance of nurses in regional hospitals in Tanzania

1.5 Significance of the Study

This study came at a time when public hospitals are facing myriads of challenges. Globalization has evoked changes which consequently have brought changes in work setups in health sector forcing employees to be more involved in their jobs, working longer hours more than 48 hours hence making it difficult for employees to keep a balance between job, family and other personal issues. Hence this has resulted in work life conflicts which has been found to be associated with mental health issues like stress and depression which in the long run affects performance of the organization. This study therefore could be of immense benefit to the regional hospitals which are mostly public owned and who need more of human resource management practices to retain their best employees to achieve their set goals and

objectives. Flexible work arrangements are useful to various parties and individual and this study was significant to the following:

1.5.1 Public Hospitals in Tanzania

There has been a marked change in the performance, growth and level of activities of both individual nurses and public hospitals in the last few years. High levels of nurses complain, and customer dissatisfaction have been observed from various public hospitals due to employees push for improvement of their working conditions, pay among other demands (Kahabuka, 2013). The findings of this study will inform them the best and appropriate work life balance practices that boost employees performance. This will save them on the cost of conducting further research to unravel the practices that promotes performance of their employees.

1.5.2 Republic of Tanzania/Policy Makers

This research will provide the government of Tanzania and policy makers with empirical evidence on the FWAs adopted by health sector in order for them to remain above competitive. The findings will help in making informed decision in improving the status quo. The findings will benefit policy makers and the government entity on the need to have more robust regulations on the FWAs in Tanzania to meet today's challenges posed by the operating environment, psychological and emotional facets of the millennium employees.

The study also sheds light to the plights of Tanzanian workers in health sector who were denied the right to work flexibly by their employers. So, the findings of this study are therefore a guide to the Ministry of Health, Gender, Elderly and Social Affairs on shortcomings of existing rules and regulations which needed to be reviewed in view of present realities.

1.5.3 Researchers and Scholars

The concept of nurses' performance is not a new one. However, not much study has been carried out on the possibility of FWAs influencing the nurse' performance in regional hospitals especially in Tanzanian context. The study is important since it

will contribute to additional knowledge on theory and practice of human resource management by providing a comprehensive report on how FWAs can influence nurses' performance in health care organizations. The academic researchers and scholars will find this research important in helping them understand the influence of FWAs and how they affect nurses' performance which in effect will open up other research gaps.

1.5.4 Human Resource Practitioners

The findings from this study will further help HR managers and management of various organizations to be able to explore the various FWAs that will engender identifying, attracting, retaining, and maintaining satisfied employees for the sole purpose of sustaining and maintaining competitive advantage. The results and suggestions from this research which was carried out in Tanzanian context can be utilized by managements to enhance public hospital and improve the contribution of health sector to the social and economic development of the nation and also enhance the percentage contribution of health sector to the national GDP. This research intends to endow human resource practitioners with guidance and support to effectively maintain employees in their organizations to improve the level of employee performance. Since the nurses are the backbone of health sector and constitutes of majority of female workforce, the findings of this study will assist healthcare organizations in the development of nurses' tailor-made program that can be strategically used in improving nurses' performance in regional hospitals in Tanzania and beyond.

1.6 Scope of the Study

The study was carried out in regional hospitals in Tanzania. Regional hospitals are important for this study since these are public hospitals which acts as a key referral point for lower-level health care centers such as dispensaries, health centers, and district hospitals (Ishijima, 2014). The target population was 28 regional hospitals in Tanzania. The study used stratified and simple random sampling to select a sample size of 404 respondents comprising of registered nursing offices, Assistant nursing

officers, Enrolled nurses and top leaders' employees working with regional hospitals in Tanzania. The study sought to investigate the influence of work scheduling, workload, job location, job continuity and intervening role of supervisor support on the influence of flexible work arrangements on performance of nurses in regional hospitals in Tanzania.

1.7 Limitations of the Study

One of the limitations of the study was heterogeneity of the population under study. The study used simple random sampling technique to ensure that all units have equal chance of being included in the study to address the challenge of heterogeneous population. Another limitation of the study was the rationale of the study. The study survived this limitation by giving adequate training to the research assistants who took time to explain to the respondents each of the areas that demanded explication and all respondents gave their consents. Moreover, a foremost problem encountered by the researcher at the time of data collection was the unwillingness of the respondents to answer the questionnaire. Nurses barely break out because a client is almost at every time to be attended to. Finally, the reluctance of the management to disclose crucial information in the name of privacy was an obstacle to the study. The limitations were countered by creating a convenient time schedule with the respondents and guaranteed them that the information was confidential and would be used for academic purposes only.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter presents review of relevant theoretical and empirical literature related with the study variables relevant to FWAs and performance. It comprises a detailed description of the concept of flexible work arrangements and nurses' performance; conceptual framework and empirical studies related with the concepts under review. This chapter also examines theories relevant to the study variables. Finally, in this chapter research gaps are also highlighted.

2.2 Theoretical Review

A theory can be defined as a supposition or a system of ideas intended to explain something, especially one based on general principles independent of the thing to be explained. (Cresswell, 2012). This study was built on the underpinning theories that inform the study variables. Efforts were made to ensure that each theory supports a variable for the study. The linking variables were also shown as a summary at the end of each theory. This thesis was built upon Job Demand Theory. Other supplementary theories included Spillover, Social exchange theory, Expectancy theory as well as Path goal theory.

2.2.1 Spillover Theory

Spillover theory states that general behavior, emotions, attitudes as well as stress can be carried over from a life domain to another (Hui, 2011). This is due to the fact that, work and family domains are interconnected despite their physical and temporal boundaries implying a bi-directional relationship between the two domains, that is, work may carry over to family (work-to-family spillover) and family may carry over to work (family-to-work spillover (Bae, 2012; Hill *et al.*, 2013).On the basis of the theory, if work-family interactions are rigidly structured in time and space, then spillover in terms of time, energy and behavior is generally negative. Studies argued that if work–family dynamics leave little room for flexibility, then negative spillover

in terms of time, energy, and behavior results (Gunavathy, 2011; Bae, 2012). Lambert (2010) further suggests that flexible work–arrangements may promote employee participation in organizations activities and initiatives through a felt obligation to give extra effort in return for additional benefits.

According to Hill *et al*., (2013), employers who permit employees to integrate work and family responsibilities, actively and efficiently produce positive spillover and a healthier, happier, more productive working staff, resulting in maximized productivity. A growing number of African countries have undertaken health facility performance studies using Spillover theory to guide the development of interventions to inefficiency in health system resources. (Sara, *et al.*, 2014). However, like many other theories, Spillover theory has its limitation as it produces results that are sensitive to measurement error. Despite the weakness, this theory best fits this study as it is able to best link FWAs and performance. This theory supported the variable work scheduling as it articulates the relationship between spillover and performance (productivity).

2.2.2 Job Demand –Resources JD-R model

The JD-R model assumes that stress from any occupational role stem from two categories, Job demands and Job resources; the former category are those aspects of the job that require intense physical or mental effort and are therefore linked with certain physiological and/ or psychological costs. According to JD-R theory, job demands can be energy depleting, which may lead to exhaustion, while job resources are motivational, enhancing work engagement. Importantly, job resources act as buffers against the impact of high job demands, such as workload, time pressure, or emotional demands (Gunavathy, 2011). According to Broeck, Vansteenskiste, Witte & Lens (2008), the job demand category contains job characteristics such as: task interruptions, workload, work-home interference, organizational changes and emotional dissonance. According to Mugo, (2011), Job demand requires sustained physical and psychological effort on the employees' part and thus being linked with certain physiological or psychological effects. On the other hand, job resource refers to physical, psychological, social or organizational aspects of the work context that:

i) can reduce the health-impairing impact of job demands; ii) are functional in achieving work goals; and iii) stimulate personal growth, development, and learning (Broeck *et al,* 2008). As outlined in the JD-R model, the job resources category includes characteristics like: opportunities for skill utilization, autonomy, supervisor support, performance feedback, financial rewards, and career opportunities (Broeck *et al,* 2008).

The JD Theory contends that, job demands, such as work overload and high expectations may be powerful predictors of burnout and poor performance. Whereas job demands are not necessarily negative, they may develop into "stressors" if they require that the employees invest too much effort and trying to meet these demands is associated with negative outcomes such as anxiety, burnout, or even depression (Schaufeli & Bakker, 2004). This model identified various job characteristics that have directly or indirectly influence the relationship between FWAs and nurses' performance including autonomy, feedback, supervisor support among others (Koivisto & Rice, 2016).).

Research based on the job demands-resources (JD-R) model (Bakker *et al.,* 2014) indicates that work performance is particularly high if employees are provided with certain job resources and that exhaustion is likely to occur in the presence of high job demands (Alarcon, 2011). According to JD-R theory, job demands can be energy depleting, which may lead to exhaustion, while job resources are motivational, enhancing work engagement. Importantly, job resources can act as buffers against the impact of high job demands, such as workload, time pressure, or emotional demands (Grawitch & Barber, 2010). As such, job resources can play a dual role because they help employees to cope with (high) job demands and are important in their own right, due to their intrinsic and extrinsic motivational role (Bakker & Demerouti, 2008).

According to Alarcon, (2011) when employees are granted work flexibility, access to these job resources and job demands is likely to be altered. Hence, FWAs in itself is neither a resource nor a demand, but influences certain context characteristics of the job. Evidence so far indeed suggests this dual role of FWAs: FWAs can either turn

out favorably for job resources increasing work engagement and performance (indirectly or directly)

Therefore, researchers have concluded that irregular working, can be interpreted as a job demand because it requires effort and energy and therefore can be related to psychological costs, while job autonomy or flexible work arrangements can be classified as a job resource because it supports the employee in coping with everyday efforts on the job (Kattenbach., 2010). This theory does not restrict itself to specific job demands or job resources but assumes that any demand and any resource may affect employee performance hence being broader and flexible than other theories (Joyce, Pabayo, Critchley, & Bambra, 2010). Therefore, the theory supported the variable workload flexibility as it articulates the fact that resource adequacy affects performance. Sufficient resources imply improved performance and the opposite also holds true.

2.2.3 Social Exchange Theory

Social exchange theory observes that all human relationships are formed by a subjective cost-benefit analysis and the comparison of alternatives (Wainaina, 2015). Social exchange involves a series of interactions that generate obligations. These interactions are usually seen as interdependent and contingent on the actions of another person. The social exchange perspective argues that people calculate the overall worth of a particular relationship by subtracting its costs from the rewards it provides (Erkut*et al.,* 2014). In institutional setting, there exists a relationship between an employee and the organization and its destiny will be determined by the worth of the relationship on both parties (Cropanzano and Mitchell, 2005). According to De Cuyper, De Witte and Emmeric (2011) to promote commitment and productive behavior among workers' employers should follow the practice of social exchange. In order for an organization to reap the benefits in terms of loyalty and commitment employees need fair and just treatment.

Lambert (2000) suggests that FWAs may promote employee participation in organization's activities and initiatives through a felt obligation to give extra effort in

return for additional benefits. Therefore, it is suggested that organizations that provide flexible work –arrangements may induce an obligation manifested as enhanced employee performance. Higher job performance may result if flexible work –arrangement provided produce a better match with an individual employee's particular needs. However, Miller, (2011) outlines several major objections with the social exchange theory being the tendency to reduce human interaction to a purely rational process that arises from economic theory, favoring openness as it was developed in the 1970s when ideas of freedom and openness were preferred, but there may be times when openness isn't the best option in a relationship. Also, the theory assumes that the ultimate goal of a relationship is intimacy when this might not always be the case. Finally, the theory places relationships in a linear structure, when some relationships might skip steps or go backwards in terms of intimacy.

As Attia *et al.,* (2014) asserts social exchange theory has been criticized for its inability to adequately address the issue of perception errors, but given the strong empirical support, the theory is useful and helpful to this study in understanding how job continuity influences the behavior of the regional hospital employees in improving their performance their organizations. The relevance social exchange theory to the study is explained in how job continuity practice can influence nurses' performance. This theory supported variable workplace continuity since it states that leaves and general work breaks have a positive impact on performance.

2.2.4 Expectancy Theory

The Expectancy Theory (ET) was propounded by Victor Vroom (Vroom, 1964) with direct application to work settings (Ojukuku *et al.,* 2012). This was later „worked on, expanded, and refined by Porter and Lawler (1968) (Mela & Kapale, 2012). The ET states that people will tend to do more when they are aware of what they will get at the end in relations to their effort. Armstrong and Taylor (2014) surmises that the level of motivation is high when people are aware of what to do to have their reward. The concept of ET originated from valency-instrumentality-expectancy (VIE) theory propounded by Vroom in 1964 (Dikker & Vinkenburg, 2010).

In the context of this study, nurses can best be motivated when they are offered with flexible work practice they truly value. This gives them proper motivation to give their best to the work and thus helps in achieving targets in a more efficient manner within lesser time. This indicates that the harmonious and holistic integration of work and non-work life result in beneficial and rewarding outcomes which in this case relates to higher levels of nurses' performance. The theory explains that employee will have emotional orientation towards outcome. According to Pallas, *et al.*, (2014) without knowing exactly what employees want and how bad they want it, it becomes very hard to anticipate how motivated they will be to take on a task, even if a reward is offered (Oswald, (2012). The theory supported the variable telecommuting and performance since it assumes that managers have access to employee instrumentality and valance factors.

2.2.5 Path-Goal Theory

Path goal theory formulated by House in 1971 describes the way that leaders encourage and support their followers in achieving goals (Attia *et al.*, 2014). The theory postulates that leaders clarify the path so subordinates know which way to go, remove roadblocks that are stopping them going there and increasing the rewards along the way. The leaders do this using any or a combination of directive behavior, supportive behavior, participative behavior or achievement-oriented behavior. According to Bhatti *et al.*, (2013), leaders play important roles in resource mobilization, policy reforms as well as employee empowerment. Similarly, they provide emotional, instrumental, and at the same time support which are provided before and after the performance improvement program. In performing the administrative roles, the nurse administrator is careful to delineate roles for the followers, generate performance targets, remove impediments along the path, and is consistent about rewards and punishments for performances. Hence, it is the goal of nursing to improve services provided to clients, and this it could achieve through focused leadership (Sadiya & Maimunah, 2015).

The four path-goal leadership styles that function to provide structure and/or to subordinates are directive, supportive, participative, and achievement oriented

(Johnson, Scholes & Whittington, 2006). The directive leader clarifies expectations and gives specific guidance to accomplish the desired expectations based on performance standards and organizational rules. The supportive leader behaves in a responsive manner thus creating a friendly climate and verbally recognizes subordinates' achievement in some rewarding modus. The participative leader takes

Nursing care of patients would be enhanced when nursing leaders apply the principles of the path-goal theory of leadership to guide subordinates through a path that helps them achieve goals satisfactory to all concerned parties – patients, nurses and employer. This theory is relevant to the variable supervisor support since leaders affect the performance, satisfaction, and motivation of workers in different ways like offering rewards for achieving performance goals, clarifying paths towards these goals and removing obstacles to performance (Quares, 2017). In addition, when high quality leadership relationships are present, supervisors provide employees with meaningful feedback and delegate decision-making and power to them (Coock &Wall, 2007). Such employees are also more likely to experience tangible and intangible benefits, such as interesting work assignments or greater control over workloads (Erkut *et al.*, 2014).

2.3 Conceptual Framework

Conceptual framework gives a diagrammatic representation of linkages or relationships between study variables, (Mugenda, 2010). A conceptual framework can be defined as a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation (Kothari, 2008). It provides links from literature to the research objectives, contributes to the formulation of the research design, provides reference points for discussion of literature, methodology and analysis data, and contributes to trustworthiness of the study giving broad scope to thinking about research. (Mela & Kapale, 2012). In this study the dependent variable (performance of nurses) is influenced by independent variable (FWAs) whereas the moderating variable in this relationship is supervisor support. The presumed relationship between the variables under investigation is illustrated in the following hypothetical model in Figure 2.1.

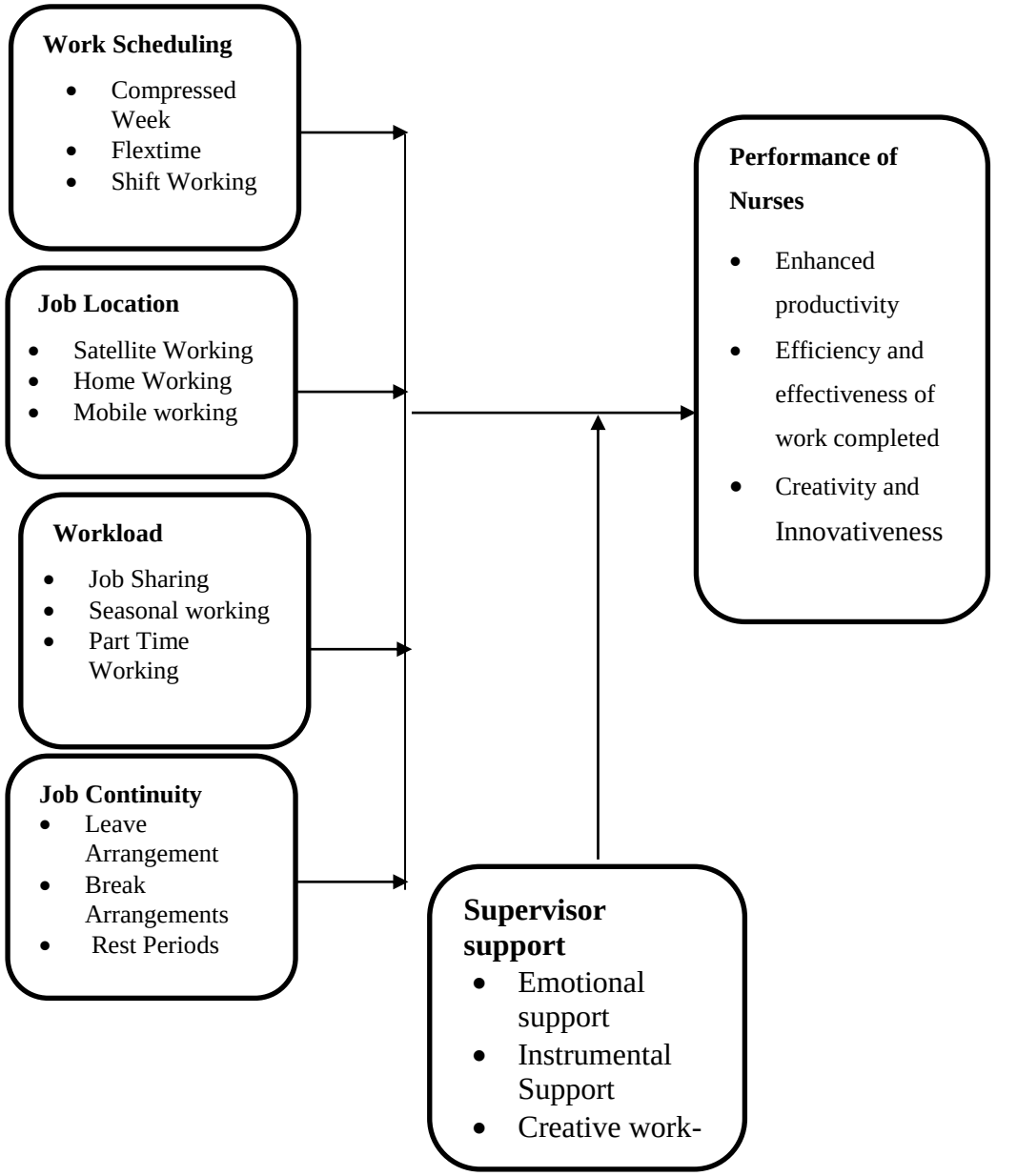

Figure 2.1: Conceptual Framework

2.3.1 Work Scheduling

Work scheduling is defined as the working practice which allow employees to schedule when their work is to be completed in different periods while deliberately obeying the contractual time (Allan *et al.,* 2012). In the nursing context, it also refers to whether nurses can finish their work during their working shifts (Gilson, 2014). It refers to work practices which allow workers to work full time hours in less than the traditional 5-day workweek by increasing daily hours worked. As Baltes, & Matthews, (2011) notes essentially, this practice allows employees to adjust their work hours slightly according to their personal needs, it is popular among employees with school-going children who are usually occupied with their families early morning and late evening. At the same time, because they are still putting in the required number of core hours at the office, their performance in the organisation is not compromised. According to M'Hallah, and Alkhabbaz, (2013) normally, categorization of working hours is based on schedules e.g. whether the employee opts for a flextime, compressed work schedule, shift working or different combinations of these. While each type possess a particular strength and weakness, managers might apply one of those three types in consideration of nurses' competencies, number of nurses, flexibility, equality, and skill mix in managing the schedule (Ichsan, *et al.,* 2019).

According to Mukururi and Ngai (2014), work scheduling covers various policies and practices such as compressed working where an employee, elects to work long hours in less days, flextime where employees negotiate start and finish times, within a range of core business hours, Shift work where the operating time of a company is extended beyond the usual 8–9 h (typically between 07–08 a.m. and 05–06 p.m.), to cover the entire 24 h, through the alternation of different groups of workers. These practices have become widely accepted in public health sector and actively implemented as an employee perfomance tool (Aver & Zabel, 2011). Common benefits of work scheduling include its ability to accommodate individual needs of employees while maintaining the same number of work hours, job performance and pay structure.

Podner & Colob, (2013) asserts that work schedules of nurses are developed around the needs for patient care. In hospitals and nursing homes, nurses are needed 24 hours a day and seven days a week creating irregular working practices in terms of hours of work, days off, and breaks within shifts. Irregular working practices in public hospitals have been found to be a major complaint among health care personnel. Therefore Murriel (2012), concluded that working irregular hours, including nights and shifts, is inherent in the nursing and medical profession despite the fact that shift work has been acknowledged as an occupational health and safety challenge for many years ago. Consequently, irregular hours and shift work poses serious physical, psychological and social health risks to individuals including fatigue, stress, reduced sleep, excessive use of tobacco, and drug and alcohol abuse. The practice leads to a decline in functioning and contribute to injuries and errors. Conclusion by Mckinney (2012) indicates that organizations that provision of decent working time arrangements are more successful in attracting, recruiting and retaining competent nursing personnel, thus reducing major costs due to turnover and attrition therefore well balanced working time arrangements in the health sector aim to reconcile the needs of nursing personnel with the requirements of health service provision.

2.3.2 Workload

Holden *et al.* (2011) define workload as the relationship between the work demands that are placed on the employee given a specified amount of time and resources. Therefore, higher workload indicates the degree to which nurses' job is taxing in terms of complexity of work by attending more patients. Rosa & Colligan, (2012) indicates nurses face a high mental workload in the performance of their duties (Sarsangi *et al.,* 2015). The US National Institute for Occupational Safety and Health (NIOSH) ranks the nursing profession among the top-40 professions with a high prevalence of diseases caused by a heavy workload (Gilson, 2014). Because of the particular nature of their occupation, nurses are burdened with a great responsibility, a heavy workload, extreme work pressure and the need to work in rotating shifts (Huang et al., 2018). Also, about 18% of nurses are forced to leave their job due to

their heavy workload (Kwegisabo *et al.,* 2014). As Baltes &Mathews, (2011) indicates a heavy workload leads to less-than-optimal care for the patients (ultimately affecting job performance as one of the major indicators of success in all organisations

Aiken *et al.,* (2012) reported that heavy workload among nurses has been found to be the most imported predictor of burnout, lack of involvement and dehumanization of patients by health care personnel. It is also a major cause of dissatisfaction among health care givers and support staff and has been found to have an influence on staff decisions as whether to leave or remain in their jobs (Jaffary, 2012) Rosa & Colligan, (2012) indicates that in health Centre's, the most commonly used unit-level workload is the nurse-to-patient ratio. Nurse-to-patent ratio should be 1:1 or 1:2 in intensive care unit, and 1:5 in the general hospital ward (Kaissie, 2010). In order to deliver good quality care and excellent service to their patients while managing operational excellence organizations should explore the best ways to ensure a good balance between patient needs and nursing staff size and expertise (Kossek &. Lee, 2015). In hospital settings, various techniques can be used in management of nurse workload such as job sharing where two or more workers voluntarily share the duties of one full time job (McCarthy *et al.,* 2012), part time working workers usually work less than 35 hours per week (Rosa & Colligan, 2012), and part year working where workers work only a certain number of months per year (Lewis, 2013).

2.3.3 Job Location

As the professional world continues to evolve, the corporate sector can expect dramatic shifts in how and where businesses choose to operate (McCarthy *et al.,* 2012). Employees may often view working at home and virtual working as valuable and attractive alternatives as they have the option to plan their day around their personal and professional obligations. According to Staples, (2012) flexible job location is defined as a situation of carrying out work tasks from a home/other base away from the usual place of work. In this particular flexible working practice, employees make use of their telephones, email and fax to get in touch with their managers and other co-workers (Ye, 2012). As noted by Tustin, (2014), healthcare

organizations utilize a variety types of flexible workplace practices namely; home-based working, satellite offices setups, neighborhood work centers, and mobile working. However, M'Hallah, and Alkhabbaz, (2013) articulates that normally, job location flexibility healthcare is based on non-bedside activities including telehealth, follow-up outselling and guidance to patients and relatives, public health awareness among others.

In similar vein, Soenanto (2016) asserts that several advantages are associated with telecommuting, such as higher motivation, more flexibility, less time spent commuting to work, and even societal advantages, such as less emissions and traffic jams in peak hours. As Guynn, (2013) postulates, home-base working is a method of telecommuting in which employees particularly work from their homes. Employees may opt to work for several days in a week. In order for this arrangement to succeed, employers provide employees with various office equipment and machines for instance, computers and fax machines (Golden, *et al.*, 2015) On the same way, satellite working is another way of telecommuting whereby employees are stationed at locality convenient to them or to their customers. The offices are properly furnished and have various office equipment (Ye, 2012). In mobile working employees work from one fixed location. Mobile workers are mostly commuting on the road. They may work from various locations for instance, hotel, planes or vehicle (Sahay, Nicholson & Krishna, 2013).

As technology has advanced, more people than ever before are looking for ways to be able to work at home (Ngah, 2010). As Aziri (2011) claims some industries that may traditionally have not had remote-work options, now can allow workers to do their job at home. Healthcare is one of those fields. The health care industry is increasingly taking advantage of technology to allow workers to do their work at home. This can help solve specific challenges and deliver superior care to patients. Remote work can be a great option for many employees, and hospitals and clinics can see direct benefits. Remote nurses use things like web cameras, the Internet, and telephones to perform duties and deliver medical care from a distance. The study by

Lu *et al*., (2012) realized that public hospital nurses perform various activities which can be done remotely without affecting their basic routine.

For stance nurses are responsible for analyzing medical data and then organizing it as well as reviewing medical records to review medical necessity, quality of care, insurance claims, and more. They search for accuracy and compliance with regulations. At the same time Kang, (2013) asserts that Nurses in public hospitals provides instructions and education other nursing students, patients or their relatives. Depending on the specific health case, online education is continually a popular option. In this way nurses get calls from patients and hear about their symptoms or problems, and are able to give them medical advice remotely. They can advise patients to come and be seen by a doctor, suggest over-the-counter medications, keep track of their symptoms, and more (Goodman, 2013).

2.3.4 Job Continuity

Flexible work continuity refers to the practice whereby there is an uninterrupted duration or continuation of work especially without essential change (Chionu, 2014). It is further defined in terms of a situation where by there is a lack of interruption or disconnection; the quality of being continuous in space or time. The Employment and Labour Relations Act, (2006) provides for the implementation of the EU Council's Directive on the Organization of Working Time (93/104/EC). Its purpose is to provide in all sectors of activity, both public and private, minimum health and safety requirements for the organization of working time. The Act sets out statutory entitlements for employees in respect of rest, maximum working time and holidays. It also deals with the issues of payment in respect of Sunday working and minimum payments for those employed under 'zero hours' contracts (Gumirija, 2014). Various forms of flexible work continuity reviewed in this study include various leaves, breaks and rest pauses as discussed below:.

Leave is a period of time that one must be away from one's primary job, while maintaining the status of employee according to Muchiti and Gachuga (2015). Leaves can be paid or unpaid and granted for many reasons, including military or

religious demands, training for a marathon, adoption, short-term disability, maternity, paternity, foster care, caring for a sick child or relative, or educational. Rest breaks are defined as short periods of work cessation used to restore the energy spent on work activities (Avery & Zabel, 2011). According to Kim *et al.*, (2017) rest breaks, which target within-work shift recovery, reduce subjective reports of acute fatigue and accident risk and maintain performance ability in other categories of workers, such as truck or bus drivers, industry workers and office employees. Likewise, Orogbu *et al*., (2015), asserts that, every nurse is entitled to a rest pause of 10 minutes' duration in the employer's time in the first and second half of the working day. Such rest pauses are to be taken at times to suit the convenience of the employer and so as not to interfere with the continuity of work where continuity, in the opinion of the employer, is necessary (Burdelak, Bukowska, Krysicka & Pepłońska, 2012). However, the hospital management may determine that the rest pauses may be combined into one 20-minute rest pause to be taken in the first part of the ordinary working day.

Likewise, nurses are entitled to a meal break of a minimum of 30 minutes' duration with such 20-minute rest pause and the meal break arranged in such a way that the ordinary working day is broken up into 3 approximately equal working periods (Berry, & Curry, 2012). Studies in nursing fields suggest that restorative breaks enhance performance and reduce the risk of errors and accidents, as shown in a review of diverse industries (Tucker, 2003). Anecdotal data suggest that staff nurses frequently skip their breaks and/or meal periods to provide patient care and a final concern that has been associated with nurses' fatigue is a lack of meal and non-meal breaks during the course of their shifts (Witkoski & Dickson, 2010). According to Balci, (2013), relaxing between demanding tasks can provide time for reflection and may reduce tension but employees facing high demands at work may skip scheduled work breaks *(*Rogers, Hwang, & Scott, 2014*).*

2.3.5 Supervisor Support as a mediator

Supervisor support is recognized as an important factor that mediates the relationship between FWAs and employee performance in different organizations (Milner, 2013;

Edger, 2012; Cummings, 2010). According to Sadiya, (2015), supervisor support is defined as employees' views concerning the degree to which their supervisors value their contributions and care about their well-being. Havig, (2014) further adds that the supervisor is a representative of the organization, and when employees identify as being cared about and valued by their supervisor, then they perceive that the organization cares for and values them as well. Previous studies demonstrate that nurses often work in problematic practice environment, characterized with various difficulties and stress-factors that can undermine staff nurses' full capacity to provide excellent care (Marguiz & Huston, 2011; Lembrechtz, Zanon & Verbruggen, 2011). Therefore, support from supervisor cause to reduce work-life conflict, which further leads to an increase in job satisfaction among nurses.

According to Manzi, *et al.,* (2014) a positive organizational climate and highly committed supportive supervision practices could encourage employees to be highly involved in organizational tasks, promotes positive well-being (e.g. job and life satisfaction) and strive to achieve organizational goals (Ahmad *et al.,* 2018). Within the organization, employee participation and channel expression could encourage a positive work environment. Edder (2012) outlined that effective supervision of healthcare professionals is critical for strengthening quality and integration of care through appropriate working strategies (Swere, 2016). Thus, the unit level nurse manager has a mediating role between dimensions of the hospital's environment, nurse-physician relations, organizational support and outcomes related to the nurse-assessed quality of care and job outcomes.(Zejert and Growsky, 2014).

According to Eder (2012) supportive supervisor behaviors, is conceptualized as behaviors exhibited by supervisors that are supportive of families and consists of the dimensions of emotional support (Sadiya, (2014), (supervisors providing support by listening and showing care for employees' work-family demands), instrumental support (Christenses & Staines, 2013), (supervisors responding to an employee's work and family needs in the form of day-to-day management transactions), role modeling behaviors (Soenanto, 2016), (supervisors demonstrating how to synthesize work and family through modeling behaviors on the job), and creative work-family

management (Frey & Breugh, 2014), (supervisor-initiated actions to restructure work to facilitate employee effectiveness on and off the job. In the work context supervisor support is an important work-related resource, it aids in achievement of nurses' work goals and, it may buffer the pressure and job stress of nurses, which, lead to greater work performance (Cummings, 2010).

Furthermore Kumar, (2014) indicated that supervisor support focusing on employee competence and feelings of efficacy promotes better performance and creativity in an organization. Supervisor support, including instrumental as well as emotional support, has been identified as an important component of workplace creativity Furthermore, employees who perceive their supervisor as caring, supportive, reliable, and loyal exhibit higher levels of innovative behaviours (Schermuly, Meyer, & Dämmer, 2013). In this way supervisors can increase the job satisfaction of their employees by rescheduling jobs shifts with their coworkers (Hsu, 2011).

Vogus (2017) stressed that as perceived supervisor support increases, the employees feel they have a duty to reciprocate to the supervisor and organization through their work efforts (for example; productivity) and are less likely to have intentions to leave the organization. In health care organizations, Wang and Waulambwa (2013). In similar vein, Milner, (2013) indicates that supervisors in healthcare settings play a significant role in managing and controlling the work environment, offering information and providing feedback to employees.

Thus, nurse administrators applying supportive leadership endeavor to remove all role confusion and ambiguities, define performance goals, elicit workers' concerns and ensure their welfare in the process (Koivitso & Rice, 2016). Thus, they have considerable discretion over the types and level of family support that employees receive (Alloubani, Almatari, & Almukhtar, 2014) irrespective of whether family-friendly benefits are provided by the organization. Hence, Active manager involvement in matching flexible work options to nurse work-life needs results in better outcomes. Managers need to know how to "bundle" human resource practices, such as flexible work options and other work-life practices that complement each other and fit with organizational strategy (Hay, 2012; Voguz, 2017).

2.3.6 Nurses' Performance

In the context of nursing, job performance refers to how effective employees are in accomplishing their tasks and responsibilities related to direct patient care (Howard, 2013). On the other hand, nurses are one of the inputs to any healthcare system and have strong effect on the healthcare performance (Havig, 2014 Watson and Stimpson, (2012) asserts that job performance is one of the important factors in medical health system staff. On the other hand, at least 50% of health services are provided by the nurses, and even in some countries, 80% of health affairs are done by the nurses. Thus, their job performance influences the organizational success and quality of health care. Therefore, determining factors which may affect the performance of nurses working in these units is important

Saxena (2018) asserts that among the disciplines of health, nursing is one of the most stressful jobs. Because they work with patients, which is inherently stressful. In similar vein Beigi and Stewart (2018) claims that nursing is a stressful profession and nurses are constantly exposed to stress due to their sensitive professional nature in a way that stress has become a recognized component of modern nursing. Therefore, public hospital with nurses as majority workforce should take cognizance of the importance of their job performance which is the fundamental value of achieving high standard of patient care (Zastocky & Holly 2010). In addition, how effective nurses perform their duties is associated with the direct care of their patients (Dieleman *et al.,* 2016).

In the healthcare context, Manzi *et al.,* (2012) asserts that nurses' job performance focuses on understanding patients' needs by delivering proper care and solutions. Therefore, it is imperative that nurses should be able to adjust their performance in order to reflect patients' reality (Shannon *et al.,* 2014). Based on literatures, Tanzania health sector experiences shortage of human resources in its health facilities where they were staffed with 14.1percent health workers where by public facilities had fewer staff members than their private counterparts (Whymann *et al.,* 2015). In countries which experience shortages in human resources for health, it is usually a

concern that health workers are overworked i.e., their caseload unsustainably high, potentially compromising the quality of service.

Gilson, (2014) asserts that in the wake of stiff competition and increasing expectation from the patients, nurses' timely service delivery which is neat and in completeness manner is crucial to overcome the challenging situation (Burdelak, et al, 2012). Professional nurses perform multiple responsibilities in healthcare settings including provision of different services to clients, recording information on multiple documents and undertaking health awareness campaigns (Meyer, 2011). However, increased workload reported by most of the public hospitals in Tanzania means that nurses perform much more work than is normally required of them (Allen & Delahunty 2010). As a result, concerns about nurses' service quality have led to increased interest in measuring and reporting nursing's performance (Riordan, 2013). As FWAs has the potential to either increase or decrease employee well-being, performance, and work-life balance depending on whether employees make optimal or suboptimal choices regarding their workplace, work location, and working hours, it is argued that for nurses and their hospitals to gain the most from FWAs, a bottom-up approach is needed (Galinsky, Sakai, & Wigton, 2011).

Studies indicates number of measures that can be taken into consideration when measuring performance such as use of productivity (Allen & Delahunty 2010), efficiency (Ghalawat & Sukhija, .2012), effectiveness (Burdelak, et al, 2012), quality and profitability (Sanz-Vergal *et al.*, (2014) as well as creativity and innovativeness (Higgins, *et al.*, 2014). According to Muli, Muathe, & Muchiri, (2014) profitability is the ability to earn profits consistently over a period of time while efficiency is the ability to produce the desired outcomes by using as minimal resources as possible while effectiveness is the ability of employees to meet the desired objectives or target. Meanhout, and Vanhoucke, (2013 contends that productivity is expressed as a ratio of output to that of input. It was a measure of how the individual, organization and industry converts input resources into goods and services. It is also a measure of how much output is produced per unit of resources employed.

Gangai, (2014) contends that quality is the characteristic of products or services that bear an ability to satisfy the stated or implied needs. It was increasingly achieving better products and services at a progressively more competitive price (Kelliher, & Anderson, (2010). Hashim, Ullah, & Khan, (2017) argues that it was the responsibility of the company managers to ensure that the organizations strive to achieve high performance levels. Therefore, managers have to set the desired levels of performance for any periods in order to achieve high performance. They can do this by setting goals and standards against which individual performance can be measured (Gilson, 2014) .To manage health care, nurses perform numerous and diverse tasks that are not limited to direct contact with the patient. Further, RNs also perform activities that do not require RN training, such as housekeeping. Nursing tasks have been classified into three categories: direct patient care, indirect patient care, and no nursing tasks or tasks unrelated to nursing Guyn, 2013; WHO, 2011).

It is widely accepted that excellent nurses' performance is more likely to generate satisfied patients and create more favorable outcomes to the organization (Gangai, 2014). Conversely, if the nurses' performance declines, it will lead to unwanted consequences such as substandard of patient care and growing number of patient complaints. In a nutshell, hospital with better nurses' performance has the competitive advantage over those that do not perceive job performance as an important factor for the patients to return to the same hospital (Mujinja, 2013). Recently, global nursing experts have been aggressively encouraging nurses to pursue creativity and innovation in nursing to improve nursing outcomes. Nurses' creativity plays a significant role in health and well-being (Gilson, 2014). In most health systems across the world, nurses provide up to 80% of the primary health care; therefore, they are critically positioned to provide creative solutions for current and future global health challenges.

2.4 Empirical Literature

2.4.1 Work Scheduling and Nurses' Performance

Flexibility in working scheduling enhance employee performance (Nadler *et al.,* 2010). Several additional benefits to flexible work schedules may include (a) positive outcomes in productivity, (b) reduced absenteeism, and (c) higher job satisfaction (Kosseck, 2012). Downes and Koekemoer (2012) conducted a qualitative, exploratory study in South Africa to explore the perceived challenges and benefits associated with implementing work–life balance policies, placing a strong focus on flextime. Utilizing semi structured interviews, Downes and Koekemoer drew a purposive, voluntary sample of 15 study participants from an international auditing and consulting organization within the financial sector. Downes and Koekemoer found four main themes from the data collected: (a) individual challenges, (b) general challenges, (c) aspects firms need to successfully implement flextime effectively, and (d) the benefits from implementing flextime. Downes and Koekemoer found that some of the benefits from implementing flextime included work–life balance, employee loyalty, and job commitment. Potential challenges included maintaining productivity, understanding flextime, and a shortage of critical resources (Downes & Koekemoer, 2012). One potential limitation of this study is that it solely focused on one organization and therefore may only be applicable to that organization as opposed to the field (Downes & Koekemoer, 2012).

Carlson et al. (2010) distributed a survey to study participants to examine the relationship of compressed working week with job performance and satisfaction in the personal and professional domains in Indonesia. The researchers also explored variations in gender differences. According to the study results, compressed working practices minimizes work-family conflict and maximizes work– family enrichment. Specifically, Carlson *et al*. concluded that schedule flexibility plays a stronger role in women than in men in terms of the work–family interface.

Moreover, studies by Avery & Zabel, (2011) indicated that, about 15% of U.S. employees have access to the compressed workweek and experience job satisfaction

better than other category of employees (Bond *et al.*, 2013). Almondes, and Araújo, (2009) investigated the impact of different shift work schedules on the levels of anxiety and stress in workers in a petrochemicals company. The sample comprised 239 workers, with an average age of 42.6, standard deviation = 5.7 years, divided into fixed daytime working (n=52) and different working shifts (n=187). The study used the t-test for independent samples, ANOVA, Pearson's correlation and the two-sample Comparison of proportions Test. The study found that, night shifts were associated with high level of employees' stress and burnout.

2.4.2 Job Location and Nurses Performance

Brueggen, Feichter, and Haesebrouck, (2017) investigated the effect of telecommuting on employee behavior. The study examined if working outside the conventional workplace (telecommuting) influenced employees' performance on tasks where it was more versus less easy to align incentives between employees and the firm. The study argued that the impact of telecommuting on employee behavior hinges on two effects, which is referred to as the selection and the incentive alignment effect. The selection effect indicated that mainly those employees that were highly motivated to perform a task engage in working on it from a remote location. Therefore, employees telecommuting showed on average higher effort than employees that perform a task from the workplace.

Greer and Payne (2014) explored high performing teleworker strategies, supervisor perception of teleworker challenges, and successful teleworker strategies relating to work-family facilitation and turnover intentions in Canada. In addition to their supervisors, 86 high performing virtual workers provided both qualitative and quantitative data (Greer & Payne, 2014). The study results indicated that the application of advanced technology, communicating, task planning, and striving for heightened productivity all contributed to virtual success

In Kelliher and Anderson's (2010) qualitative study, most remote workers experienced work intensification, because they could stay away from interruptions in the office and work more intensely.

Moreover, researchers at a center in Stanford University explored virtual work programs and employee productivity (Goodman, 2013). Stanford University researchers ran a nine (9) month controlled study at CTrip, the largest travel agency in China, which employs more than 13,000 individuals. The researchers split the sample population of 255 employees with similar qualifications and team supervisors into two groups: home-based workers and office-based workers. The study results showed that the home-based workers had a 13% increase in productivity, a $2,000 savings per employee, and staff attrition was half that of office-based workers. As evidenced by this study, cost savings are one of the primary benefits of virtual work programs (Tremblay & Thomsin, 2012).

2.4.3 Workload and Nurses' Perfomance

Asamani, Amertil, and Chebere, (2015) investigated the influence of workload levels on performance in a rural hospital. A quantitative descriptive survey was undertaken to elicit the perceived workload levels of health workers in the Donkorkrom Presbyterian Hospital, Ghana, and how it is perceived to impact on staff performance. The study found that workload level of health workers was perceived as moderate (2.91 ± 0.541 on a five-point Likert scale). However, nurses/midwives were perceived to have the highest workload, followed by paramedics, support staff and doctors. Work interruptions, procedures and processes involved in treating patients, as well as facing work-related uncertainties, were identified as determinants of perceived workload among health workers. Results show that 75% of health workers perceived moderate workload assignment would increase their performance.

Omolayo, and Omole, (2013) examined the influence of mental workload on job performance of two category of workers in the university namely, the academic and non-academic workers. 100 workers that were made up of 50 academic and 50 non-academic workers comprising of 68 male and 32 female participated in the study. Testing four hypotheses, results showed that there was no significant relationship between mental workload and job performance. Also, findings indicated that male workers did not exhibit greater mental workload than female workers. Furthermore, there was no significant main influence of age and educational qualifications on job

performance, but there was significant main influence of length of service on job performance. No significant interaction influence of age, educational qualifications and length of service was found on job performance. However, there was significant difference in the level of mental workload of academic and non-academic workers.

Clarkberg & Merola, (2003) suggested that distinctions between the work and non-work life have blurred. There has been an increase in the number of managers working relatively longer hours in developed countries, whereas workplace stress and stress related illnesses are frequently cited as common occurrences, with the general perception that the workplace is becoming more and more stressful with managers most likely to experience negative spillover from work to the non-work context. These studies found that the non-work context also had a negative impact on career outcomes, including the likelihood of participation in career focused learning and development. Examples of non-work contextual variables that negatively impact behaviors include work and family resources, work and family demands, gender, and dependents.

According to the Healthcare Workforce Census, the number of nursing staff working part-time in schools in England has increased since 2010; according to the latest published workforce statistics, 23% of nurses working in England were doing so on a part-time basis (Hui, 2015).

2.4.4 Job Continuity and Nurses' Performance

Stroup, and Yoon, (2016) investigated the impact of leave arrangements on employee performance and overall business results in Uganda. Research findings supported a strong business case for the adoption of leave policies as such policies lead to higher productivity, increased job satisfaction, greater organization commitment, higher financial performance, and better labor retention. The results were highly dependent on successful implementation of the policy where special attention be paid to managerial support, building an inclusive culture, and integrating informal flexibility within the organization may go a long way to yielding sustainable results.

Musyoka, (2015) conducted a study on the effect of staff welfare programs on employee satisfaction among commercial banks in Kenya. The study found that annual leave, family leave, child care program, sick leave, relocation benefits, transport benefits, education fees benefits, and financial assistance were all significant components of worker compensation that enhanced the relationship with employee satisfaction.

Furthermore, family-friendly policies like paid leave, leave for child needs, housing support and job satisfaction are positively related (Kang, 2013). Furthermore, family-friendly policies like paid leave, leave for child needs, housing support and job satisfaction are positively related (Kang, 2013). Similarly, access to flexitime is associated with increased job satisfaction (Possenriede and Plantenga, 2011; Frye and Breaugh, 2004). Another study also proved that people having flexible work arrangements reported more job satisfaction than those on standard arrangements (Almer and Kaplan, 2002). Furrhe more, Sydnor & Perl (2011) examined the impact of rest breaks upon accident risk in industrial settings in China. In the absence of much directly relevant research, the focus was broadened to consider the impact of rest breaks upon performance and fatigue, as well as epidemiological evidence, in both transport and non-transport settings. Relevant studies were identified from a range of electronic sources. In general, regular rest breaks were effective means of maintaining performance, managing fatigue and controlling the accumulation of risk over prolonged task performance (Gee, 2010).

The same study indicated that while two-hourly breaks were common in many industrial settings, the scheduling of additional micro-breaks were beneficial under at least some circumstances. While some evidence supports allowing workers to take rest breaks that coincide with periods of heightened fatigue, workers sometimes fail to take adequate breaks when they are needed. Wendsche, Lohmann-Haislah, and Wegge (2016) conducted a study on the impact of supplementary short rest breaks on task performance− a meta-analysis. In the meta-analysis (k = 11, N=705), investigated how supplementary, frequent short rest breaks affect task performance and strain. The study found positive effects on quality (g = 0.23) and quantity (g =

0.12) measures of task performance. The mean reduction of working time due to rest breaks was 9.3%. Performance improvements occurred not at costs of higher strain. Thus, the study showed that both employees' performance and well-being benefited from scheduled within-shift breaks.

2.4.5 Supervisor Support

Literatures indicates that supervisor support moderates the relationship between job flexibility and employee stress in the workplace (Wickramasinghe, 2012). For instance, Kahn *et al.,* (2008) found that supervisor support had both direct and indirect effects on job satisfaction through perceived control and work-family conflict. The results implied that a supervisor who was supportive of the family demands of employees had a steady positive influence on job satisfaction and health outcomes (Hui, 2012). Results show that those employees using work-family policies are more satisfied at work and have a low conflict (Sanchez, 2018). According to the previous results support from supervisor cause to reduce work-life conflict, which further leads to an increase in job satisfaction (Ngah *et al.,* 2010).

Ahmad, Adi, Noor, Rahman, and Yushuang (2013) investigated the moderating effect of supervisor support on job satisfaction and performance among nurses in Malaysia. The results indicated that supervisor support indeed mediated the relationship between the variables under study. The study concluded that nurse roles and responsibilities contribute to the quality improvement of health care services in Malaysia. Also Shahhosseini, Silong, and Ismaill, (2013) investigated the relationship between leadership support, workplace health promotion and employee wellbeing in South Africa. The study hypothesized that perceptions of company commitment to health promotion mediates the relationship between leadership support, the provision of work place health promotion facilities and employee wellbeing.

Moreover, Sullivan, and Decker, (2005) conducted a study on importance of leadership style towards quality-of-care measures in healthcare settings. Beutell, (2010) observed that perceived supervisory support was significantly related to

employee work schedule control and work schedule satisfaction. Perceived control of work schedule and work schedule satisfaction was significantly related to work-family conflict and synergy. Work schedules moderated the relationship between work-family conflict (synergy) and domain satisfaction.

Thomas and Ganster, (2015) performed a study on health care workers and found that more supervisor support attracted low work-family interference and higher satisfaction at work. Similarly, studies showed that if supervisor support was more, then the job satisfaction level of employees also increases (Kula & Guler, 2014; Gok *et al.,* 2015). Some studies reported that supervisor support was correlated with a lower degree of work stress, which contributed to more job satisfaction. Similarly, Qureshi *et al.* (2018) performed a study on nurses and found that a significant impact of supervisor support was found on job satisfaction. Therefore, employees who consider their supervisor as supportive experience more job satisfaction.

2.4.6 Nurses' Performance

Awases, Bezuidenhout, and Roos, (2013) conducted a study on factors affecting the performance of professional nurses in Namibia. A quantitative, descriptive survey was used to collect data by means of a questionnaire. A random sample of 180 professional nurses was selected from six hospitals in three regions of Namibia. Factors affecting the performance of nurses negatively were identified such as lack of recognition of employees who are performing well, quality performance outcomes and an absence of a formal performance appraisal system and poor working conditions.

Similarly, Chitsulo, Pindani, Chilinda, and Maluwa (2014) conducted a study factor promoting and hindering performance of unit nurse managers at Kamuzu and Queen Elizabeth Central Hospitals in Malawi. Purposive sampling was used to select the two major hospitals in Malawi and all available 37-unit nurse managers during the time of the study at the two hospitals participated in the study. Data were collected using semi-structured questionnaires after seeking consent from the participants and were analyzed using SPSS. Findings of the study showed that performance of unit

nurse managers was affected by inadequate material (86.4 %,) and human resources (94.5 %,) and lack of managerial skills (5.4 %,). In addition, the unit managers perceived their role to be stressful (38.9 %,) and challenging (47.2 %,).

Furthermore, Shinnick, & Woo, (2013) undertook a study on innovative thinking among medical practitioners in Ocheon Hospital in Karachi. Respondents were nursing professionals selected by convenience criteria from the in-patient medical, surgical, and intensive care units of a 1,100-bed tertiary care hospital. The study excluded emergency units, operating theatre, and central services or other in which patient are not hospitalized. The study concluded that, critical thinking as an essential skill can contribute positively to patient outcomes. Furthermore, it was felt to be essential to be able to measure critical thinking based on a theoretical model that was complex enough to engage the construct in an effective manner, a relevant consideration, given the complexity of the model.

2.5 Critique of Literature

Studies have shown that FWAs is an important component of WLB practices and enhances the employee satisfaction in the organization (Eder, 2012). FWAs improves engagement (Shanon, *et al.,* 2014) in Fu-Jin, Shieh and Tag (2010), it allows for learning and development along job career ladder which is a vital ingredient to employee performance (Cummings *et al.,* 2010), it has positive relationship with employee productivity and improves the level of employee engagement (Kovitso & Rice, 2016; Milner 2013Mbaruku *et al.,* 2014). Belmelmans (2011) conducted their study in horticultural company and found out that FWAs was the most important WLB practice for creating conducive employee relations. However, the study was done in agricultural sector and not in health sector.

A study conducted by Gangai, (2014) investigating the best WLB practices for employees in organization revealed that firms had WLB practices that motivate employees who contribute most. A limitation of this study was that it did not investigate which kind of WLB practice provide motivation for employeee performance. The study also never analysed how each WLB practice influenced

employee performance. The current study aims at investigating how different FWAs influence nurses' performance.

Duchon & Smith, (2014) contends that theoretically, work scheduling, workload, work continuity, workplace and leadership support are key antecedents of employee performance, yet there is no research directly linking these variables to nurses' performance (Sanz-Vergal, Rodriguez-Munoz, & Nielson, 2014). Similarly, theories of FWA reviewed above, among many others, implicitly assume "standard or regular work schedule and arrangements" with some homogeneity in employment experiences and motivations. The reality is more employees are working in many different ways with greater heterogeneity of work schedules, which influences how people experience work attachment, work roles, and work culture (Zhao, & Ghiselli, 2011).

Gordon, (2012) conducted a study to compare impact shift working on employee motivation that further enhances employees performance between public and private hospitals in Jordanian healthcare industry. The purpose of this study was to examine shiftwork, inter-shift recovery, fatigue, sleep debt and intent to leave among full-time nurses. Findings revealed significant differences among nurses working 10-hour shifts and their accumulation of sleep debt in comparison to nurses working 8 or 12 hour shifts. Significant differences were not found between acute and chronic fatigue, and inter-shift recovery by shiftwork. The limitation of this study is that it never identified which specific shift was associated with improved perfomance of employees. The current study shed light on the specific shift that influences employee most to put extra effort in their work.

Cook and Wall, (2010) conducted a study on new work attitude measures of trust, organizational commitment and personal need non-fulfilment among employees working in Australia. The study reported that employee supportive leadership had a mediating influence on the employee engagement but failed to inform us from which sectors of the economy were the sample drawn from. Moreover, the sample size in Margaret *et al.*, (2014) study was small and it was drawn from telecommunication sector. None of these studies examine the influence of FWAs on nurses' performance

in health sector in Tanzania. Consequently, this study sought to fill the gap by investigating the influence of FWAs on performance of nurses in regional hospitals in Tanzania. Despite several studies in the area of health sector employee performance, yet there were inadequate studies on the influence of FWAs on nurses' performance. However, no known empirical finding has been linked with regional hospitals in Tanzania.

Moreover, several researchers on employee performance have not clearly differentiated nurses' performance from other similar constructs such as job satisfaction, motivation, organizational citizenship behavior and employee commitment (Hui, 2012). Thus, the results of such studies cannot give an objective link between FWAs and nurses' performance (Sydnor & Perl, 2011). Another area of imprecision noted is that many studies confound the measurement of availability and use, often only examining the availability of formal flexible work arrangements (Bund, 2014). This study therefore bridged this gap by examining the relationship between FWAs and nurses' performance in regional hospitals in Tanzania.

2.6 Research Gaps

The problem of performance of nurses is big (Walsh, 2012; Karasek & Brayant, 2012). Theoretical and practical contributions to the literature have been made by several studies, however, with numerous limitations. For instance, a critical review of past literature showed that several conceptual, contextual and methodological research gaps existed in the influence of FWAs on nurses' performance (Hui, 2012). From the literature reviewed, there is relatively little scientific research available on influence of FWAs on performance of nurses in regional hospitals in Tanzania. Most of the related researches close to this study topic are all conducted outside Tanzania and have concentrated on various other contexts in developed countries. For instance, most of the previous researches were done in advanced economy like United State of America and Australia among nurses Adams, & Hirschfeld, 2013), in Korea among hotels employees (Havig, *et al.,* 2011), and in Pakistan among three public sector organizations of Pakistan, WAPDA, Railway and Police (Brimmer, 2013). There

were inadequate studies on FWAs on performance of nurses in Africa and especially in Tanzania. Therefore, this study was done to fill the literature gap.

Many scholars in Tanzania have linked flexible work arrangement (FWAs) to organizational performance (Manongi, *et al.,* 2012; Huber, 2013), organizational productivity (Shannon, *et al.,* 2014), turnover intentions (Paula, Tausi & Makintosh, 2016), satisfaction (Jafar, 2012) and employee commitment (Mujinja, 2013; Msuya, 2017), however, this study focused on FWAs on nurses' performance. The few scholars who have focused in this area have approached it solely organizational perspective without due recourse to the attitudinal aspect of employee which is core the concept of employee performance ((Marguis & Hauston, 2011). This study intended to fill that gap by examining this relationship in the hospital setting

Nevertheless, according to Zastocki, and Holly, (2010) though public hospitals in Tanzania practice good FWAs, nurses' performance was still low. This contradicts empirical evidence established by Erkut*et al.,* (2014) which established positive relationship between FWAs and health workers' performance. Also, there was surprising limited research concerning flexible work arrangements in regional hospitals in Tanzanian context (Victor, *et al*., 2015). This thesis addressed this lack of theory and empirical studies. Second, previous research allowed hypothesizing that there were connections between the chosen four types of flexible work arrangements and nurses' job performance (Jafari, 2012).

However, it was unclear whether just the availability of flexibility causes an increase in performance as Walsh, 2012; Karasek and Bryant, 2012) claims. Therefore, it was expected that, this thesis would put this relationship in a clearer way. At the same time, provision of FWAs in public hospitals in Tanzania had received little attention (Kagashe & Rwebangila, 2011; Munga & Mwangu; 2013; Chimhutu, *et al.,* 2015; Purvanova, 2014) and data on FWAs and public hospital performance in developing countries were scant, with little focus on FWAs and nurses' performance (Gillespie, 2011).

2.7 Summary of Literature

The literature reviewed the influence of flexible work arrangements on performance of nurses in regional hospitals in Tanzania. The flexible work arrangements reviewed includes work scheduling, workload, job location, job continuity, and nurses' performance. The study also examined the moderating role of supervisor support on the relationship between flexible work arrangements and performance of nurses in regional hospitals in Tanzania. Several theories have also been reviewed to enable a clear understanding of the topic and the issue at hand. The theories reviewed in support of the study variables were: Spillover theory, Job Demand –Resource theory, social exchange theory, Expectancy theory, and Path-goal theory. These theories emphasize on people relations, social needs, productivity and workers support value all geared towards employee and organizational work performance. The relevant literature was reviewed based on the relationship between flexible work arrangements and performance of nurses, moderating effect of supervisor support on the relationship between flexible work arrangements on performance of nurses after which the conceptual framework was developed for better clarity of purpose. Based on the critique of the relevant literature, the knowledge gap was identified and explained while the relationship found by previous studies were found to be contradictory and inconclusive. The literature reviewed indicated that there was insufficient empirical research that adequately addressed flexible work arrangements on performance of nurses in regional hospitals in Tanzania

Evidence from the literature pointed out that flexible work arrangements have the potential to influence employee performance. Since these flexible working arrangements were strategic tools that regional hospitals can use to have improved nurses this propel the thought that any health sector organization that is determining to remain competitive, and attractive to customers must adopt the best flexible working practices to influence employee performance which will guarantee sustained competitive advantage. In view of the influence of globalization and dynamic nature of business operating environment, regional hospitals must be abreast of their choice and make use of the best and suitable flexible working practices in their right

measure. Review of relevant literature also showed strong relationship between flexible working arrangements and nurses' performance outcomes such as improved productivity, increased efficiency and effectiveness in work completed and enhanced creativity and innovativeness.

The choice of the "the flexible work arrangement practices" is contingent upon legal, social and technological factors plus the industry specific factors. Consequent upon the above is the necessity of choosing the best of all the flexible working arrangements that will engender employee performance. Hence, the need to study the influence of flexible working arrangements on nurses' performance in regional hospitals in Tanzania. This is informed by the reason that low and unimpressive performance of nurses will have negative impact on the country's GDP. Furthermore, it was showed that previous studies on flexible work arrangements and nurses' performance had been conducted in developed countries and not in underdeveloped countries such as Tanzania. Also, there were inadequate studies on flexible work arrangements on nurses' performance in Africa and especially in Tanzania and in health sector. Therefore, this study was done to fill the literature gap. This study therefore seeks to establish the influence of flexible work arrangements on nurses' performance in regional hospitals in Tanzania. The methodology used for this study is presented in the succeeding chapter.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

Research methodology analyzed the procedures and methods of the research period. The section is an overall scheme, plan or structure designed to assist the researcher in answering the raised research hypotheses. It was a programme to guide the researcher in collecting, analyzing and interpreting the observed facts. Additionally, it addressed the research design especially with respect to the choice of the design. Finally, it discussed the research philosophy that was adopted, the population of study, sample and sampling techniques, data collection methods, data analysis and data presentation methods that were employed in the study.

3.2 Research Design

The research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data (Kothari & Garg, 2014). Mewing (2011) posits that it is the overall strategy and process that one chooses to integrate the different components of the study in a coherent and logical way; thereby ensuring that the research problem is addressed effectively. It is the general plan of how one goes about answering the research questions and gives the structures within which the study is implemented (Kombo, & Tromp, 2010). This study adopted an explanatory research design using both quantitative and qualitative approaches. An explanatory research design was preferred since the design is used when the problem has been well designed and where the researcher can engage in a field survey by going to the population of interest in order for the respondents to explain certain features about the problem under study (Kumar, 2011).

This design helped to gain new insights, discover new ideas and for increasing knowledge of the phenomenon since it uses a preplanned design for analysis and also determines and reports the way things are. According to Kombo & Troph (2010) explanatory research design is used when data is collected to describe persons,

organizations, settings or phenomena. The choice of this design is informed by the fact that the study seeks to describe a single variable (nurses' performance) in a single population (regional hospitals). The rationale for mixing both kinds of data was to complement each other and allow for a more robust analysis, taking advantage of the strengths of each (Small *et al*, 2011).

3.2.1 Research Philosophy

Research philosophy is a belief about the way in which data about a phenomenon should be gathered, analyzed and used (Wang, 2012). Bajpai (2011) explains that research philosophy deals with the source, nature and development of knowledge. This study adapted positivism research philosophy. Positivism research philosophy reflects the belief that reality is stable. Positivist belief that hypothesis developed from existing theories can be tested by measuring observable social realities, thus positivism is derived from natural sciences (Mugenda 2010). . This reality can be observed and described from an objective view point without necessarily interfering with the phenomenon itself (Eriksson & Kovalainen, 2015). If a research philosophy reflects the principles of positivism, then it tends to adopt the philosophical stance of the natural scientists. Positivism also allows for use of survey approach hence covering a wider population area (Mukherji and Albon, 2010). Thus, it is widely favored in the use of explanatory research.

This research adopted the positivism approach, which is based on the idea that science is an only way to learn about the truth. In positivism studies the role of the researcher is limited to data collection and interpretation through objective approach and the research findings are usually observable and quantifiable (Dudovskiy, 2011). Trustworthy knowledge was gained from factual information from regional hospitals in Tanzania. Science is the underlying ground for positivism, since it is deterministic based on the assumption that X causes Y under certain circumstances. This research assumed that work scheduling, workload, job location, job continuity influenced the performance of nurses in regional hospitals in Tanzania.

The study also assumed that leadership support had a mediating role in relationship between FWAs on performance of nurses. Meanhout & Vanhoucke, (2013) points out that the mechanical nature of scientific approach can be explained in a way that researchers develop hypotheses to be proved or disapproved via application of specific research methods. This research had five hypotheses that were stated based on the specific objectives of the study.

3.3 Study Population

According to Cooper and Schindler (2014) a population is a well-defined set of people, services, elements, and events, group of things or households that are being investigated to generalize the results. According to Mckinney (2012) target population is that population which the researcher wants to generalize results (Bajpai, 2011). The target population for this study consisted of all registered nurses (2,976) in 28 regional hospitals in Tanzania as shown in Table 3.1. These hospitals play a critical role in achieving Vision 2030. At operational level, this contribution can only be achieved through effective Flexible Work Arrangements. The cadres selected for this study were Nurses Officers, Assistant Nurse Officers and Enrolled Nurses. According to Creswell, (2008) the unit of analysis is the major entity that is being analyzed in a study. It is the 'what' or 'who' that is being studied. In this study, the unit of analysis was 2,976 nurses.

The choice of nurse cadre was based on the fact that, nurses represent the majority of workforce in health centers who are likely to suffer from irregular working than all other cadres due to the nature of their service (Mercer, Buchan, & Chubb, 2014). The unit of observation is the basic entity or object about which generalizations are to be made based on an analysis, and for which data have been collected (Erkut, *et al*., 2014). The unit of observation is determined largely by the method of data collection that will be used to answer the research questions. In this study, therefore, the unit of observation was 1375 nurses in 8 regional hospitals.

This study is essential in the Tanzanian context as people in Tanzania see work as an origin of income and status. Family is a social establishment that gives psychological

support and helps in times of need. In a family-centric society like Tanzania establishing a balance between work and home has become more vital for the employees. Modernization, education and change in society have increased the number of working women at workplaces (Kagashe & Bangile, 2013). Given such benefits or arrangements, they may feel more obliged for their employers

3.4 Sampling Frame

A sample is a carefully selected subgroup or subset that is a representative of the population under study (Mckinney 2012). Sekaran & Bougie, (2010) asserts that a sampling frame describes the list of all the units in population from which the sample was selected. Cooper and Schindler (2014) also notes that sampling frame is the source material or device from which a sample is drawn and forms the physical representation of the target population and comprises all the units that are potential members of a sample. It is the methods used in drawing samples from a population usually in such a manner that the sample will facilitate determination of some hypothesis concerning the population. The heads of departments and nurses were picked as the respondents for this study. The sampling frame of this study was all the 28 regional hospitals in Tanzania. In this frame, nurses were categorized into three categories namely; assistant Nursing Officers, Assistant Nursing Officers and Enrolled Nurses.

In Tanzania there are different types of nurses (Tanzania Nursing and Midwifery Council, TNMC, 2014), the registered nurses and the enrolled nurses. In this system registered nurse study for three years either as part of the advanced level in the secondary school or at a university. The registered nurse has responsibilities to supervise, to delegate duties, to monitor, to document and to collaborate with other health professionals. They are having a responsibility to develop the care and the nursing profession. The enrolled nurse study for two years at the advanced level. Their main responsibilities are to assist the registered nurse and to accomplish the delegated duties from the registered nurse (ibid.). Due to the shortage of nurses, it is common to find nursing staff with only one year of nursing education, also called

medical attendants, still performing the duties of an officially trained nurse (*Manzi et al,* 2012).

On the sampling frame each regional hospital was assigned a unique number and a table of random numbers was used to select 8 hospitals, which forms 30% of the total regional hospitals. This sufficiently met the minimum threshold sample size suggested by Creswell, (2012) that a sample size of 10% of the target population is regarded as adequate for small population (N<1000).

Table 3.1 Cadres of Nurses in Public Hospitals in Tanzania

S/N	Occupation	Number
1	Registered Nurse Officers	594
2	Registered Nurse Assistants	1,117
3	Enrolled Nurses	1,265
	Total	2,976

Source: TNMC, (2015).

3.5 Sample Size and Sampling Technique

Kock and Lynn, (2012) view a view a sample as a finite and representative number of individuals or objects in a population to be studied. By studying the sample one is able to draw conclusions that are generalizable to the population of interest (Sekaran & Bougie, 2011). Its main advantages are cost, speed, accuracy and quality of the data (Adjper 2014). Simple random sampling technique was used to select a sample regional hospital which were the primary sampling units in this study. The sampling frame for this study was the list of regional hospitals. On the sampling frame, each regional hospitals were assigned a unique number and a table of random numbers was used to select 8, which forms 30% of the total regional hospitals. This have sufficiently met the minimum threshold sample size suggested by Gay (2005) that a sample size of 30% of the target population is regarded as adequate for small population (N<1000).

The second step was to take a stratified sample of 404 nurses in various job scales in the hospitals selected, registered nurse officers, registered nurse assistants and enrolled nurses. Nurses in the hospitals selected formed the unit of analysis for this

study. Stratified sampling method was used to select individual nurses within the selected hospitals to take care of some variations that could occur based on job cadres pertaining to nurses' performance. According to Sahu et *al.,* (2012), a population is stratified based on different features of the population and a random sample is picked from each stratum. In this sampling method the sample error is considerably reduced.

The following formula according to Cochran (1963) was used to determine the sample size:

$$n = \frac{Z^2 pq}{\varepsilon^2} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 1$$

Where;

N_0= Sample size when the population is > 10,000

Z^2 = Standard normal deviant required at confident level of 95% which is 1.96.

p = Proportion of people influenced by performance management which is set at 0.5 each.

q = 1-p

ε= 0.5 error of margin allowed.

$$N_0 = \frac{(1.96)^2 \times 0.5(1 - 0.5)}{(0.05)^2} = 404$$

Stratified random sampling with allocation was used to pick respondents from each cadre whereby at least 30% of sampled population was considered generally acceptable (Kothari, 2014).

3.6 Data Collection Instruments

This study used questionnaires to collect primary data from regional hospitals in Tanzania. According to Kothari (2010), information obtained using questionnaires is

normally free from bias and researchers influence, thus it is accurate and valid. The study used questionnaire and secondary data. The choice of questionnaires was informed by the fact that they gather information over a large sample and are more appropriate when addressing sensitive issues since it offers greater anonymity. The questionnaire consisted of both structured and open-ended questions whereas both qualitative and quantitative data were collected (Kumar, 2011). Secondary data was obtained from relevant literature, hospital records and data collected by other researchers for other purposes. It was also collected through review of published literature such as journal articles, published theses and text books. These sources were reviewed to give insight in the search for primary information, insight on the research variables and the development of instruments (Subarymaty, 2018).

3.7 Data Collection Procedure

The procedure for data collection involved obtaining an introductory letter from JKUAT and a research permit from Regional Administration secretariat in each regional under the study. This was followed by the recruitment of research assistants. The researcher collected both primary and secondary data for this study. The primary data was collected at source while secondary data was collected from published and reference materials such as reports and journals. The questionnaires were self-administered; self-administered questionnaires are advantageous in that they cost less than personal interviews and also enable the researcher to contact participants who might otherwise be inaccessible. The questionnaires were hand-delivered to the respondents for immediate response and where the respondents are either reluctant to fill immediately or are busy, then, the drop and pick method was used, where the researcher left the questionnaire with the respondent to fill on their own then pick it later at an agreed time. A total of 500 questionnaires were administered to 404 nurses of the 8 regional hospitals under the study. Nurses were targeted because they are the custodians of the data required for the study

3.8 Pilot Test

Pilot test is a small-scale, preliminary test which aims to investigate whether crucial components of a main study will be feasible (Gangai, 2014). Cooper and Schindler (2014) indicated that a pilot test is conducted to detect weaknesses in design and instrumentation and to provide proxy data for selection of a probability sample. The researcher carried out a pilot study to pre-test the validity and reliability of data collected using the questionnaire. For this pilot study, the researcher selected a pilot group three regional hospitals from the total population of 28 hospitals that did not have formed part of the sample population. Saunders, Lewis and Thornhill (2009) recommend a pilot test of between 5% and 10% of the study sample. 10% of the sample was 9.5 hence 3 units. The questionnaires were pretested to ensure clarity and content validity prior to them being administered. Thus, a pilot test must answer a simple question:*" Can the full-scale study be conducted in the way that has been planned or should some component(s) be altered?* (Small *et al*., 2011). Their responses were subjected to statistical analysis to ascertain the reliability and validity of the instruments using Statistical Package for Social Sciences (SPSS). The results obtained from the Pilot study were discussed with the supervisors which led to the improvements of the questionnaire. The corrections agreed upon were adopted into the research instrument before the instrument was used for data collection.

3.8.1 Reliability of the Instrument

Reliability of an instrument is the consistency in producing reliable results (Kaur, 2013).). A measure is considered reliable if a person's score on the same test given twice is similar. The purpose of the reliability test is to refine the questionnaire so that respondents will have no problems in answering the questions and there will be no problems in recording the data.

Pilot study was carried out on the data collected from the pilot testing, and the Cronbach's coefficient alpha was computed. Items with Cronbach's coefficient alpha of 0.90 and above were considered as excellent. Items with Cronbach's coefficient alpha of 0.80 – 0.89 were seen as very good and Cronbach's coefficient alpha of 0.7

was considered as adequate (Saunders, Lewis, & Thornhill, 2016). This study adopted Cronbach's coefficient alpha of 0.7 as the benchmark to test for reliability of the measures in the questionnaire for this study. Cronbach's alpha is a general form of the Kunder- Richardson (K-R) ^{20} formula for reliability test.

The formula is as follows:

$$\mathbf{KR^{20} = (K)\ (S^2 - \sum S^2) - (S^2)\ (K\text{-}1)}\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\mathbf{...1:}$$

KR^{20} = Reliability coefficient of internal consistency

K = Number of items used to measure the concept

S^2 = Variance of all scores

S^2 = Variance of individual items

3.8.2 Validity of data

According to Creswell (2012), validity is the degree to which the results obtained from the analysis of the data actually represent the result obtained or represent variables under study. This study adopted content validity and face validity. Content validity is qualitative in nature. It ascertains whether the content of the questionnaires is appropriate and relevant to the study purpose. While face validity ensures that the appearance of the questionnaire in terms of feasibility, readability, and consistency of style, formatting and the clarity of the language used (Mugenda, 2010). In this study, content validity was established on 3 levels. The first level was on the part of the researcher who reviewed the entire items one after the other to see whether or not the items could measure what it was designed to measure. The second level was when the instrument was presented to the supervisors and research expert opinion from Professionals in this field. Their comments were incorporated to improve the instrument.

The third level occurred when the data collected by the use of the instrument were subjected to statistical analyses and the Content Validity Index (CVI) was calculated. In this process, the experts were asked to rate each item based on relevance, clarity, simplicity and ambiguity on the four-point scale. Content Validity Index (CVI) for each item was determined. The scale level CVI (S-CVI) was obtained by taking the

average of all the item level CVI. The S-CVI obtained for the 4 raters was 0.934, which was more than the recommended S-CVI of 0.90 (Cooper and Schindler, 2014). This implies that the instrument passed the test for the internal consistency

Table 2.2 Content Validity Index

Rater	Number of Items (A)	Number of Valid Items (B)	Content Validity Index =B/A
1	184	162	0.880
2	184	170	0.924
3	184	179	0.973
4	184	176	0.957
Average			0.934

3.9 Data Analysis and Presentation

Data analysis involves searching and arranging of data collected from the study in groups or classes on the basis of common characteristics (McKinney, 2012). This study collected both qualitative and quantitative data. In this research endeavor, the data collected were analyzed using both descriptive and inferential statistics. The data were organized for processing, which involve: response coding, tabulation of the data, and statistical computations. Qualitative data analysis was analyzed using content analysis. According to Gangai (2014) qualitative data analysis involves organizing, accounting for and explaining the data to make sense out of the respondents‟ definitions of the situation, noting patterns, themes, categories and 65 regularities. The qualitative data collected from the open-ended items on the questionnaire was grouped into clusters of responses based on their similarities to the major concepts emanating from the responses and was summarized thematically.

For quantitative data, inferential statistical analysis was undertaken. The data gathered were subjected to hypothesis testing. Pearson Products Moment Correlation (PPMC) analysis was calculated to find out the extent and direction of the relationship between the variables of study. The multiple regression analyses were used to find out relationships between the independent variables and dependent variable, analysis of variance (ANOVA) was calculated to check for the overall

influence of the flexible work arrangements on nurses' performance in regional hospitals in Tanzania. The significance of the coefficients was determined by using standard F and t tests. The findings were presented using tables, charts and figures. All these data analyses were done by the use of the Statistical Packages for Social Sciences (SPSS version 22).

3.10. Diagnostic Tests

In statistical analysis there are parametric tests that are done which assume certain characteristics about the data, also known as assumptions (Statistics Solution, 2017). Violation of these assumptions changes the conclusion of the research and interpretation of the results. Therefore, all research must follow these assumptions for accurate interpretation. In this study the following, assumptions were considered, linearity, multicollinearity, normality and heteroscedasticity.

Normality

According to Vaismoradi, *et al*., (2013), normal distribution is assumed by many statistical procedures. Normal distributions take the form of a symmetric bell-shaped curve. In this study the test for normality of the dependent variable was done by use of Kolmogorov Smirnov, which according to Cooper and Schindler (2014) is a non-parametric test of the equality of continuous, one-dimensional probability distributions that can be used to compare a sample with a reference probability distribution (one-sample K–S test), or to compare two samples (two-sample K–S test) test.

Multicollinearity

Multicollinearity refers to excessive correlation of the predictor variables (Saunder, & Townsend, 2018). When correlation is excessive (using the rule of thumb, $r>0.90$), standard errors and beta coefficients become large, making it difficult or impossible to assess the relative importance of the predictor variables. Multicollinearity test was done to determine whether there was any undesirable situation where the correlations among the independent variables were strong. Multicollinearity occurs when the independent variables are not independent from

each other. In this study, Variance Inflation Factor (VIF) was used to determine the multicollinearity (Garson, 2012). The variance inflation factor o is defined as VIF = 1/T. Similarly, with VIF > 10 there is an indication for multicollinearity to be present; with VIF > 100 there is certainly multicollinearity in the sample.

Heteroscedasticity

Heteroscedasticity is the circumstance in which the variability of a variable is unequal across the range of values of a second variable that predicts it (Lembrechts *et al.*, 2016). A group of variables is heteroscedastic if there are sub-populations that have different variability from others. The variability can be quantified by the variance or any other measure of statistical dispersion which is a proof of absence of homoscedasticity. Homoscedasticity assumes that scores are normally distributed about a regression line (Bruce, 2015). In this study, homoscedasticity was assessed by examination of a scatter plot of the squared residuals.

Linearity

Linearity is an assumption that the data collected would form a straight line when graphed (Garson, 2012). Linearity is a requirement for performing linear regression. A linear regression line for nonlinear data was not the line of best fit. In this study, linearity assumption was tested with scatter plots.

Factor Loading Analysis Test

Factor analysis test is to identify and remove any item from the questionnaire that has low factor loading and to test for construct validity and also to identify variability among variables in order to reduce redundancy in data (Hair, Black, Babin, & Anderson, 2014). It has been recommended that a factor loading of less than 0.4 may be considered as not related to the other items or indicates an additional factor that could be explored (Saunder, & Townsend, 2018). This study ran factor analysis test for the independent, and dependent variables and adopted the 0.40 factor loading as benchmark in line with (Kombo, 2010)

3.11 Statistical Modeling

This study used multiple regression model to measure the influence of flexible work arrangements in performance of nurses in regional hospitals in Tanzania. There were four independent variables in this study thus the multiple regression model was as follows:

$$Y= \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_{4+} \varepsilon$$

Equation 2: Econometric Model for FWAs and Performance of Nurses

Where:

Y= Dependent Variable (Performance of Nurses)

α = Y intercept (constant) whose influence on the model is insignificant

X_1 = Work Scheduling

X_2 = Job Location

X_3 = Workload

$X_{4=}$ Work Continuity

ε= Stochastic term (Error Term)

β_1, β_2, β_3, β_4 β_5 represent units change in the dependent variable as a result of a unit change in the respective independent variable and it is the proportion of positive effect.

Inferential statistics such as T-test and analysis of variance (ANOVA) to include F statistics was used to test the significance of the overall model at 5% level of significance. The chi-square was used to measure association between work scheduling, workload, job continuity job location and performance of nurses in regional hospitals in Tanzania (Satake, 2015).

3.12 Test for Moderation

A multiple linear regression was used to test the moderating effect of leadership support on the relationship between factors affecting FWAs and performance of employees.

The multi-linear regression model was as indicated;

$Y= \alpha +\beta_1X+\beta_2X5+\beta_3X* X_5+ \mathcal{E}$ as indicated in Equation 3.

Where,

Y= Performance of Nurses

α = Constant

X= Composite of Factors (X_1, X_2, X_3, X_4)

X_5= Leadership Support

$\mathcal{E}$ = margin of error

The moderating effect was the joint effect of leadership support and factors for performance of Nurses. The significance of moderating effect was evaluated for significance at a p value of 0.05. If reported p value was less than 0.05, then the moderating effect was considered to be significant.

3.13 Hypotheses Testing

A hypothesis is a predictive statement capable of being tested by scientific methods, which relates an independent variable to some dependent variables (Cooper & Schilder, 2014). Thus, hypothesis states what we are looking for and it is a proposition which can be put to a test to determine its validity. The alternative hypothesis which is also the research hypothesis is the one which the researcher wishes to prove (Fisher, 2010). The P-value was computed and inferences were made. The level of significance, which is the amount of risk the researcher is willing to accept in the research, was also relevant in hypothesis testing. The level of significance is always 5% (0.05) or 10% (0.10) which is always denoted by the letter α (alpha) (Kothari & Garg, 2014). The P-value was compared with α (alpha) to help in establishing whether the alternative hypothesis is to be accepted. The null hypothesis was rejected in favour of the alternative hypothesis at alpha multiplied by 100% level of confidence, if the P value is higher than the alpha. The P-value is the smallest level of significance at which the given sample observations would lead the researcher to reject the null hypothesis (Cresswell, 2012).

Table 3.3 Summary of Hypothesis Test

No	Variable	Hypothesis	Analytical tool	Criteria
1.	Work Scheduling	**β_{01}**: Work scheduling has significant influence on the performance of nurses in regional hospitals in Tanzania.	Linear Regression Analysis $PN= \beta_0 + \beta_1X_1+ \varepsilon$	Reject H_1, if $p<0.05$, otherwise accept H_1
2	Workload	**β_{02}:** Workload has significant influence on the performance of nurses in regional hospitals in Tanzania.	Linear Regression Analysis $PN= \beta_0 + \beta_2X_2+ \varepsilon$	Reject H_2, if $p<0.05$, otherwise accept H_2
3	Job Continuity	**H_{03}:** Job Continuity has significant influence on the performance of nurses in regional hospitals in Tanzania.	Linear Regression Analysis $PN= \beta_0 + \beta_3X_3+ \varepsilon$	Reject H_3, if $p<0.05$, otherwise accept H_3
4	Job Location	**H_{04}**: Job Location has significant influence on the performance of nurses in regional hospitals in Tanzania.	Linear Regression Analysis $PN= \beta_0 + \beta_4X_4+ \varepsilon$	Reject H_4, if $p<0.05$, otherwise accept H_4
5	Supervisor Support	**H_{05}**: Supervisor Support has significant mediating role on the relationship between the influence of flexible work arrangements on the performance of nurses in regional hospitals in Tanzania.	Linear Regression Analysis $PN= \beta_0 + \beta_5X_5+ \varepsilon$	Reject H_5, if $p<0.05$, otherwise accept H_5

CHAPTER FOUR
RESEARCH FINDINGS AND DISCUSSION

4.1 Introductions

This chapter presents the results and analysis of the data collected from 8 regional hospitals in Tanzania. The findings and detailed analysis are presented based on the five research objectives and hypotheses of the study succinctly. First, it evaluates the response rate, respondents' demographic information, reliability and validity of the survey constructs. Secondly, the descriptive analysis of variables and diagnostic tests are presented. Finally, the chapter reviews the results of the correlation analysis, regression analysis, test of hypotheses and optimal model as well as presenting discussion of the results and implication rising from the findings.

4.2 Response Rate

In analyzing the results, it was important to understand the response rate of the research. Response rate is one of the most important indicators of survey quality because it shows the demographic representativeness within the range examined. The researcher administered 400 questionnaires to nurses and nursing management staff of 8 regional hospitals in Tanzania. The findings of response rate presented in Table 4.1

Table 4.1 Response Rate

Questionnaire	Numbers	Percentage
Correctly filled	381	93.4
Not returned	19	9.6
Total	400	100

The results indicate that 381 questionnaires were completely filled, which is 94.4% response rate. Lynn, Roel, Johanna and Martin (2010) contends that a response rate of 70% is appropriate for data analysis. Therefore, the response rate in this study was a sufficient representation of the target population that can be reliable for data analysis.

4.3 Results of the Pilot Study

The study conducted a pilot test analysis on regional hospitals to ascertain if the research instrument would bring out reliable and valid information. The pre-test was conducted on 40 respondents drawn from 3 regional hospitals not included in the study. Their responses were subjected to statistical analysis to ascertain the reliability and validity of the instruments using Statistical Package for Social Sciences (SPSS). The results are presented on the reliability and validity of the research instruments as herein shown.

4.3.1 Reliability Test

Blischke and Murthy (2011) define reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trials. It was verified by the consistency of the observation of an outcome. In this study, reliability was calculated using Cronbach‘s alpha formula with the aid of SPSS. The alpha measures the internal consistency of a test and it was expressed as a number between 0 (no internal consistency) and 1 (complete internal consistency) (Tavakol & Dennick, 2011). The higher the reliability coefficiency, the lesser the errors attributable to the test score. According to Mugenda (2010), an alpha of 0.6 and below is poor. Therefore, Cronbach’s alpha coefficient of 0.7 and above is interpreted to be reliable. The results of Reliability are as shown in Table 4.2.

Table 4.2 Reliability Analysis

Variable	Number of items	Cronbach alpha	Comments
Work Scheduling	9	0.805	Reliable
Workload	9	0.853	Reliable
Job Continuity	9	0.838	Reliable
Job Location	10	0.909	Reliable
Supervisor Support	10	0.900	Reliable
Nurses Performance	9	0.932	Reliable

The results in Table 4.2 show that cronbach's alpha for all the items were all above 0.7 implying that the instrument was sufficiently reliable for measurement. Since all the variables measured had a cronbach's alpha of above 0.7, they were all accepted. The data collected can thus be generalised to reflect the opinion of the respondents in the target population.

4.3.2 Validity Test

The study considered content and face validity. Content validity ascertains whether the content of the questionnaires is appropriate and relevant to the study purpose. While face validity ensures that the appearance of the questionnaire in terms of feasibility, readability, and consistency of style, formatting and the clarity of the language used (Parsian, 2009). Content validity was done by subjecting the data collection instrument to four human resource experts. These experts were required to indicate whether the items in the research instruments were relevant or not. The results of their responses were analyzed to establish the percentage representation using the content validity index. The content validity formula is; *Content Validity Index = (No. of judges declaring item valid)/ (Total No. of items)*. The result of the content validity is as shown in Table 4.3.

Table 4.5 Content Validity Index

Rater	Total items	Valid items	Fraction
1	59	48	0.9714
2	59	47	0.9571
3	59	45	0.9286
4	59	49	0.8429
Average			0.925

The results in table 4.3 show that the test yielded an average validity index score of 92.5%. This implied that the instrument was valid as emphasized by Zamanzadeh and Ghahramanian (2015).

4.4 Demographic Information of the Respondents

This section provides the details of personal characteristics of the respondents under the demographic information. According to Cooper and Schindler (2014),

demographic information in a study is essential in establishing a good rapport between the researcher and the respondent out of which the respondent becomes more willing to give information on the main research questions. Through background information, the researcher is able to identify whether the respondent is in a position and competent to respond to the research questions as intended in the study. As noted by Jasmine, Nasina and Muhammad (2016), the availability of flexible working options are more in demand because there are more dual-earner couples, women and single-parent families, as well as those who have geriatric care responsibilities, in the workplace. Therefore understanding demographic characteristics of respondents under the study is paramount.

In this study, respondents who participated in the study were requested to indicate their gender, marital status, spouse occupation, the job title, department of operation, educational qualification, working experience, number of working hours, years of working with the hospital (tenure), as well as the number of patients saved per day. The information provided insight into the credibility of the respondents to provide the required information for the study. The findings of the study are as discussed next.

4.4.1 Distribution of Respondents by Gender

The study sought to establish the gender of the respondents. The findings as shown in Table 4.4 revealed that majority of the respondents (58.8%) were female while (35.2%) of the respondents were male indicating unfair gender balance. The nursing staff in the hospitals sampled is skewed towards a majority of women. The findings indicates that since majority of the responses for this study relies on the perceptual measures of the respondents, this gender distribution is expected to accommodate the opinions and views from one side of the gender divide. That is why the nursing profession in most of developing countries is female-dominated. The findings implies that due to the nature of the roles of men and women in our society, the primary responsibility for family caretaking often falls on women, and such responsibility affects the working lives of women more than it affects the working lives of men.

Therefore, professional female nurses are more likely to have access to flexible working options that focus on autonomous scheduling. Confirming gender imbalance in nursing profession in Zambia, Zamanzadeh, Valizadeh, Negarandeh, Monadi and Azadi (2013) argues that, male nurses confront challenging traditional gender-defined roles and stereotypes from the society when choosing to enter a female-dominated profession (nursing). A similar study carried out by Baxter & Chesters, (2011) indicated that although flexibility is important to both men and women in the workforce, generally speaking, flexibility is essential for women because women are the primary caretakers of the household thus require personal control over the duration and scheduling of their working hours. Carlson, Grzywacz, and Kacmar (2010) concurred with Baxter and Chesters and supported the notion that women, as a standard, benefit more from flexible work arrangements than men do.

Table 4.4 Composition of Respondents by Gender

	Frequency	Percent
Female	224	58.8
Male	134	35.2
N/A	23	6.0
Total	381	100.0

4.4.2 Respondents Department of Operation

The distribution of respondents by department of operation was sought in the study. The respondents were asked to indicate their current working department as provided in the questionnaire. The findings as indicated in Table 4.5 shows that 34.0% respondents were from maternity department, 22.1 %, of respondents were from pediatric department, 18.8% of respondents were from Outpatient department, 11.1% of respondents were from Surgical department, 6.7% of respondents were from Emergency department, 3.0% of respondents were drawn from Orthopedic department, 1.7% of respondents were from male department and 1.6% of respondents were drawn from female department. The finding shows that the majority respondents were drawn averagely from different departments which helped in making a good conclusion since inclusion of all categories

uniformly reduced the chances of biasness towards departments prone to irregular working practices.

Table 4.5 Distribution of Respondents by Department of Operation

Name of the Department/Unit	Frequency	Percent
Maternity	103	34.0
Pediatric	88	22.1
Outpatient	52	18.8
Surgical Ward	40	11.1
Emergency	32	6.7
Orthopedic	24	3.0
Male Ward	22	1.7
Female Ward	20	1.6
Total	381	100

4.4.3 Job Categories of Respondents

On the questionnaire administered to the respondents, an item requested the respondents to indicate their job category. The findings were as indicated in Table 4.6 below whereby 41.2% of respondents belonging to Registered Nurse Attendants category, 29.7% of respondents had a Registered Nurse Officer category, while 29.1% of respondents had a title of Enrolled Nurses. The findings imply that majority of nurses in regional hospitals had a long-term training with international recognized qualifications. However, the result form this study differed from that of Rosa & Coligan, (2015) who reported that the majority (42%) of the nurses in public hospitals in Chenai belonged to Enrolled nurse/midwives' category. Moreover, it is possible that various job category of respondents has impact on the attitudes and behaviors towards flexible work arrangements and their perspective of work situations such as leadership or performance.

Table 4.6 Distribution of Respondents by Job Categories

Job Position	Frequency	Percent
Registered Nurse Assistant (RNA)	157	41.2
Registered Nurse Officer (RNO)	113	29.7
Enrolled Nurse	111	29.1
Total	381	100.0

4.4.4 Level of Education of Respondents

The study sought to establish the respondents' level of education. As the findings on Table 4.7 portray, 57.7% of the respondents had a university level of education, 37.3% of respondents had College education, and 5.5% of respondents had Secondary education level.

The findings shows that the respondents were well educated which made it easy for them to. Also, this is an indication of the hospitals having a well skilled nursing staff who would be expected to provide a high quality of nursing service. The finding of this study agreed with Orogbu (2015) who reported the majority (47.1%) of the respondents in 19 public and private hospitals in Nigeria were university graduates. Likewise, the finding of this study agreed with Awes (2012) who reported that 40% of the respondents in public hospitals in Namibia were university graduates.

Table 4.7 Distribution of Respondents by Level of Education

Education Level	Frequency	Percent
College level	142	37.3
Secondary school level	19	5.0
University level	230	57.7
Total	381	100.0

4.4.5 Working Experience of Respondents

The number of years each respondent has worked with the hospital was also sought. The data collected on working experience with the hospital is presented in Table 4.8. The findings shows that 33.9% of the respondents had served their organization continuously for a period between 11– 20 years, 28.1% of the respondents had served their organizations between 6 – 10 years, 21.0% had served their organizations for more than 20 years, and 17.1% had served for less than 5 years. This shows that majority of nurses had good experience on activities of their hospitals and therefore stood a better chance to respond to the research questions. Furthermore, since majority of the respondents belongs to generation Y and Z they are characterized as having low power distance, those that have

entrepreneurial spirit, like work flexibility, fun, want autonomy, and they are short term and fast achievers (Bae & Fabry, 2014). This extensive experience in the profession provides a solid back ground for nursing activities suggests that the responses they gave on FWAs issues could be relied upon.

Table 4.8 Distribution of Respondents by Years Worked

Years Worked	Frequency	Percent
11 to 20 years	129	33.9
5 to 10 years	107	28.1
Less than 5 years	65	17.1
More than 20 years	80	21.0
Total	381	100.0

4.4.6 Household Composition of Respondents

The study also sought to assess the household composition of respondents. From Table 4.9, 41.9% of respondents came from two parents' household with children, 24.9% of respondents were from single parent household with children, 16.9% of respondents came from two parents' family with no children, and 16.2% of respondents came from one person household setup. The findings indicate that it was found that, a simple majority of the nursing staff come from a two parents' household, with children set up (39.6%). This reflects a prevalence of the father, mother and children family set up.

There is an indication of single parent families among the nursing staff with 22.8% single parent families. This indicates that, majority of respondents were working parents thus performed both work and family roles hence experiencing professional and family life interference. Therefore, the findings implies that majority of respondents could the family-oriented policies and solutions, that could cater to all the non-work demands. The family composition is very important in nursing and therefore could influence the utilization of flexible working arrangements among nurses. Confirming this finding, Faegan, (2013) argued that 59% of women surveyed in 17 organizations in Turkey indicated that children introduce practical difficulties in coordinating schedules because of

childcare requirements and other constraints. Thus, parents are able to coordinate their work schedules less than they would ideally like to.

Table 4.9 Distribution of Respondents by Household Composition

Family Composition	Frequency	Percent
Two parents' household with children	159	41.9
Single parent household with children	97	24.9
Two persons household with no children	64	16.9
One person household with no children	61	16.2
Total	381	100.0

4.4.7 Partner/Spouse Employment

Other important demographic of the sample was spouse employment. The data collected on partner/spouse employment is presented in Table 4.10. The findings shows that 52.5% of the respondents said that their spouses had no employment, while 47.5% of respondents presented that their partners were employed. From the findings, high number of unemployed spouses could indicate high level of resource dependence within their family setups. Unless the partners are engaged in self-employment this would point to a prevalence of joblessness. Thus, nurses' income has become a more important source of household financial security. This reality is implying that the single-earner families, might be willing to work excessive hours to cover for the family income gap. It can also imply that; majority of respondents were parents trying to reconcile family life and professional life. The findings concur with Steiber and Haas (2012) who also reported that majority (51%) of employee indicated, which implied that if the spouse was working, this had a positive association with intention to turn overTable 4.10 Respondents' Spouse Employment Status

Employment Status of Partner/Spouse	Frequency	Percent
Yes	186	47.5
No	195	52.5
Total	381	100.0

4.4.8 Number of Hours Worked per Day

The number of hours worked per day was sought in this study. The respondents were asked to indicate their working hour's bracket as provided in the questionnaire. The findings as indicated in Table 4.11 shows that 68% of the respondents worked for more than 8 hours per day, 31.2% of respondents worked for exactly 8 hours a day and 0.8% of respondents worked for less than 8 hours per day. The finding indicates that the 12-hour shift is so popular in regional hospitals with few nurses who works on part-time basis. This indicated that working three, 12-hour shifts was often highly appealing to nurses who, in theory, stand to benefit from additional "weekend" days that allow them to spend more time with their family or pursuing other areas of interest. However, the findings could also indicate high level of medical errors, burnout, and patient dissatisfaction, putting a hospital's long-term viability in jeopardy. The findings confirm the results of the study by Singh & Seema, (2014) who found that 68% of nurses in public hospitals in Ghana worked for more than 12 consecutive hours in a day, experiencing high stress levels which lead to serious health conditions and medical errors.

Table 4.11 Distribution of Respondents' Working Hours

Hours Worked	Frequency	Percent
8 hours and above	259	68.0
Exactly 8 hours	119	31.2
Less than 8 hours	3	.8
Total	381	100.0

4.4.9 Number of Patients Served Per Day

The number of patients saved per day was sought in this study. The respondents were asked to indicate the number of patients saved per day in bracket as provided in the questionnaire. The number of patients served per day was grouped into categories as follows: 0-9:1, 10-19:2, 20-29:3, 30-39:4, 40-49:5, 50-59:6, 60-69:7, 70-79:8, 80 and above 9. As Table 4.12 below indicates, 31.8% of the respondents

served between 60 and 69 patients per day while 2.1% of respondents served more than 80 patients per day.

The findings indicates that, nurses in regional hospitals are overloaded in terms of number of patients attended per day compared to the maximum recommended ratio. This implies that there in inefficiency in service delivery in nursing profession which could affect health care performance. The findings support the results by Kamati, Cassim and Karina, (2014) who found that nurses the number of patients served by a single nurse in India exceeded the International recommended rate. The findings further is a strong indication that the hospital is understaffed and the effects are an increased workload on the available workforce. Research shows that a heavy nursing workload adversely affects patient safety (Oliver, & Gachunga, 2010).

Table 4.12 Grouped Respondents by Number of Patients Served per Day

Interval	Frequency	Valid Percent
1 (0 – 9)	6	1.6
2 (10 – 19)	121	33.2
3 (20 – 29)	26	7.1
4 (30 – 39)	67	18.4
5 (40 – 49)	8	2.2
6 (50 – 59)	15	4.1
7 (60 – 69)	102	27.9
8 (70 – 79)	12	3.3
9 (80 – 89)	8	2.2
Total	365	100.0

4.5 Diagnostic Tests of Variables

4.5.1 Factor Analysis

Factor analysis is an approach that involves condensing information contained in a number of variables into a smaller set of dimensions (factors) with a minimum loss of information (Baets, 2002). Factor analysis was conducted to assess the convergent validity of the hypothetical constructs (Mugenda & Mugenda, 2012). Factor analysis establishes threshold of variables to be considered for

interpretation. Lynn, Roel, Johanna and Martin (2010) described factor loading as follows 0.32 (poor), 0.45 (fair), 0.55 (good), 0.63 (very good) or 0.7 (excellent). This was assessed using the value of standards loading of the indicators for the underlying construct and the scores are to be statistically significant above 0.5 (Cresswell, 2012).

Alauddin & Nghiemb, (2010) stated that factor loading with Eigen values (total variance) greater than 0.5 should be extracted and coefficients below 0.49 deleted from matrix since they are not important. It was conducted in order to reduce the data to a meaningful and manageable set of factors (Sekeran, 2006). It also helped to analyze the structure of the interrelationships (correlations) by defining the factors. Fit statistics were therefore evaluated to determine which predetermined model(s) best explain the relationships between the observed and the latent variables.

4.5.1.1 Factor Loading for Work Scheduling

The first objective of this study was to assess the influence of work scheduling on the performance of nurses in regional hospitals in Tanzania. The objective had a total of ten items. The component matrix was used to determine the factor loading so as to know which item should be used for further analysis. The results are presented in Table 4.13. From the results, highest factor loading among the work scheduling items was .89 and the lowest factor loading was .61. It is noted that all the factors under this objective had a factor loading above 0.4 which led to the conclusion that all the items were found suitable for further analysis.

Table 4.13 Factor Loading Analysis for Work Scheduling

Statement	Factor Loading
The number of working shifts among nurses vary from time to time	0.62
Flexi-working has enabled nurses to have high degree of independence with their working arrangements	0.69
There is a possibility to influence the creation of duty roster since every nurse is consulted	0.73
Nurses are given an advance notice about what days and hours they will need to work,	0.71
Nurses have a greater ability to set their own work start and end times	0.68
Mandatory shifts contribute to both work-family conflict and work stress among nurses.	0.74
Nurses have an opportunity to negotiate for shifts that best suit their needs.	0.66
There are no enough staff/nurses required to ensure compressed working in the unit	0.61
Nurses can compress their work week by working longer hours on fewer days	0.89
Compressed working has helped nurses to increase to increase their work efficiency	0.61

Extraction Method: Principal Component Analysis.

4.5.1.2 Factor Loading for Workload

The second objective of this study was to assess the influence of workload on the performance of nurses in regional hospitals in Tanzania. The objective had a total of ten items. The component matrix was used to determine the factor loading so as to know which item should be used for further analysis. The results are presented in Table 4.14. From the results, highest factor loading among the workload items was .72 and the lowest factor loading was .62. It was noted that all the sub variables had values more than 0.5 and therefore they were accepted and thus no sub variable was dropped.

Table 4.14 Factors Loading for Workload

Statement	Factor Loading
Too much workload has compromised nurse's professional over the past five years	0.67
Nurses continuously perform multiple tasks outside their profession	0.75
The daily number of patients overseen by nurses exceeds the maximum limits in nursing profession	0.70
Nurses' workload fluctuates from time to time hence affect quality and safety of patient care	0.71
Part –time working has helped nurses to easily have reasonable workload	0.62
Mandatory overtime limits nurses' ability to achieve normal workload	0.71
Job sharing practices supports nurses to meet the day to day increased workload demands in their units	0.64
Seasonal working helps nurses cope better with work and personal issues hence be more productive in the organization	0.72
Nurses are emotionally exhausted because of inadequate resources and supports to meet workload demands,	0.67

Extraction Method: Principal Component Analysis.

The third objective of this study was to assess the influence of job continuity on the performance of nurses in regional hospitals in Tanzania using the component matrix. The results are presented in Table 4.15. From the results, highest factor loading among the job continuity items was .84 and the lowest factor loading was .61. It is noted that all the factors under this objective had a factor loading above 0.4 which led to the conclusion that all the items were found suitable for further analysis.

Table 4.15 Factor Loading for Job Continuity

Statement	Factor Loading
Nurses put much effort in my work because it offers various leaves	0.64
Nurses are more committed because my leave schedule is not interfered by organizational activities	0.61
Nurses continue working for this organization because I am well supported with rests periods	0.77
Employee rest periods has increased nurses work output and overall organization productivity.	0.82
Rest periods help nurses cope better with work and personal issues hence be more productive in the organization	0.70
Nurses are able to take at least 30 minutes break during working hours	0.64
Employee breaks enable nurses to take care of their personal life while remaining efficient.	0.84
Through weekend rest periods nurses are able to effectively handle family engagements that may affect my performance	0.65
Nurses are comfortable with variety of leaves in the organization	0.78

Extraction Method: Principal Component Analysis.

In this objective all the sub variables had values more than 0.5 and therefore they were accepted and thus no sub variable was dropped.

4.5.1.3 Factor Loading for Job Location

The fourth objective of this study was to assess the influence of job location on the performance of nurses in regional hospitals in Tanzania Factor analysis was conducted on statements regarding job location. The Factor loading for job location is as shown in Table 4.16.

Table 4.16 Factors Loading for Job Location

Statement	Factor Loading
My hospital supply nurses with required equipment to enable them to work from an off-site location.	0.62
Nurses have regular scheduled days to be in the office and to work from home.	0.61
Nurses work from an off-site location for part of the regular week	0.64
The hospital will pay for nurses' phone/give nurse a phone and pay for their internet if they working from home	0.65
Tele-work has enabled nurses solve work problems while they are away from work	0.72
Working from home has enabled nurses to improve their performance in the hospital	0.63
The hospital has introduced mobile working which has helped to easily balance both home and work responsibilities	0.73
Satellite working has improved nurses' attitude towards quality service delivery	0.64
Mobile working has enabled nurses to in efficient use of resources in my hospital	0.65
Working from home has improved the quality and safety of patient care through reduced unanticipated interruptions	0.64

Extraction Method: Principal Component Analysis.

Table 4.16 indicates the set of sub variables under the variable job location. All the sub variables had values more than 0.5 and therefore they were accepted and thus no sub variable was dropped.

4.5.1.4 Factor Loading for Supervisor Support

The fifth objective of this study was to assess the moderating effects of supervisor support on the influence of flexible work arrangements on the performance of nurses in regional hospitals in Tanzania Factor analysis using component matrix was conducted on statements regarding supervisor support as shown on Table 4.17.

Table 4.17 Factors Loading for Supervisor Support

Statement	Factor Loading
My supervisors are always with me in solving my personal and family problem.	0.89
My supervisors appreciate me for what I did for my work.	0.76
My supervisor encourages me to take part in important decisions	0.87
My supervisor is willing to listen to my problems in juggling work and non-work life	0.76
My supervisor is a good role model for work and non-work balance.	0.87
I can depend on my supervisor to help me with scheduling conflicts if I need it.	0.76
My supervisor thinks about how the work in my department can be organized to jointly benefit employees and the company	0.68
My supervisors provide mentorship programs for all employee	0.69
My supervisor grants me greater autonomy and involves me in decision making	0.79
My supervisor encourages participatory approaches in designing working time arrangements.	0.78

Extraction Method: Principal Component Analysis.

Table 4.17 shows the set of sub variables under the variable supervisor support. All the sub variables had values more than 0.5 and therefore they were accepted and thus no sub variable was dropped.

4.5.1.5 Factor Loading for Nurses' Performance

A principal Component Analysis was performed on all ten nurses' performance measures in order to examine the dimensionality of nurses' performance and also to find out if all the variables were significant and useful for further analysis. According to Cresswell (2012), the rationale behind this was to group the factors and to retain a small number of factors which had the highest influence. The nurses' performance in regional hospitals in Tanzania had a total of ten items. The component matrix was used to determine the factor loading so as to know which item should be used for further analysis. The results of factor loading analysis were shown in Table 4.18. From the results, highest factor loading among the

performance of nurses' items was .84 and the lowest factor loading was .62. It is noted that all the factors had a factor loading above 0.4 which led to the conclusion that all the items were found suitable for further analysis.

Table 4.18 Factor Loading for Nurses' Performance

Statement	Factor Loading
Our hospital productivity has improved over the last five years	0.67
The efficiency and effectiveness of the work completed by nurses has improved in the last five years.	0.73
Quality of services rendered by nurses to customers has greatly improved over the last 5 years	0.68
Overall nurses target achievements have improved over the last 5 years	0.89
Nurses have been able to achieve organization goals of last 5 years	0.67
There is efficient use of resources in provision of health services in my unit	0.68
Target given to different nurses are often met on time	0.63
Majority of nurses can work independently and they give high performance	0.87
Nurses offer nursing care best suited to the patient's needs.	0.78
Nurses in our hospital have been enabled to ensure timely service delivery to customers	0.86

Extraction Method: Principal Component Analysis.

4.5.2 Test for Normality

In order to evaluate how far the dependent variable data deviated grossly from a bell-shaped normal distribution the histogram and normal probability plots (P-P Plot) was assessed (Graphpad, 2011). Given that H0 and H1, set $\alpha=0.05$, the rule is that reject H0 if P-value is less than α else fail to reject H0, where:

H0: The data is normal

H1: The data is not normal

In this study, the sample size was 381. With $N \geq 30$ or more observations, the sampling distribution of the mean can be safely assumed to be normal (Mordkoff, 2016). A histogram and a P-P Plot were plotted for the data and a near-perfect

bell-curve was observed for the dependent variable, performance of nurses. It was noted that, the histograms for both FWAs and nurses' performance was close to normal distribution as shown in Figure 4.1.

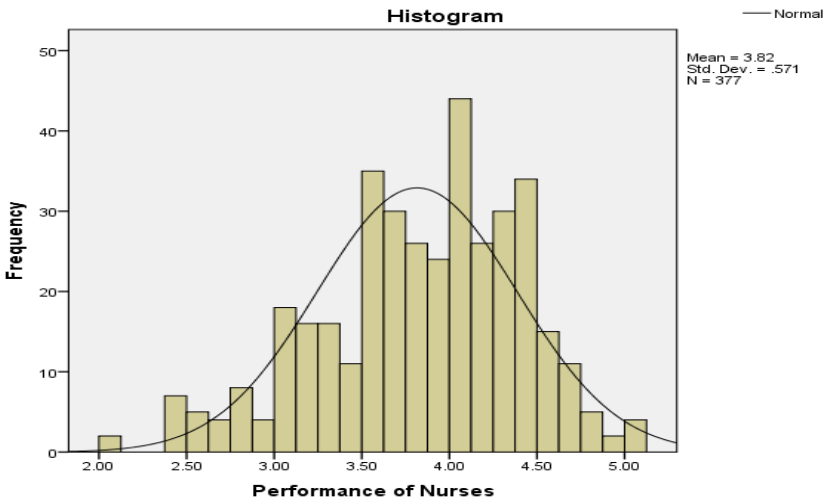

Figure 4.1: Histogram of the Performance of Nurses

The P-P Plot of Regression Standardized Residual values were approximately normal. That is, the values of are close to or on top of the reference line. Figure 4.2 shows the normal P-P plot which indicates that the condition of normality for nurses' performance was satisfied. The P-P plot is an excellent way to see whether the data deviate from other distributions but only interested in the normal distribution. After visually examining the plots (see Figure 4.2), it was concluded that residuals were normally distributed.

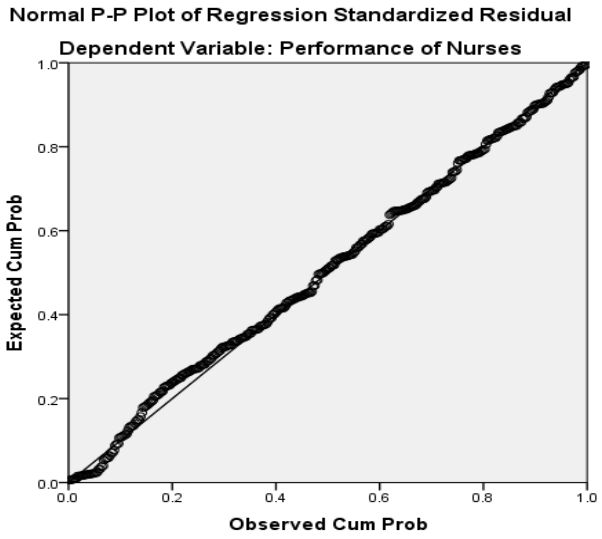

Figure 4.2: Normal P-P Plot of Regression Standardized Residual

According to Shenoy and Madan (2009), for a variable to be normally distributed most of the points should lie on the theoretical quintile line. The theoretical quintile line of the data is fitted and from the normal P-P plot it indicates that the observed values versus the expected normal values are randomly distributed along the line of best fit indicating that the dependent variable is normally distributed. In case the dependent variable is not normally distributed then normality has to be sought for before proceeding to check whether the dependent variable is influenced by the other independent variables.

4.5.3 Heteroscedasticity

The assumption of homoscedasticity implies that the residuals of different independent variables (predictors) remain similar along the line of best fit. This study used Kolmogorov-Smirnov test, also known as K-S test to determine whether the data collected on nurses' performance in regional hospitals in Tanzania as a dependent variable is normally distributed or not. The K-S test is mostly used in order to assess the assumption of univariate normality by comparing the observed cumulative distribution of scores to the theoretical cumulative distribution for a normally distributed variable (Kang, 2013). It has

been suggested that graphically methods such as Q-Q plot and histogram can be used along with K-S test for robustness. The hypotheses for the K-S test are:

Ho: The data is normally distributed

H1: The data is not normally distributed

The findings as shown in Figure 4.3 indicated that the points on the plot formed a linear pattern passing through the origin with a unit slope. It is visually clear that the residuals were normally distributed and therefore, the model could be applied in the analysis (Gok *et al.,* 2015).

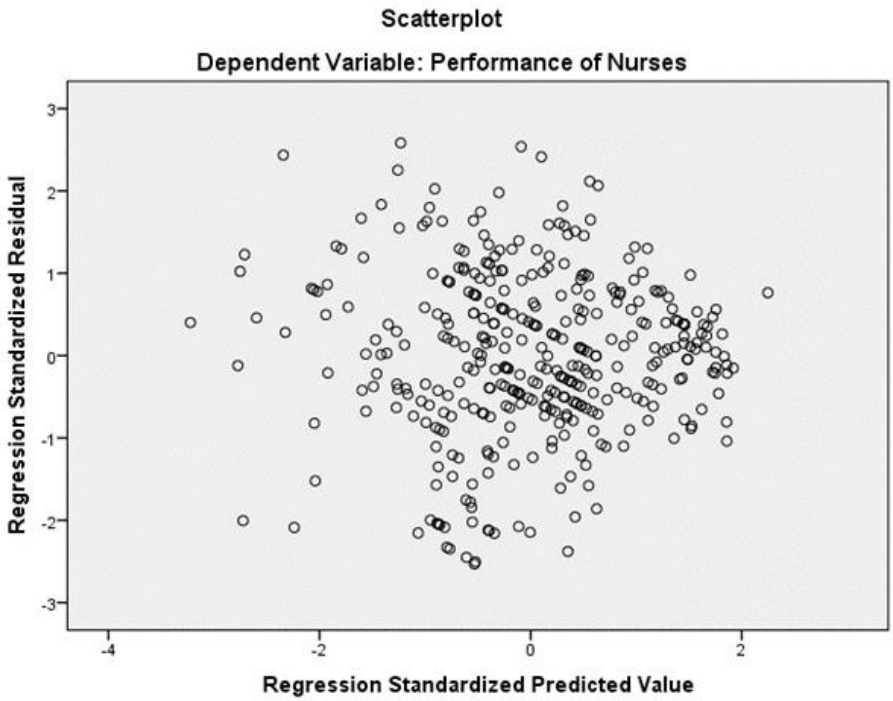

Figure 4.3: Scatter plot for Heteroscedasticity

The critical region is determined by the p-value. If the p-value >0.05, the null hypothesis is accepted, otherwise it will be rejected. According to Ghasemi and Zahediasl (2012), Kolmogorov-Smirnov (K-S) test is the most popular and appropriate test for normality test. A Normally distributed data when using Kolmogorov-Smirnov should have a significant value of above the standard value of 0.05 to exemplify that the variable under consideration is not statistically significant to normal distribution. Table 4.19 shows all variables with the

distribution of the variables of the study with reference to K-S test. The findings show that the variables have significance values higher than 0.05 thus implying that they are normally distributed.

Table 4.19 One-Sample Kolmogorov-Smirnov Test

Variable	**Kolmogorov-Smirnov**		
Work Scheduling	Statistic.	Df.	Sig.
Job Location	.163	96	.103
Workload	.074	96	.0.81
Job Continuity	.038	96	.109
Leadership Support	.185	96	.091
Performance of Nurses	.071	96	.089

4.5.4 Multicollinearity

Multicollinearity exists when the standard errors of estimated coefficients of two or more independent variables are inflated (Cresswell, 2011). To test for multicollinearity the study adopted Variance Inflation Factor (VIF) approach to test for multicollinearity. This study adopted the rule of thumb for VIF value of 10 as the threshold (Altindag &Siller, 2014). The VIF values of greater than 10 would indicate presence of multicollinearity. These results s indicted in Table 4.20 revealed that the VIF values of the independent variables were within the threshold of 10 (ten). The tolerance value was greater than 0.1 ruling out the possibility of multicollinearity (Rivaz, 2017).

Table 4.20 Flexible Work Arrangements Coefficients

Independent Variables		
	Tolerance	**VIF**
Job Continuity	.663	**1.508**
Work Scheduling	.533	**1.877**
Job Location	.530	**1.887**
Workload	.533	**1.876**
Leadership Support	.632	**1.832**
Mean Tolerance/VIF	0.748	**1.417**

This study adopted a benchmark of VIF=4.0. Tolerance values ranged from .530 and .663 while the VIF ranged between 1.748 and 1.417. Work scheduling had a

VIF of 1.887, Workload 1.876, Job continuity 1.508, Job location 1.887 and Leadership support a VIF of 1.417. The findings indicated that all the predictors" VIF value passed the test because, they were less than the acceptable benchmark of 4.0. Since tolerance values were above 0.1 and VIF below 4, it is safe to conclude that there is no problem of multicollinearity with the data.

4.6 Descriptive Analysis of the Study Variables

Descriptive statistics are used to summarize the feature of the samples Fade, 2011). Descriptive analysis refers to statistically describing, aggregating, and presenting the constructs of interest or associations between these constructs. As provided by Sahu *et al.,* (2015), descriptive analysis explains the findings of the study and provides an understanding on the key elements explaining the relationship between FWA and employee's feelings towards their perfomance. Therefore descriptive statistics enables a researcher to present the data in a more meaningful way, which allows simpler interpretation of the data.

4.6.1 Descriptive Analysis for Work Scheduling

The study sought to investigate the influence of work scheduling on nurses' performance in public hospitals in Tanzania. To achieve this objective respondent were to respond to specific statements formulated based on the sub-constructs of the variable which were; shift working, compressed working and flextime. A five-point Likert's scale was used as the measure where 1 was strongly disagree, 2 disagree, 3 uncertain, 4 agree and 5 strongly agree.

Work Scheduling Components

The study sought to establish the respondents' level of agreement or disagreement with specific statements regarding work scheduling and nurses' performance. The findings, as indicated in Table 4.21 revealed that majority of the respondents agreed with the statement that there is no enough staff to support work scheduling by a mean of 3.38 and a standard deviation of 1.175. On the second statements, the majority of the respondents agreed with the statement that the compressed working enable nurses to take time off for family reasons by a mean of 3.28 and a

standard deviation of 1.037. Moreover, majority of respondents agreed with the statement that nurses can compress their work week by working longer hours on fewer days by a mean of 3.95 and a standard deviation of 1.27 whereas on the last statement, majority of the respondents agreed with the statement that compressed working work has helped nurses to increase their work efficiency by a mean of 3.78 and a standard deviation of 1.339.

The findings compare with those by Zastocky and Holly (2010) who found that compressed working was mainly an aspect which determined nurses' commitment in their organizations since they could be able to reconcile their work family challenges hence making decisions that are coherent to organizational goals and objectives. According to Margaret *et al.* (2011), for a nurse to be successful in their work, it is essential that they have the required flexibility to alter their work scheduling. As the Spillover theory highlights, employers who permit employees to integrate work and family responsibilities, actively and efficiently produce positive spillover and a healthier, happier, more productive working staff, resulting in maximized productivity (Hill *et al.,* 2013).

Table 4.21 Compressed Working Components

Statement	**Mean**	**Std. Dev.**
There are no enough staff/nurses required to ensure compressed working in the unit	3.38	1.175
Compressed working enables nurses to take time off for family reasons	3.28	1.037
Nurses can compress their work week by working longer hours on fewer days	3.95	1.27
Compressed working work has helped nurses to increase their work efficiency	3.78	1.339

Flextime Components

The research aimed at establishing the respondents' level of agreement on the specific statements regarding flextime and its influence on nurses' performance. According to the findings as shown on Table 4.22, majority of the respondents

agreed with the first statement that limited flextime contributes to both work-family conflict and work stress among nurses by a mean of 3.53 and standard deviation of 1.169. On the second, majority of the respondents agreed with the statements that their flexi-working has enabled nurses to have high degree of independence with their working arrangements by a mean of 3.26 and a standard deviation of 1.241. The other statement, majority of respondents disagreed that nurses have a greater ability to set their own work start and end times by a mean of 2.11 and a standard deviation of 1.231. The findings imply that nurses value the opportunity to create their own working hours to support personal responsibilities, relieving some of the pressure experienced inside and outside of their place of employment (Nadler *et al.,* 2010). According to Lathois, (2011) employees engaged in flextime work scheduling have a greater opportunity to better manage and assess their time required to complete their tasks.

Table 4.22 Flextime Components

Statement	Mean	Std. Dev.
Limited flextime contributes to both work-family conflict and work stress among nurses.	3.53	1.169
Flexi-working has enabled nurses to have high degree of independence with their working arrangements	3.26	1.241
Nurses have a greater ability to set their own work start and end times	2.11	1.231

Shift Working Components

The study sought to establish the respondents' level of agreement or disagreement with various statements regarding shift working as an aspect work scheduling and its influence on nurses' performance. The findings are as shown in Table 4.23 whereby on the first statement that there was the possibility to influence the creation of duty roster, majority of the respondents agreed with the statement by a mean of 3.69 and a standard deviation of 1.059. On the second statement that the nurses are given an advance notice about what days and hours they will need to work the majority of the respondents agree by a mean of 3.67 and a

standard deviation of 1.052. Regarding the statement that the number of working shifts among nurses vary from time-to-time majority of the respondents agreed with the statement by a mean of 3.33 and a standard deviation of 1.308.

On the last statement that nurses have an opportunity to negotiate for shifts that best suit their needs majority of the respondent agreed with the statement by a mean of 3.22 and a standard deviation of 1.115. The findings imply that most of the nurses in regional hospitals supports the utilization of shirt working arrangements since the option helps them to harmonize work and family aspects yielding a more productive and engaging work environment. The findings concur with the study by Wickramasinghe (2012). Who carried a stud involving more than 30,000 nurses in 12 European countries, and found that those working shifts of 12 hours or longer were more likely to report job dissatisfaction and intention to leave their job and experience burnout.

Table 4.23 Shift Working Components

Statements	Mean	Std. Dev.
There is a possibility to influence the creation of duty roster since every nurse is consulted	3.69	1.059
Nurses are given an advance notice about what days and hours they will need to work	3.67	1.052
The number of working shifts among nurses vary from time to time	3.33	1.308
Nurses have an opportunity to negotiate for shifts that best suit their needs.	3.22	1.115

4.6.2 Descriptive Analysis for Job Location

The second objective of the study was to determine the influence of job location on the performance of nurses in regional hospitals in Tanzania. The main measures of the variable were: satellite working, working from home and mobile working. The respondents were asked specific questions based on these measures and the findings are as herein presented.

Satellite Working

The respondents' views on their levels of agreement or disagreement with specific statements on satellite working as an important job location factor and its influence of nurses' performance were sought. The findings as shown in Table 4.24 revealed that on the first statement that satellite working has enabled nurses solve work problems while they are away from work majority of the respondents disagreed with the statement as evidenced by a mean of 2.99 and a standard deviation of 1.248 while on the second statement that satellite working has improved nurses attitude towards quality service delivery majority of the respondents disagreed with the statement as evidenced by a mean 2.72 and a standard deviation of 1.236

The other statement was that satellite has improved the quality and safety of patient care through reduced unanticipated interruptions majority of the respondents disagreed with the statement as evidenced by a mean of 2.69 and a standard deviation of 1.22. The findings are in line with those by Peterson (2012) who upholds the need for linking flexible work practices with the nature of specific job. Specifically, Burg-Brown, (2013) argues that placing a focus on flexible work options, reduced hours, and working remotely does not result in less work–life. Changing work environments, coupled with increasing access to technology, can result in gray lines between life and work (Burg-Brown, 2013). Flexible time–space workplace policies often result in blurred boundaries between work and home life (Fonner & Stache, 2012; Valoura, 2013).

Table 4.24 Satellite Working Components

Statements	Mean	Std. Dev.
Satellite working has enabled nurses solve work problems while they are away from work	2.99	1.248
Satellite working has improved nurses' attitude towards quality service delivery	2.72	1.236
Satellite has improved the quality and safety of patient care through reduced unanticipated interruptions	2.69	1.22

Working from Home Components

The study sought to establish the respondents' level of agreement or disagreement with various statements regarding working from home and its influence on nurses' performance. The findings are as shown in Table 4.25 whereby on the first statement that the hospital will pay for nurses' phone/give nurse a phone and pay for their internet if they working from home majority of the respondents were neutral with the statement as shown by a mean of 3.06 and a standard deviation of 1.269. On the second statement that working from home has enabled nurses to improve their performance in the hospital majority of the respondents agreed with the statement as evidenced by a mean of 3.55 and a standard deviation of 1.11.

Likewise on the statement that the hospital supply nurses with required equipment to enable them to work from home majority of the respondents agreed with the statement as evidenced by a mean 3.33 and a standard deviation of 1.36 whereas on the last statement that nurses have regular scheduled days to be in the office and to work from home majority of the respondents disagreed with the statement as evidenced by a mean of 2.91 and a standard deviation of 1.224. Supporting these findings, Altindag and Siller, (2014) asserts that beyond the bed side roles nurses continue to juggle multiple roles in hospitals, including those roles related to administrative roles, and housekeeping. Nevertheless, work stress and burnout remain significant concerns in nursing, affecting both individuals and

organizations. Therefore, nurses and Midwives a generalist approach using a flexi remote working, to address the diverse needs of their multiple roles.

Table 4.25 Working from home Components

Statements	Mean	Std. Dev.
The hospital will pay for nurses' phone/give nurse a phone and pay for their internet if they working from home	3.06	1.269
Working from home has enabled nurses to improve their performance in the hospital	3.55	1.111
My hospital supply nurses with required equipment to enable them to work from home.	3.33	1.36
Nurses have regular scheduled days to be in the office and to work from home.	2.91	1.224

Mobile Working Components

The study sought to find out the agreement level of the respondents on the statements regarding mobile working. The findings as shown in Table 4.26 revealed that majority of the respondents disagreed with the first statement which was indicated that nurse's benefit from mobile working as part of the regular working days evidenced by a mean of 2.63 and a standard deviation of 1.211. Mobile working has enabled nurses to in efficient use of resources in my hospital majority of the respondents disagreed with the statement as shown by a mean of 2.24 and a standard deviation of 1.35. Regarding the qualitative results of this job location variable, 61% of respondents recommended that health service managers are required to determine which roles require physical attendance by staff at the workplace based on service needs in order to facilitate working from home arrangements for nurses whose roles can be done remotely. Also 45% recommended the establishment of policies and procedures for proper guidance to nurses who are eligible working outside the employer's premises. The findings could imply that since majority of respondents were women, who jungles multiple responsibilities, they could be more comfortable with this practice. As Carlson *et al,* (2013) concluded location flexibility plays a stronger role in women than in men in terms of the work–family interface. In an additional study on flexible work

arrangements. In the same way Nadler *et al.* (2010) found that 43% of employees received the opportunity of a flexible work arrangement whereby, 79% of the female employees took advantage of the flexible work arrangements, whereas only 63% of the male employees opted to

In similar vein the findings contradicts with Hitt *et al.*, (2015) who established that mobile working can often be a source of work–life imbalance (Katrina, (2014) since employees may find themselves tied to their cell phones, checking e-mail at all hours of the day and night. This attachment to work may have the potential to cause an unnecessary and conflicting overlap between the two important domains.

Table 4.26 Mobile Working Components

Statements	Mean	Std. Dev.
Nurses benefit from mobile working as part of the regular working days	2.63	1.211
Mobile working has enabled nurses to in efficient use of resources in my hospital	2.24	1.35
Mobile working increases nurses' productivity	3.00	1.23

4.6.3 Descriptive Analysis for Workload Flexibility

The third objective of the study was to assess the influence of workload on performance of nurses in regional hospitals in Tanzania. The study was determined to establish how various prospects of workload that influence nurses' performance among Tanzanian regional hospitals. The variable was derived based on specific measures which included; job sharing, seasonal working and part time working. Likert's scale (five points) was used to measure the respondents' level of agreement where 1 is strongly disagree, 2 disagree, 3 uncertain, 4 agree and 5 strongly agree. To achieve this objective respondent were asked to indicate their opinions regarding ten items of workload as indicated in Table 4.27 to Table 4.29.

Job Sharing Components

The study sought to establish the respondents' level of agreement on the statements regarding job sharing as an aspect of workload flexibility. The findings

as shown in Table 4.27 revealed that majority of the respondents disagreed with the first statement that all job sharing practices supports nurses to meet the day to day increased workload demands in their units as shown by a mean of 2.88 and a standard deviation of 1.10 while on the second statement that limited compatible skills and knowledge among staff limits nurses to achieve normal workload, majority of the respondents agreed with the statement as shown by a mean of 3.77 and a standard deviation of 1.237. The respondents further agreed with the statement that few staff for job sharing results into job fluctuation among nurses hence affect quality and safety of patient care as shown by a mean of 3.38 and a standard deviation of 1.226 while on the last statement that the daily number of patients overseen by nurses exceeds the maximum limits in nursing profession majority agreed as shown by a mean of 4.55 and a standard deviation of 1.034.

The findings imply that as much as job sharing is concerned, the regional hospitals were relatively utilizing the practice in their units. According to Soenanto (2016), the nursing profession contains dedicated professionals who work varying shifts with assorted timeframes to recover before returning to work

Table 4.27 Job Sharing Components

Statement	Mean	Std. Dev.
Job sharing practices supports nurses to meet the day to day increased workload demands in their units	3.22	1.221
Job sharing allows me to finish work earlier so I can attend to my personal issues	3.77	1.237
Few staff for job sharing results into job fluctuation among nurses hence affect quality and safety of patient care	3.38	1.226
The daily number of patients overseen by nurses exceeds the maximum limits in nursing profession	4.55	1.034

Seasonal Working Components

The study sought to establish the respondents' level of agreement or disagreement with various statements regarding seasonal working and its influence on nurses' performance. The findings are as shown in Table 4.28 whereby on the first statement that seasonal working helps nurses cope better with work and personal

issues hence be more productive in the organization majority of the respondents agreed with the statement as evidenced by a mean of 3.71 and a standard deviation of 1.832. Likewise on the statement that seasonal working is a solution for compromised nurses workload majority of the respondents agreed with the statement as evidenced by a mean 4.04 and a standard deviation of 1.022 whereas on the last statement that seasonal working can influence on nurses' ability to complete essential tasks majority of the respondents agreed with the statement as evidenced by a mean of 3.25 and a standard deviation of 1.421. The findings of this study concurred with the findings of Manongi *et al.,* (2012) who reported that seasonal working is attractive alternatives to employees as they have the option to plan their day around their personal and professional obligations.

Table 4.28 Seasonal Working Components

Statement	Mean	Std. Dev.
Seasonal working helps nurses cope better with work and personal issues hence be more productive in the organization	3.71	1.832
Seasonal working is a solution for compromised nurses' workload	4.04	1.022
Seasonal working can influence on nurses' ability to complete essential tasks.	3.25	1.421

Part time Working

The study aimed at establishing the agreement level of respondents on statements on part time working as an aspect of nurses' performance. The findings as shown in Table 4.29 revealed that on the first statement that part time working has helped nurses to easily have reasonable workload majority of the respondents agreed with statement as evidenced by a mean of 3.99 and a standard deviation of 1.044. The second statement was that nurses continuously perform multiple tasks outside their profession majority of the respondents agreed with the statement as shown by a mean of 3.29 and a standard deviation of 1.004

The third statement was that the part time working increases willingness of employees to help each other in my unit majority of the respondents disagreed with the statement as evidenced by a mean of 2.99 and a standard deviation of 1.165. The findings imply that part time working as practiced in most regional hospitals indicating a potential benefit on nurses' performance. Additionally, the European Working Conditions Survey revealed that 85% of those working less than 30 hours per week were satisfied with their work–life balance (Ojokuku and Salami, 2011).

The qualitative results under workload variable revealed that he majority of staff nurses (53%) expressed high workload as an obstacle to provide the standard care to the patient, relatives an indication that although nurses were interested to provide quality care to the patients, their time available was not enough. Furthermore 47% of respondents was not agreeable with managers' decision making regarding their duty shifts because they wanted independent decision making for themselves and managers' decision-making decreased nurses' autonomy in practice.

Table 4.29 Part time Working Components

Statement	Mean	Std. Dev.
Part –time working has helped nurses to easily have reasonable workload	3.99	1.044
Nurses continuously perform multiple tasks outside their profession	3.19	1.004
Part time working increases willingness of employees to help each other in my unit	2.99	1.165

4.6.4 Descriptive Analysis for Flexibility in Job Continuity

The fourth objective of the study was to assess the influence of job continuity as a determinant of flexible work arrangements on the performance nurses in regional hospitals in Tanzania. The study was determined to establish how various prospects of work continuity that influence performance of nurses in regional hospitals in Tanzania. The variable was derived based on specific measures which

included; leave arrangements, break arrangements and rest periods. Likert's scale (five points) was used to measure the respondents' level of agreement where 1 is strongly disagree, 2 disagree, 3 uncertain, 4 agree and 5 strongly agree.

Leave Arrangement Components

The study sought to establish the respondents' level of agreement on the statements regarding leave arrangements as an aspect of job continuity. The findings as shown in Table 4.30 revealed that majority of the respondents agreed with the first statement nurses put much effort in their work because it offers various leaves evidenced by a mean of 3.81 and a standard deviation of 1.106 while on the second statement that nurses are more committed because my leave schedule is not interfered by organizational activities majority of the respondents agreed with the statement as shown by a mean of 3.78 and a standard deviation of 0.921.The respondents further disagreed with the statement that nurses are comfortable with variety of leaves in the organization majority of the respondents disagreed with the statement as shown by a mean of 2.91 and a standard deviation of 1.2.27

This is an indication that regional hospitals offer various leave to their employees. The results are consistent with a study conducted by Koivitso & Rice (2016) in Ethiopia in which 75% of the respondents agreed that public hospitals offer leave benefits such as study leave, maternity leave, compassionate leave to their employees. The results contradicts the findings by Sroup &Yoon (2016) who found that nurses often work through their breaks and concluded that nurses not having any time off during a shift can lead to higher stress levels. The same study recommended that hospital leaders need to make sure their nurses are taking enough time off during their shift so they are alert.

Table 4.30 Leave Arrangements Components

Nurses put much effort in their work because they are not denied any benefit because of taking leave	3.81	1.106
Nurses are more committed because their leave schedule is not interfered by organizational activities	3.78	0.921
Nurses are comfortable with variety of leaves in the organization	2.91	1.2.27

Break Arrangements

The respondents' level of agreement or disagreement with specific statements on break arrangements as an aspect of job continuity was sought. The findings as shown in Table 4.31 revealed that the majority of the respondents disagreed with the statement that nurses are able to take at least 30 minutes break during working hours by a mean of 2.104 and a standard deviation of 1.511. On the statement that employee breaks enable nurses to take care of their personal life while remaining efficient majority agreed as portrayed by a mean of 3.21and a standard deviation of 1.203. The respondents were neutral by a mean of 3.0 on the statement that statutory breaks increase employee's morale in this organization to put extra effort in the tasks assigned and a standard deviation of 1.328. This is an indication that nurses in regional hospitals gives its employee an opportunity to enjoy different type of leave benefits. However, this is conflicting with a study conducted by Okoronwa (2017) which found that nurses are not encouraged to take study leave which undermines their creativity.

Table 4.31 Break Arrangements

Statements	Mean	Std Dev.
Nurses are able to take at least 30 minutes break during working hours	2.104	1.511
Employee breaks enable nurses to take care of their personal life while remaining efficient.	3.21	1.203
Statutory breaks increase employee's morale in this organization to put extra effort in the tasks assigned	3.0	1.328

Rest Periods

The study sought to find out the respondents' level of agreement on the statement regarding the rest periods as an aspect of job continuity. As shown in Table 4.32, the findings revealed that majority of the respondents were neutral with the first statement that nurses continue working for this organization because they are well supported with rests periods as shown by a mean of 3.03 and a standard deviation of 1.134 while on the second statement that employee rest periods has increased nurses work output and overall organization productivity majority of the respondents agreed with the statement by a mean of that 3.36 and a standard deviation of 1.197.

The respondents disagreed that rest periods help nurses cope better with work and personal issues hence be more productive in the organization as shown by a mean of 2.456 and a standard deviation of 1.231 whereas on the last statement that through weekend rest periods, nurses are able to effectively handle family engagements that may affect my performance majority of the respondents disagreed with the statement as evidenced by a mean of 2.88 and with a standard deviation of 1.221. The findings compare with those by Sulivan & Decker (2011) who highlighted the need of providing adequate ret period for healthcare workers in acute settings in Ontario.

Regarding qualitative results of job continuity 59% of nurses recommended that in order to improve performance nursing management should prevent disturbances of nurses' rest breaks in addition to other work design interventions such as reducing quantitative demands and social conflicts and especially when implementing cognitive challenging tasks.

Table 4.32 Rest Periods

Statements	Mean	Std Dev.
Nurses continue working for this organization because they are well supported with rests periods	3.03	1.134
Employee rest periods has increased nurses work output and overall organization productivity.	3.36	1.197
Rest periods help nurses cope better with work and personal issues hence be more productive in the organization	2.456	1.231
Through weekend rest periods nurses are able to effectively handle family engagements that may affect my performance	2.88	1.221

4.6.5 Descriptive Analysis for Supervisor Support

The study sought to investigate the mediating role of leadership support on the influence of flexible work arrangements on performance or nurses in regional hospitals in Tanzania. The study sought to find out the extent to which support from by the nurse leaders moderate the relationship between flexible work arrangements and performance of nurses in regional hospitals in Tanzania. The specific measures of the variable were; emotional support, instrumental support and creative work-family management. The respondents were asked to indicate their level of agreement of disagreement on specific statements based on a five-point Likert's scale. The findings are as herein presented.

Emotional Support

The study sought to find out respondents' level of agreement with the statements on emotional support as an aspect of leadership support. As the findings in Table 4.33 portray, on the first statement that my supervisor provides the impartial guidance and creating a sense of worth majority of the respondents agreed with the statement as proved by a mean of 3.94 and a standard deviation of 1.004 whereas on the second statement that my supervisor creates an environment encouraging inquisitiveness majority of the respondents agreed with the statement by a mean of 3.45 and a standard deviation of 0.937. On the statement that my supervisor creates opportunities for autonomous performance majority of the respondents agreed with the statement by a mean of 3.57 and a standard deviation

of 0.967 while on the last statement that the in this hospital, there is availability for help where required majority of the respondents disagreed with the statement as evidenced by a mean of 2.84 and a standard deviation of 0.867. The findings imply that nurses who experience stronger emotional support from management, supervisors and coworkers will respond with better job attitudes and behavior, which in turn contributes to higher job satisfaction and higher quality of patient care. The findings reap support from the argument by Hordacre, (2011) cultivating emotional support from family, friends/colleagues and supervisors can help an individual cope with stress and enhance a nurse's quality of life

Table 4.33 Emotional Support

Statement	Mean	Std. Dev.
My supervisor provides the impartial guidance and creating a sense of worth	3.94	1.004
My supervisor creates an environment encouraging inquisitiveness	3.02	0.937
My supervisor creates opportunities for autonomous performance	3.57	0.967
In this hospital, there is availability for help where required	2.84	0.867

Instrumental Support

The study sought to find out respondents' level of agreement with the statements on instrumental support as an as a mediator factor on the influence of flexible work arrangements on performance of nurses in regional hospitals in Tanzania. As the findings in Table 4.34 portray, on the first statement that my supervisor provides the impartial guidance and creating a sense of worth majority of the respondents agreed with the statement as proved by a mean of 3.94 and a standard deviation of 1.004 whereas on the second statement that my supervisor creates an environment encouraging inquisitiveness majority agreed by a mean of 3.45 and a standard deviation of 0.937. The other statement was that my supervisor creates opportunities for autonomous performance majority of the respondents agreed with the statement by a mean of 3.57 and a standard deviation of 0.967. In this hospital, there is availability for help where required majority of the

respondents agreed with the statement by a mean of 2.84 and a standard deviation of 0.867. The findings revealed that as much as the organization provided instrumental support, nurses improved their performance. The findings are in concurrence with the Path Goal theory which upholds the need for organizations to enhance the supportive leadership of the employees by ensuring that the leader pays attention to the needs and well-being of employees and makes work pleasant for them by being friendly and empathetic (Kolf-Deira, 2011). Furthermore, Rawashdeh *et al.,* (2016) found that providing supportive practices such as flexible scheduling and managerial support has positive effects on control perceptions of employees, which were negatively related to work-family conflict

Table 4.34 Instrumental Support

Statement	Mean	Std. Dev.
My supervisor grants me greater autonomy and involves me in decision making	3.213	1.923
I can depend on my supervisor to help me with scheduling conflicts if I need it.	3.21	1.234
My supervisor thinks about how the work in my department can be organized to jointly benefit employees and the company	3.091	1.941
My supervisors provide mentorship programs for all employee	3.10	1.825

Creative Work-Family Management

The study sought to find out the agreement level of the respondents on the statements regarding creative work-family management. The findings as shown in Table 4.35 revealed that majority of the respondents agreed with the first statement which was indicated that my supervisor encourages participatory approaches in designing working time arrangements as evidenced by a mean of 3.42 and a standard deviation of 1.071. On the second statement that my supervisor is a good role model for work and non-work balance majority of the respondents agreed with the statement as shown by a mean of 3.3 and a standard deviation of 1.132 while on the third statement that my supervisor is willing to listen to my problems in juggling work and non-work life majority of the respondents agreed with the statement as shown by a mean of 3.52 and a standard

deviation of 1.002. The results of the present study suggest that encouraging supportive leadership behaviours may be helpful in enhancing nurses' perfomance. Thus, supportive leadership style can be a perfomance improvement intervention applied within a health care setting likely to be associated with quality of the working life of nurses as well.Supporting these findings, Sellgrenet (2008) asserts that nurse leaders play a challenging role in the workplace and contribute to the effectiveness of a health care organisations.

Regarding supervisor support variable,qualitative results indicated that nurses had shown dissatisfaction regarding managers' practice and stated some aspects of managers practice which needed to improve such as keeping competitive salary for staff nurse, providing counseling system to supporting nursing practice, better recognition and acknowledgement system, better job security, providing supportive managerial style, better unit size and Applying vacation system. The findings concur with those by Staples, (2012) who established that nurse leaders are crucial to the creation and sustainability of organizational support practices, which may buffer the negative effects of disruptive behavior and incivility on nurses' work, health, and well-being. Support from nurse leaders should also aim at creation of supportive work environment that maximizes nurse well-being and work-life balance to create a satisfied and productive work force. Therefore, the study concluded that nursing supervision has a positive influence on nurses' well-being and their ability to cope with their stressful work situations

Table 4.35: Creative Work-Family Management

Statements	Mean	Std. Dev.
My supervisor encourages participatory approaches in designing working time arrangements.	3.42	1.071
My supervisor is a good role model for work and non-work balance.	3.3	1.132
My supervisor is willing to listen to my problems in juggling work and non-work life	3.52	1.002

4.4 Performance of Nurses in Regional Hospitals in Tanzania

The main aim of the study was to assess the influence of flexible work arrangements on the performance of nurses in regional hospitals in Tanzania. The dependent objective of the study was therefore the performance of nurses in regional hospitals in Tanzania. The variable was measured through enhanced productivity, efficiency and effectiveness of the work completed, creativity and innovativeness. Various statements were used whereby the respondents were asked to rate them based on the Likert's scale. The responses are as herein presented.

Enhanced Productivity

The study sought to find out the respondents' agreement level with the statements on enhanced productivity as a measure of nurses' performance. The findings as shown in Table 4.36 indicated that on the first statement that the overall nurses target achievements have improved over the last 5 years majority of the respondents disagreed with the statement as shown by a mean of 2.7 and a standard deviation of 0.891. Nurses have been able to achieve organization goals of last 5 years 3.37 1.093 while on the second statement that quality of services rendered by nurses to customers has greatly improved over the last 5 years majority agreed as shown by a mean of 23.56 and a standard deviation of 0.972. The other statement was that nurses in our hospital have been enabled to ensure timely service delivery to customers' majority of the respondents agreed with the statement as shown by a mean of 3.52 and a standard deviation of 1.187. The findings imply that there is improvement in productivity in regional hospitals basing on target achievements, and improved in service delivery. Lazar, (2010) claims that improved productivity can be attracted by lowering the work-family conflict of employees with the help of increasing the perception of support among employees using family-friendly policies and supervisor support.

Table 4.36: Enhanced Productivity

Statements	Mean	Std. Dev.
Overall nurses target achievements have improved over the last 5 years	2.07	0.891
Nurses have been able to achieve organization goals of last 5 years	3.37	1.093
Quality of services rendered by nurses to customers has greatly improved over the last 5 years	3.56	0.972
Nurses in our hospital have been enabled to ensure timely service delivery to customers	3.52	1.187

Efficiency and Effectiveness of work completed

The respondents' level of agreement on the statement regarding the efficiency and effectiveness of work completed was sought. The findings as shown in Table 4.37 revealed that majority of the respondents were neutral with the first statement that there is efficient use of resources in provision of health services in my unit a mean of 3.03 and a standard deviation of 0.98. On the second statement that the efficiency and effectiveness of the work completed by nurses has improved in the last five years majority of the respondents agreed with the statement by a mean of 3.85 and a standard deviation of 0.804. The third statement that majority of nurses can work independently and they give high performance majority of the respondents agreed with the statement by a mean of 3.64 and a standard deviation of 0.903 while on the last statement that target given to different nurses are often met on time majority agreed as shown by a mean of 3.04 and a standard deviation 0.937. The findings imply that most of regional hospitals attained high level of efficiency in service delivery. According to Rivaz (2017), efficiency in service delivery is the best example of an organization that is objected towards achieving competitiveness and firm growth and performance.

Table 4.37 Efficiency and effectiveness of work completed

Statements	Mean	Std. Dev.
There is efficient use of resources in provision of health services in my unit	3.03	0.98
The efficiency and effectiveness of the work completed by nurses has improved in the last five years.	3.85	0.804
Majority of nurses can work independently and they give high performance	3.64	0.903
Target given to different nurses are often met on time	3.04	0.937

Innovative Work Behavior

The study sought to find out the respondents' level of agreement on the statement regarding the innovative work behavior as an aspect of nurses' performance. As shown in Table 4.38, the findings revealed that majority of the respondents agreed with the first statement that nurses have the ability to generate idea for overcoming challenges 3.82 and a standard deviation of 1.051 whereas, on the statement that nurses are able to anticipate problems and developing contingency plans majority of the respondents disagreed with the statement by a mean of 2.41and a standard deviation of 1.032. The respondents agreed that nurses are able to implement new ideas that changes services or processes in an institution by a mean of 3.42 and a standard deviation of 1.222.

The findings imply that regional hospitals should develop innovative behavior in nurses which was more important in improved perfomance. According to the International Council of Nurses (2013), innovation is highly needed for nursing practice in promoting health, minimizing risk factors for health conditions, avoiding diseases, improving attitudes toward the healthy life, and enhancing the treatment strategies and procedures. The findings supports the findings by Saldana (2014) which insists that nurses often encounters unexpected situations and involves taking care of patients with different backgrounds and health conditions; hence, they need to go beyond nursing routine and acquire creative thinking to make useful decisions (6). In most health systems, nurses are the main professional component of 'front line' staff providing up to 80% of primary health

care. As such, they are critically positioned to provide the creative and innovative solutions for current and future global health challenges**.**

Table 4.38 Innovative Work Behavior

Statement	Mean	Std. Dev.
Nurses have the ability to generate idea for overcoming challenges	3.82	1.051
Nurses are able to anticipate problems and developing contingency plans	2.41	1.032
Nurses are able to implement new ideas that changes services or processes in an institution	3.42	1.222

4.7 Analysis of Interview Responses

The study obtained different opinions from the interview conducted with sixteen hospital supervisors in selected regional hospitals in Tanzania. The interview results are presented in Appendix 7. In line with the interview the respondents were asked to state their level of awareness with FWAs practices in their organizations. The majority (42.3%) of the respondents were aware with FWAs practices, 32.9% were very aware with FWAs practices while 24.8 were not aware with these practices. This indicates that there is awareness regarding FWAs practices in regional hospitals in Tanzania. This could because majority of nurse leaders were female nurses with university degree, hence having possibility of high knowledge and experience on employee welfare issues. Regarding the question which required them to state the frequency of approving FWAs requests, majority of respondents (51.6%) indicated the approval to be done weekly, 35% indicated the approval to be done daily while 13.4% of respondents indicated the possibility of monthly approval. This implied that approval FWAs practice in regional hospitals in Tanzania are done weekly upon submission of the request. According to respondents, weekly approval is highly preferred in the sense that, it gives enough room to supervisors to be able to thoroughly scrutinize the applications and avoid biasness.

Furthermore, the study had the interest of inquiring from the management about different types of FWAs utilized in regional hospitals in Tanzania. As Appendix 7

indicates significant majority of respondents (40.9%) said that the mostly utilized category of flexible working arrangements is work scheduling, 31.3% indicated workload flexibility, 13.9% indicated job continuity and the same percentage (13.9%) again indicated utilization of location flexibility. In particular, the interview revealed that shift working, part-time working, shortened work week, self-determined start and end times, mobile and satellite working, flexible leave were common flexible working practices applicable in their organizations. This indicates that flexible working practices are being promoted by regional hospitals as an important element of efforts to improve nurses' performance

Regarding the interview question which inquired about the procedures observed before the final approval of FWAs request, 42.3% indicated that FWA applicant needs to consult their supervisors prior to application for the request, 30.5% indicated that formalization of the request as the second procedure, 18.5% indicated filling of a special form as a the third procedure whereas performance report handling over was indicated by 8.7% as one of the required procedure to observe in applying for FWAs in regional hospitals. This indicates that applications for utilization of FWAs in regional hospitals observe clearly stipulated guidelines and procedures to avoid any sort of business

Furthermore the interview required the respondents to indicate the main reasons presented by nurses during submission of FWAs requests. The responses Appendix 7 indicated that nearly, half of respondents requests for FWAs based on family grounds, 30.4% focused of studying reasons where as 18.1% indicated need for recreation as another reason for applying for FWAs. The results support the findings by Mungania *et al.,* (2016) who assert flexible schedules are perceived to help reduce the chronic pressures imposed on workers by time and role conflicts that arise when work and non-work responsibilities overlap in the same block of time.

Moreover concerning the interview question inquiring about the basis relied upon final approval of the request, results in Appendix 7 indicated that the approval was granted basing on employee right as stipulated in employment policy, 31.3%

indicated that the approval bases on genuineness of reasons presented, where as 27.9% of respondents indicated that the basis of approval is done subject to the patient demand. Furthermore regarding the role of supervisor support on the influence of FWAs on nurses performance, 34.2% indicated that supervisors are responsible for creating awareness about FWAs to different stakeholders, FWAs negotiation was another supervisor role as presented by 25.5%, FWAs approval was another role indicated by 23.0% whereas 17.3% indicated that supervisors were responsible to monitor the implementation of FWAs in organization. The findings concurs with Bemelmans (2011) who found that supportive leaders show concern for the employees, work for their welfare and contribute to a friendly environment. In this way supervisor support actually functions as a buffer, which acts in a positive manner to deduce the stress and increases the level of performance.

The respondents were further asked to indicate their perceived overall influence of FWAs on nurses' performance. The interview results in Appendix 7 shows that 40.9% presented that FWAs encourage staff to work harder, 36.3% indicated that FWAs reduces work-family conflict among employees whereas 15% indicated that FWAs increases employee commitment. The results are supported by Mungania *et al.,* (2016) who reported that flexible work arrangements are connected to a number of positive outcomes for employees who access them including better mental health and reductions in stress, burnout, turnover and absenteeism and increases in retention, loyalty, job satisfaction, innovation, creativity and productivity

4.7 Inferential Statistics/Statistical Modelling

Inferential statistics are methods used to generalize, predicts, make estimates, test hypothesis and draw conclusion from a set of data (Gok 2012). Hence, in this study, inferential analysis was conducted through the use of correlation and regression analyses to determine the influence of flexible work arrangements on performance of nurses in regional hospitals in Tanzania

4.7.1 Correlation Tests (Pearson Correlation) of Variables

A statistical relationship between variables is referred to as correlation. It is a measure of how well the variables are related and to what direction and degree. Mugenda and Mugenda (2012) surmise that correlation coefficient informs a researcher the magnitude and direction of the relationship between two variables. The correlation ratio is able to detect almost any functional dependency, it indicates strength of a linear relationship between variables, and however, it has been argued that its value generally does not completely characterize their relationship (Damghani, 2013). The nature of the data determines the measure to use. In this study, the Pearson product moment correlation was used. The result of correlation, represented by ρ is between -1 and +1. A result of -1 indicates that there is perfect negative correlation between the two variables, while a result of +1 means that there is perfect positive correlation between the two variables, while 0 means no relationship at all (Sekaran & Bougie, 2013). Correlation can be high, moderate or low depending on how close the value is to ±1, the bigger the coefficient, the stronger the association (Mugenda & Mugenda, 2012). Pearson product moment correlation (r) was used in this study to analyze the relationships between the variables (work scheduling, job continuity, workload, job location, and performance of nurses) and the p-value of significance to show the degree and significance of the relationship. The coefficient of determination (R^2) "was used to measure how well the regression line presents the data" (Ajibola, 2019).

4.7.2 Correlation Analysis between Construct Work Scheduling and Nurses' Performance

The study sought to find out the relationship between work scheduling and nurses' performance and to know whether or not there is a statistically significant relationship between the two variables at 95% confidence level. The Pearson Correlation results as presented in Table 4.39 revealed that there is a positive and significant relationship between work scheduling and nurses' performance in this study with r = 0. 443 and p-value of .0000 (which is less than alpha=0.05 level of significance). The result indicated that the relationship between work scheduling

and nurses' performance in regional hospitals in Tanzania is positively statistically significant at 5% level of significance. Therefore, availability of flexible work scheduling would increase the level of nurses' performance. This result supports the position held by Bae and Young (2017) that. Employees' perceptions of the primary benefits work scheduling were autonomy, improved health, stress reduction, job security, and job satisfaction (Chimote & Srivastava, 2013) whereas satisfied, well-balanced employees influence productivity in the workplace (Mamman *et al.,* 2011)

4.7.3 Correlation Analysis between Construct Job Continuity and Nurses Performance

Pearson correlation coefficient was used to gauge the relationship between flexible work continuity and nurses' performance. Table 4.39 revealed that there was positive and significant relationship between job continuity and nurses' performance. ($r= 0.469$, p-value <0.05). This shows that nurse's performance in regional hospitals in Tanzania is influenced by job continuity practices. The implication of the findings of the study concurred with the findings of Shuck *et al,* (2011) who found out that there was a positive significant relationship between job continuity and nurses' performance. These results imply that there is positive and significant relationship between job continuity and nurses' performance in regional hospitals in Tanzania. This shows that nurses' performance in regional hospitals in Tanzania is influenced by job continuity practices. Therefore, an increase in job continuity practices would enhance and increase the level of nurses' performance positively.

4.7.4 Correlation Analysis between Construct Job Location and Performance of Nurses

Pearson correlation coefficient was used to gauge the relationship between location flexibility and nurses' performance in regional hospitals in Tanzania. Table 4.39 shows the Pearson's correlation coefficient between the job location

and nurses' being 0.397, $p<0.05$, two tailed, tested at 95% confidence level. The results showed that there is positive and significant relationship between job location and nurses' performance in regional hospitals in Tanzania. This shows that nurses' performance in regional hospitals in Tanzania is influenced by job location components. The finding of this study agreed with some previous studies (Edmans *et al.*, 2012) that, with perceived location flexibility, employees have greater discretion over their work and can tailor their work to personal preferences which ultimately contributes to performance improvement

4.7.5 Correlation Analysis between Construct Workload Flexibility and Nurses Performance

The study analyzed the relationship between workload practice and nurses' performance in regional hospitals in Tanzania using the Pearson product moment correlation. Table 4.39 show the Pearson's correlation coefficient workload components and nurses' performance being 0.449, $p<0.05$, two tailed, tested at 95% confidence level. The results indicated that there is positive and significant relationship between workload components and nurses' performance in regional hospitals in Tanzania. The study found out that the relationship is moderate. This shows that nurses' performance in regional hospitals in Tanzania is influenced by workload components positively and significantly. The conclusion of this study based on the findings agreed with earlier researches conducted by De Menezes & Kelliher, (2011) who also reported positive and significant relationship between workload and performance of employee in Jordanian private Airlines.

4.7.6 Correlation Analysis for Moderating Variable, Supervisor Support

In this study, Pearson correlation coefficient was used to gauge the moderating effect of supervisor support on the influence of FWAs and nurses' performance. As Table 4.39 indicates the moderating effect of supervisor support was positively and significantly associated to nurses' performance ($r=0.567$, $p=0.001<0.05$). The study found out that the relationship is moderate. This shows that supervisor support moderates the relationship between flexible work arrangements and

nurses' performance positively and significantly. This shows that the influence of flexible work arrangements on nurses' performance is moderated by leadership support positively. This result supports the position held by Quaresh *et al.*, (2018) which ascertained that supervisor support mediates the relationship between job flexibility and employee performance

This imply that, a meaningful workplace environment that aids employees to focus on work and interpersonal harmony is considered to be a key determinant of employee performance improvement (Rana *et al*, 2014). Further, it has been evident from previous research that amiable organizational leaders that support FWAs policies and procedures are extremely important for employee performance and the eventual achievement of the business goals (Mamman *et al.*, 2011).

Table 4.39 The Overall Correlation Matrix

		Flexible Work Continuity	Work Scheduling	Location Flexibility	Workload Flexibility	Supervisor Support	Performance of Nurses
Flexible Work Continuity	Pearson Correlation	1	.510**	.462**	.504**	.471**	.469**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	376	376	376	373	375	375
Work Scheduling	Pearson Correlation	.510**	1	.599**	.575**	.502**	.443**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	376	379	378	375	376	377
Location Flexibility	Pearson Correlation	.462**	.599**	1	.602**	.482**	.397**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	376	378	378	375	376	377
Workload Flexibility	Pearson Correlation	.504**	.575**	.602**	1	.533**	.449**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	373	375	375	375	373	374
Supervisor Support	Pearson Correlation	.471**	.502**	.482**	.533**	1	.567**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	375	376	376	373	376	375
Performance of Nurses	Pearson Correlation	.469**	.443**	.397**	.439**	.567**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	375	377	377	374	375	377

**. Correlation is significant at the 0.01 level (2-tailed).

4.8: Multiple Regression Analysis

The study sought to carry out regression analysis to establish the statistical significance relationship between the independents variables notably work scheduling, job continuity, workload, job location on the dependent variable that was nurses' performance. According to Kothari, (2008) regression analysis is a statistical process of estimating the relationship among variables. On the same note, Wan (2013) contends that regression analysis helps in generating an equation that describes the statistical relationship between one or more predictor variables and the response variable. In order to investigate the influence flexible work arrangements on performance of nurses in regional hospitals in Tanzania, the study employed a linear regression analysis. The univariate and multiple regression analyses were conducted to empirically determine whether or not the independent variables were significant determinants of nurses' performance in regional hospitals in Tanzania.

In understanding the result of multiple regression analysis, the R squared was used to check how well the model fitted the data. The coefficient of determination, R^2 was used in this study as a useful tool because it gives the proportion of the variance (fluctuation) of one variable that is predictable from the other variable. It was a measure that allowed one to determine how certain it can be in making predictions from a certain model. The coefficient of determination is the ratio of the explained variation to the total variation. The coefficient of determination is such that 0<r2< 1, and denotes the strength of the linear association between x and y. The regression analysis results were presented using regression model summary tables, analysis of Variance (ANOVA) table and beta coefficients tables.

4.8.1 Regression Analysis on Work Scheduling

H_{a1}: Work scheduling had a positive significant influence on performance of nurses in regional hospitals in Tanzania

It was hypothesized that work scheduling has a positive significant influence on performance of nurses in regional hospitals in Tanzania. Regression analysis was conducted to determine the significance relationship of work scheduling and nurses' performance. The relationship was tested using a simple regression model of the form $Y=\beta_0+\beta_1X_1+\varepsilon$. The results for the model summary are as presented in Table 4.40 where R^2 (coefficient of multiple determinants) is shown. As the model depicts, the adjusted R^2 is 0.634, an indication that there is a strong relationship between work scheduling and nurses' performance in regional hospitals in Tanzania. This means that a proportion of 63.0% of performance nurses in regional hospitals in Tanzania can be explained by the singular effect of work scheduling.

Table 4.40 Model Summary for Work Scheduling

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.743[a]	.646	.634	.41295

The model significance was presented using the ANOVA test. Results in Table 4.41 shows that the significance of the F-value of 91.42 which is greater than the F critical and significant at 0.000 <0.05. This implies that work scheduling has a positive and significant effect on the nurses' performance in regional hospitals in Tanzania.

Table 4.41 ANOVA Results for Work Scheduling

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	24.057	1	24.057	91.428	.000[b]
	Residual	98.669	375	.263		
	Total	122.726	376			

a. Dependent Variable: Performance of Nurses
b. Predictors: (Constant), Work Scheduling

As shown in Table 4.42, the unstandardized coefficient for the variable was 0.534 and the P-value is 0.000. The new model now becomes $Y = 0.047 + 0.534X_1 + \varepsilon$ thus implying that at a significance level of 0.000, work scheduling will impact

the performance of nurses by up to 53.0%. The findings also indicate that the t-statistics (22.58) is higher than the t-critical (0.84) an indication that work scheduling significantly influences nurses' performance.

Table 4.42 Results for Work Scheduling

Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	.0471	.419		0.84.6	.000
	Work Scheduling	.534	.635	.443	22.58	.000

a. Dependent Variable: Performance of Nurses

Based on the above findings, the study therefore accepts the alternative hypothesis that work scheduling has a significant effect relationship on performance of nurses in regional hospitals in Tanzania. The findings compare with those by Manongi, *et al.,* (2012) who found that as a result of availability of work scheduling flexibility, nurses' performance was enhanced hence the scholar concluded that work scheduling had a positive and significant influence on nurses' performance

4.8.1.1: Moderating Effect of Supervisor Support on the Influence of Work Scheduling on Nurses Performance

The moderating effect of supervisor support on the relationship between work scheduling and the performance of nurses was evaluated. It was hypothesized that supervisor support has positive significant moderating effect on the relationship between work scheduling and performance of nurses. The moderating effect is shown on the Table 4.43. With respect to the moderation effect of supervisor support on the relationship between work scheduling and the performance of nurses, it was noted that the model without the interaction term, supervisor support, was significant with R^2 64.2% but after moderation, the R^2 increased significantly to 68.6%. It is noted that Model 2 with supervisor support accounted for significantly more variance than just work scheduling alone implying that supervisor support moderates work scheduling on nurses' performance. Further

work scheduling was significance with P value 0.00<0.05. This implies that supervisor support moderates the relationship between the work scheduling and nurses' performance in regional hospitals in Tanzania.

Table 4.43 Moderating Effect of supervisor Support on Work Scheduling

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	Sig. F Change
1	.734 a	.646	.646	.634	.4195	90.229	.000
2	.595 b	.686	.351	.45914	.359	91.708	.000

a. Predictors: (Constant), Work Scheduling
b. Predictors: (Constant), Work Scheduling, Supervisor Support

4.8.2 Regression Analysis on Job Location

$Ha_{2:}$ Job Location had a positive significant influence on performance of nurses in regional hospitals in Tanzania

It was hypothesized that job location had a positive significant influence on performance of nurses in regional hospitals in Tanzania. Regression analysis was conducted to determine the significance relationship of work scheduling and nurses' performance. The relationship was tested using a simple regression model of the form $Y=\beta_0+\beta_2X_2+\varepsilon$. The results for the model summary are as presented in Table 4.44 where R^2 (coefficient of multiple determinants) is shown. As presented in the table, the coefficient of determination R Square is 0.397 and R is 0.157 at 0.01 significance level. The model shows that job location explains 39% of the variation in nurses' performance. This implied that there exist a positive significant relationship between job location and nurses' performance. The results indicates that not all resisted nurses work directly with patients at their bedside and therefore many registered nurses are able to do their work anywhere in the world. According to Rawashder *et al.,* (2012) due to technology and the ever-changing medical industry, remote options are readily available to registered nurses.

Table 4.44 Model Summary for Job Location

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.397[a]	.157	.155	.52513

a. Predictors: (Constant), Location Flexibility
b. Dependent Variable: Performance of Nurses

The model significance was presented using the ANOVA test. Results in Table 4.45 shows that the significance of the F-value of 70.04 which is greater than the F critical and significant at 0.000 <0.05. This implied that there exist a positive significant relationship between job location and nurses' performance in regional hospitals in Tanzania.

Table 4.45 ANOVA Results for Job Location

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	19.315	1	19.315	70.043	.000[b]
	Residual	103.411	375	.276		
	Total	122.726	376			

a. Dependent Variable: Performance of Nurses
b. Predictors: (Constant), Location Flexibility

Table 4.46: Coefficients Results for Job Location

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.976	.104		28.63	.000
	Location Flexibility	.3271	.032	.397	8.369	.000

a. Dependent Variable: Performance of Nurses

As shown in Table 4.46, the unstandardized coefficient for the variable was 0.534 and the P-value is 0.000. The new model now becomes $Y = 0.029 + 0.327X_2 + \varepsilon$ thus implying that at a significance level of 0.000, job location will impact the performance of nurses by up to 32.0%. The findings also indicate that the t-statistics (28.635) is higher than the t-critical (8.369) an indication that job

location significantly influences nurses' performance. Rooh *et al.,* (2013) allude that under expectancy theory, job location is classified as a natural reinforcer. Therefore, if flexible job location components are applied consistently it can be a very powerful reinforcer to improve nurses performance.

Based on the above findings, the study therefore accepts the alternative hypothesis that job location has a significant effect relationship on performance of nurses in regional hospitals in Tanzania. On the same line, Saxena (2018) contends that flexible job location practices help employee to control over time and avoid the distance and congestion, hence creating the sense of corporate responsibility and improve job satisfaction and morale

4.8.2.1 Moderating Effect of Supervisor Support on the Influence of Job Location on Nurses Performance

With respect to the moderation effect of supervisor support on the relationship between job location and the performance of nurses, it was noted that the model without the interaction term, supervisor support, was significant with R^2 39.7% but after moderation, the R^2 increased significantly to 58.4 %. It is noted that the model with supervisor support accounted for significantly more variance than just job location alone implying that supervisor support moderates job location on nurses' performance. Furthermore, job location was significance with P value 0.00<0.05. This implies that supervisor support moderates the relationship between the job location and nurse's performance in regional hospitals in Tanzania.

Table 4.47 Moderating Effect of Supervisor Support on Work Scheduling

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
1	.397[a]	.157	.156	.52345	.158	70.065	.000
2	.584[b]	.341	.338	.46362	.183	103.477	.000

4.8.3 Regression Analysis on Workload versus Nurses Performance

Ha_3: Workload had a positive significant influence on performance of nurses in regional hospitals in Tanzania

It was hypothesized that workload has a positive significant influence on performance of nurses in regional hospitals in Tanzania. The relationship was tested using a simple regression model of the form:

$Y=\beta_0+\beta_3X_3+\varepsilon.$

The model summary as shown in Table 4.48 below revealed that the R-value is 0.439. Therefore, R-value (.439) for the workloads suggested that there is a strong effect of the independent variable on performance nurses in regional hospitals in Tanzania. It can also observe that the coefficient of determination, the adjusted R square (R^2) value is 0.191, which represents 19.1% variation of the dependent variable (nurses' performance), which is due to the change in independent variable (workload). However, the adjusted R^2 value indicates that 15.5% of the total variation in the performance of nurses can be explained by the flexible workload. The adjusted R^2 value = 0.191 lies just below 0.2 and 0.4 and therefore considered moderate correlation.

Table 4.48 Model Summary for Workload

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.439[a]	.193	.191	.51400

a. Predictors: (Constant), Workload Flexibility
b. Dependent Variable: Performance of Nurses

From the ANOVA results on workload and nurses 'performance as shown in Table 4.49, it is evident that an F statistic of 89.3 which is greater than the F-critical of 12.610 was observed which indicated that the model was significant. This was supported by a P-value of (0.000). The reported P-value of (0.000) was less than the conventional P-value of (0.05) thus implying that model applied can significantly predict the change in the performance of nurses in regional hospitals in Tanzania as a result of workload. The study, therefore, accepted the alternative hypothesis H_{A2} at 95% confidence interval, meaning there was a significant relationship between workload and nurses' performance in regional hospitals in Tanzania.

Table 4.49 ANOVA Results for Workload

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	23.522	1	23.522	89.031	.000[b]
	Residual	98.281	372	.264		
	Total	121.802	373			

a. Dependent Variable: Performance of Nurses
b. Predictors: (Constant), Workload Flexibility

By applying the standardized coefficients, the resultant regression equation $Y=\beta_0+\beta_3X_3+\varepsilon$ yields $Y= 0.251X_3$, where Y is the performance of nurses and X_3 is workload. From the coefficients, the new model now becomes $Y = 0.251 + 0.370X_3 + \varepsilon$. This implies that at a p-value of 0.000, a unit increase in workload results to 37.0% increase in the performance of nurses in regional hospitals in Tanzania. The findings concur with Possenriede & Plantenga (2011) who contended that the work practice which allows flexibility in terms of job sharing, seasonal working or part time working improves the performance of nurses by

being able to dedicate the required time in multiple responsibilities both at work and home settings. In qualitative responses regarding this objective, flexible workload practices were beneficial to majority of nurses in the sense that nurses could be able to advance their career, provide quality service in and integrity manner and being more curious in learning new ways of service provision

Table 4.50 Coefficients for Workload Flexibility

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	T	Sig.
1	(Constant)	.251	.140		17.993	.000
	WF	.370	.039	.439	9.436	.000

a. Dependent Variable: Performance of Nurses

4.8.3.1 Moderating Effect of Supervisor Support on the Influence of workload on Nurses Performance

With respect to the moderation effect of Supervisor support on the relationship between workload and the performance of nurses, it was noted that the R square of .187 was noted for the model without the interaction term, supervisor support, R square of .46.3 for the model with the interaction term, supervisor support. It is noted that the model with supervisor support accounted for significantly more variance than just workload practice an indication that there is potentially significant moderation between workload flexibility and supervisor support on the performance of nurses. This imply that when nurses find a supportive attitude from their leaders regarding a well-balanced workload they work with more devotion and deal with job stress in a better way. The results of this study are consistent with the findings of Lee *et al.*, (2017) who also showed a positive moderating effect of supervisor support on relationship between workload and employee job performance.

Table 4.51 Moderating Effect of Supervisor Support on Workload

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	Sig. F Change
1	.435[a]	.189	.187	.51375	.189	86.438	.000
2	.588[b]	.46.3	.342	.46217	.156	88.202	.000

Predictors: (Constant), Workload Flexibility

4.8.4 Regression Analysis on Job Continuity versus Nurses Performance

Ha4: Work continuity had a positive significant influence on performance of nurses in regional hospitals in Tanzania

It was hypothesized that work continuity has a positive significant influence on performance of nurses in regional hospitals in Tanzania. The relationship was tested using a simple regression model of the form:

$Y=\beta_0+\beta_4X_4+\varepsilon$.

Table 4.52 Model Summary for Flexible Work Continuity

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.469[a]	.220	.218	.50390

a. Predictors: (Constant), Flexible Job Continuity
b. Dependent Variable: Performance of Nurses

At a significance level, $\alpha = 0.05$, we test the hypothesized relationship, H_{a4}: work continuity has a positive significant influence on performance of nurses. As indicated in Table 4.52.The adjusted R^2 value indicates that 22.0% of the total variation in the performance of nurses can be explained by the flexible work continuity. The adjusted R^2 value = 0.218 lies between 0.2 and 0.4 at 0.01 significance level and therefore considered moderate correlation.

An ANOVA test was performed to further attest the relationship job continuity and performance of nurses in regional hospitals in Tanzania. The results are as summarized in Table 4.53 below. The table shows that the variable has a P-value equal to 0.000 while the F-statistic was 105.12 demonstrating that the model is statistically significant in explaining the change in the dependent variable, considering that the P-value is less than 0.05 at the 95% level of confidence.

Table 4.53 ANOVA Results for Job Continuity

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	26.693	1	26.693	105.126	.000[b]
	Residual	94.710	373	.254		
	Total	121.402	374			

a. Dependent Variable: Performance of Nurses
b. Predictors: (Constant), Flexible Work Continuity

The regression coefficient shown in Table 4.54 indicates that job continuity is statistically significant since its p-value is less than 0.05 (p-value =0.000). Using the coefficient in Table 4.54, the regression model turns to be: $Y = 0.318 + 0.654X_4 + \varepsilon$ the findings imply that a unit change in job continuity positively influence up to 65.4% increase in performance of nurses in regional hospitals in Tanzania. The t-calculated was 10.25 implying that job continuity significantly influenced nurses' performance. The alternative hypothesis is therefore accepted; and concluded that job continuity has a positive and significant effect on performance of nurses in regional hospitals in Tanzania.

Table 4.54 Coefficients for Job Continuity

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	.318.607	.120		21.677	.000
	FWC	.654	.034	.469	10.253	.000

a. Dependent Variable: Performance of Nurses

4.8.4.1 Moderating Effect of Supervisor Support on the Influence of job continuity on Nurses Performance

With respect to the moderation effect of supervisor support on the relationship between job continuity and the performance of nurses, it was noted that the model without the interaction term, supervisor support, was significant with R^2 21.7% but after moderation, the R^2 increased significantly to 47.4 %. It is noted that the model with supervisor support accounted for significantly more variance than just job continuity alone implying that supervisor support moderates job continuity on nurses' performance. Furthermore, job continuity was significance with P value 0.00<0.05. This implies that supervisor support moderates the relationship between the job continuity and nurse's performance in regional hospitals in Tanzania. The findings concur with imply that once the degree of support, guidance, and appropriate tools for flexible work continuity has been provided nurses' effectiveness will be realized. The results corroborate with the findings of Shuck *et al* (2011), which indicated that employees who gain support from both supervisors and colleagues can cope with job stress as a result their performance improves simultaneously.

Table 4.55 Moderating Effect of Supervisor Support on Job Continuity

					Change Statistics		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
1	.468a	.219	.217	.50457	.219	104.178	.000
2	.611b	.473	.370	.45261	.154	91.329	.000

a. Predictors: (Constant), Flexible Work Continuity
b. Predictors: (Constant), Flexible Work Continuity, Supervisor Support

The Analysis of Variance (ANOVA) results as shown in Table 4.55 further confirms that the model fit is appropriate for this data since p-value of 0.000 which is less than 0.05, implying a significant positive relationship between the moderating effect of supervisor support on work continuity and nurses' performance.

4.9 Analysis of the Overall Regression Model

An overall regression model was carried out to determine the combined effect of work scheduling, job location, and workload and work continuity on nurses' performance. Since the full measurement model was successfully conducted for each of constructs under this study, and it was satisfied that the measurement model was valid and well fitted to the data, thus it was best to proceed to full structural model to test the hypothesized relationships between variables. The findings on model fitness (model summary) are as shown in Table 4.56 which revealed that all the determinants of flexible work arrangements focused on in the study had a strong influence on the performance of nurses in regional hospitals in Tanzania. This is evidenced by the adjusted R^2 value of 0.61 which means that work scheduling, job location, and workload and work continuity explained up to 61. % of the overall performance of nurses in regional hospitals in Tanzania.

Table 4.56 Overall Model Summary Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.502[a]	.295	.281	.613

a. Predictors: (Constant), work scheduling, job location, and workload and work continuity

b. Dependent Variable: Performance of Nurses

The analysis of variance (ANOVA) for the overall model is as shown in Table 4.57 The results depicted that when combined, work scheduling, job location, and workload and work continuity had a significant influence on the performance of nurses in regional hospitals in Tanzania This is evidenced by the P-value of 0.000 < 0.05 and the F-calculated of 118.12 which is way higher than the F-critical.

Table 4.57 ANOVA Results for the Overall Model

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	126.693	1	46.693	118.126	.000b
	Residual	194.710	373	.54		
	Total	321.402	374			

a. Dependent Variable: Performance of Nurses

b. Predictors: (Constant), work scheduling, job location, and workload and work continuity

4.10 Multiple Regression of Coefficients

The results revealed that work scheduling, job location, and workload and work continuity had a significant and positive influence on the performance of nurses in regional hospitals in Tanzania. By applying the standardized coefficients, the resultant regression equation:

$Y= \alpha + \beta_1X_1 + \beta_2X_2+ \beta_3X_3+ \beta_4X_{4+} \varepsilon$ resulted into a fitted model of

$Y=2.077+ 0.534X_1 + 0.327X_2+ 0.370X_3+ 0.654X_{4+e}$

The results shown on Table 4.58 indicated that job continuity was leading with the highest influence on nurses' performance with $\beta_0 = 0.654$, t = 5.045, p-value < 0.001 followed by work scheduling with $\beta_0 = 0.534$, t = 2.841, p-value = 0.05. According to Kossek, (2012); Griffin *et al.,* (2014); Lazer *et al.,* (2010) the main categories of flexible work practices that have a direct influence on employee performance includes work scheduling, job location, workload, and job continuity. The findings also concur with the argument by Lu *et al.,* (2012) that the determinants of flexible work arrangements had a significant influence on nurses' performance.

Table 4.58 Multiple Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	2.077	.145		14.361	.000
	Work Scheduling	.128	.045	.534	2.841	.005
	Location Flexibility	.045	.041	.327	1.090	.277
	Workload Flexibility	.135	.050	.370	2.689	.008
	Flexible Work Continuity	.204	.040	.654	5.045	.000

a. Dependent Variable: Performance of Nurses

The study further concurs with the findings by Edmans, (2012) which asserts that, offering various form of work flexibility helps employees to being able to handle work and non-work obligations in a more balanced manner, hence being regarded as one of the main policies to cope with demands from both work and life (Zoonen, & Fonner, 2016).

4.10.1 Moderating Effect of Supervisor Support

The objective was to establish the moderating effect of supervisor support on the relationship between flexible work arrangements on perfomance of nurses in regional hospitals in Tanzania. All the independent variables were moderated by the variable supervisor support to give a composite. Results are presented in Table 4.59.

Table 4.59 Moderating effect of Supervisors Support on Components of FWAs

Variable	Unstandardized Coefficients B	Std. Error	T	Sig.	R^2 Before Moderation	R^2 After Moderation	R^2 Change
Work Scheduling *Supervisor Support	-0.27	0.12	-2.34	0.02	64.62%	68.6%	17.4%
Job Location*Supervisor Support	-0.14	0.12	-1.18	0.24	15.7.5 %	34.1%	5.1%
Workload* Supervisor Support	-0.28	0.12	-2.43	0.02	18.3%	46.3%	10.8%
Job Continuity* Supervisor Support	-0.10	0.10	-1.00	0.32	21.9%	47.3%	5.9%

The R^2 for work scheduling before moderation was 44.6% but after moderation, the R^2 increased significantly to 68.6%. This implies that supervisor support moderates work scheduling on nurses' performance. Further work scheduling was significance with P value 0.02<0.05. This implies that supervisor support moderates the relationship between the work scheduling and nurses' performance in regional hospitals in Tanzania. The R^2 for job location before moderation was 15.7% but after moderation, the R^2 increased insignificantly to 34.1%. Further job location was insignificant with P value 0.00>0.05. This implies that supervisor

support does not moderate the relationship between job location and nurses' performance in regional hospitals in Tanzania. The results could imply that since supervision and guidance of nurses working remotely is a challenge, nurses could not feel comfortable with the supervisor support. At the same time, majority of respondents indicated that technological gargets for to be used by mobile nurses were inadequate. The results are similar to Marquis & Huston (2011) who found that adverse consequences for individuals such as social isolation, career stagnation, and family conflict, were also reported in their investigations regarding mobile working.

The R^2 for workload before moderation was 18.9% but after moderation, the R^2 increased significantly to 47.4%. This implies that supervisor support moderate's workload practices on nurses' performance. Further workload practice was significant with P value 0.02<0.05. This implies that supervisor support moderates the relationship between the workload and nurses' performance in regional hospitals in Tanzania. The R^2 for job continuity before moderation was 21.9% but after moderation, the R^2 increased significantly to 47.3%. Further job continuity was significant with P value 0.00>0.05. This implies that supervisor support moderates the relationship between the job continuity and nurses' performance in regional hospitals in Tanzania (Wayne, Casper, Matthews, & Allen, 2013).

4.11 Hypotheses Testing

Hypotheses were tested using multiple linear regression analysis as represented in Table 4.60.

4.11.1 Hypothesis Testing for Work Scheduling

The first Hypothesis to be tested was:

H_1: Work scheduling had a positive significant influence on performance of nurses in regional hospitals in Tanzania

The hypothesis was tested by using multiple linear regression and determined using p-value. The acceptance/rejection criteria were that, if the p value is less

than 0.05, we reject the H_{A1} but if it was more than 0.05, the H_{A1} is not rejected. Therefore, the alternative hypothesis is: Work scheduling had a positive significant influence on performance of nurses in regional hospitals in Tanzania. Results in Table 4.60 shows that the p-value was 0.00. This was supported by a calculated t-statistic of 22.58 that is larger than the critical t-statistic of 2.842. The alternative hypothesis was therefore not rejected. The study therefore adopted the alternative hypothesis work scheduling had a positive significant influence on performance of nurses in regional hospitals in Tanzania.

4.11.2 Hypothesis Testing for Job Location

The second Hypothesis to be tested was:

H_2: Job location had a positive significant influence on performance of nurses in regional hospitals in Tanzania

The hypothesis was tested by using multiple linear regressions and determined using p-value. The acceptance/rejection criterion was that, if the p value is less than 0.05, we reject the H_{A2} but if it is more than 0.05, the H_{A2} is not rejected. Therefore, the alternate hypothesis is that Job location had a positive significant influence on performance of nurses in regional hospitals in Tanzania. Results in Table 4.60 shows that the p-value was 0.00. This was supported by a calculated t-statistic of 28.58 that is larger than the critical t-statistic of 8.369. The alternative hypothesis was therefore not rejected. The study therefore adopted the alternative hypothesis Job location had a positive significant influence on performance of nurses in regional hospitals in Tanzania

4.11.3 Hypothesis Testing for Workload

The third Hypothesis to be tested was:

H_3: Workload had a positive significant influence on performance of nurses in regional hospitals in Tanzania

The hypothesis was tested by using multiple linear regression and determined using p-value. The acceptance/rejection criteria were that, if the p value is less

than 0.05, we reject the H_{A3} but if it is more than 0.05, the H_{A3} is not rejected. Therefore, the alternative hypothesis is that: Workload had a positive significant influence on performance of nurses in regional hospitals in Tanzania. Results in Table 4.60 shows that the p-value was 0.000. This was supported by a calculated t-statistic of 17.993 that is larger than the critical t-statistic of 9.436. The alternate hypothesis was therefore not rejected. The study therefore adopted the alternative hypothesis that Workload had a positive significant influence on performance of nurses in regional hospitals in Tanzania.

4.11.4 Hypothesis Testing Job Continuity

The fourth Hypothesis to be tested was:

H_{A4}: Job continuity had a positive significant influence on performance of nurses in regional hospitals in Tanzania

The hypothesis was tested by using multiple linear regressions and determined using p-value. The acceptance/rejection criterion was that, if the p value is less than 0.05, we reject the HA4 but if it is more than 0.05, the HA4 is not rejected. Therefore, the alternative hypothesis is Job continuity had a positive significant influence on performance of nurses in regional hospitals in Tanzania Results in Table 4.60 shows that the p-value was 0.000. This was supported by a calculated t-statistic of 27.441 that is larger than the critical t-statistic of 5.045. The alternative hypothesis was therefore not rejected. The study therefore adopted the alternative hypothesis that Job continuity had a positive significant influence on performance of nurses in regional hospitals in Tanzania

4.11.5 Hypothesis Testing for Supervisor Support as a moderator

The fifth Hypothesis to be tested was:

H_{A5}: Leadership support as a moderating factor had a positive significant moderating effect on the relationship between flexible work arrangements and performance of nurses in regional hospitals in Tanzania

The hypothesis was tested by using multiple linear regression and determined using p-value. The acceptance/rejection criteria were that, if the p value is less than 0.05, we reject the H_{A5} but if it is more than 0.05, the H_{A5} is not rejected and concluded that Supervisor Support as a moderator had a significant effect on job continuity, work scheduling and workload. However, it did not significantly moderate the relationship between Job locations on nurses' performance in regional hospitals in Tanzanian as shown in Table 4.60.

Table 4.60 Summary of Hypotheses Results

Objective No.	Objective	Hypothesis	Rule	p-value	Comment
1	To examine the influence of Work scheduling and performance of nurses in regional hospitals in Tanzania.	HA1: Work scheduling had a positive significant influence on performance of nurses in regional hospitals in Tanzania	Do not reject HA1 if p value <0.05	p<0.05	**The alternative hypothesis was not rejected; therefore, Work scheduling had a positive significant influence on performance of nurses in regional hospitals in Tanzania**
2	To establish the influence of Job location and performance of nurses in regional hospitals in Tanzania.	HA2: Job location had a positive significant influence on performance of nurses in regional hospitals in Tanzania	Do not reject HA2 if p value <0.05	p<0.05	**The alternative hypothesis was not rejected; therefore, Job location had a positive significant influence on performance of nurses in regional hospitals in Tanzania**
3	To determine the influence of Workload and performance of nurses in regional hospitals in Tanzania.	HA3: Workload had a positive significant influence on performance of nurses in regional hospitals in Tanzania	Do not reject HA3 if p value <0.05	p<0.05	**The alternative hypothesis was not rejected; therefore, Workload had a positive significant influence on performance of nurses in regional hospitals in Tanzania**
4	To evaluate the influence of Job continuity and performance of nurses in regional hospitals in Tanzania.	HA4: Work continuity had a positive significant influence on performance of nurses in regional hospitals in Tanzania	Do not reject HA4 if p value <0.05	p<0.05	**.The alternative hypothesis was not rejected; therefore, Work continuity had a positive significant influence on performance of nurses in regional hospitals in Tanzania**
Objective 5	To articulate the moderating effect of supervisor support on the influence of flexible work arrangements and performance of nurses in regional hospitals in Tanzania	HA5: Leadership support as a moderating factor had a positive significant moderating effect on the relationship between flexible work arrangements and performance of nurses in regional hospitals in Tanzania	Do not reject HA5 if p value <0.05	p<0.05	**Supervisor Support as a moderator had a significant effect on job continuity, work scheduling and workload. However, it did not significantly moderate the relationship between Job location on nurses' performance in regional hospitals in Tanzania.**

4.12 Model Optimization and Revised Conceptual Framework

According to the findings of this study, all the variables had a significant and positive influence on the performance of nurses in regional hospitals in Tanzania, except job location that had a negative significant influence. To determine the hierarchy of influence and contribution of the IV to DV, the optimal model was drawn and the graphical representation is given in Figure 4.4. The model was formulated using the coefficients in Table 4.49. It is evident that performance job continuity had the highest regression coefficient followed by work scheduling, workload, and job location. The combined influence of flexible work arrangements on performance of nurses in regional hospitals in Tanzania was also indicated. Results were arrived at through running multiple regressions. Results of the new conceptual framework are presented in Figure 4.4.

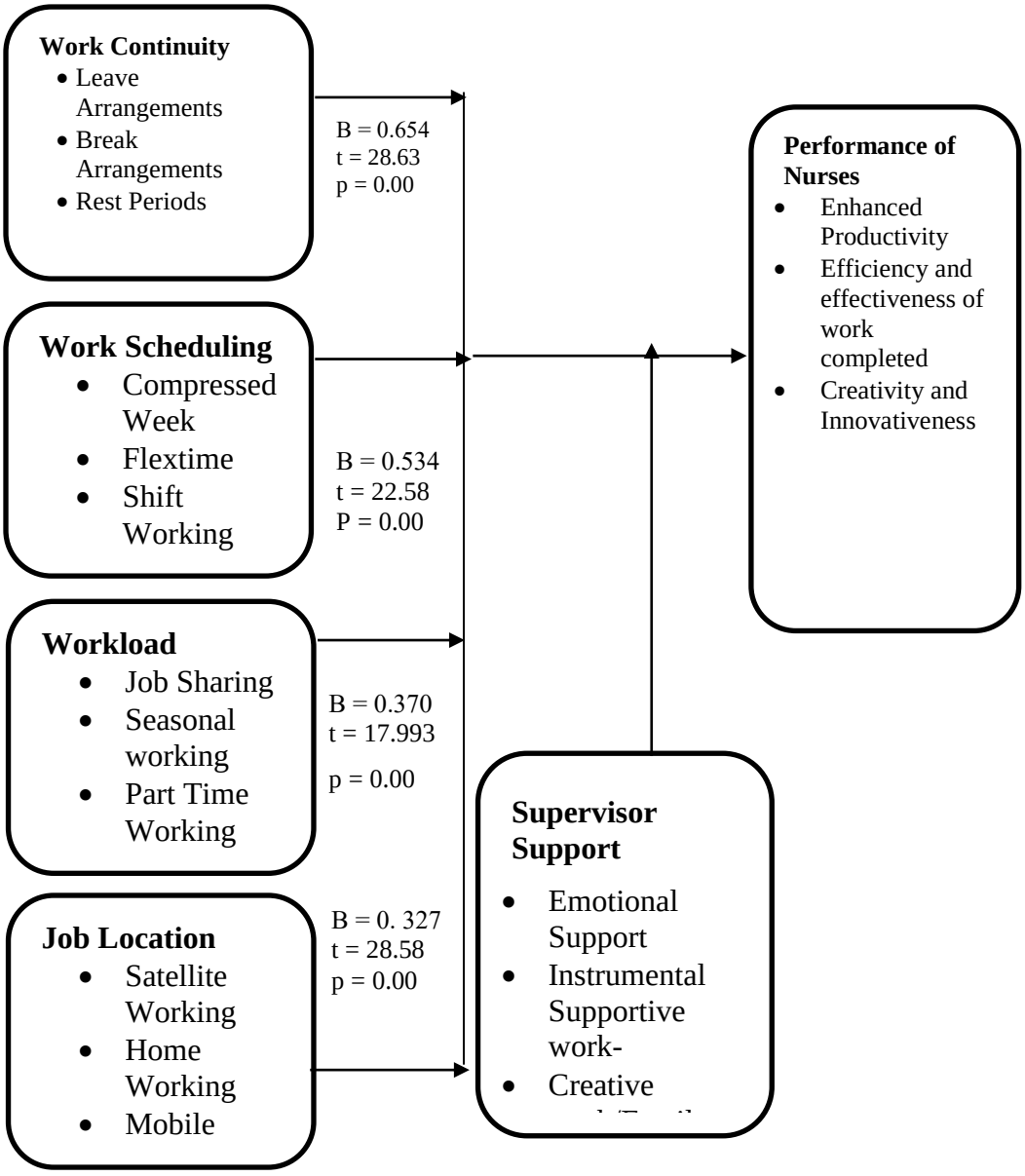

Figure 4.4: Revised Conceptual Framework

As shown in Figure 4.4, no variable was dropped since all the variables were significant. The variables were arranged in order of their impact they have on the dependent variable

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the major findings of the study, highlights the relevant conclusions made, presents the recommendations and proposes areas deemed worthy for further research. The study sought to examine the influence of flexible work arrangements in performance of nurses in regional hospitals in Tanzania. It established the relationship between work scheduling, job continuity, workload, and job location moderated supervisor support on nurses' performance.

5.2 Summary of Findings

The study obtained a response rate of 94.4% which was possible due to the large number of the sampled respondents. This was considered adequate for analysis as well as making conclusion and recommendations of the study. Majority of the respondents were females while majority of respondent had a job title of Registered Nurse Assistant. At the same time, majority of respondents worked for more than 8 hours per day whereas most of the sampled respondents had a working experience of between 11 to 20 years.

5.2.1 Influence of Work Scheduling on Performance of Nurses

The first objective of the study was to establish the influence of work scheduling on performance of nurses in regional hospitals in Tanzania. The findings revealed that the hospital leaders did not adhere to labor laws as the central guide for regulation working hours whereby their high tendency of irregular working hours in most of the units. Further inferential analysis of the study model revealed that a positive significant relationship between work scheduling the performance of nurses. At the same time, leadership support had a significant moderating effect on the relationship between work scheduling and the performance of nurses. Therefore, improvement in the work scheduling is expected to make significant improvement in the performance of nurses.

5.2.2 Influence of Job Continuity on Performance of Nurses

The second objective of the study was to establish the influence of job continuity on performance of nurses in regional hospitals in Tanzania. The study reported a high prevalence of missed, interrupted, or delayed rest breaks in nursing units whereby majority of the respondents indicated that their leaders did not give all the required support related to insufficient rest breaks. The findings further reveled that rest break activities and high quality rest break areas were the factors that relieve nurses from job demands and could be helpful in coping with them. Moreover, the study established that nurses working three consecutive 12-hour shifts suffer from sleep deprivation report disturbance in their personal relationships, reduction in work productivity, and negative attitudes toward work. Likewise, leadership support had a significant moderating effect on the relationship between job continuity and the performance of nurses. The results on both the univariate and overall model revealed that job continuity had a positive and significant influence on performance of nurses in regional hospitals in Tanzania.

5.2.3 The influence of workload on Performance of Nurses

The third of the study was to establish the influence of workload on performance of nurses in regional hospitals in Tanzania. The study found that heavy workload associated with shortage of staff in nursing unit was a serious challenge in regional hospitals. The respondents indicated that they had to perform multiple responsibilities and, in most cases, they were overburdened with non-nursing activities including administrative duties. They further indicated that, despite their commitment to non-nursing activities, there was a serious delay in payment of their overtime something which affects the working morale. Furthermore, leadership support had a significant moderating effect on the relationship between workload and the performance of nurses. The results of the model also revealed that flexible workload positively and significantly influenced the performance of nurses in regional hospitals in Tanzania. The model output revealed that workload positively

and significantly influences the performance of nurses in regional hospitals in Tanzania.

5.2.4 Influence of Job Location on Performance of Nurses

The fourth objective of the study was to assess the influence of job location on performance of nurses in regional hospitals in Tanzania. The study established that satellite working and working from home were key to nurses' performance whereby hospitals were able to provide supportive equipment to nurses working in remote settings. However, the findings revealed that the nurse leaders were not able to effectively monitor the performance of nurses in remote centers due to lack of knowledge on technology used. The findings further portrayed that remote working was practiced by specialty nurses who were assigned special tasks out of bed side activities. At the same time, leadership support had a significant moderating effect on the relationship between job location and the performance of nurses. The model output revealed that job location negatively and significantly influences the performance of nurses in regional hospitals in Tanzania.

5.2.5 Moderating effect of Supervisor support on the relationship between Flexible Work Arrangements and Performance of nurses

The fifth objective of the study was to establish the moderating effect of supervisor support on the relationship between flexible work arrangements on the performance of nurses in regional hospitals in Tanzania. The study established that leadership support played a significant positive influence on the relationship between flexible work arrangement components (work scheduling, job location, workload and flexible work continuity) and the performance of nurses. It was further noted that the model with the interaction term, leadership support accounted for significantly more variance than just when flexible work arrangements components were examined alone. The findings revealed that supervisors play a critical role in fostering or hindering employees from using FWAs.

The findings further portrayed that supervisor are the doorkeepers for the effective work and family policies. They are always related to final approval regarding

whether employees can use FWAs program. Thus, the findings imply that once the degree of support, guidance, and suitable environment for effective implementation of flexible work arrangements practices then nurses' performance effectiveness will be realized. The inferential analysis of the study model revealed that indeed leadership support had a positive and significant influence on the relationship between the influence of flexible work arrangement on the performance of nurses in regional hospitals in Tanzania.

5.3 Conclusion of the Study

5.3.1 Work Scheduling and Performance of Nurses

Based on the findings, the study showed that regional Hospitals utilized shift working and compressed working practices as approaches to enhance flexibility in work scheduling among nurses. These approaches were relevant and contributed to nurses' performance. Only a small section of the workforce benefitted from flextime. The study concluded that there were lack of staff involvement and rigidity in selection of suitable working hours among nurses in regional hospitals in Tanzania. Based on the findings of the study, it is concluded that work scheduling is a key driver of nurses' performance

5.3.2 Job Continuity and Performance of Nurses

Based on the findings, the study showed that job continuity is pivotal to nurses' performance. It further demonstrated that flexibility in job continuity is important factor influencing nurses' performance in regional hospitals in Tanzania. Furthermore, the study depicted that nurses were denied their rights to have rest breaks due to staffing challenges and patients' conditions. The study concluded that job continuity was an essential ingredient to increasing the level nurses' performance that would dovetail to organizational effectiveness and customer retention.

5.3.3 Workload and Performance of Nurses

The study concluded that nurse experienced heavy workload due to shortage of staff in respective units. Based on the findings of the study, it was concluded that various

approaches are utilized in regional hospitals in order to balance staff workload. There were a lot of complains regarding delayed payments of overtime allotted to nurses. The study also concluded that workload had a positive significant influence on performance of nurses and that despite heavy workload experienced by staff, majority were able to sacrifice their time and energy to improve their work.

5.3.4 Job Location and Performance of Nurses

Based on the findings, the study concluded that job location had negative and significant relationship with the performance of nurses. It was also concluded that nurses play various roles concurrently depending on the unique needs of a patient at the time**.** Thus, satellite working had a lot of influence on the nurses' performance compared to other determinants. Based on the findings of the study, it was concluded that job location flexibility was laced with limited devices, limited managerial control and unethical practices. However, satellite working encouraged nurses to work harder while in few it discourages nurses because of the limited knowledge of information technology equipment.

5.3.5 Moderating effect of leadership support on the Influence of Flexible Work Arrangements of performance of Nurses

Findings of the study concludes that nursing profession was very autonomous and it requires nurses to make decisions and take responsibility for their actions. It also concluded that nursing leaders in regional hospitals were able to provide a clear vision, hence n nurses felt to be motivated and empowered. Furthermore active manager involvement in matching flexible work options to nurse work-life needs results in better outcomes. The study also concluded nurse performance may be improved by addressing nurse autonomy, relationships among nurses, their colleagues and leaders, and resource accessibility. The study also concluded that leadership support had a positive significant influence on the relationship between flexible work arrangements and performance of nurses in regional hospitals in Tanzania.

5.4 Recommendations

In line with the conclusions of the study, the following recommendations were advanced:

5.4 1 Work Scheduling and Performance of Nurses

Based on the conclusion of the study, it is recommended that public hospitals should focus more on the determinants of work scheduling in order to address the problem of nurses' performance in Tanzania and in the world at large. The study recommends that regional hospitals should embrace appropriate work scheduling that are nurse-centered as a way of enhancing performance improvement. Hence the regional hospitals should put a robust employee practices which allow workers to work full time hours in less than the traditional 5-day workweek by increasing daily hours worked and improves the performance of nurses be entrenched in the regional hospitals in Tanzania. This should be part of the human resource for health policies to avoid the challenges associated with employee benefits including career progression and associated financial benefits.

5.4.2 Job Continuity and Performance of Nurses

In view of the conclusion on job continuity, it is recommended that human resource for health practitioners should adopt a modern way of dealing with employee leaves and rest breaks which to avoid uninterrupted connection of duties. It is further recommended that employees should be allowed to participate creation of duty rosters, and consider individual requests regarding alternating of the duty rosters. This will collectively enhance collective ownership of the programme and improve nurses' performance.

5.4.3 Work load and Performance of Nurses

In view of the conclusion on nurses' workload, this study recommended that regional hospitals should ensure that they strategically harmonize nurses' workload in the respectable units. Regional hospitals should adopt continuous workload harmonization approached which is done regularly for the improvement of the level

of performance of nurses. The study also recommends that the work practices which allows flexibility in terms of work intensity and improves the performance of nurses be mainstreamed in the hospitals in Tanzania.

5.4.4 Job location and Performance of Nurses

On job location, it is recommended that management should enhance feeling of freedom, autonomy and self-reliance among nurses to improve nurses' performance. Provision of required resources and knowledge is highly recommended to nurses engaged under remote working. Also, performance assessment approaches of remote workers should be clearly spelled out in employee contacts to avoid performance evaluation misconception.

5.4.6 Leadership support as a mediating factor on the influence of flexible work arrangement and performance of nurses

Based on the conclusions of the study, it is recommended that regional hospital leaders should enhance their nurses' performance by creating supportive work environment for smooth operation of flexible work arrangements. Furthermore, the study recommends that the practice of leadership that appreciates and engages employees and makes them feel that their supervisors value their contributions and care about their well-being be reinforced in the leadership structures of hospitals in Tanzania to further improve the performance of nurses.

5.5 Recommendations of the Study

Based on the findings of the study, the following recommendations can be drawn on;

Policy Implications:

There has been scanty and unclear literature and information on the influence of flexible work arrangements on performance of nurses in regional hospitals in Tanzania. The study exemplifies the main determinant of FWAs such as work scheduling, job continuity, and workload and job location and notes that health sector organizations should use them to set policies

Theoretical Implication:

Little has been done previously to link the theories in this study with the aspects flexible work arrangements. This study brings a clear view on how the theories uphold flexible work arrangements as a way of improving nurses' performance. The theories explain the value and linkage of the variables in improving nurses' performance in regional hospitals.

Pragmatic Implications:

The study points out the enablers of flexible work arrangements and how they can singularly influence nurses' performance. It elaborates that due to the variability of working hours, workload and locations, employees feel respect for their personal interests and meet the high levels of social and respect needs, so it can form sense of corporate responsibility and improve job satisfaction and morale.

Similarly, based on the findings, the following recommendations can be made on each of the specific variables of the study:

5.5.1 Work Scheduling and Performance of Nurses

This study recommends that the regional hospitals through the management should ensure effective work scheduling to allows nurses to flexibly and autonomously select the specific time to work instead of a unified and fixed commute time system

5.5.2 Job Continuity and Performance of Nurses

It is recommended that the management of regional hospitals should embrace the ability of nurses to get adequate rest and rejuvenation and nurses should not work through their breaks in the sense that inadequate time for rest and renewal can cause adverse health consequences and can impact patient safety as well.

5.5.3 Workload and Performance of Nurses

Hospital management should aim for a fair and sensible distribution of nursing staff over the wards, resulting in an equally distributed and manageable workload for all nursing staff.

5.5.4 Job Location and Performance of Nurses

Regional hospitals in Tanzania should increasingly take advantage of technology to allow health care workers to do their work at home especially non-bedside nursing jobs which accounts for about 43% of their daily work.

5.5.5 Mediating Role of Supervisor Support

Hospital management should embrace a supportive leadership to promote nurses' well-being through a healthier work design and lead in a way that supports nurses' performance. Furthermore, nurses should be allowed to air their views and be involved in decision making and allowed to choose the best flexible work practice that they find addressing their needs. This way, they will be motivated to contribute more to hospital performance.

5.6 Recommendations for Further Studies

The study focused on flexible work arrangements and performance of nurses in regional hospitals in Tanzania. There should be a study to establish other prospects of influencing performance of nurses which are exceedingly facing performance challenges. The study focused on regional hospitals in Tanzania while there are other hospitals and health care organizations even in the private sector facing the same problems as far as flexible working arrangements and nurses 'performance is concerned. There should be a study to therefore unveil influence of these prospects while focusing on other sectors.

This study employed explanatory research design using both qualitative and quantitative approaches but the researcher is also aware of other research designs. In view of this, the study, therefore, suggests that other researchers employ longitudinal study so as to study the measure over a period of time. Furthermore, this study

collected data using a semi-structured questionnaire, it is the opinion of the researcher that other methods should be employed to provide basis for comparison archers employ longitudinal study so as to study the measure over a period of time

There should be a study to unveil the other factors contributing to performance nurses apart from the determinants of flexible working arrangements.

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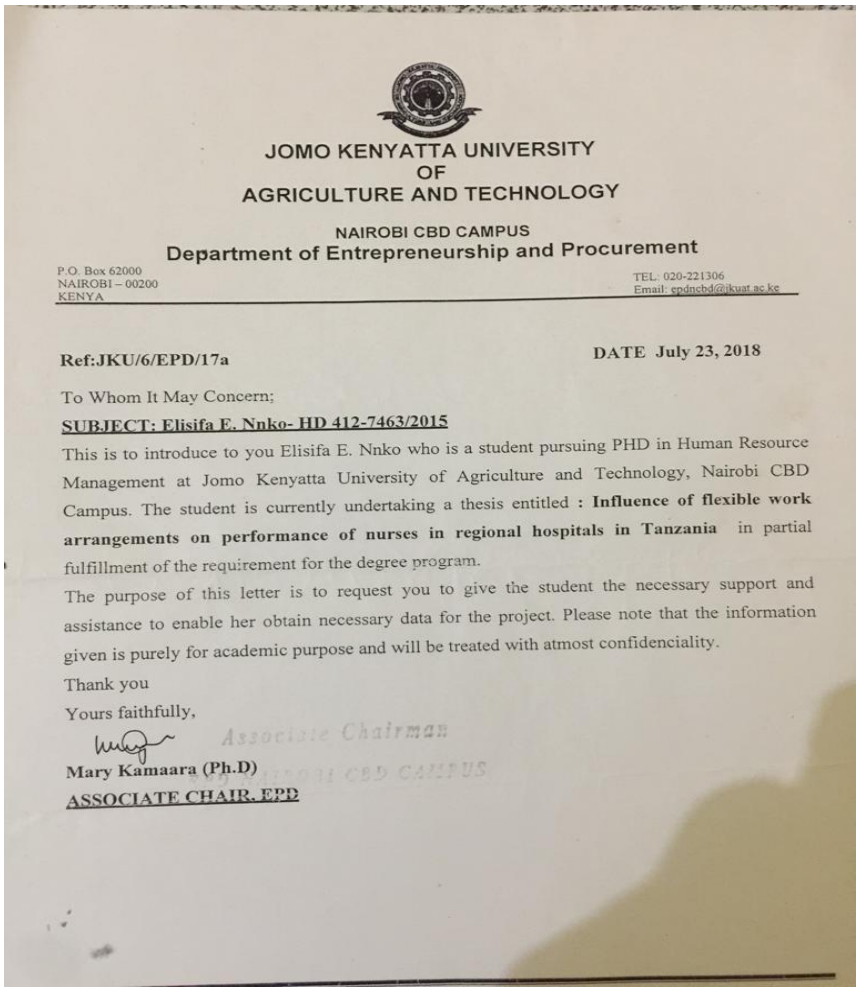
APPENDICES

Appendix 1: Data Collection Introduction Letter



JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY

NAIROBI CBD CAMPUS
Department of Entrepreneurship and Procurement

P.O. Box 62000
NAIROBI – 00200
KENYA

TEL: 020-221306
Email: epdncbd@jkuat.ac.ke

Ref:JKU/6/EPD/17a **DATE July 23, 2018**

To Whom It May Concern;

SUBJECT: Elisifa E. Nnko- HD 412-7463/2015

This is to introduce to you Elisifa E. Nnko who is a student pursuing PHD in Human Resource Management at Jomo Kenyatta University of Agriculture and Technology, Nairobi CBD Campus. The student is currently undertaking a thesis entitled **: Influence of flexible work arrangements on performance of nurses in regional hospitals in Tanzania** in partial fulfillment of the requirement for the degree program.

The purpose of this letter is to request you to give the student the necessary support and assistance to enable her obtain necessary data for the project. Please note that the information given is purely for academic purpose and will be treated with atmost confidenciality.

Thank you

Yours faithfully,

Associate Chairman

Mary Kamaara (Ph.D)

ASSOCIATE CHAIR, EPD

Appendix II: Letter of Introduction

Dear Respondent:

My name is Elisifa Ezekiel Nnko, a PhD student at Jomo Kenyatta University of Agriculture and Technology. I am undertaking a PhD research study on the: '***Influence of Flexible Work Arrangements on performance of nurses in Regional Hospitals in Tanzania***. As part of the PhD program requirement, the researcher is supposed to collect data and would be grateful if you would consent to participate in this survey, through filling the questionnaire provided.

The information provided will only be used for academic purposes only and will be treated with uttermost confidentiality.

Thank you for consenting to participate in this study.

Yours Faitfully,

Elisifa E Nnko

HD412-7463/2015

Jomo Kenyatta University of Agriculture & Technology, School (JKUAT).

Appendix III: Questionnaire

This questionnaire is aimed at collecting data on Influence of Flexible Work Arrangements on Performance of Nurses in Regional Hospitals in Tanzania for a PhD Thesis. The data was used for academic purpose only and was treated with strict confidence. You are requested to participate in the study by providing answers to the items in the sections as indicated. Where appropriate use tick(√)

SECTION ONE: GENERAL INFORMATION

Indicate name of the department…..……(Optional)

Please tick your Gender

Male [ ] Female [ ]

Please, indicate your job position (Please Tick).

a) Registered Nurse Officer [ ] b) Registered Nurse Assistant [ ] Enrolled Nurse c) Other…….. (Please specify)

Please, indicate your working experience

a) Less than 5 years [ ] b) 5 to 10 years [ ] c) 11 to 20 years [ ] d) More than 20 years [ ]

What is your highest level of formal education?

a) O' level/A 'level [ ] b) Certificate [ ] c) Diploma [ ] d) First Degree [ ]

e) Master's Degree [ ] f) Postgraduate Diploma [ ] h) PhD [ ]

Please indicate your family composition

a) One person family [ ] b) Two persons family [ ] c) Single parent family with children at home [ ] d) Two parents, with children at home [ ]

Please, indicate the number of maximum patients attended in a day ……

Does your partner have a paid job?

Yes [ ] (b) No [ ] c) Not applicable [ ]

Please, indicate your maximum working hours per day

Less than 8 hours [ ] (b)Exactly 8 hours [ ]

8 hours and above [ ]

PART B: Work Scheduling

Work Scheduling refers to work practices which allow workers to work full time hours in less than the traditional 5-day workweek by increasing daily hours worked (Baltes &Mathews, 2011). You are therefore requested to provide an honest opinion that best describe your response in the following statements by marking X

Scale: (Strongly Agree=5, Agree=4, Neutral=3, Disagree=2, Strongly Disagree=1)

SN	Statement	5	4	3	2	1
1	There are no enough staff/nurses required to ensure compressed working in the unit					
2	Compressed working enables nurses to take time off for family reasons					
3	Nurses can compress their work week by working longer hours on fewer days					
4	Compressed working work has helped nurses to increase their work efficiency					
5	Limited flextime contributes to both work-family conflict and work stress among nurses.					
6	Flexi-working has enabled nurses to have high degree of independence with their working arrangements					
7	Nurses have a greater ability to set their own work start and end times					
8	There is a possibility to influence the creation of duty roster since every nurse is consulted					
9	Nurses are given an advance notice about what days and hours they will need to work					
10	The number of working shifts among nurses vary from time to time					
11	Nurses have an opportunity to negotiate for shifts that best suit their needs.					

Is there any other information you would like to add not mentioned above? (Please specify)…….

PART C: Job Location

Location Flexibility refers to a practice of either working at home or at a central place convenient to ones' customers (Blair-Loy & Wharton, 2012). You are therefore requested to provide an honest opinion that best describe your response in the following statements by marking X

Scale: (Strongly Agree=5, Agree=4, Neutral=3, Disagree=2, Strongly Disagree=1)

	Statement	5	4	3	2	1
1	Satellite working has enabled nurses solve work problems while they are away from work					
2	Satellite working has improved nurses' attitude towards quality service delivery					
3	Satellite has improved the quality and safety of patient care through reduced unanticipated interruptions					
4	The hospital will pay for nurses' phone/give nurse a phone and pay for their internet if they working from home					
5	Working from home has enabled nurses to improve their performance in the hospital					
6	My hospital supply nurses with required equipment to enable them to work from home.					
7	Nurses have regular scheduled days to be in the office and to work from home.					
8	Nurses benefit from mobile working as part of the regular working days					
9	Mobile working has enabled nurses to in efficient use of resources in my hospital					
10	Mobile working increases nurses' productivity					

Is there any other information you would like to add not mentioned above? (Please specify)…….

PART D: Workload

Workload Flexibility refers to any flexibility in terms of work intensity (Ariel, 2013). You are therefore requested to provide an honest opinion that best describe your response in the following statements by marking X

Scale: (Strongly agree=5, Agree=4, Neutral=3, Disagree=2, Strongly Disagree=1)

	Statement	5	4	3	2	1
1	Job sharing practices supports nurses to meet the day to day increased workload demands in their units					
2	Job sharing allows me to finish work earlier so I can attend to my personal issues					
3	Few staff for job sharing results into job fluctuation among nurses hence affect quality and safety of patient care					
4	The daily number of patients overseen by nurses exceeds the maximum limits in nursing profession					
5	Seasonal working helps nurses cope better with work and personal issues hence be more productive in the organization					
6	Seasonal working is a solution for compromised nurses' workload					
7	Seasonal working can influence on nurses' ability to complete essential tasks.					
8	Part –time working has helped nurses to easily have reasonable workload					
9	Nurses continuously perform multiple tasks outside their profession					
10	Part time working increases willingness of employees to help each other in my unit					

Is there any other information you would like to add not mentioned above? (Please specify)…….

PART D: Job Continuity

Flexibility in Work Continuity refers to a working practice whereby an employee is allowed to be away from his/her primary job, while maintaining the status of

employee (Muchiti, 2013). You are therefore requested to provide an honest opinion that best describe your response in the following statements by marking X

Scale: (Strongly agree=5, Agree=4, Neutral=3, Disagree=2, strongly Disagree=1)

	Statement	5	4	3	2	1
1	Nurses put much effort in their work because they are not denied any benefit because of taking leave					
2	Nurses are more committed because their leave schedule is not interfered by organizational activities					
3	Nurses are comfortable with variety of leaves in the organization					
4	Nurses are able to take at least 30 minutes break during working hours					
5	Employee breaks enable nurses to take care of their personal life while remaining efficient.					
6	Statutory breaks **increase** employee's morale in this organization to put extra effort in the tasks assigned					
7	Nurses continue working for this organization because they are well supported with rests periods					
8	Employee rest periods has increased nurses work output and overall organization productivity.					
9	Rest periods help nurses cope better with work and personal issues hence be more productive in the organization					
10	Through weekend rest periods nurses are able to effectively handle family engagements that may affect my performance					

Is there any other information you would like to add not mentioned above? (Please specify)……
…….

PART E: Supervisor Support

Supervisor Support is defined as employees' views concerning the degree to which their supervisors value their contributions and care about their well-being (Sadiya, 2015). You are therefore requested to provide an honest opinion that best describe your response in the following statements by marking X

Scale: (Strongly agree=5, Agree=4, Neutral=3, Disagree=2, Strongly Disagree=1)

	Statement	5	4	3	2	1
1	My supervisor provides the impartial guidance and creating a sense of worth					
2	My supervisor creates an environment encouraging inquisitiveness					
3	My supervisor creates opportunities for autonomous performance					
4	In this hospital, there is availability for help where required					
5	My supervisor grants me greater autonomy and involves me in decision making					
6	I can depend on my supervisor to help me with scheduling conflicts if I need it.					
7	My supervisor thinks about how the work in my department can be organized to jointly benefit employees and the company					
8	My supervisors provide mentorship programs for all employee					
9	My supervisor encourages participatory approaches in designing working time arrangements.					
10	My supervisor is a good role model for work and non-work balance.					
11	My supervisor is willing to listen to my problems in juggling work and non-work life					

Is there any other information you would like to add not mentioned above? (Please specify)……

PART F: Performance of Nurses

Performance of nurses refers 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 (Gilson, 2014). You are therefore requested to provide an honest opinion that best describe your response in the following statements by marking X

Scale: (Strongly agree=5, agree=4, Neutral=3, Disagree=2, strongly Disagree=1)

	Statement	5	4	3	2	1

1	Overall nurses target achievements have improved over the last 5 years					
2	Nurses have been able to achieve organization goals of last 5 years					
3	Quality of services rendered by nurses to customers has greatly improved over the last 5 years					
4	Nurses in our hospital have been enabled to ensure timely service delivery to customers					
5	Nurses have been able to achieve organization goals of last 5 years					
6	There is efficient use of resources in provision of health services in my unit					
7	The efficiency and effectiveness of the work completed by nurses has improved in the last five years					
8	Majority of nurses can work independently and they give high performance					
9	Target given to different nurses are often met on time					
10	Nurses have the ability to generate idea for overcoming challenges					
11	Nurses are able to anticipate problems and developing contingency plans					
12	Nurses are able to implement new ideas that changes services or processes in an institution					

Is there any other information you would like to add not mentioned above? (Please specify)……

Thank you very much for participating in this study

Appendix IV: Interview Guide with Hospital Leaders

Kindly, tell me the extent to which you understand the concept of FWAs

What are the different types of FWAs currently in practice?

In your own opinion, what are the procedures for FWAs approval?

In your own opinion, what is the frequency of FWAs approval?

Kindly, state the main procedures for FWAs approval

Kindly, state your opinion on the main reasons for nurses' request for FWAs?

In your own opinion, in what way do you think are the roles of supervisor support in influencing the relationship between FWAs and nurses' performance?

In your own opinion, in what way do you think the FWAs influences nurses performance in your hospital?

Thank you very much for participating in this study

Appendix VI: Number of Nurses in Regional Hospitals in Tanzania

Sn	Region	Name of the Hospital	Number of Nurses
1	Dar es Salaam	Amana	151
2	Simiyu	Somanda	76
3	Kagera	Bukoba	119
4	Dodoma	Dodoma Regional Hospital	122
5	Iringa	Iringa Regional Hospital	108
6	Tabora	Kitete	96
7	Mtwara	Somanda	96
8	Manyara	Manyara	61
9	Kigoma	Maweni	97
10	Kilimanjaro	Mawenzi	181
11	Mbeya	Mbeya Regional Hospital	149
12	Morogoro	Morogoro Regional Hospital	136
13	Arusha	Mount Meru	219
14	Mara	Musoma	95
15	Dar es Salaam	Mwananyamala	139
16	Ruvuma	HOMSO	81
17	Mwanza	Sokou Toure	63
18	Shinyanga	Shinyanga Regional Hospital	76
19	Singida	Singida Regional Hospital	79
20	Lindi	Somanda	82
21	Rukwa	Sumbawanga	96
22	Tanga	Bombo	121
23	Dar es Salaam	Temeke	164
24	Pwani	Tumbi	158
	TOTAL		2,766

Source: URT, Health Facility Registry, (2017)

Appendix VI: Operationalization of Variables

Variable	Variable Name	Operationalization of Variable	Operationalization of Variable
Dependent Variable	Performance of Nurses	Enhanced Productivity	Timeliness
			Target achievement
			Goal achievements
		Efficiency and effectiveness in work completed	Use of resources
			Independency
			Integrity
		Creativity and Innovativeness	Idea generation
			Idea implementation
			Problems anticipation
Independent Variable	Flexible Work Arrangements	Work Scheduling	Compressed Work week
			Flextime
			Shift working
		Job Location	Satellite working
			Home working
			Mobile Working
		Workload	Job sharing
			Seasonal Working
			Part time working
		Job Continuity	Leave Arrangements
			Breaks Arrangements
			Rest breaks
Moderating Variable	Supervisor Support	Emotional Support	Impartiality
			Inquisitiveness
			Consultation
		Instrumental Support	Autonomy
			Mentorship
			Conflict management.
		Work-Family Management	Role modeling
			Active listening
			Individualize consideration

Appendix VII: Target Population

Name of the Regional Hospital	Nurse Cadre	Total Population	Sample Size	Percentage (%)
Amana	Registered Nurse Officers	28	8	30%
	Registered Nurse Assistants	59	18	30%
	Enrolled Nurses	84	25	30%
Total		171	51	
Manyara	Registered Nurse Officers	19	6	30%
	Registered Nurse Assistants	41	12	30%
	Enrolled Nurses	68	20	30%
Total		128	38	
Mawenzi	Registered Nurse Officers	42	13	30%
	Registered Nurse Assistants	64	19	30%
	Enrolled Nurses	98	29	30%
		204	61	
Morogoro	Registered Nurse Officers	26	8	30%
	Registered Nurse Assistants	57	17	30%
	Enrolled Nurses	79	24	30%
Total		162	49	
Mt. Meru	Registered Nurse Officers	38	11	30%
	Registered Nurse Assistants	71	21	30%
	Enrolled Nurses	103	31	30%
Total		212	64	
Shinyanga	Registered Nurse Officers	25	8	30%
	Registered Nurse Assistants	56	17	30%

	Enrolled Nurses	88	21	30%
Total		170	46	
Singida	Registered Nurse Officers	21	6	30%
	Registered Nurse Assistants	59	18	30%
	Enrolled Nurses	69	21	30%
Total		149	45	
Bombo	Registered Nurse Officers	21	6	30%
	Registered Nurse Assistants	59	17	30%
	Enrolled Nurses	74	22	30%
Total		151	45	

Appendix VIII: Descriptive Analysis for Interview Results

Statements	Reposes	Frequency	Percentage
Awareness of FWAs practices	Very aware	5	32.9
	Aware	9	42.3
	Unaware	2	24.8
	Total	16	100.0
Frequency of FWAs approval	Daily	3	35.0
	Weekly	11	51.6
	Monthly	2	13.4
	Total	16	100.0
Types of FWAs utilized	Compressed working	8	40.9
	Workload flexibility	4	31.3
	Job continuity	2	13.9
	Location flexibility	2	13.9
	Total	16	100.0
Procedures for FWAs approval	Meeting between the supervisor and individual staff	9	42.3
	Formalization of the request	4	30.5
	Filling special form/roster	2	18.5
	Handing over report	1	8.7
	Total	16	100.0
Reasons for FWAs requests	Family reasons	11	51.5
	Study reasons	3	30.4
	recreation reasons	2	18.1
	Total	16	100.0
Basis for approval	Employee rights	8	40.9
	Clarity of the reasons	4	31.3
	Advance notice	2	13.9
	Patent demand	2	13.9
	Total	16	100.0
Roles of supervisor support	FWAs awareness creation	7	34.2
	FWAs Negotiation	4	25.5
	FWAs approval	3	23.0
	FWAs monitoring	2	17.3
	Total	16	100.0
Perceived overall influence of FWAs on nurses performance	Encourage staff to work more/harder	8	
	Reduces work-family conflict	4	40.9
	Increases employee commitment	3	36.6
	Improves employee relations	2	15.0
	Effective use of hospital resources	1	7.5
	Total	16	100.0