

**TOWARDS THE SUCCESSFUL IMPLEMENTATION OF INTERVENTION
STRATEGIES IN THREE NAMIBIAN STATE HOSPITALS:
A DETERMINISTIC FRAMEWORK**

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ABNER KUKEYINGE SHOPATI

9512713

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MAIN SUPERVISOR: DR. HONORÉ KABWEBWE MITONGA (UNAM)

**CO-SUPERVISOR: DR. HENRIE BENEDICT (CAPE PENINSULA
UNIVERSITY OF TECHNOLOGY)**

ABSTRACT

Healthcare reform is a difficult policy issue that involves complex trade-offs between policy goals, such as ensuring access to high-quality healthcare and keeping public spending at fiscally affordable levels. Namibia, like most emerging economies faces challenges in expanding public healthcare coverage without undermining its fiscal sustainability. Yet, in the wake of the 2008 global financial crisis, developed countries had to undertake fiscal consolidation, which has seen a decline in the flow of donor funds to healthcare in developing countries. With dwindling donor funding and increased public outcry on the deterioration of healthcare delivery systems in Namibia, the Ministry of Health and Social Services had for the first time since independence, to introduce the Health Sector Strategic Plan 2009 – 2013. With this in mind, the aim of this study was to develop a deterministic framework for the successful measurement of healthcare service quality in public healthcare organisations, focusing on the staff members' satisfaction levels with the 2009 - 2013 strategic decisions implementation in three Namibian State hospitals based in Windhoek (Katutura), Rundu and Oshakati. A quantitative interpretive structural modelling (ISM) approach was used within an action implementation framework (AIF). The AIF is an implementation science approach that played the dual role of providing a hands-on approach to implement strategy and identifying determinants for its evaluation. As such, this study employed three models that complied with the action implementation framework's dual roles. The EIS model provided the hands on support to the implementing strategy role by retrospectively focusing on the 2009-2013 MoHSS Strategic plan implementation. While, the Enablers, also referred to as the Implementation Success Factors (ISF) model and the Inhibitors, also referred to as the Implementation Failure Factors (IFF) models were used to identify the determinants for its evaluation. The study used primary data from a cross-sectional field survey of 290 staff from the three intermediate state hospitals. The study found 13 effective factors related to four dimensions, which are content of the strategy, contextual, structural, and operational factors. As such, the study concludes that content and context factors are interdependent such that the content of the strategy depends on the strategic context. At the same time, effective implementation depends on the operational factors, which are also influenced by structural factors during the strategy formulation stage. Consequently, the study

formulated a research model for the successful measurement of healthcare service quality in public healthcare organisations based on the perceptions of the healthcare staff. The study recommends that the intermediate hospitals should have their own financial management strategies that guide the implementation of national strategies and policies.

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ABBREVIATIONS AND ACRONYMS

ANOVA- Analysis of Variance

IFF- Implementation Failure Factors

BSC – Balance Score Card

CRC- Convention on the Rights of then Child

ISFs- Implementation success factors

DCV- Demography Control Variable

DPT- Diphtheria Pertussis Tetanus

EFA- Exploratory Factor Analysis

EIS- Expected Implementation Satisfaction

ES- Expected Satisfaction

FF- Failure Factor

FM- Financial Management

G- Governance

GDP- Gross Domestic Product

GOVERN- Governance

HIV/AIDS- Human Immune Deficiency Syndrome

HSSR- Health and Social Services System Review

HR- Human Resource

HRM-Human Resource Management

IDM- Infrastructure Development and Management

IMR- Infant Mortality Rate

IYCF- Infant and Young Child Feeding

KMO- Kaiser-Meyer-Olkin

KISH- Katutura Intermediate State Hospital

M- Mean

MDGs- Millennium Development Goals

MGECW- Ministry of Gender Equality and Child Welfare

MMR- Maternal Mortality Rate

MoHSS- Ministry of Health and Social Services

MoLSW- Ministry of Labour and Social Welfare

MoVA- Ministry of Veteran Affair

MoWT- Ministry of Work and Transport

NDHS- Namibia Demographic Health Survey

NDP-4- National Development Plan- 4

NHPF-1- National Health Policy Framework-one

NMR- Neonatal Mortality Rate

NSA- Namibia Statics Agency

OECD- Organisation for Economic Cooperation and Development

OISH- Oshakati Intermediate State Hospital

PERT- Program Evaluation Review Technique

PHC- Primary Healthcare

RISH- Rundu Intermediate State Hospital

SD- Standard Deviation

SP- Service Provision

SERVPRO- Service Provision

SWOT- Strength, Weakness, Opportunity and Threat

THE- Total Health Expenditure

U5MR- Under-5 Mortality Rate

USD- United States Dollar

WHO- World Health Organisation

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DECLARATION

I, Abner Kukeyinge Shopati, hereby declares that this study is a true reflection of my own research, and that this work, or part thereof has not been submitted for a degree in any other institution of higher learning.

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Date

CHAPTER 1

INTRODUCTION

1.1.Orientation of the study

Healthcare reform is a difficult policy issue that involves complex trade-offs between policy goals, such as ensuring access to high-quality healthcare and keeping public spending at fiscally affordable levels. Healthcare reform is a key fiscal policy challenge in both advanced and emerging economies. As, Clements, Coady & Gupta (2012) notes, the health sector in advanced economies has been one of the main drivers of government expenditure. While in emerging economies, healthcare reform is a key issue, it is often limited by fiscal resources and plagued with substantial lags in health indicators (Clements *et al.*, 2012).

Namibia, like most emerging economies faces challenges in expanding public healthcare coverage without undermining its fiscal sustainability. Yet, in the wake of the 2008 global financial crisis, developed countries had to undertake fiscal consolidation, which has seen a decline in the flow of donor funds to health in developing countries. The dwindling donor funding to the Namibian health sector has put pressure on the Namibian government to increase budgetary allocation to the sector. Despite, an increasing budgetary allocation, there has been a public outcry on the deterioration of healthcare delivery systems in Namibia. This is particularly evident in public healthcare organizations like Katutura Intermediate Hospital (KISH), Oshakati Intermediate Hospital (OISH) and Rundu Intermediate Hospital (RISH).

These three intermediate hospitals are constantly receiving complaints of poor service delivery. They are confronted with increasing demand on public healthcare services, diminishing funding and a broken referral system, which is making it difficult to satisfy 85 percent of the population of Namibia, which uses these facilities (NDHS, 2013). This is exacerbated by the fact that most public healthcare patients circumvent the initial stages of the referral system, going directly to the intermediate hospitals, which causes significant delays and clogs up the system.

Additionally, public healthcare managers must tackle countless barriers and limitations that significantly contribute to the challenge of measuring, testing, and effectively employing implementation strategies in healthcare practice. For instance, the 2012 Presidential Commission of Inquiry on health matters noted critical concerns in the areas of management, which called for effective strategic rethinking of the Ministry's current practices in implementing its strategic decisions (MoHSS, 2013). The same report highlighted the absence of effective governance in its findings, emphasizing that these deficiencies contributed to poor-quality patient care. These deficiencies include a lack of an appropriate governance structure with skills and capacity to prudently plan, implement policies, and use resources (both financial and human) (MoHSS, 2013).

Myers, Margaritis, Hlahla, *et al.* (2013) found that the ineffective governance structure of Namibian state hospitals negatively affects hospital management's decision-making authority and ability. They highlighted that the current governance structure confines the authority of hospital management as they do not have efficient power to exercise key decisions required to improve service delivery, address bottlenecks, and realign services

to meet the needs of the communities served (Myers, *et al.*, 2013). Moreover, implementing strategic plans is an inherently complex social intervention that addresses a multifaceted and complicated processes within interpersonal, organizational, and community contexts (Alexander & Hearld, 2012).

Government bureaucratic processes further complicate the situation in public hospitals. Public health care relies on other public offices, ministries or agencies (OMAs) to make administrative decisions regarding maintenance, procurement, logistics, and outsourcing of non-clinical services. The MoHSS and public hospital management are solely responsible for the clinical service delivery. Whereas, the Ministry of Works and Transport (MoWT) independently controls all activities relating to hospital infrastructure maintenance, renovation, and construction and owns the hospital structures themselves. While, the Ministry of Finance (MoF) allocates budgets and the Ministry of Higher Education (MoHE) is responsible for the education of healthcare professionals. In addition, the Public Service Commission (PSC) is directly responsible for all staff-related measures in the hospitals. These inherently interconnected responsibilities are crucial for strategy implementation divided among multiple agencies making the public healthcare system cumbersome, disjointed, and inefficient (Myers, *et al.*, 2013).

In Namibia, public hospitals do not have individual strategic plans but implement national intervention strategies as divisions of MoHSS. Subsequently, this study focuses on the 2009-2013 Strategic plan, which came after an extensive situational analysis in the form of the 2008 Health Sector Review. The situational analysis assessed the efficiency and effectiveness issues affecting the quality of healthcare service delivery in Namibia

(MoHSS, 2008). The strategic plan was part of the recommended reforms and interventions for reducing health disparities and addressing unequal allocation of health services within the current system. Furthermore, the 2009-2013 strategic plan saw the introduction of the balanced scorecard (BSC), as a tool for implementing strategies in public sector healthcare organisations in Namibia. As such, this study investigates the effectiveness of strategy implementation in public healthcare organisations, with the aim of providing a guiding framework for developing balanced scorecard (BSC) indicators for public healthcare organisations in Namibia, Africa and other emerging economies.

1.2. Statement of the Problem

State hospitals constitute an important component of the healthcare system in developing countries, and they account for up to 50% of the total cost of healthcare (Hanson, Atuyambe, Kamwanga *et al.*, 2002). The growing health needs, epidemics, and increasing costs of diagnostics and treatment procedures are placing unprecedented demands on public hospitals, making it crucial to assess these institutions with regards to their efficiency in allocating scarce resources (Goshtasebi, Vahdaninia, Gorgipour, *et al.* (2009).

Over the last few decades, public health sector organizations have been adapting the Balanced Score Card (BSC), as a strategy implementing tool for improving public health service delivery (for example Lawrence and Sharma, 2002; Askim, 2004; Nisson, 2010; Grigoroudis *et al.*, 2012; Meena & Thakkar, 2014). However, although many studies have analysed how the BSC is used and what the consequences for the organization are, they have not analysed the BSC strategic implementation process using the staff members'

perceptions. As such, this study focuses on developing a deterministic framework that seeks to simplify and ensure the implementation success of intervention strategies in public healthcare organisations. Additionally, this study falls under the broad field of implementation strategies and is located within the emerging discipline of implementation science. Implementation strategies have unparalleled importance in implementation science, as they constitute the ‘how to’ component of changing healthcare practice (Proctor, Powell, & McMillen, 2013). Therefore, this study seeks to develop a deterministic framework, contextualized within public health reform in developing countries, particularly hospitals in low resource settings. The framework is expected to provide the ‘how to’ components necessary for measuring healthcare service quality in Namibian state hospitals, towards ensuring a successful and sustainable healthcare system.

1.3. Aims of the Study

The aim of the study was to develop a deterministic framework for the successful measurement of healthcare service quality in public healthcare organisations, focusing on the staff members’ satisfaction level with the 2009 - 2013 strategic decisions implementation in the three Namibian State hospitals.

1.4. Objectives

The objectives of this research were:

- To determine the effective factors contributing to the failure of implementation of strategic decisions in public healthcare organisations, particularly among the Namibian state hospitals.

- To explore the staff members' satisfaction levels with 2009 - 2013 strategic decision implementation in the three intermediate public hospitals in Namibia.
- To determine the interrelationships between the different factors related to the implementation failure and healthcare staff's satisfaction levels with the 2009 - 2013 strategic plan implementation.
- To formulate a deterministic framework for the successful measurement of healthcare service quality in public healthcare organisations based on the perceptions of healthcare staff.

1.4. Research Methodology

This section gives a brief overview of the research design and methodology of this study. A detailed discussion of the study's research design and methodology is given in Chapter 4. A conceptual framework was proposed for the implementation of strategies in public healthcare by this study, this was based on the review of literature on some case studies. Thereafter a quantitative approach was followed to evaluate the proposed framework. Chapter 4 provides information on the adopted research process for this study. It further elaborates on the research philosophy, design, approach and strategy for this study. A questionnaire that was specifically designed for the purpose of this research was used as the main research instrument. Descriptive and inferential statistical techniques were used to analyse the collected data. Based on the results, recommendations were made and the proposed framework was improved.

1.6. Significance of the study

This study contributes to the field of healthcare management, implementation strategies, implementation science, strategic management, public health sector administration theory, research, and practice regarding the effectiveness of the strategic implementation process using healthcare staff's perceptions. Although many studies have analysed public sector strategic management, none have empirically assessed the implementation strategy process using quality of service perceptions of healthcare staff. As such, this research was important in determining the effective factors that contribute to the failure of implementation of strategic decisions in Namibian public healthcare, particularly among the three intermediate public hospitals in Namibia.

The findings of the study are likely to assist the government through the Ministry of Health and Social Services (MoHSS) on the critical factors contributing to the success or failure of effective implementation of strategic plans in the area of public healthcare. The study is significant to the policy makers, academics and the various public healthcare stakeholders such as patients, doctors, nurses, development partners, NGOs and donor agencies, by providing the necessary tools and knowledge that will aid the review of the existing programmes, which is necessary to ensure sustainable public healthcare delivery.

1.7. Scope/Delimitation of the study

The study focussed on the three major intermediate public hospitals in Namibia (Katutura, Rundu and Oshakati) with their respective regional management teams. These three major intermediate public hospitals in Namibia were preferred as they serve as referrals of patients from district hospitals of the 14 political regions of Namibia. Furthermore, the

study excluded MoHSS staff who were on leave for the period under study, staff who were working night duty and all staff who were not in the employment of MoHSS as from 01 February 2009 to 28 February 2013 when the strategic plan 2009-2013 was implemented.

Additionally, the research was delineated according to four criteria. Firstly, registered nurses, doctors and management for the three public hospitals and the regions determined the BSC performance ratings. Secondly, factors contributing to strategic plan implementation failure in public healthcare were identified. Thirdly, the interrelationships between the different factors relating the implementation failure and healthcare staff's satisfaction levels with the 2009 - 2013 strategic decisions implementation were determined. Fourthly, a deterministic framework for the successful measurement of healthcare service quality in public healthcare organisations based on the perceptions of healthcare staff was formulated. Findings from this research have the potential to assist in instilling a better view to policy makers and other stakeholders that the effective implementation of strategic plans can be a way out to achieve quality healthcare services to the public.

1.8. Limitation of the study

The study was limited by minimal availability and/or unavailability of most recent secondary data in Namibian public health settings as this study was the first study of this nature to be conducted in Public healthcare in Namibia. To that end, literature on similar studies elsewhere was pursued. The study assessed the retrospective perceptions of top management and staff, who implemented the 2009 - 2013 strategic decisions. Their historical accounts might not give a true reflection of what transpired. As such, it might

be biased to generalise the findings across the whole public healthcare sector even though in most cases, the situation might be the same.

Furthermore, the study intended to use a mixed method whereby qualitative instruments would be used to interview MoHSS top executives and documentary analysis would be used for triangulation purposes. However, during the study, the researcher was informed at the last minute that not all MoHSS top executives would be available for interviews, a decision that the researcher respected, despite the permission to conduct research having been granted by the MoHSS Permanent Secretary. Additionally, the MoHSS BSC performance annual reports and the summative reports for the 5 years were not made available to the researcher; the reason advanced was that such reports could not be located. The three public intermediate hospitals made annual reports only available but not 5 years' summative reports. As a result, the study used the quantitative approach that resulted in a staff survey of the three intermediate public hospitals.

The study develops a deterministic framework for the successful measurement of healthcare service quality in public healthcare organisations. While, this model has value in terms of its multiple perspectives orientation, it also has limitations. The framework was developed systematically from the literature and primary survey data of the staff perceptions. However, the framework will need to be tested with other applications to ascertain its relevance to other public healthcare organisations such as different types and sizes of hospitals in Namibia and other countries. The other limitation is that the framework, like other models tries to simplify the real world of implementation through a few measurable variables. Additionally, the model does not take into account the phases

of strategy implementation and only identifies the critical factors for successful implementation without providing the measurement criteria. Thus, further work needs to be undertaken to operationalise the identified service-quality factors and how they can be used in all stages of strategy management in public healthcare.

1.9. Ethical Considerations

Confidentiality of information collected was maintained in all respects. Respondents were informed that information provided would be kept confidential and they were required to voluntarily participate in the study. To ensure anonymity, names of participants were not required on the questionnaire but they had to indicate their positions. The ethical issues were clearly explained to the participants before they were requested to complete the questionnaire. Informed consent was also sought from all respondents.

1.10. Division of the Dissertation

This section of the chapter highlights how the dissertation is organised.

Chapter 1: Introduction - gives a background to the study, the problem under investigation and the setting of the problem, objectives and significance of the study, as well as the ethical considerations.

Chapter 2: Context of the study- describes the historical background to show the factors that shaped the current Public healthcare system and strategic management in government hospitals, in Namibia.

Chapter 3: Literature review - discusses literature relevant to the study and definition of key terms, focussing on related studies and their findings. These are compared with the

findings of the study in later chapters. Review of the literature assisted in establishing issues to consider when developing the conceptual framework and the questionnaires.

Chapter 4: Research design and methodology - gives a description of the research population, research design and data collection techniques, data collection instruments, data analysis techniques, research participants, the relevant measures and statistical analysis, which makes the study reproducible, piloting of the data collection instruments, and an evaluation of the research methodology.

Chapter 5: Data analysis and presentation of research findings—This chapter presents, interprets and analyses the research findings. The findings are compared and contrasted with the findings of numerous prior studies presented in Chapters 2 and 3. Explanations for outcomes between the results of this study and previous literature are deliberated on. This is followed by concluding remarks on the results.

Chapter 6: Summary of Findings, Conclusions and Recommendations - The chapter presents a summary of key findings, conclusions of the study, including their theoretical and managerial implications. Recommendations for practical implementation to solve the problem are also made, including recommendations for further research.

1.11. Summary

This chapter presented the orientation of the study and statement of the problem in an attempt to elucidate the challenges MoHSS faces in improving public healthcare, which has prompted this study. This chapter also outlined the research objectives, limitation and the operational definition of strategy implementation that guided this study. The next chapter focuses on the contextual background of the study.

CHAPTER 2

CONTEXT OF THE STUDY

2.1. Introduction

This chapter presents the context of the study by giving an overview of the Namibian Healthcare system, which includes a brief history of reasons and justifications for health reform in Namibia. The review also includes issues such as health inequalities, escalating cost of healthcare and the healthcare system inefficiencies. The chapter also looks at the Namibian Health Policy framework and the organisation of the Namibian Public Health System. The chapter wraps up with a literature review on Health reforms and strategic plan implementation in the public healthcare context.

2.2 Overview of Namibian Healthcare System

According to the World Health Organization (WHO) (2010), healthcare systems are fundamentally guided by the following objectives:

- improving the health of the population it serves;
- providing financial protection against the costs of ill-health;
- Responding to people's expectations; and
- Ensuring health equity.

Improving the health of the population is the primary objective of a healthcare system. However, due to cost limitations and unpredictable demand for healthcare, mechanisms for sharing risk and providing financial protection become important. Thirdly, responsiveness to people's expectations reflects the importance of respecting people's

dignity and autonomy and the confidentiality of information (WHO, 2010; Clements, Coady, & Gupta, 2012). Lastly, health equity is implicitly part of any health system because improving health means not only maximizing the average health of the population, but also minimizing the differences among individuals and groups. Thus, the need for health systems to provide financial protection is driven by health equity concerns (Clements *et al.*, 2012).

The Ministry of Health and Social Services (MoHSS) is mandated to oversee, provide and regulate public, private and non-governmental sectors in the provision of quality health and social services, ensuring equity, accessibility, affordability and sustainability (MoHSS, 2009). The Namibian Healthcare system caters for the 2.1 million population of Namibia, who lives in the 824,297 square kilometers country bordered by South Africa and Botswana in the east, Angola and Zambia in the north. The population density has increased from 1.7 persons per square kilometer in 1991 to 2.6 in 2011 (NSA, 2012). The scattered population creates challenges in the provision of healthcare services. The uncertain weather patterns and levels of poverty especially in rural areas have an influence on the burden of childhood illnesses and the care seeking behaviour experienced in the country (MoHSS, 2015).

Public funds are the largest financier of curative care, inpatient and outpatient, while donors are the largest financier of public health programmes, though Namibia faces reduced international health funding in coming years. Household contributions are low and are on the decline, showing that the population is largely protected from the burden of health costs (MoHSS, 2015). The MoHSS allocates a budget to each regional

management team and referral hospitals for provision of healthcare to a geographically defined population. Until 2001, budgets allocations were made according to historical criteria, which perpetuated the deprivation of the regions most in need of healthcare support. However, after 2001, the Ministry started the implementation of the needs-based resource allocation formulae with a view to developing an equitable funding system through a task team (World Bank, 2010).

Namibia is divided into 14 administrative regions and has 34 health districts. The country is experiencing rapid urbanization, which has seen the rate increase from 28 percent in 1991 to 43 percent in 2011 (NSA, 2012). Namibia is predominantly young (medium age 21 year) with about 37 percent of its population below the age of 15 years, of which 13.5 percent of the population is made up of under-five years (NSA, 2012). According to the WHO Global Health Observatory (2010), the life expectancy at birth was earlier estimated at 65 years for both sexes with the females living up to 66 years and males up to 63 years. However, between 1991 and 2001, life expectancy declined from 63 years to 50 years for females and 59 years to 48 years for males. This decline is attributable to the HIV/AIDS epidemic that has remained high at 18.8 percent among pregnant women (MoHSS, 2014a).

Although the government has been increasingly investing in health services, up to USD 145 per capita per year (2008/9 MoHSS) the impact indicators, such as the maternal mortality ratio and under-five mortality have not reduced as expected. The 2013 Namibian Demographic Health Survey (NDHS) data shows an improvement in the neonatal, infant, under-five mortality rates and maternal mortality ratio. The decline in mortality rate brings

the country back to the 2000 level (MoHSS/NSA, 2013). In 2013, the Under-5 mortality rate (U5MR) was 55/1000 live births while the Infant mortality rate (IMR) was 39/1000 live births, the Neonatal mortality rate (NMR) was 20/1000 live births and the maternal mortality ratio (MMR) was 358/100,000 live births. While, in 2006 the NDHS recorded an MMR of 449 per 100,000 live births and U5MR of 69 per 1000 live births reflecting an increase from the 2000 NDHS which has shown a MMR of 271 and U5MR of 62.

According to Nowicki (2004) healthcare systems should ensure quality first by studying clinical outcomes such as MMR, NMR and U5MR, followed by clinical processes, then studying all outcomes and all processes, and finally, studying key outcomes and key processes. For instance, in 2013, 71 percent of U5MR was during the infant period and the neonatal mortality rate was 36.4 percent of the under-five mortality (clinical outcomes). The majority of neonates and their mothers die during the first few days after birth. Although the majority of mothers attend antenatal care at 96.6 percent and 87.4 percent are delivered in a health facility (Clinical processes). With 88.2 percent deliveries made by skilled healthcare providers the postnatal care remains a challenge (MoHSS, 2014).

The MoHSS has thus come up with a strategic directive which ensures that all mothers and their babies should be thoroughly checked within 48 hours after delivery. The 2006 NDHS found that only 65 percent of mothers are seen within 2 days after delivery. This challenge prompted that the implementation of key neonatal interventions and postnatal activities be given top priority in the community, at outreach and at the facility levels (MoHSS, 2014). The MoHSS has thus created an enabling environment for the

implementation of the key strategic interventions to meet clinical outcomes. These are supporting national and sectoral policies and strategies. In addition, the per capita funding for health is good, access to healthcare is at 79 percent for the majority of the population and the user charges are within reach of the majority.

2.2.1 Health Inequalities

Namibia has one of the highest income inequalities in the world as evidenced by the Gini coefficient of 0.65 and a 37 percent unemployment rate (MoHSS, 2015). The income disparity is associated with Namibia's colonial history and the continued unequal distribution of productive resources and capital since independence. Despite progress in improving health indicators, Namibia like many other countries has large inequalities in health status. These inequalities are largely driven by socioeconomic factors, such as income, education, and occupation, and thus are determined outside the healthcare sector (Clements *et al.*, 2012).

Clements *et al.* (2012) further argues that there is no evidence of a trade-off between raising the average health status of the population and improving equity, suggesting it is possible to simultaneously achieve both the equity and the efficiency goals. In addition, some features of healthcare systems actually contribute to inequalities in health outcomes. For instance, informal payments for healthcare services, which are prevalent in many emerging economies, disproportionately burden the poor (Jakab, 2007).

The MoHSS health facilities generate as much as N\$37.2 million a year from user fees for health services as well as ambulance fees, meal fees, and mortuary fees (MoHSS, 2015).

However, the absence of a national policy for fee retention at the point of service means that these revenues are returned to the Ministry of Finance. These user fees differ between clinics, health centres, and hospitals, and by type of patients (private and state patients). The fees range from N\$4 (clinic visits) to N\$30 (national referral centre) for state outpatients, and between N\$2 and N\$15 for follow-up visits (MoHSS, 2015). According to exit interviews by the World Bank (2010), patients' access to services is constrained by the perceived high cost of access to care (user fees, as well as opportunity costs) and lack of transport. The long distances arising from the size of the country raises the out-of-pocket transport costs of patients.

Zere *et al.* (2007) in their study on equity in healthcare in Namibia, noted that the pace of redressing inequalities in the distribution of scarce healthcare resources in Namibia has been slow. They argue that this is due to the primary adherence to the historical incrementalist type of budgeting to allocate resources. As a result, regions with high levels of deprivation and relatively greater need for healthcare resources have been getting less than their fair share. They recommend that MoHSS should abandon the historical incrementalist method of budgeting/resource allocation and adopt a more appropriate allocation mechanism that incorporates measures of need for healthcare (Zere, *et al.*, 2007).

2.2.2 Escalating Cost and Inefficiencies

Healthcare costs have been growing rapidly for several decades. Since 1970, total real per capita health spending has increased fourfold, while spending as a share of GDP has increased from 6 percent to 12 percent in advanced economies. In emerging economies,

total health spending has increased from below 3 percent of GDP to 5 percent. These increases have put great fiscal pressure on governments and financial pressure on households and businesses (Clements *et al.*, 2012). The primary drivers of growth in health spending include rising income, population aging, and technological advancements.

Additional factors include the Baumol effect, health insurance coverage, and health policies (Pomp and Vujic, 2008; Clements *et al.*, 2012). Pomp and Vujic (2008) posits that the Baumol effect refers to the rising unit labour costs in sectors where it is difficult to achieve productivity gains, such as health services. This is mainly because salary increases in the health sector go in line with economy-wide averages, while productivity does not, this results in the unit labour costs rising in relative terms. Moreover, the cost of treatment programs are likely to escalate over the coming years, as increasing numbers of people living with HIV/AIDS are projected to reach a stage of the disease at which they require treatment, and as an increasing number of patients currently receiving treatment are projected to require far more expensive (second-line) drugs (MoHSS, 2015).

In addition to escalating costs, public healthcare systems are plagued by inefficiencies and without these inefficiencies, Namibia could achieve the same level of health outcomes with a lower level of spending. A study by the Organization for Economic Cooperation and Development (OECD) suggests that reducing inefficiencies in health systems by half in the OECD would raise life expectancy at birth, on average, by more than one year (Joumard, Andre, & Nicq, 2010). By comparison, a 10 percent increase in healthcare spending per capita would increase life expectancy by only three to four months. The WHO estimates that 20 to 40 percent of resources spent on health are wasted. The most

common causes of inefficiency include inappropriate and ineffective use of medicines, medical errors, and suboptimal quality of care, waste, corruption, and fraud (WHO, 2010). Contrastingly, Savedoff (2007) argues that it is difficult to ascertain the appropriate level of healthcare spending due to the complexity of the health sector. He argues that in addition to health spending, other factors, including lifestyle factors, education, pollution, and income, also play important roles and thus complicating health status (Joumard *et al.*, 2010).

Given the large inefficiencies in healthcare systems, addressing these inefficiencies may be the best route to improve health outcomes, rather than raising spending. However, there is no single model that delivers the best results across all countries. As such, the nature of government intervention (e.g., mandates, regulations, provision, and financing) has varied substantially across countries and over time, as has the level of public health spending (Joumard *et al.*, 2010). These differing approaches to providing and financing healthcare, and the resulting differences in the level of public health spending across countries, reflects differences in country preferences and constraints. Countries may place different weights on equality of access, face differing fiscal constraints, or attach different weights to health spending as opposed to other uses of public funds. Yet there is a need to ensure that whatever model is adopted for healthcare, public healthcare services are provided in an efficient way (Clements *et al.*, 2012).

2.3 Organisation of the Namibian Public Healthcare System

Health services in Namibia are provided through the public health sector (government), and the private sector, which comprises - for-profit and not-for-profit organizations. The

public healthcare system provides services to the majority of the population, predominantly funded through general taxation. The Namibian government is the largest source of health financing at 54 percent, followed by the private sector 38 percent and donors 8 percent (MoHSS, 2015). Namibia's 2012/13 Health Accounts Report (2015) shows a decline in funding from external donors and a growing reliance on government funding. The Total health expenditure (THE) in Namibia for 2012/13 was N\$9.2 billion representing 9 percent of the country's gross domestic product (GDP) (MoHSS, 2015).

The Namibian public healthcare system is divided into national, regional and district levels and its organizational structure is reflective of these levels. With the national level having the following directorates (World Bank, 2010):

- Primary Healthcare;
- Special Programmes;
- Tertiary Health, Clinical Support Services;
- Policy, Planning and Human Resource Development; and
- Developmental Social Welfare Services (World Bank, 2010).

The system is further divided into 14 administrative regions and 34 health districts. However, the health districts are not aligned with any other government ministry's subdivisions and do not follow the 121 official constituency boundaries. The government has outsourced some services to some of the faith-based facilities-especially in remote areas (MoHSS-ICF, 2011). The health services are available mainly in clinics, health centres and hospitals. In addition, health services utilization depends on the quality,

affordability of services offered and the availability of health facilities within walking distance. The MoHSS (2014) estimates that about 21 percent of the population is living 10 km or more from a health facility, which hinders easy access to health services. This has prompted the introduction of the Health Extension Worker's programme in 2012, as a result increasing the number of outreach points that are visited by district based health staff. However, patients are expected to pay a nominal user charge for services other than preventive services. A health facility survey conducted in 2009 reported that almost all health facilities charge a fee to treat sick children (MoHSS-ICF, 2011).

2.3.1 Health Referral System

The MoHSS Roadmap (2014) notes that the existing models of healthcare provision, often subjected to fragmentation and insufficient coherence, appear to be one of the main causes limiting the efficiency of interventions and quality of health outcomes. The MoHSS Roadmap (2014) also noted that Hospitals are now seen to represent a collection of things that no longer fit together, with elements of high specialisation not suited for general work or integration with primary care and social services. As such, there is a need to adopt the role and function of a 'modern' hospital, which involves re-orienting services to a system centred on procedures and/or particular types of patient problems. According to a follow-up report of the auditor-general's study on the MoHSS-referral system for the financial years 2008, 2009 and 2010, the main aim of the Referral System is to achieve health for all Namibians (Kathora & Strauss, 2012).

Kathora and Strauss (2012) in their review of the Health referral systems noted that the roles and classifications of health facilities were outlined as recommended; however the

auditors found that the MoHSS did not have criteria for resource allocation according to the different hospital classes. At the time of the audit, there was still no approved policy in place, concerning how feedback should be given. The only means of feedback given was through the patient's health passport or when the referral facility follows-up on referred cases telephonically. The risk of feedback via the health passport is that it only reaches the referring facility if the patient goes back for follow-up treatment.

According to Low, de Coeyere, Shivute, and Brandt (2001), an effective referral system is a key element of health services based on primary healthcare (PHC). A good referral system should ensure that the appropriate equipment and skills are available at district, intermediate and national levels to treat complicated cases that cannot be handled at lower levels of care. Therefore, in order for the referral system to function properly, there is a need for a formal referral policy. This will improve and strengthen communication strategies (especially feedback between all levels of care). As well as, improve transportation of patients by vehicles, which should always be in a good running condition. A good referral system will also ensure the provision of suitable training opportunities for all health workers at all levels of care (Low *et al.*, 2001).

The referral system has not been functioning properly due to the absence of a referral policy to guide the referral of patients from one level to another. Myers, *et al.* (2013) reported that individuals who circumvent the initial stages of referral, going directly to district or intermediate hospitals, as patients' perception is that they will receive better care at the hospitals, breaks the Namibia referral system. This causes significant delays at these intermediate hospitals that clogs up the system as a whole. At Katutura Intermediate

Hospital, for instance, bottlenecks are commonplace as all national referrals are initially sent to KISH. This has resulted in overcrowding and often has limited bed availability (Myers, *et al.*, 2013). Figure 2.1 shows the referral system in theory and in practice and the associated bottlenecks in the referral system.

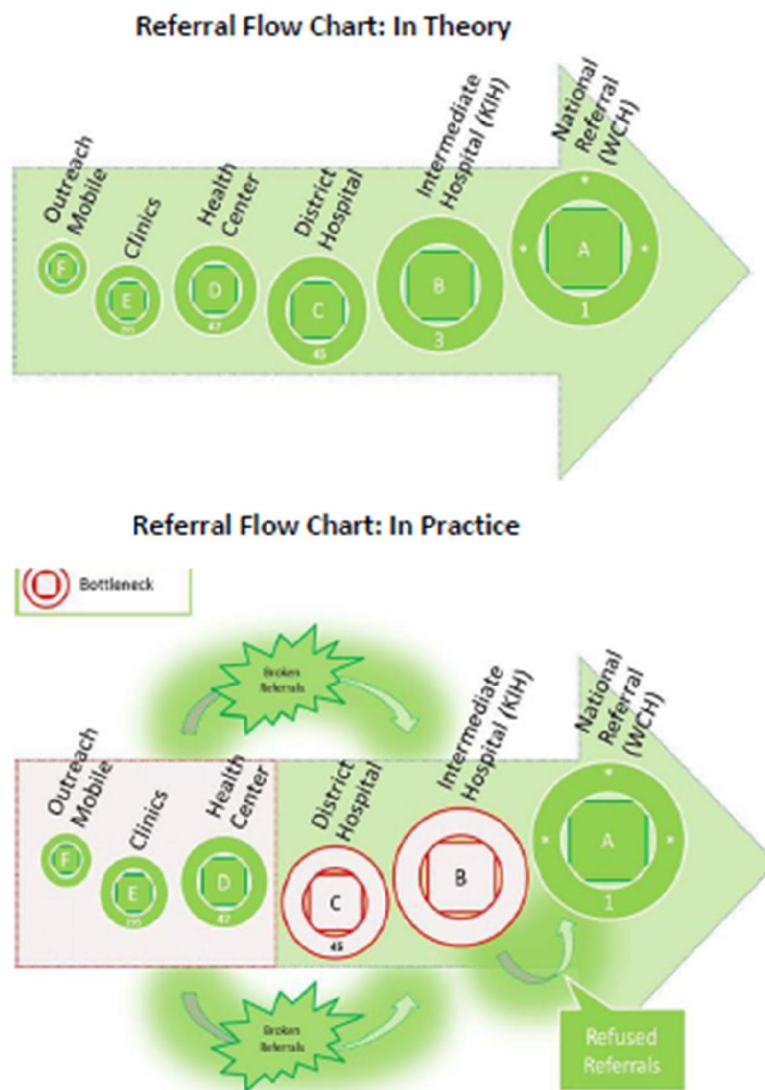


Figure 2.1 Referral Flow Chart in theory and practice
 Source: (Myers, *et al.*, 2013)

2.3.2 National Referral Policy

In 2013 the MoHSS developed the National Referral Policy, which seeks to address shortcomings resulting from the absence of a referral policy in the Ministry of Health and Social Services (MoHSS, 2013a). This National Referral Policy as shown in Figure 2.1 outlines the main aspects related to the referral of patients, which includes the referral criteria, communication between different levels of healthcare delivery to facilitate the referral, transportation of referred patients, and equitable distribution of resources to improve the management of referrals.

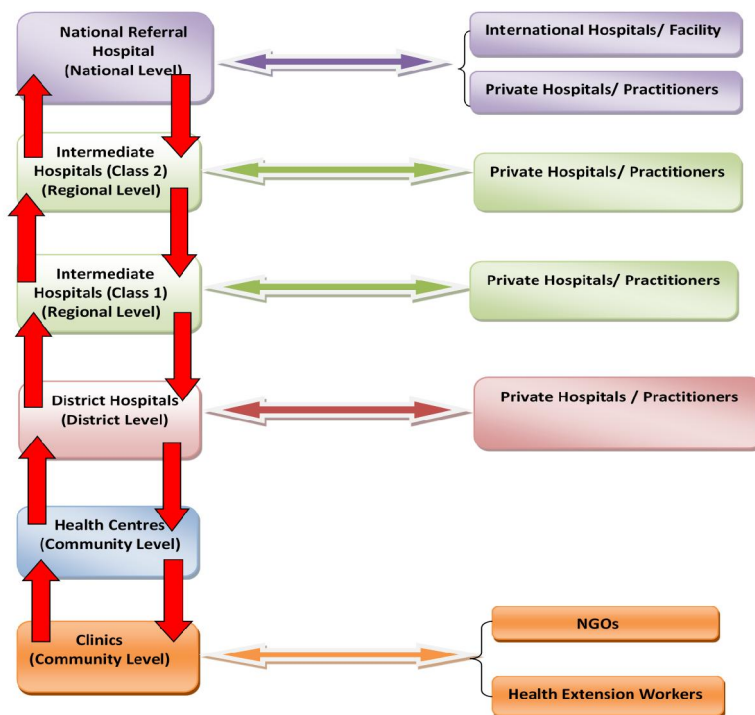


Figure 2.2 Referral of Patients Flow Chart

Source: (adapted from the MoHSS National Referral Policy, 2013)

The public healthcare system has a network of health facilities that are all referred to three intermediate hospitals and one national referral hospital. Hospitals play a critical role in

the delivery of health services in Namibia. Figure 2.2. shows how the National Referral policy will be implemented at the different levels starting with community clinics and health centres, who then refer to the district, then intermediate, and lastly national referral hospitals. The reporting is done to the next level of authority. The objectives of the National health referral system are (MoHSS, 2013a):

- To develop referral guidelines for each level of healthcare delivery;
- To build the capacity and confidence of healthcare workers at different levels;
- To continuously improve the quality of healthcare services;
- To allocate adequate resources appropriately (human) in terms of numbers and skill mix, financial, and equipment;
- To strengthen specialist outreach support services to intermediate and district hospitals and medical officers support visit to health centres and clinics;
- To develop standard mechanism for coordination and communication between different levels of healthcare;
- To establish formal agreement on referral services between state and private health facilities;
- To introduce air transport for state patients with emergency conditions that requires urgent treatment (National Referral Policy, 2013a).

The MoHSS as the key provider of healthcare services supported by its partners is responsible for making sure that the healthcare system is managed properly. The healthcare system is divided into three main levels of healthcare delivery, namely primary,

secondary and tertiary (MoHSS, 2014). Concerning the referral system, patients are referred from primary to secondary and tertiary levels. The National Referral Policy will be implemented in the period 2014 – 2019. However, in the period of study (2009 – 2013), the policy was not yet implemented. During this period, there were no referral criteria to guide the health workers when referring patients and this absence led to a low acceptance rate, unnecessary and delayed referrals. There was also friction between some referring and accepting doctors, which at times put the patients' lives at risk, as there were no clear guidelines on who takes responsibility for documentation of patients who die on their way to referral centres (MoHSS, 2013a).

According to Low *et al.* (2001), some patients refer themselves from one level to another as they assume that they get better service at other levels. This leads to overcrowding and over burdening of the referral centres like the three Intermediate Hospitals in Rundu, Katutura and Oshakati. This resulted in the intermediate hospitals handling patients who could otherwise be managed at lower levels of healthcare. Furthermore, Katutura Intermediate State Hospital (KISH), because of its specialised services ended up doubling as a regional and national referral hospital; Oshakati Intermediate State Hospital (OISH) and Rundu Intermediate State Hospital (RISH) are referring patients to KISH. This puts an enormous burden on Katutura Intermediate State Hospital (KISH). The new policy considered this and added class 2 intermediate hospitals (RISH and OISH) that will be a referral for Class 1 Intermediate Hospital (KISH). According to the National Referral Policy (2013a) the intermediate hospital (General Medical Care –Class 1) is the level between the district and national level, which provides both secondary and tertiary healthcare. According to MoHSS (2013a) a Class 1 carries out the following functions:

- Communicates to district and national levels
- Renders Clinical diagnosis and treatment
- Renders promotive, preventative, rehabilitative and curative services
- Provides secondary and tertiary health services
- Conducts specialist support outreach services to the district level
- Identifies training needs
- Provides training (pre and in-service)
- Conducts operational research for service improvement
- Promotes networking with other healthcare providers
- Conducts consultative meetings with private healthcare providers and establish referral procedures including air transportation of state patients
- Refers patients to the next level of healthcare according to the set referral criteria.
- Provides clinical and practical training for attached students
- Conducts scientific research
- Provides medicine dispensing services
- Supports District hospitals.

While, the Intermediate hospital (Special and General Medical Care –Class 2) refers to the level between Class 1 and national level which provides both secondary and tertiary healthcare (MoHSS, 2013a). It carries out the following functions (MoHSS, 2013a):

- Communicate to Class 1 and national levels
- Renders clinical diagnosis and treatment

- Renders promotive, preventative, rehabilitative and curative services
- Provides secondary and tertiary health services
- Conducts specialist support outreach services to the Class 1 level
- Identifies training needs
- Provides training (pre and in-service)
- Conducts operational research for service improvement
- Promotes networking with other healthcare providers
- Conducts consultative meetings with private healthcare providers and establish referral procedures including air transportation of state patients.
- Refers patients to the next level of healthcare according to the set referral criteria.
- Provides clinical and practical training for attached students
- Conducts scientific research
- Provides medicine dispensing services
- Supports Class 1 hospitals (MoHSS, 2013a).

The National Referral Hospital, which is currently the Windhoek Central Hospital, is the highest level of healthcare, which provides highly specialized healthcare services. It links up with other national and international healthcare providers (MoHSS, 2013a). Hospitals play a critical role in the delivery of health services in Namibia. Their availability, spatial distribution, accessibility to the population, range of services delivered, management, and attitudes of health workers providing services in them go a long way in determining the perception of the quality of services by the utilizing population (MoHSS, 2014b).

Kathora and Strauss (2012) argue that for the referral system to function properly all referral levels need to be appropriately equipped (having the necessary equipment, personnel with correct skills mix, pharmaceuticals and transport), so that very few emergencies are referred to the national hospital, and emergencies are referred to the nearest competent health facility in the same or nearest region. The problem of delayed referrals, referral of inadequately managed patients especially emergency needs to be corrected because both contribute significantly to morbidity and mortality in the country (MoHSS, 2014b).

Low *et al.* (2001) posits that in order to minimise unnecessary referrals, it is preferable that district hospitals and health centres be equipped with modern technology (including equipment, information systems), adequate and qualified staff in all fourteen (14) regions. If referral steps are bypassed, treatment costs are greater than necessary. Higher-level hospitals become overloaded while lower level facilities are underused. In addition, the Public health facilities are poorly maintained. This can be attributed to several causes including inadequate funding, failure of material and finishes poor supervision, and unclear lines of responsibilities between the MoHSS and the Ministry of Works and Transport (MoWT).

2.5 Health Reform

At independence in 1990, the Namibian government inherited a fragmented healthcare and social welfare system that was administered by Second Tier Authorities that created eleven different administrations and parallel programmes (MoHSS-ICF, 2011). One of

the first tasks of the new Government was to bring together these Second Tier Authorities, leading to the creation of the Ministry of Health and Social Services. The MoHSS adopted the primary healthcare (PHC) approach to the delivery of health services to the Namibian population. The approach reflects all eight components of PHC:

- Promotion of proper nutrition and adequate supply of safe water
 - Maternal and child care, including birth spacing
 - Immunisation against the major infectious diseases
 - Basic housing and basic sanitation
 - Prevention and control of locally endemic diseases
 - Education and training in the prevention and control of prevailing community health problems
 - Appropriate treatment for common diseases and injuries
 - Active community participation in health and social matters
- (MoHSS/NSA, 2013).

The primary healthcare approach adopted by the new government provided an opportunity for the restructuring of the public health sector, based on the principles of equity, affordability, involvement of communities and participation of other sectors in the provision of services. This resulted in a rapid transformation of the sector with the creation of new structures including new directorates that enabled the Ministry of Health and Social Services (MoHSS) to unify the fragmented services and to pay special attention to disadvantaged regions and difficult to reach communities. All these changes were

embodied firstly in the Policy Statement of 1990 and subsequently in the Policy Framework of 1998 (MoHSS, 2008).

During the first ten years after independence, major progress was made in all regions in Namibia with the improvement in key health indicators (MoHSS, 2000). During this period, the Namibian healthcare system achieved universal health coverage, which provided financial protection from the cost of illness and improved health by providing access to services that would otherwise be unaffordable for a significant share of the population (Card, Dobkin and Maestas, 2009). According to Clements, Coady, and Gupta (2012) the key issue facing universal health coverage has been how to provide it at an affordable cost. The authors noted that universal coverage can be achieved through a tax-financed system, a social insurance system, private insurance, or a mixed system, and each system has its advantages and disadvantages. The most important barrier to universal coverage in many countries is the insufficient availability of resources (WHO, 2010).

Clements *et al.*, 2012 posits that political stability, a strong institutional and policy environment, and a well-educated population can facilitate achievement of universal coverage. However, also important is a political commitment to allocate health spending to the provision of basic services for the entire population, rather than concentrating resources on curative services benefiting middle- or upper income groups (Clements *et al.*, 2012).

In Namibia, very little focus was traditionally placed on rural/community health, disease prevention, the promotion of good nutrition, or educational programs. Pre-independence,

a great majority of Namibians lacked the most primary healthcare services (Myers, *et al.*, 2013). As a result, the post-independence government has shown strong political commitment in health spending through steady year-to-year increase of government health expenditure (MoHSS, 2015). Between 2001 and 2013, government health expenditure as a percentage of total government expenditure varied between 11.7 percent and 14.7 percent, the latter percentage occurring in 2007/08. As of 2012/13, government health expenditure as a percentage of total government expenditure was 13 percent. This means that the government is allocating nearly 15 percent of its budget to the health sector, as per the Abuja Declaration targets (MoHSS, 2015).

According to World Bank (2010), Namibia spends about 5-10 percent of GDP on public health services, which is more than many other African countries. However, the outcomes of this substantial health sector investment remain uneven. For instance, the share of children immunized against DPT and measles is lower than in most of the countries that spend less than Namibia, and has even declined in 2001 (World Bank, 2010). In contrast, infant and under five mortality rates in Namibia have improved more rapidly than many other countries. These contrasts in health sector performance are characteristic of Namibia, which calls for an integrated strategy implementation model that is necessary to ensure sustainable public healthcare delivery.

In 2010, the World Health Organization ranked Namibia 189th of 191 countries in terms of health sector's performance, as measured using disability-adjusted life expectancy, and 168th in terms of overall performance of the health sector (WHO, 2010). At the same time, Namibia ranked 66th based on per capita health expenditure. This large discrepancy in

ranking indicates that other countries with less spending per capita have achieved a higher “level of health.” Given the above, in recent years, Government has been placing greater emphasis on the more efficient use of social sector resources, in parallel with ensuring continued adequate sector allocations (World Bank, 2010).

2.5.1 National Health Policy Framework

The National Health Policy Framework 2010-2020, states that the Health and social welfare services will be affordable and the principle of equity and fairness will underpin the commitment expressed in this policy framework; special attention will be given to vulnerable groups (MoHSS, 2010). The National Health Policy Framework 2010-2020, provides for a comprehensive description of the general goals of health and social services and the strategies that are to be employed in achieving the goals (MoHSS, 2010).

Since independence, the Ministry of Health and Social Services embarked upon the process of formulating a policy on health and social services for the country and the first policy statement was issued in 1990 and revised in 1998. The current policy document sets out the National Health Policy Framework for the period 2010 – 2020. The Framework forms the basis of more detailed programme policies that are to be operationalised through management plans, strategic plans, the country’s development plans and international commitments (MoHSS, 2010). These commitments include (MoHSS, 2014b):

- the 1990 United Nations’ Convention on the Rights of the Child (CRC),
- the 2000 Millennium Development Goals (MDG);

- the 2001 Abuja Target Declaration;
- the 2005 African Union Declaration on Child Survival;
- the 2003 WHO/AFRO and African Union's Road Map for the accelerated maternal and new-born mortality reductions;
- The 2008 Ouagadougou Declaration on Renewal of Primary Healthcare and Health Systems in Africa (MoHSS, 2014b).

According to the National Health Policy Framework 2010-2020, 'Quality of care is and will be a pivotal dimension of all health services'. Despite favourable consumer surveys (MoHSS, 2008) the MoHSS recognises that service quality must be improved at all levels, especially in primary healthcare, obstetric care and ambulance services (MoHSS, July 2010). The referral system is weak and there are equipment shortages, and as a result, there is no continuity of care, largely due to lack of transport. Outreach and mobile services are not functioning optimally for the same reason (WHO, 2010).

The MoHSS is committed to improvements in all these areas and is currently working on several reforms, such as restructuring the MoHSS; systems integration; improved NHA and implementing the Health Extension Workers Strategy. According to MoHSS (2014), the Ministry has developed by a number of policies, strategic plans and guidelines, with the Primary Healthcare (PHC) as the overarching policy. The health policies takes into account Vision 2030, and the various 5-years National Development Plans. The 1998 National Health Policy Framework (NHPF-1), which was reviewed in 2008 and the current National Health Policy Framework NHPF-2, was published in 2010. The child

survival strategy (2014-2018) , which aligned to the National Development Plan-4 (NDP4) and Health Sector Strategic Plan (2014 – 2018) which succeeded the 2009-2013 MoHSS Strategic Plan (MoHSS, 2014b).

MoHSS also has programme specific policies and strategies/plans/guidelines that direct the allocation of resources and have a bearing on the implementation of public healthcare interventions. These include the following (MoHSS, 2014b):

- the National Policy on Reproductive Health, the National Policy on HIV/AIDS;
- the National Malaria Policy(2005) and the Malaria Strategic Plan (2010-2016);
- the National Policy on Infant and Young Child Feeding (IYCF 2003);
- the Road Map for Accelerating the Reduction of Maternal and New-born Morbidity and Mortality (2007);
- Feeding Guideline on Nutrition Management for People Living with HIV/AIDS and National Guidelines for Adolescent Friendly Health Services (MoHSS, 2014b).

The MoHSS reviews its policies and activities through annual review/planning meetings that are jointly conducted with regional directorates and partners. However, the fragmented nature of the program specific strategies and guidelines result in the MoHSS performing well in one sector, while performing poorly in another. This research therefore aims to develop a framework that will integrate the many international, regional, national and subnational policies and strategies into an integrated strategy implementation model for three intermediate public hospitals in Namibia, which can be scaled up to cover the whole Public Healthcare system.

2.7. Summary

This chapter presented the contextual background crucial to the understanding of the factors that shape the current public healthcare system and the factors contributing to the strategic decisions' implementation failure in Namibian public healthcare. The next chapter focuses on the broader literature review and empirical studies on healthcare service quality measurement and implementation strategies in public healthcare.

CHAPTER 3

LITERATURE REVIEW

3.1. Introduction

This chapter discusses literature relevant to the study, focussing on related studies and their findings. The review of the literature helps in identifying issues to consider when developing the conceptual framework and the questionnaires. The chapter starts by discussing the theoretical framework and strategy implementation perspectives. It then reviews empirical studies on public healthcare organisations, strategy implementation complexities, and implementation success and failure factors. The chapter also presents the implementation of strategies in the Namibian public health sector. The chapter ends with the conceptual framework and research propositions.

3.2. Theoretical Framework

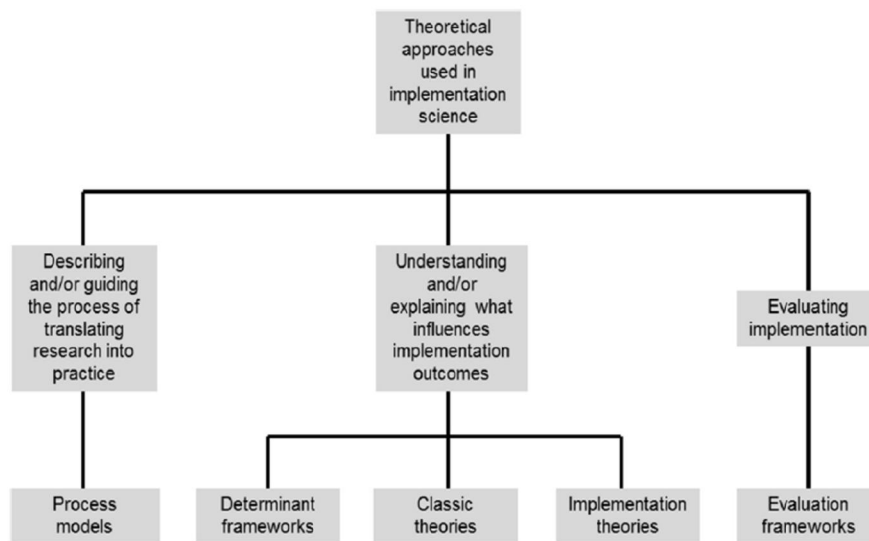
The ever-expanding role players and stakeholders, with divergent interests and conflicting agendas had fragmented the global health community (Hoffman, 2011). The fragmentation along the divergent views is bringing in new paradigms, theories and ways of thinking focused on reforming healthcare. There are clarion calls for effective governance and innovative solutions necessary to achieve the health-related Sustainable Development Goals (SDGs), global health security, and other priorities of the international community. Hoffman (2011) reports of new ideas on better ways to make global health decisions and allocate limited global health resources. He contrasts the calls for total transformation with those calling for the incremental approach of small changes;

some rely on existing institutions while others propose new organizations. In seeking solutions, that simplifies and ensures implementation success of intervention strategies in public healthcare organisations, the study draws upon emerging perspectives in strategic management, implementation science, and healthcare reform to come up with a conceptual model for measuring healthcare service quality in public healthcare organisations.

Ahmed, Bwisa, Otieno, & Karanja (2014) posits that the fear of making the wrong decision is what drives us to utilize a scientific approach. The emerging perspectives that use the scientific approach include management science (MS), strategic decision making and implementation science (IS). While, Nilsen (2015) notes that implementation science comes out of the need to address challenges associated with the use of research to achieve more evidence-based practice (EBP) in health care and other areas of professional practice. Similarly, Hoffman (2011) motivated that due to the growing importance of global health governance, all proposals are worthy of consideration, but none deserve implementation without such consideration. As such, the best available research evidence should inform any health future reforms and implementation of strategic decisions.

However, implementation strategies that have often not paid attention to the theoretical underpinnings risk becoming expensive trial and error exercises. In 1998, Kitson, Harvey and McCormack were the first to develop a conceptual framework for enabling the implementation of evidence based practice. They named it the Promoting Action on

Research Implementation in Health Services framework, or PARIHS framework (Kitson, Harvey, & McCormack, 1998). The PARIHS framework is a conceptual framework that postulates strategic interacting elements, which influence successful implementation of evidence-based practices. Since, then several researchers have used it as a basis for empirical studies on implementation strategies in healthcare. Additionally, there have been updates and proposed refinements to the framework (Helfrich, *et al.*, 2010). More recently, Nilsen (2015) building on the PARIHS framework, developed a taxonomy that outlines and distinguishes the different categories of theories, models and frameworks within implementation science. This taxonomy is important to this study, as it locates the appropriate theoretical framework for the research. The theoretical approaches used in implementation science are presented in Figure 3.1.



Three aims of the use of theoretical approaches in implementation science and the five categories of theories, models and frameworks.

Figure 3.1 Taxonomy of Theoretical Approaches used in Implementation Science

Nilsen (2015) proposed five categories of theoretical approaches used to achieve three overarching aims. He notes that implementation science has progressed towards increased

use of theoretical approaches to provide better understanding and explanation of how and why implementation succeeds or fails. The proposed taxonomy, therefore distinguishes between different categories of theories, models and frameworks in implementation science. In order, to facilitate appropriate selection and application of relevant approaches in implementation research and practice. As such, this study is located under the determinant frameworks, which provide generic support for carrying out implementation endeavours (Nilsen, 2015).

Determinant frameworks refer to a broad-spectrum of determinants that are hypothesised or have been found to influence implementation outcomes. Furthermore, each type of determinant typically comprises a number of individual barriers, hindrances or impediments and/or enablers (facilitators), which are seen as independent variables. These determinants will have an impact on implementation outcomes, which will be the dependent variable. Nilsen's (2015) identified eight types of determinant frameworks based on implementation determinants and outcomes. These include: the PARIHS framework, conceptual models of innovation attributes, innovation features, nature of the research, guidelines and evidence barriers, ecological framework of innovation, CFIR intervention and clinician guideline characteristics (Nilsen, 2015).

3.3. Strategy Implementation Perspectives

Strategy implementation is more important for the organisation than the strategy formulation, because if the staff and management do not successfully implement the

strategic plan, its costs and damages are usually more than the failure of strategy formulation (Lau 1999). Various scholars have studied implementation in public healthcare (Latif, Gohar, Hussain, and Kashif, 2013; Evans, Brown, & Baker, 2015; Hazelton, et al., 2014); implementation science (Ross, Stevenson, Lau, & Murray, 2016); talent management (Tafti, Mahmoudsalehi, & Amiri, 2017), health demand management (Kork & Vakkuri, 2016), public sector management (Wynen & Verhoest, 2015; Connolly, 2016); e-procurement in public sector (Vaidya, Sajeev and Callender, 2006).

According to Lau (1999) strategy implementation is becoming more difficult rather than strategy formulation and top management is required to keep in mind three levels of the strategic planning process context of the organization, content of strategy and procedure for implementation. Yang, Guohui, and Eppler (2008) studied how to make strategy work through a literature review of the factors influencing strategy implementation. They reviewed sixty articles in the field of strategy implementation. They summarized the research contexts, research results, theoretical bases, research methods and analytical techniques used in the strategy implementation field and developed a framework that can provide guidance to practitioners and act as a checklist of factors to consider before and during the implementation process (Yang *et al.*, 2008).

Yang *et al.* (2008) proposed a framework of strategy implementation research composed of mixed factors for strategy formulation and strategy implementation. They proposed that as a mixed factor, strategy formulation is both an institutional and an interpersonal process that gathers data and viewpoints and ultimately results in strategic decisions (Yang *et al.*,

2008). They argued that for strategy implementation to be successful, it relies on strategic decisions and how they would have been reached.

In addition, they presented these decisions as either hard, institutional, factors (organizational structure, administrative systems) or soft, people-oriented factors (executors, communication, implementation tactics, consensus, and commitment) that influence implementation outcomes dialectically (Yang *et al.*, 2008). Furthermore, they noted the complex mutual influence among mixed factors such as departmental relationships, soft factors such as communication, consensus, and commitment) and Hard factors such as organizational structure and administrative systems.

Yang *et al.*, (2008) also noted that implementation, execution, and actualization of goals was often used interchangeably to define strategy implementation. As such, they argue that there are three distinctive conceptions used to describe strategy implementation, the first approach uses a *process perspective* that takes strategy implementation as a sequence of carefully planned consecutive steps. The second approach treats strategy implementation as a series of more or less concerted (but often parallel) actions and examines these actions from a *behavior perspective* and some authors combine the process perspective and behavior or action perspective and form a third approach, *hybrid perspective*. The perspective definitions of strategy implementation are as follows:

Process Perspective

The process perspective views implementation, as a process that turns plans into action assignments and ensures that such assignments are executed in a manner that

accomplishes stated objectives of the plan (Ivančić, 2013). This perspective defines implementation, a highly complex and interactive process with many variables affecting it. Strategy implementation is also portrayed as a lively process by which companies identify future opportunities (Vaidya, *et al.*, 2006).

Strategy implementation may also be viewed as a process inducing various forms of organizational learning, because both environmental threats and strategic responses are a prime trigger for organizational learning processes (Wynen & Verhoest, 2015). Strategy implementation is an iterative process of implementing strategies, policies, programs and action plans that allows a firm to utilize its resources to take advantage of opportunities in a competitive environment (Connolly, 2016).

Behaviour perspective

Implementation is a series of interventions concerning organizational structures, key personnel actions, and control systems designed to control performance with respect to desired ends (Davies, Walker, & Grimshaw, 2003). Implementation designates the talent management interventions that align organizational action with strategic intention (Davies, *et al.*, 2003). The behaviourist perspective looks at the actions initiated within the organization and its relationships with external constituencies to realize the strategy implementation. Strategy implementation is viewed as a hands-on operation and action-oriented human behavioural activity that calls for executive leadership and key managerial skills (Davies, *et al.*, 2003).

Hybrid perspective

David, (2011) presents a hybrid perspective of implementation, as a redesign of structure, systems, process, people, and rewards. Implementation is defined as the sum total of the activities, choices required for the execution of a strategic plan - the process by which strategies, and policies are put into action. The hybrid perspective of implementation involves organizational design reconfiguration (Kork & Vakkuri, 2016). In other instances, implementation is viewed as an action-oriented process that requires administration and control (Latif, *et al.*, 2013). Strategy execution is defined as the systematic implementation of the various activities that make up a formulated decision-making strategy.

Yang *et al.*, (2008) found it interesting that not all the above definitions of implementation mentioned the (non-managerial) employees, who are responsible for in turning strategic plans into results. As such, Yang *et al.*, (2008) redefined strategy implementation as a dynamic, iterative and complex process, which is comprised of a series of decisions and activities by managers, employees and affected by a number of interrelated internal and external factors to turn strategic plans into reality in order to achieve strategic objectives (Yang *et al.*, 2008).

The study adopts Yang *et al.*, (2008)'s definition of strategy implementation as it allows for a systematic exploration of the effective factors that contribute to the effective implementation of strategic decisions in the complex public healthcare systems. This allows for better understanding of the relationships among the factors and their implications on the success or failure of the implementation of the strategic plans.

3.4. Public Healthcare Organisation (PHO) Implementation Complexities

Meyer, Pascucci and Murphy (2012) investigated the implementing strategies in the complex healthcare systems in two Brazilian nonprofit hospitals. They used a comparative, qualitative case study to analyze the implementation of strategies in complex organizations. By using interviews, non-participant observation, and documents they discussed the important aspects of the strategic approach, which were the implementation of strategies, and the influence of ambiguity, unpredictability and uncertainty in the way strategies are implemented (Meyer *et al.*, 2012).

The analysis indicated that the implementation of strategies in the hospitals had to do with the practices and processes that are adopted (how) and the practitioners (strategists) involved (who) (Meyer *et al.*, 2012). Their findings reinforce the importance of the strategizing process in the implementation of strategies and found that strategic practices are adopted in parallel with the formal planning and are characterized by informality. They concluded that hospitals are complex organisations characterised by complicated organizational structures and complex interactions, power of interest groups and internal politics, and vulnerability to the external environment (Meyer *et al.*, 2012). All of these factors strongly resemble the challenges faced by the three Namibian public intermediate hospitals under study.

Strategic management of complex systems requires administrators in the public healthcare sector to strictly focus on the strategic implementation process and its related complexity.

This study aims to develop an integrated strategy implementation model for these complex public healthcare organisations, that is necessary to ensure sustainable public healthcare delivery and continued performance improvement. Meyers *et al.* (2012) notes that though the hospital managers have made progress in professionalizing their management teams, they still struggles to be fully professional amid the complexity. This is because most managers lack the professional preparation and vision necessary for the job, while others fail to take into consideration the unique characteristics and complexity of hospitals (Meyers *et al.*, 2012).

The problem is further compounded by the state hospital manager's lack of autonomy and a general lack of appropriate theories and managerial practices that consider the specificities of hospitals as organizations. David (2011) reminds us that formulating a plan may be difficult, but implementing strategies is even more difficult. Lega, Longo and Andrea (2013) carried out a study on decoupling the use and meaning of strategic plans in public healthcare. The aim of the study was to analyse the role played by strategic documents in Public healthcare organisations (PHOs) given their degree of overall coherence. Using three Italian Local Health Authorities (LHAs), they analysed the logical correlations between the different strategic documents adopted by individual PHOs in order to understand their degree of coherence, coordination and disclosure, and the role they play in management, steering the organisation and accounting to stakeholders (Lega *et al.*, 2013).

They found that officially adopted strategic plans offer vague and qualitative targets for steering complex PHOs, with no clear or explicit overarching quantitative strategy and all

the strategic planning documents studied were found to be externally oriented. However, the available quantitative reports were always related to past performance, analytic and clearly stated future goals that were not in place, and that the future strategies were described using only a qualitative and narrative approach (Lega *et al.*, 2013). While, stakeholders are enabled to understand past performance and critical issues of the public health institution, what matters is how they will perform in the future. By providing a strategic vision with qualitative choices one has a means of gaining and developing a protected space for hidden decision-making, which might be necessary in order to allow PHOs to take autonomous managerial decisions without the involvement of the external stakeholders who were involved in the formal process of drafting these documents (Lega *et al.*, 2013).

Lega *et al.*, (2013) argues that this is a consequence of the complexity of PHOs and managers in the public healthcare sector should be aware of this complexity and not fall victim to it. Meyer et al (2012) recommends that other variables, such as political and sociocultural factors, should be taken into account, as well as the volatile and unpredictable environmental forces. Complexity that is present in the public healthcare sector shapes the way managerial approaches are identified, adopted and implemented. In times of increasing uncertainty, instability and competition, the search for a better understanding of how strategies are executed provides meaningful results for leaders who hope to bring about success in any organization (Meyer *et al.*,2012).

Consequently, management should instead base their strategic decision-making on an awareness of the different purposes of each planning document, assigning it the most

appropriate role in the overall planning decision process. For instance, the MoHSS has formulated a number of national strategic plans such as the Child Survival Strategy 2014-2018, National Strategic Framework for the HIV/AIDS response (NSF) covering 2010 – 2017, National Health Policy Framework 2010-2020 and the National Referral Policy. The many strategies with overlapping implementing periods complicates an already complex implementation process.

Lessons from Meyer *et al.*, (2012)'s Brazilian cases confirms strategy as a social practice, which allows for a better understanding of the implementation of strategies and its influence on management effectiveness (Meyer *et al.*, 2012). Lega *et al.*, (2013) argues the strategic plan titles are not always consistent with their content and the real meaning they have in managing the organisation and its relationship with the external context. Therefore, they recommend that managers should use the various planning documents to govern the healthcare organisation, while simultaneously creating favourable conditions for exchanges and consensus building with the external contexts and all stakeholders (Lega *et al.*, 2013).

This research, therefore aims to evaluate the extension of strategic space to be created by public healthcare managers and how this can be effectively achieved through increased hospital autonomy without breaking stakeholder trust and social contracts. This research contributes to filling this research gap through a conceptual framework building on frameworks such as Chawla and Govindaraj (1996)'s study on Improving Hospital Performance through Policies to Increase Hospital Autonomy: Implementation Guidelines. Chawla *et al.*, (1996) developed with others a framework of methodological

guidelines for evaluating autonomy. The framework suggested that the important issues in evaluating hospital autonomy could be addressed in the form of the following questions:

- Description of the nature and extent of its autonomy.
- Description of the process by which autonomy has been extended to the hospital.
- Description of the structure of hospital management, organization, internal systems and practices, and any changes that may have occurred to reflect the level of autonomy the hospital has.
- Description and analysis of the impact of autonomy, in terms of the effect of autonomy on efficiency, equity, quality of care, public accountability, and resource mobilization.
- Identification and description of the major implementation issues in the extension of autonomy to this hospital, and analysis of the main lessons learned in the process (Chawla and Govindaraj, 1996, p. 3).

Chawla and Govindaraj (1996) summarised findings of five studies that used the framework. Their framework is used as a guide in the assessment of the autonomy effort in each participating country and assist in organizing the presentation of the data and results. The evaluation framework suggested a combination of qualitative and quantitative analyses of the experience of the study hospitals with autonomy (Chawla and Govindaraj, 1996). Four evaluative criteria were used in assessing hospital autonomy in each country, based on the project guidelines that were efficiency, equity, public accountability, and quality of care. The research methods used included secondary data collection and

analysis, direct observation by the study teams, interviews, and field surveys (Chawla and Govindaraj, 1996).

They found that in five out of six case studies undertaken as part of the project, autonomy in public sector hospitals has not yielded many of the hoped-for benefits in terms of efficiency, quality of care, and public accountability, although there has been occasional and isolated successes. A fact still true today, however the complexity of the hospital may have increased, which makes hospital autonomy crucial. The MoHSS has also made progress in this regard with the three intermediate public hospitals reporting directly to the Office of the Permanent Secretary. However, more needs to be done towards strengthening the loosely coupled and complex hospital system with quasi-autonomous work units or cells with weak couplings between them, towards greater integration and increased autonomy (Meyer *et al.*, 2012).

With this viewpoint, hospitals are pluralist organizations with multiple objectives not necessarily compatible with a single or global strategic direction (Meyer *et al.*, 2012). This is supported by Lega *et al.*, (2013) who found that strategic plans in public healthcare have different goals, and different language, with the aim of answering to different stakeholders' expectations. They confirm that public hospitals' strategic plans are often heavily oriented towards a generic development and have ambiguous and loosely integrated goals. Therefore, in highly pluralistic contexts, participatory strategy approaches are more effective than rational ones. As such, the strategy making in these organisations requires collaborative decision-making processes involving the plurality of actors playing distinct but tightly knit roles (Lega *et al.*, 2013).

Meyer *et al.* (2012) observed that in hospitals, there is a top management triangle sharing power but with competing interests, these are the administrators, trustees and clinicians, however, none of them have an effective power at the summit in the organisation. Thus, authority shared by administrators and medical professionals creates a conflict over scarce resources that fuels the political environment hence the impediment of strategic implementation in hospitals. Moreover, Porter and Teinsberg (2006) notes that nowadays, hospitals are faced with service quality improvement cost and significant changes of services offering resulting from rapid-paced technological advances, advances in healthcare itself, and changes in legislation (Meyer *et al.*, 2012). These changes and reform in the healthcare provision require more and better administration, careful planning, and immediate response to external demands and corresponding attention to the expectations of the various stakeholders. To implement the strategies, a unique approach that best suits the internal and external challenges is crucial. Adopting the best approach, however, necessitates addressing the issues of the variables affecting the strategy implementation.

Lega *et al.* (2013) found that officially adopted strategic plans like the MoHSS 2009-2013 Health Sector Strategy offer vague and qualitative targets for steering complex PHOs like the three intermediate hospitals. Therefore, the 2009-2013 Strategic plan's five themes have no clear or explicit overarching quantitative strategy and are externally oriented towards the external stakeholders like the government, the public, civic society, NGOs and international organisations. Therefore, the proposed framework intends to provide an evaluation framework that can measure the impact of strategic decisions' implementation

success or failure on internal stakeholders' satisfaction and quality of service perceptions at the three intermediate public hospitals.

David (2011) argues that there is no one ideal strategy-evaluation system and that the unique characteristics of the organization, including its size, management style, purpose, problems, and strengths should determine the strategy-evaluation and control system's final design. He notes that successful organizations' strategy-evaluation and control system are such that they treat facts as friends and controls as liberating. Successful organisations not only survive but also thrive in the troubled waters due to their strategy evaluation and control systems that are sound.

3.5. Implementation Success Factors

Kotas (2015) defines critical or key success factors as determinants of possible future success. She highlight that the will of success is the drive behind any action undertaken by any organization. As such, key success factors are the resources, competences and qualifications used to create a competitive advantage on a particular market. Kotas (2015) notes that there is little empirical research covering the key success factors in social service organizations. However, she found that the specified factors include areas of organizations' functioning such as, quality management, social responsibility and private-public sector partnerships.

Reyes-Alcázar, Torres-Olivera, Núñez-García, and Almuedo-Paz (2012) studied the implementation success factors for quality assurance in healthcare organizations. They noted that in recent years the health services sector has been stressing the need to use

management tools that support the implementation of a clinical leadership based on greater autonomy and decision-making in management (Reyes-Alcazar, *et al.*, 2012). This they argue will allow alignment of clinical management with the ultimate goals of the health systems, towards a high degree of effectiveness, which responds to the needs and expectations of the public, ensuring medium to long term sustainability of the sector (Reyes-Alcazar, *et al.*, 2012).

An improvement in clinical management will improve the authority shared by administrators and clinical professionals, which according to Meyer *et al.* (2012) has often resulted in competing interests. These competing interests create a conflict over the scarce resources that fuel a political environment that impedes strategy implementation, especially in hospitals. There are many initiatives aimed at boosting clinical management in the public health sector as a strategy to ensure greater effectiveness and sustainability of the health services (Reyes-Alcazar, *et al.*, 2012). Reyes-Alcazar, *et al.* (2012) analyzed the possible implementation success factors to be considered when implementing clinical management initiatives.

Aquilani, Silvestri, Ruggieri, & Gatti (2017) carried out a systematic literature review on total quality management critical success factors, in order to identify new avenues of research. The study reviewed 103 articles published from 1993 to 2016, accessed from Ebsco, JSTOR, and Springerlink databases and on the search engine Google Scholar. Out of the 103 articles, 88 were based on empirical evidence and 15 were conceptual (Aquilani, *et al.*, 2017). Their study found that it seems clear “leadership/top management

commitment,” at 10.29% occurrences was the most cited CSF, followed by customer focus or satisfaction (7.65%), Training and Education (7.39%) (Aquilani, *et al.*, 2017)

Farzin, Kahreh, Hesan, & Khalouei (2014) carried out a survey to identify the critical success factors (CSFs) in strategic knowledge management implementation. Farzin, *et al.* (2014) identified and adopted from literature 24 CSFs that provide an appropriate framework for SKM implementation. Using structural equation modeling (SEM) they analyzed these critical success factors and found unidimensional model fit of strategic knowledge management implementation and the 24 CSFs. They recommended that future researchers may use their results to develop frameworks for the other industries.

3.6. Implementation Failure Factors

Latif, *et al.*, (2013) explored the barriers to effective strategic planning, with the aim of understanding how and where strategic planning goes awry and what executives can do about it. Their paper described some of the most common barriers which organisations face towards effective strategic planning and these included barriers at different stages of effective strategic planning, like barriers in formulation of strategic plans, barriers in implementation of strategic planning. Some of the barriers experienced during planning usually continue through to execution and implementation. They concluded that, in order to achieve the goal of effective strategic planning, effective change management and leadership are indispensable (Latif, *et al.*, 2013).

Evans *et al.*, (2015) cites employee attrition and turnover, improper documentation, and major restructuring. Workforce instability among leaders and front-line staff, the limitations of administrative and clinical databases for supporting research and learning, and demands for large-scale reform are common challenges facing healthcare organisations and systems. Furthermore, physicians are often not direct employees of healthcare organisations and may have little interest in contributing their time and knowledge to organisational improvement efforts. Without stronger management of such issues, what is known at one point in time is lost with the passage of time.

Mapetere, Mavhiki, Nyamwanza, Sikomwe and Mhonde (2012) argue that a lack of creative strategic vision in the organisation means that the organisation could not motivate and boost up morals of the staff to obtain the determined objectives, besides, communication among the middle level management and high level management in the organisation remained very low. Owing to lack of communication, the top-level management could not convey their appropriate messages to low-level management. Another important reason for the failure of the strategic plan is lack of leadership skills among leaders that engendered many ambiguities among the working staff and leaders who could not understand the situations of the organisation (Mapetere, *et al.*, 2012).

Mackenzie, Wilson, and Cider (2001) joined the debate on the factors influencing strategic plan implementation failure, with arguments focused on the leadership style of an organisation. They argued that one could obtain the desired goals and objectives of the company through creating the vision for the organisation according to the set-up of the firm (Mackenzie, *et al.*, 2001). They argued for aligning the staff for the achievement of

the goals of the firm rather than the personal goals, as well as providing support to the intellectual individuals in complicated settings and clarifying expectations of the organisation from the team and their performance in the organisation (Mackenzie, *et al.*, 2001).

Hazelton *et al.* (2014) identified the challenges and defined strategies for providers and policymakers who implemented the Affordable Care Act (Obamacare) in Low-Income HIV/AIDS Care and Treatment Settings. They used tenets of grounded theory approach to collect and analyse qualitative data from literature and interviews (Hazelton, *et al.*, 2014). They found five common themes that emerged around the challenges and opportunities faced by providers, patients, and policymakers during implementation.

Evans *et al.* (2015) studied the conceptualization, management and measurement of intellectual capital (IC) in healthcare through a review of the literature and cross-sectional survey of hospital managers' perceptions of IC. They linked their finding with 37 peer-reviewed empirical studies on IC in healthcare published between 1990 and 2014. They found six interrelated challenges for managers and policy-makers. Although, the primary objectives of the studies are different they share similar views on the implementation failure factors in healthcare settings. Evans *et al.* (2015), notes that managers and policy-makers often have difficulty assessing whether necessary human resources, capabilities and processes are in place for the successful development and implementation of strategy, change or innovation.

Latif *et al.* (2013) argues that despite the best intentions and a lot of hard work, strategic planning most predictably fails not because its a bad idea but there are some barriers which

are involved in its failure. The management challenges outlined above, paired with the dynamic and highly politicized healthcare environment, create a unique setting within which to apply an intellectual capital perspective. Contrastingly, they noted that it is mandatory for the leadership to involve employees in the decision-making process, along with the explicit description of their roles within the organization, and called for a full mechanism of employees' accountability and regular checks, required to remove these barriers (Latif, *et al.*, 2013).

The employee accountability barrier is crucial to public healthcare organisations in Namibia, because the public sector managers do not have autonomy on their employees, for instance, if a hospital's member of staff is charged, the slow bureaucratic process involved in coming up with a disciplinary hearing is so demoralising to the hospital managers and this makes the employees less accountable. However, the case is different in private hospitals, as the immediate supervisor has the power to institute a disciplinary hearing and performance related sanctions to the employee's remuneration, while in the public sector, the payroll is dealt by the Ministry of Finance and the Public Service Commission. As such, there is a need for increased autonomy in the Intermediate hospitals so as to increase employee accountability, for example.

Evans *et al.*, (2015) notes that leaders of healthcare organisations must respond to multiple stakeholders and meet performance goals across multiple – often competing – dimensions of effectiveness, including access, quality and cost. In addition, many healthcare organisations, such as teaching hospitals and regional planning and governance bodies,

have missions that include knowledge generation, translation and application in addition to service delivery and system planning respectively. The concept of intellectual capital offers a broad lens for identifying and examining the resource configurations that best support achieving the complex mandates of healthcare organisations.

Kalali, Anvari, and Dastjerdi (2011) explored and confirmed the main factors, which are the basis, and causes of failure of the health sector in Iran. Kalali *et al.*, (2011) identified four factors involved in the failure in strategic plan implementation in the Iranian health sector as context, content, structure, as well as operational framework of the organisation. Kalali *et al.*, (2011) managed to identify the most repeatedly and frequently factors. They then developed four dimension factors using exploratory and confirmatory factor analysis. The Kalali model identified these dimensions as context dimension (0.94), content dimension (0.87), operational dimension (0.71), and structural dimension (0.67) as effective factors on the failure of strategic decisions implementation in Iranian health service sector (Kalali et al., 2011).

Sial, *et al.* (2013) confirmed the Kalali model dimensions by applying them in Pakistan's purely public sector organizations. These two studies confirmed the applicability of these dimensions to public healthcare organisations. Sial *et al.*, (2013)'s contribution resulted in them defining these four Kalali *et al.*, (2011) dimensions as follows:

- Content dimensions include the ingredients involved in strategy formulation
- Contextual dimensions include the internal and external environmental for the strategy implementation in public sector organizations.

- Operational dimensions refer to the problems that happen in the operational level during the strategy implementation.
- Structural dimensions point out the organizational structure, power, and responsibilities (Sial *et al.*, 2013).

Sial *et al.*'s (2013) study showed variation on the most important reason for the failure of the strategic plans implementation in public healthcare system. In Iran, the content dimension was first and the contextual dimension had the lowest importance on describing the reason of managerial decision failure while operational and structural dimension were located between these extremes. Whereas in Pakistan, it was the operational plan of the implementation. The operational dimensions includes resources limitation, incompetent management and staff, poor planning for execution and lack of integration among the department are the main reasons for failure, after that context dimensions, structural and content dimensions (Sial *et al.*, 2013). This variation necessitated the researcher to add an item that covers service provision to their 16 effective failure factors.

3.7. Conceptual Model and Research Propositions

The study makes its research propositions within an active implementation framework. Consequently, the study uses a deterministic framework that functions as an action model that will identify the implementation success and failure factors in complex settings such as the public healthcare service sector (Helfrich, *et al.*, 2010). Rycroft-Malone (2010) highlights that active implementation frameworks's dual role of providing hands-on support to implement strategy and identifying determinants for its

evaluation. Figure 3.3 presents the conceptual framework for effective implementation of strategic decisions in public healthcare organisations in the Namibian setting.

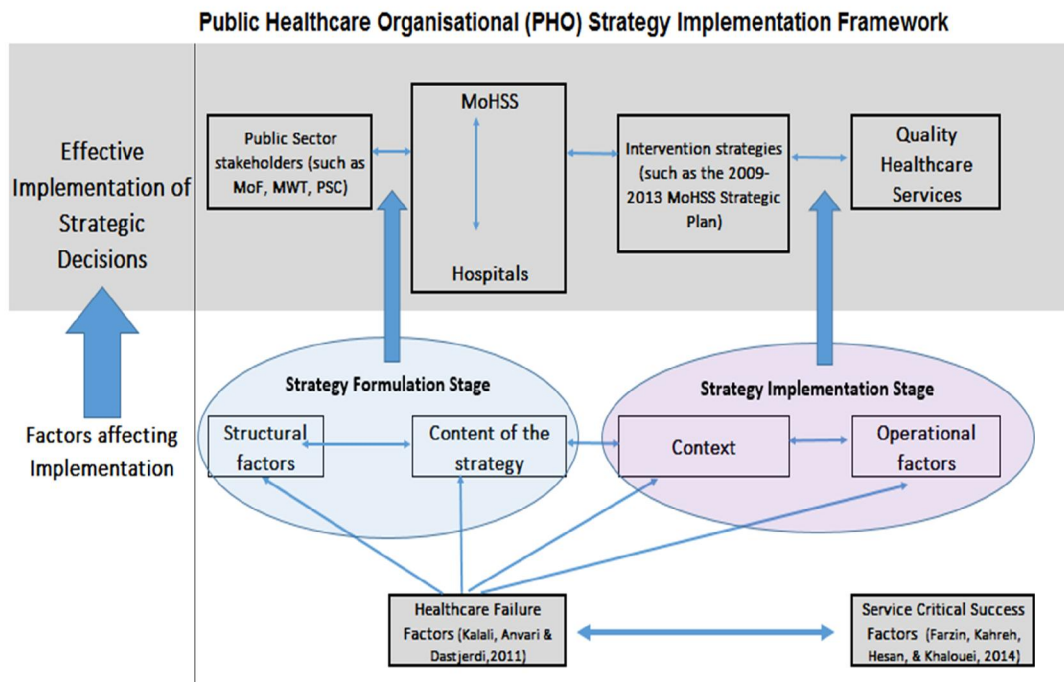


Figure 3.3: Research Conceptual Model. Source: Author's work.

In conclusion, this study makes the following propositions within an active implementation framework, presented in Figure 3.3:

Proposition 1:

- Effective strategy implementation in Public healthcare organisations (PHOs) is directly affected by the public sector institutions it interacts with in providing healthcare services. In this study, the PHOs are the Intermediate Hospitals that implement the National strategies and mandates of the Ministry of Health and Social Services (MoHSS). As well as, other public sector institutions such as the Ministry of Finance (MoF), Ministry of Works and Transport (MWT) and the Public Service Commission (PSC).

Proposition 2:

- Several determinants exist, which mediates the implementation relationships between PHOs and the ministry or department of health. The study determinants refer to the different factors affecting implementation outcomes. These include the content of the strategy, contextual, structural, and operational factors.

Proposition 3: The study uses the staff perceptions to measure and validate the implementation relationships that affect service quality and intervention strategies in public healthcare organisations (PHO).

The study follows Meena and Thakkar's (2014) approach of to develop a Balanced Scorecard-based performance measurement framework for health care system. However, study uses a deterministic framework similar to integrated Interpretive Structural Modelling and Analytic Network Process (ISM-ANP) based quantitative approach in Meena and Thakkar's study. Meena and Thakkar's (2014) used ISM-ANP based approach for the development of balance scorecard for health care system. Their research identified Key Performance Indicators (KPIs) and their interrelationships for health care system. The integrated approach of ISM and ANP was employed for the development of balance scorecard. However, their study was limited to the system representing some commonalities with chosen cases (Meena & Thakkar, 2014).

3.8. Summary

This chapter discussed the theoretical framework and strategy implementation perspectives, which guided the research. It then reviewed empirical studies on public healthcare organisations, strategy implementation complexities, and implementation success and failure factors. The chapter also discussed the implementation of strategies in the Namibian public health sector. The chapter ends with the conceptual framework and research propositions.

CHAPTER 4

RESEARCH METHODS

4.1 Introduction

This chapter outlines the research methodology adopted in identifying the implementation success factors in the implementation of strategic plans in the public healthcare system in three hospitals in Namibia. The researcher discusses the research design adopted and gives reasons for choosing the specific design, describes the population under study as well as the sample size used and the specific sampling techniques applied in selecting the sample. Other issues discussed include data collection procedures and the approach to data analysis. This chapter also discussed the ethical, validity and reliability issues.

4.2 Research design

Kobus (2013) defined research design as the plan on how to proceed in determining the nature of the relationship between variables. For this research, a descriptive survey study was conducted. Descriptive research is social research with the primary aim of describing, rather than explaining, a particular phenomenon (Gravetter & Forzao, 2012). Kumar, (2011) emphasized that descriptive research presents a picture of the specific details of a social situation, setting, or relationship. Descriptive research is more relevant to the topic of this research study as it focuses on describing the situation of the three public intermediate hospitals' perceptions on the implementation of the strategic decisions and its impact on client satisfaction. When using a descriptive design, the main purpose is to describe situations and events.

This research study utilized a quantitative methodology approach. A quantitative approach was more appropriate to determine the extent of the problem, issue or phenomenon by quantifying the variability, whereas a qualitative approach is more appropriate to explore the nature of the problem, issue or phenomenon without quantifying it. In using the quantitative approach, the research sought to provide a description of the observed situation, as well as the historical enumeration of events, and an account of different opinions that different people have about the factors contributing to the failure to implement strategic decisions in public healthcare organisations.

This involved examining the relationship between variables of interest. All constructs must display adequate construct validity, whether they are new scales or scales taken from previous research. As such, variable scales were carefully checked for content validity. Pre-tests were used to purify measures prior to confirmatory testing. After an evaluation of the measuring instruments available in the literature, the instruments were chosen, based on their relevance to the study as well as their psychometric characteristics namely: validity and reliability.

4.3 Population

The population of the study was the staff and management of three state intermediate hospitals in Namibia. The hospitals covered were Katutura Intermediate State Hospital (KISH) in Khomas region, the Rundu Intermediate State Hospital (RISH) in Kavango region and the Oshakati Intermediate State Hospital (OISH) in Oshana region. The study only covered those who had been in continuous employment of the MoHSS for the period

February 2009 - February 2013. This gave a total combined population of 400 staff members consisting of registered nurses, medical doctors, and hospital management. The study also covered 53 MoHSS regional management members responsible for oversight of the state hospitals.

4.4 Sampling

Saunders, Lewis and Thornhill (2009) assert that sampling provides a variety of techniques that enables a researcher to reduce the data that one needs to collect by examining only data from a subgroup rather than the whole population. The sampling methods are divided into probability and non-probability sampling methods. Paul and Jeanne (2010) argued that probability sampling, enables the researcher to calculate the desired sample size, within the acceptable margin of error. Proportional stratified random sampling was used in this study.

According to Gravetter and Forzao (2012, p. 147) stratified random sampling refers to a probability sampling method that has a population consisting of N elements, with the population divided into H groups, called strata and each element of the population being assigned to one, and only one, stratum. Stratified sampling offers several advantages over simple random sampling because it can provide greater precision than a simple random sample of the same size (Gravetter and Forzao, 2012). A stratified sample can guard against an "unrepresentative" sample (for example, an all-male sample from a mixed-gender population). However, the main disadvantage of a stratified sample is that it may require more administrative effort than a simple random sample (Gravetter and Forzao, 2012).

For this research, a proportional stratified random sample was considered appropriate taking into consideration the structure of the MoHSS. The population of hospital staff was greater than that of regional management teams, therefore a sample of 89 percent was chosen for hospital staff and an 8 percent sample was chosen for regional management teams. The bigger sample selection of hospital staff was preferred to guarantee significant statistical analysis and generalization to the entire population under study thereafter. The study used the change list for the month of April 2016 from hospitals and the list of names for regional management teams. Random numbers equal to the names and corresponding to each of the names in the lists were created for the MoHSS staff by categories and stratum. All staff names matching the number selected were included in the sample. The study sample size came up to 290. This included 220 registered nurses (management and non-management) and 17 medical doctors (management and non-management), as well as, 18 regional management team, giving the total sample size of 290.

4.5 Research Instrument

Questionnaires were the main instrument used for data collection. According to Kobus *et al.* (2013), questionnaires are the most commonly used data collection instrument. Some of the advantages of questionnaires are the presumption to be relatively cheaper, easy to do and the interviewer in case of group administration can immediately assist with issues in the questionnaire, which are not clear to the respondents (Kobus *et al.*, 2013, p.157). However, some of the pitfalls of using questionnaires are that the primary researcher has limited control over what happens in the field and/or the primary researcher (Kobus *et al.*, 2013, p. 157) cannot control conditions in which the questionnaire is administered.

The questionnaire was chosen as the data collection instrument for this study in order to gather a broad spectrum of information from respondents. It does not put respondents under pressure of giving immediate information, as in the case of interviews. The questions constructed were close ended. The close-ended questions also allowed respondents to write in an optional response if they chose to. Unlike open-ended, close-ended questions, are easy to standardize and data gathered makes is easy to analyse statistically using SPSS. The survey design was used in the research with the use of a self-administered questionnaire. The questionnaire was made of the three sections (see Appendix C).

Structured questionnaires emphasize on how accurately different participants' answers can be compared (reliability). Highly structured questionnaires can collect much quantifiable data and can work well in situations where you cannot record the interview in full. An important advantage of the survey questionnaire is its adaptability and ability to reach a large sample and ease of analysis. With structured questionnaires, it is possible to get a representative sample and the results can be used to make statements (Zikmund and Babin, 2010, p.307).

4.6 Questionnaire Construction

The questionnaire responses used the LibQUAL rating and the Likert scale. Zikmund and Babin (2010, p.255) posits that Likert scales are simple to administer and understand. They also allow respondents to indicate their attitudes by checking how strongly they agree or disagree with carefully constructed statements. The scale results reveal the

respondent's attitude ranging from very positive to very negative. The questionnaire responses were designed to allow the respondents to choose from multiple response alternatives such as, strongly agree, agree, neutral, disagree, and strongly disagree (Zikmund and Babin, 2010).

The questionnaire for MoHSS staff consisted of three sections: Section A, used the LibQUAL rating to assess the Satisfaction with the MoHSS strategic plan objectives for 2009-2013 Implementation (Expected implementation satisfaction). Section B: also used the LibQUAL rating to identify the critical success factors required for ensuring success of an organisation in effectively implementing its strategic mission and objectives (Implementation success factors). The identification of these ISFs was meant to help the MoHSS staff to direct and measure the success of the public healthcare system in Namibia. Section C: Barriers/Challenges to the MoHSS strategic plan objectives for 2009- 2013 (implementation failure factors) and demographics and career information (control variable) (See Appendix C).

4.6.1. Expected Implementation Satisfaction (27 items)

This study discussed the effectiveness of the strategic plan implementation of the Ministry of Health and Social Services at its three Intermediate hospitals and regions. In attempting to comprehend, whether the Ministry strategic plan implementation met the implementers' (staff's) expectations, the study developed constructs from the 2009-2013 Strategic plan objectives. The study developed the following five dimensions: Service Provision, Human

Resource Management, Infrastructure development and management, Governance and Financial Management. The list below displays the items in each dimension:

Service Provision (11 items)

- SP-1 Streamline and harmonize services/functions/programs
- SP-2 Improve Focus on core function
- SP-3 Improve waste management system
- SP-4 Improve fleet management
- SP-5 Provide adequate, formalized and structured community based health services
- SP-6 Improve stakeholder relations and coordination
- SP-7 Adopt and implement management system at all level
- SP-8 Reduce malnutrition
- SP-9 Decrease morbidity rates
- SP-10 Decrease mortality rates
- SP-11 Ensure prompt and effective response to disasters

Human Resource Management (5 items)

- HR-1 Improve conditions of service for health and social workers
- HR-2 Ensure adequate and appropriate staff complement and strength
- HR-3 Improve staff morale
- HR-4 Create a skilled work force
- HR-5 Devolve level of decision making to appropriate levels

Infrastructure development and management (3 items)

- IDM-1 Ensure proper management of infrastructure and equipment
- IDM -2 Improve health facilities to be responsive to emerging needs
- IDM -3 provide a minimum district service package (MDSP)

Governance

- G-1 Ensure responsive legislation and policies
- G-2 Implement efficient and effective contract management system
- G-3 Improve information management system
- G-4 Improve the procurement and payment system
- G-5 Strengthen the stewardship role of the Ministry of Health and Social Services

Financial Management

- FM-1 Improve financial management
- FM-2 Ensure capital formation make up at least 10 percent MOHSS total budget
- FM-3 Ensure equitable and efficient allocation of resources among the ministry`s directorates.

4.6.2. Implementation success factors (20 items)

Section B of the questionnaire instrument was based on the critical success factors (CSF) for strategic knowledge management (SKM) implementation for the service sector (Farzin, *et al.*, 2014). As such, this study adopted the following 20 items for the implementation success factor dimension:

1. Organisational Alignment to Strategy and values consistent with core business.
2. Community involvement in corporate decision-making.
3. Employee's re-orientation to change organisational culture.
4. Social norms and impact on community factors.
5. Linking incentive system to the plan.
6. Client driven centred.
7. Top management support, commitment and involvement.
8. Interdepartmental cooperation and teamwork.
9. Internal communication, stakeholder management and public relations.
10. Staff member education and training on the strategic plan.
11. Competence of the strategic plan implementation Steering Committee.
12. Understanding and effective use of the strategic plan implementation tools.
13. Competitive orientation of the organisation.
14. Organisational orientation to local competition.
15. Legal norms.
16. Use of external consultants.
17. Role of Information Technology.
18. Inspirational leadership.
19. Financial control and planning optimization.
20. Project management skills (Farzin, *et al.*, 2014, p. 597).

4.6.3. Implementation Failure Factors (17 items)

Section C of the questionnaire instrument adopted sixteen effective factors on the failure of strategic decisions implementation in the health service sector identified by Kalali, *et al.* (2011). An extra item was added on the strategy not being patient centred, making them 17 items. There are presented as follows:

- 1) Limited resources cause to implement or accomplish strategic plan;
- 2) Your hospital can't implement strategic plan for the reason that it is public healthcare hospital;
- 3) Strategic plans implementation failed due to deficient communication system of your ministry;
- 4) The difference of opinion among you and your higher management in the way of objective affects performance of your hospital/region;
- 5) New problems may occur while implementing the strategic plan
- 6) The people who execute the plan may agree to another plan too;
- 7) The people who are assigned to execute the strategic plan must have education and expertise in strategic plan modelling;
- 8) Lack of leadership or instructions of leadership cause failure of the strategic plan implementation;
- 9) The Executive of organization may help you in implementation of the strategic plan;
- 10) Before implementation of the strategic plan all material or important information is necessary to be achieved;
- 11) After completion of the strategic plan formulation, opinion of the operational staff must be obtained for its rejection or acceptance before its

implementation;

12) The structure of the hospital may become a barrier in implementation the strategic plan;

13) Whatever the strategic plan is, it must be prepared in accordance to information of the objectives;

14) The strategic plan must be prepared in accordance to the system of an organization;

15) The managers must adopt strict attitude to implement the strategic plan once developed;

16) Before implementation these strategic plan, duties and nature of assignments of each manager must be clearly defined (Kalali, *et al.*, 2011; Sial *et al.*, 2013);

17) Client's satisfaction rating on services rendered by your hospital shall be the critical determinant factor for the success of strategic plan implementation.

4.6.4. Demographic Control Variables

To control for individual employee differences and differences in the work context, demographic information is used as control variables. Seven demographic characteristics of the employees included were:

1. Age
2. Gender
3. Region
4. Organisation Name

5. Experience in Years
6. Occupation
7. Current Position.

4.7 Data Collection Procedure

Questionnaire administration has important implications for research methodology, the validity of the results of the research, and for the soundness of recommendations developed from evidence using questionnaire-based research. The administration of the questionnaires involved obtaining permission from the MoHSS and the three intermediate hospitals (see Appendix A), the institutions where the research was focused. The letter of permission made full disclosure of the goals of the study to the relevant authorities. Additionally, a covering letter (Appendix B) was attached to the questionnaires and the research ensured that the participants were legally and psychologically competent to give consent and aware of their rights such as liberty to withdraw from the survey (Gravetter and Forzao, 2012, p.108).

There are various ways of doing survey with questionnaire such as by mail, telephone or direct interview and so on. Although some people are reluctant to participate in a survey, the presence of an interviewer generally increases the percentage of people willing to complete the interview. People are often more hesitant to tell a person “no” face-to-face than they are over the phone, in a mail request, or through some other impersonal contact. However, personal interviews also have the disadvantage of the respondents not being anonymous and as a result; they may be reluctant to provide confidential information to another person (Zikmund and Babin, 2010, p.157).

For this research, data was collected via face-to-face interviews with the help of four research assistants located in each hospital. Time to complete the questionnaires was set at 1 hour. This method for collecting data is regarded to be less time consuming and to be cost-effective. Follow-up contact was made by the research assistants to ensure a high response rate. The researcher/research assistants encouraged the participants to complete the questionnaire to avoid any issues of missing data. Before distributing the questionnaires to the participants, the researcher/research assistant first discussed the cover letters with participants (Appendix B). The researcher/research assistants explained how the questionnaire should be answered without leading participants towards the answers required.

4.8 Pilot study

Welman, Kruger and Mitchell (2014) stated that when a new measurement instrument is developed, it is useful to “test it out” before administering it to the actual sample. The intention of any pilot study is to detect possible flaws in the measurement procedure, identify unclear or ambiguously formulated items and offer an opportunity for researchers and assistants to notice non-verbal behaviour (Welman *et al.*, 2014).

Before administering the questionnaire to participants in the study, the researcher tested it on a small sample of nine respondents of which three respondents were selected from three categories. The analysis of the pilot survey revealed flaws in section C of the questionnaire where the Likert scale values were reversed and this was corrected so that it would align with section A and B, LibQUAL rating scale. The terminology in the questionnaire was

also tweaked so that the phrasing and emphasis encouraged participants to give definite answers rather than general answers (Rugg and Petre, 2007).

The pilot test fine-tuned the questionnaire and ensured that the questionnaire instrument asked straight forward questions whereby possible alternatives were given as answers in which respondents were required to choose from. The pilot study enabled the researcher to make amendments that were necessary in maximizing returns and minimizing the error rate on answers. It also allowed for the changing of some questions in Section B to be more direct and simple to understand.

4.9 Data analysis

After the respondents finished filling in the questionnaires, the questionnaires were collected for analysis. The data was transferred directly from the completed questionnaires to the prepared SPSS version 23-computer database matching the format used for the questionnaires. Data entry was combined with validation whereby range, structure, and consistency checks were pre-programmed in order to ease the detection and immediate correction of errors. At this stage, questionnaires with gross errors that could not be resolved were rejected. All respondents' questionnaires were given computer-derived codes that were specific for each respondent. The study used SPSS AMOS Version 23 to validate and determine the interrelationships between variables. The analysis comprised three phases, the first phase involved descriptive analysis, followed by validity and reliability analysis and finally, structural equation modelling.

4.9.1. Descriptive statistical analysis

Descriptive statistics was used to describe the sample characteristics in numerical data in terms of the chosen constructs as well as the relevant biographical variables. The results of this analysis were described in tabular or graphic layout. The descriptive statistics used in this study were percentages, means, standard deviation, skewness, kurtosis and frequency tables (De Vos, Strydom, Fouche, & Delpont, 2011).

In this study, means were provided for the respondents' minimum, desired, and perceived levels of the strategic plan implementation for each item on the survey. Means were also provided for the general satisfaction of the respondents on the levels of strategic plan implementation outcomes questions. The expected satisfaction (ES) score should be closer to the perceived satisfaction (p); it will be weighed four times more than the minimum satisfaction (m) and the desired (d) satisfaction. After these values were added together, they were then divided by 6 to determine the Expected satisfaction for each item of the survey, as well as for each of the five dimensions of strategic plan implementation.

Therefore, the Expected Satisfaction (ES) score was calculated using Clark's (1962) classical PERT formula. Pleguezuelo, Pérez, and Rambaud (2003) in their operations research paper on the expression for the mean in the PERT method, noted that the PERT mean involves a parameter, k , that sometimes has been set to four. The authors insisting on the similarity between the beta and the normal distributions, argued that certain hypotheses lead to k being exactly 4 (Pleguezuelo *et al.*, 2003). Therefore, this study uses the similarity between the beta and normal distribution to adopt the formulae:

$$\text{Expected mean} = \frac{\mathbf{m + 4p + d}}{\mathbf{6}} \quad (\text{Clark, 1962, p.406}).$$

In general, expected satisfaction is a composite indicator of the extent to which the respondent is satisfied with the implementation of the strategic plan. A higher expected satisfaction score indicates that the respondents' satisfaction level on strategic plan implementation is closer to their desired level of the implementation. While, a lower expected satisfaction score indicates that the respondents are not satisfied with the strategic plan implementation.

4.9.2. LibQUAL Item Scale Analysis

In order to determine the strategic plan implementation success and/or failure as expressed by workers and management, this study adopted the LibQUAL model of service quality measurement to measure respondents' minimum, desired and perceived levels of strategic plan implementation on the dimensions highlighted above. The Implementation adequacy gap score is calculated by subtracting the minimum score from the perceived score on any given question, for each respondent. Both means and standard deviations are provided for the implementation adequacy gap scores on each item of the survey, as well as for each of the five dimensions of strategic plan implementation. In general, implementation adequacy is an indicator of the extent to which you are meeting the minimum expectations of your respondents. A negative implementation adequacy gap score indicates that your respondents' perceived level of implementation is below their minimum level of implementation and is printed in red.

The implementation superiority gap-score is calculated by subtracting the desired score from the perceived score on any given question, for each respondent. Both means and standard deviations are provided for service superiority gap scores on each item of the survey, as well as for each of the five dimensions of strategic plan implementation. In general, implementation superiority is an indicator of the extent to which you are exceeding the desired expectations of your respondents. A positive implementation superiority gap score indicates that your respondents' perceived level of strategic plan implementation is above their desired level of the implementation and is printed in green.

4.9.3. Radar chart

Radar charts are useful when you want to look at several different factors all related to one item. Sometimes called “spider charts” or “polar charts”, radar charts feature multiple axes or “spokes” along which data can be plotted. Variations in the data are shown by distance from the centre of the chart. Lines connect the data points for each series, forming a spiral around the centre. In this study, each axis represents a different survey question. Questions are identified by a code at the end of each axis. The five dimensions measured by the survey are grouped together on the radar charts, and each dimension is labelled: Service Provision, Human Resource Management, Infrastructure development and management, Governance and Financial Management.

The Radar chart was used in this study to present the item summaries of the results from the 27 core survey questions of the Ministry of Health and Social Services' Balanced scorecard of the strategic plan in the provision of service quality to clients. Radar charts

are an effective way to show strengths and weaknesses graphically by enabling you to observe symmetry or uniformity of data. Points close to the centre indicate a low value, while points near the edge indicate a high value. When interpreting a radar chart, it is important to check each individual axis as well as the chart's overall shape in order to gain a complete understanding of its meaning. It shows how much data fluctuates by observing whether the spiral is smooth or has spikes of variability. Respondents' minimum, desired, and perceived levels of strategic plan implementation are plotted on each axis of the radar charts. The resulting "gaps" between the five levels are shaded in blue, yellow, green, and red.

Generally, a radar graph shaded blue and yellow indicates that respondents' perceptions on the strategic plan implementation fall within the "zone of tolerance"; the distance between minimum expectations and perceptions on the implementation is shaded in blue, and the distance between their desired and perceived levels of the implementation is shown in yellow. When respondents' perceptions fall outside the "zone of tolerance", the graph will include areas of red and green shading. If the distance between the respondents' minimum expectations and perceptions of the level of implementation is red, that indicates a negative strategic plan implementation adequacy gap score. If the distance between the desired level of the implementation and perceptions on the level of the implementation is represented in green, that indicates a positive strategic plan implementation superiority gap score.

Skewness and kurtosis

According to Kobus (2013) skewness refers to a measure of symmetry (or a lack thereof), or the numerical measure of the shape of the distribution of the data. The data in this research was categorized as symmetrical if it looked the same on each side of a central point. However, variables and some data sets do not always resemble a normal distribution. Kurtosis measures whether data is either peaked or flat in relation to the normal distribution. Skewness and kurtosis values ranging between the -1 and +1 normality range are recommended for conducting parametric tests (Hair, *et al.*, 2013).

4.10 Validity and Reliability

Reliability is tested through familiarity with the environment in which the study is conducted. The research instrument is subjected to a test – retest technique, based on the assumption that the phenomenon to be measured remains unchanged at two times of testing and that any change is the result of random error (Wegner, 2010). In this study, the parallel form of reliability was used. This was obtained by administering different versions of an assessment tool to the same group of individuals. It was applied through the different sections of the Questionnaire. Wegner (2010) states that inter-rater reliability is a measure of reliability used to assess the degree to which different assessors agree in their assessment decisions. On the other hand, internal consistency reliability is a measure of reliability used to evaluate the degree to which different test items that probe the same construct produce similar results (Pallant, 2010).

In this study, correlation analysis and Cronbach's alpha test was used to test for reliability. The average inter-item correlation is a subtype of internal consistency reliability. It is

obtained by taking all of the items on a test that probe the same construct and determining the correlation coefficient for each pair of items, and finally taking the average of all of these correlation coefficients (Pallant, 2010). The Cronbach's alpha test for scale reliability is carried out during analysis to test for inter-rater reliability and the average inter-item correlation (Pallant, 2010). Reliability is ensured through maintaining a fit and match between what the researcher records as data and what actually happens in the natural research setting. Thus, this research would only be proved reliable if other researchers derive the same findings and conclusions on the same data (Zikmund & Babin, 2010).

According to Rugg and Petre (2010) validity refers to the extent to which an empirical measure accurately reflects the concept it is intended to measure. In terms of qualitative research, validity can be achieved through depth, honesty, richness of data obtained, and the extent of triangulation, disinterest of the researcher or objectivity of the researcher. In this study face validity and content validity were determined, while criterion validity did not apply. To establish face validity, the questionnaire was submitted to the supervisor for assessment and this ensured that the questions actually assessed the test characteristics identified by the researcher. To establish, content validity, the questionnaire was aligned with the research objectives and each question on the questionnaire was corresponding to the literature (Saunders *et al.*, 2009). In this study, construct validity was determined using CFA/SEM analysis in SPSS AMOS version 23 software. The CFA/SEM analysis was used due to its ability to assess the construct validity of a proposed measurement theory. Construct validity refers to the extent to which a set of measured items actually reflect the theoretical latent construct they are designed to measure (Gaskin, 2017).

4.9.4. Exploratory Factor Analysis

The psychometric properties of the constructs were assessed using Pallant (2010)'s method for EFA analysis and Gaskin (2017)'s method was used for the CFA/SEM analysis. The psychometric properties of the item Statements were assessed by exploring the dimensionality of the relevant variables and internal consistency of the scales. Exploratory factor analysis was used to explore the dimensionality of the relevant variables based on the existing literature on the study's measures. The analysis focused on two main issues in determining whether a particular data set is suitable for factor analysis. These were sample size, and the strength of the relationship among the variables (or items) (Pallant, 2010).

In general, there is need for a large enough sample for the estimates obtained in the sample survey to be reliable enough to meet the objectives of the survey. An estimator is said to be precise if it has a low variance. That is, if it produces values that centre increasingly around the expected value as the sample size (n) increases (Pallant, 2010). In this study, Pleguezuelo, Pérez, and Rambaud's (2003), program evaluation review technique (PERT) expected value calculation was used to ensure a low variance and a normal distribution. In addition, Pallant (2010) states that the data set should contain at least five respondents for each item in the scale under evaluation. As a result, the research sample size of 290, has a sampling adequacy of up to 58 items. This was more than adequate to evaluate the 27 item-scale for the dependant variable (Section A questions), the 20-item scale of the independent variable (Section B questions) and the 17-item scale for the intervening variable (Section C questions).

The strength of the relationships among the variables (or items) was tested using the Kaiser-Meyer-Olkin (KMO) test, which must produce a value larger than 0.5. In addition, the items within the scales should adequately correlate with a Bartlett's test of sphericity that should be significant ($p < .05$) (Pallant, 2010). The study results showed that all the necessary conditions were met and that it was appropriate to conduct an Exploratory Factor Analysis. The factor extraction method used the Principal axis factoring, with Varimax Rotation. This method was chosen in order to simplify the interpretation of the factors by focusing on the shared variance between items, as well as placing limitations on the location of the factors within the factor space by minimizing the number of variables that had high loadings on each factor (Kline, 1994). Furthermore, only items that contained factor loadings greater than 0.30 were considered to be significant and were thus retained (Hair *et al.*, 2013).

4.9.5. Confirmatory Factor Analysis (CFA)

CFA is similar to EFA in some respects, but philosophically it is quite different. With CFA, the researcher specifies both the number of factors that exist within a set of variables and which factor each variable will load highly on before results can be computed. Therefore, the technique does not assign variables to factors; instead, the researcher must be able to make this assignment before any results can be obtained. SEM is then applied to test the extent to which a researcher's a-priori pattern of factor loadings represents the actual data (Gaskin, 2017). The study follows Gaskin's CFA/SEM procedure and applies the SPSS AMOS plugins; "Pattern Matrix Model Builder"(PMMB), "Master Validity"(MV), "Model fit measures"(MFM) in an iterative process. Using the Pattern

Matrix Model builder (PMMB) plugin involves copying the SPSS dimension reduction output's EFA pattern matrix and pasting in into PMMB and running. This results in a CFA/SEM model whose validity and model fit measures are tested using the MV and MFM plugins (Gaskin & Lim, 2016). The procedure uses CFA for psychometric evaluation of measures, construct validation and path analysis of the relationships between constructs, as well as testing method effects and testing measurement invariance.

4.9.6. Structural equation modelling (SEM)

SEM is an extension of the general linear model (GLM) of which multiple regression is a part. Additionally, SEM is more powerful in that it takes into account the modelling of interactions, nonlinearities, correlated independents and measurement error. In this study, SEM was used as a more powerful alternative to multiple regression, path analysis, factor analysis, time series analysis, and analysis of covariance (Hair, *et al.*, 2013). In this study, SEM was used to test the research propositions and answer the research question as well as distinguishing between direct and indirect relationships among variables, and to analyse interrelationships between latent variables without random error. The SEM process focuses on the validation of the measurement model by obtaining estimates of the parameters of the model and assessing whether the model itself provides a good fit to the data (Hair *et al.*, 2013).

4.11 Methodological limitation

This research intended to use a mixed method whereby qualitative instruments could be used to interview top MoHSS executives and for documentary analysis as highlighted

above. However, during the study, the researcher was informed that no MoHSS top executives would be available for interviews, a decision which the researcher respected. Despite this, permission to conduct research was granted by the MoHSS Permanent Secretary, MoHSS BSC performance annual reports and 5 years' summative reports were not made available to the researcher, the reason advanced was that such reports could not be located. The three public intermediate hospitals made annual reports only available but not the 5 year summative report. These annual reports were scrutinised and it was found that the format adopted was not based on BSC performance measurement and/or could it assist in any way to answer the research questions of this study, thus no qualitative data and/or results analysis could be available in the next chapter. To mitigate this matter, the quantitative approach was used to gather primary data from MoHSS staff.

4.12 Elimination of Bias

The survey administration and data collection techniques employed minimised the bias that occurs when respondents either consciously or unconsciously tend to answer questions with a certain slant that misrepresents the truth such as acquiescence bias and extremity biases (Zikmund and Babin, 2010). In order, to avoid social desirability bias that may occur consciously or unconsciously because the respondent wishes to create a favourable impression or save face in the presence of an interviewer, the researcher adopted the LibQUAL model of service quality measurement to measure respondents' minimum, desired and perceived levels. These were then composited into a calculated expected value of their responses. During questionnaire construction, efforts were made to use gender-neutral words and the demographic section did not ask questions which would for instance identify people by race or ethnic group as it is not relevant. Overall,

the questionnaire avoided language that suggests evaluation or reinforces stereotypes (Zikmund & Babin, 2010).

4.13 Ethical Considerations

Throughout the process of data collection, the problem of persuading participants to cooperate with the researcher was present. The researcher had to reassure the respondents because without such co-operation, there would be no response or there would be incomplete answers. However, informed consent was sought from the respondents, they were informed of their rights to refuse to participate and this is an ethical right that the researcher always respected (De Vos, *et al.*, 2011).

When research is undertaken at health service facilities, permission for such research should be obtained from the authority in charge of the service (Ary, Jacobs and Sorenson, 2010). In this case, written permission was obtained from the Permanent Secretary of the Ministry of Health and Social Services in Namibia. Following the Permanent Secretary's acceptance of the researcher's request, regional health directors and Medical Superintendents of the three intermediate state hospitals in which the research took place further granted an oral permission. Each respondent participated on a voluntary basis and those who wished to withdraw their participation were permitted to do so at any given time of the study. The cover letter explaining the research purpose and rights of the respondent was attached to each questionnaire of this study. This was done in compliance with the meeting of ethical demands in this nature of studies, which requires that participants get involved after an informed consent.

Kumar (2011) states that anonymity is of great importance in studies where employees are being asked to make statements about their working conditions, which was the case in this study. This study, therefore omits the names of participants and assurance was given to them in the covering letter attached to each questionnaire that their names would not be associated with the outcome of the study. In many studies, confidentiality like anonymity cannot be strictly maintained, especially when an interviewer who has direct contact with all participants collects data. In this study, this was more crucial especially that the researcher and assistants were known professional colleagues of the respondents and were able to be recognised during questionnaire distribution and collection thereafter. Henceforth, it was important that respondents were re-assured that the information given would only be used for the stated purpose of the research and no other persons would have access to the research data. However, respondents were informed that the outcome of the study would be shared with the employers, Ministry of Health and Social Services and KISH, RISH and OISH in particular.

4.14 Summary

This chapter outlined some of the fundamental methodological issues on how the research was carried out. These included the research design, population, sample, research instruments, procedure, data analysis validity and reliability which was used. Some ethical aspects were also presented in this chapter. The next chapter covers the presentation, interpretation, and analysis of results.

CHAPTER 5

PRESENTATION, INTERPRETATION AND ANALYSIS OF RESULTS

5.1 Introduction

This chapter presents, interprets and analyses the research findings. The findings are compared and contrasted with the findings of prior studies as presented in Chapters 2 and 3. Variations between outcomes of this study and previous literature are deliberated on.

5.2 Demography and Career Information of Research Respondents

Demography of Respondents

This section presents the socio-demographic breakdown of the research participants. The total sample size for the research was 290 members of staff. A good response rate of 72 percent resulted in 240 usable questionnaires for the MoHSS staff.

Table 5.1 shows that over 39 percent of the respondents were above 50 years of age, with 28.6 percent and 27.6 percent representing the 30 to 39 years and 40 to 49 years age groups respectively. It also shows that less than 5 percent were aged between 20 to 29 years. The Table also shows the gender distribution with 81.4 percent females and only 18.6 percent males. The respondents were all having university degrees due to the nature of the work they do, which requires skilled people.

Table 5.1 Demography Information for MoHSS Staff (N=210)

Variable	Description	Frequency	%
Age	20 - 29 years	10	4,8%
	30 – 39 years	60	28,6%
	40 – 49 years	58	27,6%
	50 – 59 years	73	34,8%
	60 years and above	9	4,3%
Gender	Male	39	18,6%
	Female	171	81,4%
Education	University Degree	210	100,0%
Region	Oshana	84	40,0%
	Kavango	53	25,2%
	Khomas	73	34,8%
Organisation Name	Oshana Directorate Management Team	5	2,4%
	Kavango Directorate Management Team	7	3,3%
	Khomas Directorate Management Team	3	1,4%
	Oshakati Intermediate Hospital	79	37,6%
	Rundu Intermediate Hospital	46	21,9%
	Katutura Intermediate Hospital	70	33,3%

The sampling ensured that all three intermediate hospitals were well represented with the Oshana region contributing 40 percent, of which 37.6 percent were from Oshakati Intermediate Hospital and 2.4 percent being the Oshana Directorate’s management team. Khomas region represented 34.8 percent of the respondents, of which 33.3 percent were from Katutura Intermediate Hospital and 1.4 percent from the Directorate’s management team. Lastly, Kavango region contributed 25.2 percent, with 21.9 percent representing Rundu Intermediate Hospital and 3.3 percent representing the Kavango Directorate’s management team.

Respondents' Career Information

Table 5.2 Career Information of MoHSS Staff (N=210)

Variable	Description	Frequency	%
Experience Years	1-5	15	<i>7,1%</i>
	6-10	41	<i>19,5%</i>
	11-15	21	<i>10,0%</i>
	16-20	38	<i>18,1%</i>
	21-25	23	<i>11,0%</i>
	26-30	37	<i>17,6%</i>
	31-35	27	<i>12,9%</i>
	36-40	4	<i>1,9%</i>
	41 and above	4	<i>1,9%</i>
Occupation	Medical Officer	14	<i>6,7%</i>
	Principal Medical Officer	1	<i>,5%</i>
	Senior Medical Officer	3	<i>1,4%</i>
	Registered Nurse	131	<i>62,4%</i>
	Senior Registered Nurse	48	<i>22,9%</i>
	Chief Registered Nurse	1	<i>,5%</i>
	Control Registered Nurse	1	<i>,5%</i>
	Administration	11	<i>5,2%</i>

Table 5.2 shows that over 70 percent of the respondents had more than 10 years experience, with only 7.1 percent having 1 to 5 years' experience and 19.5 percent with 6 to 10 years' experience. The table also shows that 18.1 percent had 16-20 years'

experience, with 17.6 percent having 26 to 30 years' experience and 16.7 percent with more than 30 years' experience. About 62.4 percent of the respondents were Registered Nurses, while 22.9 percent of the respondents were Senior Registered Nurses. Medical Officers were only 6.7 percent, while Administrators were 5.2 percent. More senior staff members were also represented with the Chief Registered Nurse, Control Registered Nurse and Principal Medical Officer each having a respondent.

Interpretation of Demographic and Career Information

Table 5.1 and Table 5.2 presented the demography and career Information of the MoHSS Staff. The results revealed that the staff interviewed were well experienced, which implies the hospital and regional managers were well versed with the operations of the Health sector in Namibia and have been part of the health reform initiatives since independence in 1990. The research also found that the health sector requires highly skilled people with all the respondents having university degrees.

When the exploratory factor analysis was carried out with the Demography control variables (DCV), the findings were as presented in Table 5.13. The factorial analysis showed that 'Age Group' and 'Experience in years' would represent the same factor and for further analysis only one of them should be used to avoid multi-collinearity. The same applies to position in 'Organisation' and 'Level in Management', as well as 'Region under study' and 'Organisation's Name'. Therefore, for further analysis 'working experience', 'level in management' and 'region under study' were carried forward for further analysis.

Therefore, demographic variability is observed from the ‘Region under Study’ or ‘Organisation’s Name’, which implies that there is a significant difference between the three intermediate hospitals, with Oshakati Intermediate Hospital servicing four of the most populous regions in the country. While, Katutura Intermediate Hospital located in close proximity to the Windhoek Central Hospital (the National Referral Hospital), acts as referral hospital for the other two Intermediate hospitals. This puts an enormous burden on Katutura Intermediate State Hospital (KISH).

The National Referral Policy (2013) considered this and added a class 2 intermediate hospital (RISH and OISH), that will be referring to a Class 1 Intermediate Hospital (KISH). The Rundu Intermediate Hospital can therefore, be assumed to represent what is expected of a Class 1 referral hospital. According to the National Referral Policy (2013) the intermediate hospital (General Medical Care –Class 1) is the level between the district and national level, which provides both secondary and tertiary healthcare. While, the Intermediate hospital (Special and General Medical Care–Class 2) refers to the level between Class 1 and national level which provides both secondary and tertiary healthcare (MoHSS, 2013a).

5.3 Descriptive Statistics

Expected Implementation Satisfaction (EIS)

Respondents were asked to rate quality service indicators of MoHSS Balance Score Card (BSC) based on LibQUAL rating’s three columns from 1 (low) to 9 (high) scales for “perception”, “desire”, and “minimum” services. The minimum and desired service

expectations were considered indicators of the importance of the service (attribute or dimension item) to the respondents' users. The researcher has determined the most important areas for service improvement by identifying the items that ranked highest by respondent on minimum/desired service level. The minimum expectations of level of service that users consider as adequate represents the minimum level of service that users will tolerate or will be willing to accept. The services performed below the respondent's minimum expectations could create disappointment, frustration and dissatisfaction as well as decrease their loyalty and effective strategic plan implementation. In this study, a radar chart was used to present these expectations and satisfaction levels with the Radar Chart axis representing the 27 core survey questions of the Ministry of Health and Social Services' Balance Score Card of the strategic plan. Figure 5.1 presents the results.

Figure 5.1: Radar Chart of Satisfaction with Implementation of MoHSS Strategic Plan Objectives

- Perceived Greater Than Desired ■ Perceived Less Than Desired ■ Perceived Greater Than Minimum
- Perceived Less Than the Minum □ Perceived equal to the Minimum

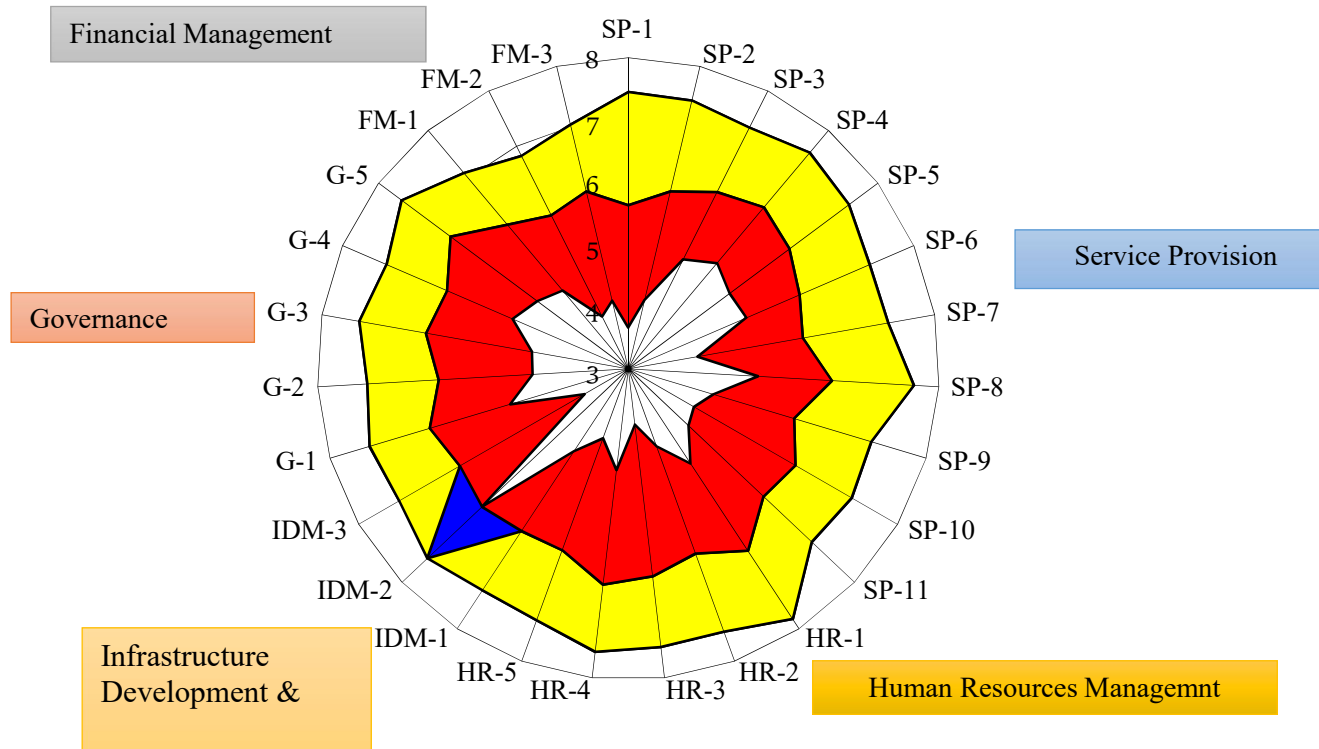


Figure 5.1 presents the statistical data of the respondents' satisfaction in terms of how the strategic plan objective met the minimum required implementation level of the respondents. The Radar Chart in figure 5.1 shows the aggregate results for the 27 Section A survey question responses. On each axis, respondents' minimum level, desired level and perceived levels of satisfaction with the strategic plan are plotted and the resulting "gaps" between the three levels represents implementation adequacy or implementation superiority depending on the shade of colour. The five dimensions or Strategy Themes are grouped together and labelled: Service Provision, Human Resource Management, Infrastructure development and management, Governance and Financial Management.

Figure 5.1 shows overall that the respondents are not adequately satisfied with the strategic plan implementation as seen in the high concentrations of the red and yellow shades. The implementation of the strategic plan objectives is not meeting the minimum levels of satisfaction required by the respondents with only one item in blue, others are perceived to perform less than the minimum (red) implementation adequacy. The chart also shows that the respondents' perceived level of satisfaction with strategy implementation is rated less than the desired levels (yellow) of implementation superiority. The only item perceived to perform better than minimum level (blue) is related infrastructure development and management (IDM-2).

The analysis continues by presenting descriptive item statistics for the expected satisfaction (ES) score and the LibQUAL rating's 3 scores for "perception", "desire", and "minimum" satisfaction. The ES score is a composite indicator of the extent to which the respondent is satisfied with the implementation of the strategic plan. Table 5.3 and Table 5.4 presents the results for the ES scores.

Table 5.3: Descriptive Item Statistics for higher expected satisfaction (ES) scores for MoHSS Staff (N=210)

Section A: Questionnaire Item Description	Mean (Std. Deviation)						Expected Satisfaction (ES)	
	Minimum	Perceived	Desired	Expected Satisfaction (ES)	ES Skewness	ES Kurtosis		
Human resource management Improve conditions of services for health and social workers.	6,50 (1,86)	4,82 (2,11)	7,81 (1,37)	5,60 (1,59)	-0,08	-0,43		
Governance Ensure responsive legislation and policies.	6,33 (1,73)	4,98 (2,23)	7,34 (1,47)	5,60 (1,69)	0,03	-0,84		
Governance Improve procurement and payment system.	6,17 (1,80)	5,02 (2,08)	7,23 (1,68)	5,58 (1,68)	0,17	-0,63		
Governance Strengthen the stewardship role of the MoHSS.	6,56 (1,85)	4,82 (2,09)	7,54 (1,50)	5,57 (1,56)	0,06	-0,34		
Governance Improve information management system.	6,30 (1,79)	4,57 (2,40)	7,39 (1,59)	5,50 (1,54)	-0,05	-0,51		
Human resource management Create skilled work force.	6,49 (1,83)	4,64 (2,04)	7,58 (1,58)	5,44 (1,56)	-0,01	-0,16		
Infrastructure development and management Improve health facilities to be responsive to emerging needs.	6,23 (1,84)	4,61 (2,22)	7,44 (1,42)	5,35 (1,64)	-0,02	-0,64		
Infrastructure development and management Ensure proper management of infrastructure and equipment.	6,12 (1,81)	4,59 (2,08)	7,26 (1,52)	5,29 (1,59)	0,21	-0,59		
Financial management Improve financial management.	6,02 (1,87)	4,64 (2,26)	7,11 (1,86)	5,28 (1,82)	0,02	-0,66		
Governance Implement efficient and effective contract management system.	6,05 (1,91)	4,54 (2,04)	7,20 (1,60)	5,23 (1,57)	0,05	-0,35		
Human resource management Ensure adequate and appropriate staff complement and strength.	6,16 (1,88)	4,32 (2,09)	7,50 (1,58)	5,16 (1,53)	0,02	0,20		
Service Provision Ensure prompt and effective response to disasters.	5,99 (1,97)	4,33 (2,49)	7,06 (1,64)	5,06 (1,92)	0,05	-0,75		
Human resource management Devolve levels of decision making to appropriate levels.	6,10 (1,91)	4,19 (2,19)	7,30 (1,58)	5,02 (1,61)	0,08	-0,59		

Table 5.4: Descriptive Item Statistics for Lower Expected Satisfaction (ES) scores for MoHSS Staff (N=210)

Section A: Questionnaire Item Description	Mean (Std. Deviation)				Expected Satisfaction (ES)	
	Minimum	Perceived	Desired	Expected Satisfaction (ES)	ES Skewness	ES Kurtosis
Financial management Ensure equitable and efficient allocation of resources among the ministry's directorates.	5,93 (2,02)	4,13 (2,18)	7,03 (2,08)	4,92 (1,80)	0,20	-0,40
Human Resource Management - Improves staff morale.	6,36 (1,96)	3,90 (2,46)	7,50 (1,72)	4,91 (1,83)	0,15	-0,63
Infrastructure development and management Provide minimum district service package.	6,12 (1,89)	3,81 (2,60)	7,25 (1,63)	4,77 (1,90)	0,17	-0,59
Service Provision Improve fleet management.	6,39 (1,78)	5,22 (2,03)	7,54 (1,52)	4,76 (1,78)	0,28	-0,59
Service Provision Reduce malnutrition.	6,28 (1,97)	5,09 (2,18)	7,60 (1,59)	4,75 (1,78)	0,31	-0,57
Financial management Ensure capital formation make up at least 10% of MoHSS total budget.	5,76 (1,99)	3,94 (2,44)	6,83 (1,97)	4,73 (1,98)	0,04	-0,77
Service Provision Provide adequate, formalised and structured community based health services.	6,23 (1,76)	5,03 (2,07)	7,42 (1,51)	4,72 (1,79)	0,31	-0,49
Service Provision Improve waste management system.	6,18 (1,78)	4,97 (2,05)	7,34 (1,59)	4,69 (1,83)	0,22	-0,73
Service Provision Improve Focus on core function.	5,93 (1,80)	4,14 (2,36)	7,43 (1,51)	4,67 (1,79)	0,39	-0,54
Service Provision Decrease mortality rates.	6,10 (2,04)	4,22 (2,49)	7,15 (1,71)	4,65 (1,90)	0,22	-0,58
Service Provision Improve stakeholder relationships and co-ordination.	6,00 (1,88)	5,07 (1,98)	7,23 (1,56)	4,65 (1,78)	0,20	-0,62
Service Provision Adopt and implement performance management system at all level.	5,85 (2,11)	4,13 (2,58)	7,24 (1,84)	4,62 (1,76)	0,27	-0,34
Service Provision Streamline and harmonise services/functions/programs.	5,63 (1,97)	3,66 (2,50)	7,45 (1,63)	4,62 (1,77)	0,31	-0,46
Service Provision Decrease morbidity rates.	5,78 (2,01)	4,43 (2,48)	7,08 (1,76)	4,58 (1,88)	0,29	-0,70

A higher expected satisfaction score (above 5) indicates that the respondents' satisfaction level of strategic plan implementation is closer to their desired level of the implementation (Table 5.3). Overall, Table 5.3 presents the 13-items, which the MoHSS staff were moderately satisfied with during implementation of the Strategic Plan. These include all Governance objectives (with ES Means from 5.50 to 5.60). All Human Resource objectives (with ES Means above 5.1) except for Improving Staff Morale (M= 4.91. S. D= 1.83). The other higher satisfaction objectives include Improved financial management.

From the 27-item statements used to assess the Satisfaction with the MOHSS strategic plan objectives for 2009- 2013 Implementation (Dependant Variable), only 13-items scored a higher expected satisfaction score and these are presented in Table 5.3, in which 14-item statements scored a lower expected satisfaction score. The results show that the item statement HR-1 "*Improve conditions of services for health and social workers*" (M = 5.60, S. D=1.59) had the highest expected satisfaction score, which implies that the MoHSS staff felt that the successful implementation of this strategic goal was very important. The staff also have a high desired level of satisfaction for this objective (M= 7.81, S. D= 1.37), and the minimum level of satisfaction is very high (M=6.50, S. D=1.86). However, their perceived level of current implementation is moderate (M=4.82, S. D=2.11). While, a lower expected satisfaction score (below 5) indicates that the respondents were not satisfied with the strategic plan implementation (Table 5.4). Overall, Table 5.4 presents the 14-items, which the MoHSS staff were not satisfied with during the implementation of the Strategic Plan. These include most of the Service provision objectives.

Implementation success factors

Table 5.5: Descriptive Item Statistics for Implementation success factors (N=210)

CSF	Item Statement	Minimum		Perceived		Desired		Expected		Expected	
		Mean	S. D	Mean	S. D	Mean	S. D	Mean	S. D	Skewness	Kurtosis
4	Service Provision Social norms and impact on community factors.	6,45	1,91	5,49	2,08	7,68	1,42	6,01	1,57	-0,19	-0,34
12	Human resource management Understanding and effective use of the strategic plan implementation tools.	6,54	1,81	5,37	1,95	7,55	1,65	5,93	1,50	-0,26	0,26
10	Human resource management Staff member education and training on the strategic plan.	6,73	1,82	5,29	2,06	7,63	1,61	5,92	1,58	-0,26	-0,12
17	Governance Role of Information Technology.	6,33	1,78	5,41	2,02	7,42	1,49	5,90	1,52	-0,31	-0,02
15	Governance Legal norms.	6,46	1,69	5,37	2,05	7,40	1,52	5,89	1,55	-0,13	-0,82
3	Service Provision Employees re-orientation to change organisational culture.	6,30	1,74	5,37	1,96	7,39	1,49	5,86	1,47	-0,04	-0,31
7	Human resource management Top management support, commitment and involvement.	6,60	1,92	5,20	2,07	7,63	1,52	5,84	1,59	-0,20	-0,19
18	Governance Inspirational leadership.	6,46	1,72	5,23	1,91	7,43	1,56	5,80	1,47	0,24	-0,53
6	Service Provision Client driven centred.	6,10	1,77	5,31	1,84	7,20	1,62	5,76	1,41	-0,31	-0,26
19	Financial management Financial control and planning optimization.	6,38	1,83	5,06	2,00	7,50	1,45	5,69	1,55	-0,14	-0,36
16	Governance Use of external consultants.	6,34	1,81	5,02	1,99	7,36	1,52	5,62	1,53	-0,22	0,45
13	Infrastructure development and management Competitive orientation of the organisation.	6,30	1,77	4,95	2,12	7,41	1,46	5,58	1,57	-0,08	-0,51
20	Financial management project management skills.	6,40	1,86	4,89	2,00	7,46	1,66	5,57	1,56	0,08	-0,32
14	Infrastructure development and management Organisational orientation to local competition.	6,24	1,83	4,94	2,02	7,22	1,60	5,54	1,57	0,01	-0,10
2	Service Provision Community involvement in corporate decision making.	6,16	1,78	4,86	2,17	7,29	1,59	5,48	1,65	-0,27	-0,11
8	Human resource management Interdepartmental cooperation and teamwork.	6,16	1,84	4,79	2,12	7,38	1,66	5,45	1,56	-0,33	0,23
11	Human resource management Competence of the strategic plan implementation Steering Committee.	6,10	1,83	4,82	2,02	7,17	1,67	5,43	1,53	-0,07	-0,14
5	Service Provision Linking incentive system to the plan.	5,94	2,11	4,82	2,22	7,17	1,74	5,40	1,73	-0,11	-0,21
9	Human resource management Internal communication, stakeholder management and public relations.	6,30	2,04	4,59	2,26	7,47	1,71	5,35	1,68	-0,19	-0,44
1	Service Provision Organisational Alignment and articulates explicitly its purpose, vision And values consistency with core business.	5,71	1,93	4,71	2,16	7,21	1,58	5,29	1,67	-0,04	-0,16

In Section B of the questionnaire, respondents were asked to identify the Implementation success factors required for ensuring the success of an organisation in achieving its Strategic Mission and Objectives (Independent Variables). Table 5.5 presents the results. The identification of these ISFs was meant to help the MoHSS staff to direct and measure the success of the public healthcare system in Namibia. Table 5.5 shows the 20-item statements used to identify the Implementation success factors required for ensuring success of an organisation in achieving its Strategic Mission and Objectives. The item factors are sorted in descending order of the expected value and the results show the importance of service provision, human resources and governance factors to the success of the organisation in achieving its Strategic plan. Identifying implementation success factors is an iterative process that highly considers the link between the organisation's mission and strategic goals to deduce essential elements of organisational activity for achieving success.

According to Rothberg and Morrison (2012, p. 2), the identification of implementation success factors should begin with an analysis of the organisation's strengths, weaknesses, opportunities, and threats (SWOT). The process of implementation success factors identification should then look at the factors that are interrelated with, or have significant impact on, other areas of the business. This process also involves evaluating how the organisation monitoring and measuring the performance achievement of its strategic plan implementation and how such process is communicated to the entire staff of the ministry and relevant stakeholders.

Implementation Failure Factors

Table 5.6: Descriptive Item Statistics for Implementation Failure Factors (N=210)

Section C: Questionnaire Item Statement	Mean	S. D	Skewness	Kurtosis
Your hospital can't implement strategic plan for the reason that it is public healthcare hospital (FF2)	3,2	<i>0,8</i>	-0,9	1,2
The people who execute the plan may agree to another plan too (FF6)	2,3	<i>1</i>	0,4	-0,6
Strategic plans implementation failed due to lack of communication system of the ministry (FF3)	2,3	<i>1</i>	0,3	-0,8
The executive of the organisation helps organisational members in implementing the strategic plan (FF8)	2,2	<i>0,9</i>	0,2	-0,8
The structure of the hospital may become a barrier in implementing the strategic plan (FF12)	2,1	<i>1</i>	0,5	-0,8
The difference of opinion among staff and management members affects performance of the hospital/region (FF4)	1,9	<i>0,9</i>	0,8	0,1
The managers must adopt strict attitudes to implement the strategic plan once developed (FF15)	1,9	<i>0,9</i>	0,8	-0,1
Limited resources cause to implement or accomplish strategic Plan (FF1)	1,9	<i>1</i>	0,8	-0,7
After completion of the strategic plan formulation, opinion of the operational staff must be obtained for its rejection or acceptance before its implementation (FF11)	1,9	<i>0,8</i>	0,9	0,4
New problems may occur while implementing the strategic plan (FF5)	1,8	<i>0,7</i>	1,2	2,5
The strategic plan must be prepared in accordance to the system of an organisation (FF14)	1,8	<i>0,8</i>	1,1	1,1
Whatever the strategic plan is, it must be prepared in accordance to information of the organisational objectives (FF13)	1,7	<i>0,7</i>	1,1	1,6
Lack of leadership or instructions of leadership cause failure of the strategic plan implementation (FF8)	1,6	<i>0,8</i>	1,3	1,4
Before implementation of the strategic plan, all materials or important information about the strategy need to be in place(FF10)	1,6	<i>0,6</i>	0,8	0,7
The people who are assigned to execute the strategic plan must have education and expertise in the strategic plan modelling(FF7)	1,5	<i>0,7</i>	1,4	2,5
Client's satisfaction rating on services rendered by the hospital shall be the critical determinant factor for the success of the strategic plan implementation (FF17)	1,5	<i>0,7</i>	1,6	2,4
Before implementing the strategic plan, duties and nature of assignment of each manager must be clearly defined(FF16)	1,4	<i>0,7</i>	1,8	3,6

In Section C of the questionnaire, the respondents were asked to identify the barriers to the implementation of the MoHSS strategic plan objectives for 2009-2013. Table 5.6 presents the results. Table 5.6 shows the 17-item statements used to identify the barriers to the implementation of the MoHSS strategic plan objectives for 2009-2013. The item factors are sorted in the descending order of the mean. The lower mean value (1) results imply that the respondents strongly agree with the item statement, while a higher mean value (5) would imply they strongly disagree with the item statement. The results show that the respondents agree on the importance of these items in impeding the success of the organisation in achieving its Strategic plan. However, there were mixed responses to the statement that *'Your hospital can't implement the strategic plan for the reason that it is a public healthcare hospital'* (M=3.2, S. D=0.8), with a slight skewness to the right (-0.9) implying that a slight majority disagree with the statement. The skewness and Kurtosis values show that the results were within range for normality assumption.

5.4 Validation of the Measurement Model

This section presents the results of the SPSS EFA and SPSS AMOS CFA models, which were used to evaluate the role of measurement error in the model.

Expected Implementation Satisfaction (EIS)

The Expected Implementation Satisfaction (EIS) scale includes 27 items that consist of 11 items on service provision, 5 items on governance, 3 items on infrastructure development, 5 items on human resource management and 3 items on financial management. EFA is used to group the 27 items into three factors of institutions that have control in ensuring effectiveness of the implementation. The factors include the public healthcare organisation (the state intermediate hospitals), the responsible government

ministry (MoHSS) and the public sector effect (MWT, MoF & PSC). Human Resource Management (5 items). Table 5.7 presents the results.

Table 5.7 EFA Analysis of EIS Scale

Variable	Description	Factor		
		MoHSS	PSE	PHO
Service_Prov_ES_Focus	Improve focus on core function	.934		
Service_Prov_ES_Fleet	Improve fleet management	.922		
Service_Prov_ES_Stream	Streamline and harmonize services	.920		
Service_Prov_ES_Dec_Mort	Decrease mortality rates	.918		
Service_Prov_ES_Dec_Morb	Decrease morbidity rates	.918		
Service_Prov_ES_Waste	Improve waste management system	.917		
Service_Prov_ES_Adeq_Form	Provide adequate, formalized and structured community based health	.917		
Service_Prov_ES_Stake	Improve stakeholder relations and coordination	.915		
Service_Prov_ES_Red_Mal	Reduce malnutrition	.906		
Service_Prov_ES_PMS	Adopt and implement management system	.906		
HRM_Devolve_Decision	Devolve decision making to appropriate levels		.773	
HRM_Skilled_Force	Create a skilled work force		.729	
HRM_Staff_Morale	Improve staff morale		.703	
Infrastructure_MDSP	provide a minimum district service package (MDSP)		.659	
HRM_Adeq_Staff_comp	Ensure adequate and appropriate staff complement and strength		.604	
Governance_Contract	Implement efficient and effective contract management system		.579	.343
Governance_Leg_Policies	Ensure responsive legislation and policies		.550	.444
Infrastructure_Faci_emerging	Improve health facilities to be responsive to emerging needs		.526	.349
Infrastructure_mgt equip	Ensure proper management of infrastructure and equipment		.520	.418
HRM_Condition_workers	Improve conditions of service for staff		.513	
Service_Prov_ES_Disasters	Ensure prompt and effective response to disasters	.333	.413	.313
Governance_MIS	Improve information management system			.827
Governance_Stewardship	Strengthen the stewardship role of MoHSS			.804
Financial_mgt_Improve	Improve financial management	.314		.691
Governance_Proc_Pay	Improve the procurement and payment system		.303	.667
Financial_mgt_Capt	Ensure capital formation make up at least 10 percent MOHSS total budget	.317		.654
Financial_mgt_Equit	Ensure equitable and efficient allocation of resources	.349	.311	.579
Eigenvalue		14.305	3.747	1.675
% of Variance		52.982	13.878	6.203
Cumulative %		52.982	66.860	73.063

Table 5.7 presents the results from the EFA that used Principal Axis Factoring with Direct Oblimin rotation. The 27-item EIS scale is reduced to the three factors of public healthcare organisation (PHO), Ministry of Health and Social Services (MoHSS) and Public Sector Effect (PSE). The results are consistent with Myers, *et al.*, (2013)'s assessment of the Namibian hospital governance structure, autonomy and management (see Figure 3.1).

Myers, *et al.*, (2013) highlights the organisational structure and bureaucratic processes of healthcare service provision in Namibia, where, service provision by both MOHSS and PHO is affected by PSE, in that their buildings are managed by the Ministry of Works and Transport. On the other hand, their human resources are managed by the Public Sector Commission and financial management is effected through the Ministry of Finance. This makes it challenging for hospital management teams to effectively implement any strategic interventions. Additionally, health facilities require specialised construction and major renovations to improve patient safety, poor sanitation services and unpredictable water supply that increase the risk of hospital acquired infections (Myers, *et al.*, 2013).

Furthermore, the study used SPSS AMOS version 23 software to determine construct validity of the three EIS measures. The analysis also involved the determination of the EIS model fit for further analysis, using the iteration method suggested by Gaskin (2017) and model fit measure cut off criterion from Hu & Bentler (1999) as applied in the Gaskin and Lim, (2016) AMOS Model fit measures Plugin.

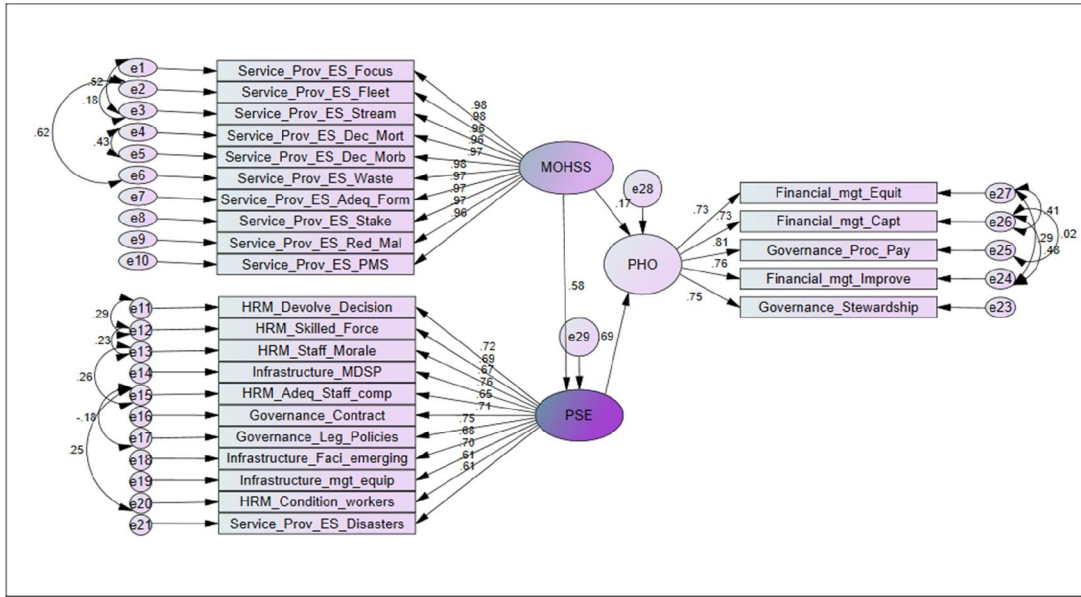


Figure 5.2 EIS Model Fit

Figure 5.2 shows that PHO is dependent on PSE and the MoHSS for effective implementation of strategic interventions. It also shows that PSE is dependent on MoHSS.

Table 5.8 presents the model fit measures.

Table 5.8 EIS Model Fit Measures

Measure	Estimate	Threshold	Cutoff Criteria*			Interpretation
			<i>Terrible</i>	<i>Acceptable</i>	<i>Excellent</i>	
CMIN	440.734	--				--
DF	283	--				--
CMIN/DF	1.557	Between 1 and 3	>5	>3	>1	Excellent
CFI	0.977	>0.95	<0.90	<0.95	>0.95	Excellent
SRMR	0.054	<0.08	>0.10	>0.08	<0.08	Excellent
RMSEA	0.052	<0.06	>0.08	>0.06	<0.06	Excellent
PClose	0.346	>0.05	<0.01	<0.05	>0.05	Excellent

*Hu & Bentler (1999) as applied in the Gaskin and Lim, (2016) AMOS Model fit measures Plugin

Table 5.8 presents the model fit measures of the final EIS model from numerous iterations guided by the cut off criteria and validity concerns. The EIS model fit was excellent, without any validity concerns.

Implementation Success Factors (ISF)

The Farzin, *et al.*, (2014) unidimensional, 20-item Implementation success factors (ISF) scale was evaluated using Principal Axis Factoring with Direct Oblimin rotation. The results presented in Table 5.9 show that the 20-item ISF scale is reduced to four dimensions.

Table 5.9: Results of the Factor Analysis on ISF Scale

Variable	Description	Operational	Context	Content	Structure
ISF_10_HRM_Edu_Tr	Staff member education and training	.718	.309		
ISF_11_HRM_Compt_Com	Competence of the implementation Steering Committee.	.610			
ISF_12_HRM_SP_Imp_Tools	Understanding and effective use of the strategic plan implementation tools.	.740			
ISF_8_HRM_Inter_Coop	Interdepartmental cooperation and teamwork.	.546		.381	
ISF_9_HRM_Internal_Com	Internal communication, stakeholder management and public relations.	.632			
ISF_13_Infra_Dev_Mgt_Competitive	Competitive orientation of the organisation.		.424		
ISF_14_Infra_Dev_Mgt_Competitive_Loc	Organisational orientation to local competition.	.355	.529		
ISF_15_Governance_Legal	Legal norms.		.640		
ISF_16_Governance_Ext_Cons	Use of external consultants.	.312	.546	.346	
ISF_17_Governance_Inf_Tech	Role of Information Technology.		.390		.368
ISF_3_Service_Prov_Emp_cult	Employees re-orientation to change in culture.		.556		
ISF_4_Service_Prov_Social	Social norms and impact on community factors.		.560		
ISF_1_Service_Prov_Org_Core	Organisational alignment & consistent with core business			.600	
ISF_2_Service_Prov_Comm_Corp	Community involvement in corporate decision making.			.771	
ISF_5_Service_Prov_Incetive	Linking incetive system to the plan.			.375	
ISF_6_Service_Prov_Cl_Dr	Client driven centred.		.303	.353	
ISF_7_HRM_Top_Mgt	Top management support, commitment and involvement.			.424	
ISF_18_Governance_Ins_Lea	Inspirational leadership.		.433		.460
ISF_19_Financial_Mgt_Fin_Coant	Financial control and planning optimization.				.852
ISF_20_Financial_Mgt_Proj_Mgt	project management skills.				.639
Eigenvalue		7.29	1.45	1.40	1.24
% of Variance		36.47	7.26	7.00	6.20
Cumulative %		36.47	43.73	50.73	56.93

Table 5.9 results are not consistent with Farzin, *et al.*, (2014) who modelled it as a unitary dimension of implementation in the service sector. However, the results are consistent with the four dimensions suggested by Kalali *et al.*, (2011) and Sial *et al.*, (2013). The four dimensions were then confirmed and validated using CFA/SEM model fit. The results are presented in Figure 5.3 and Table 5.10.

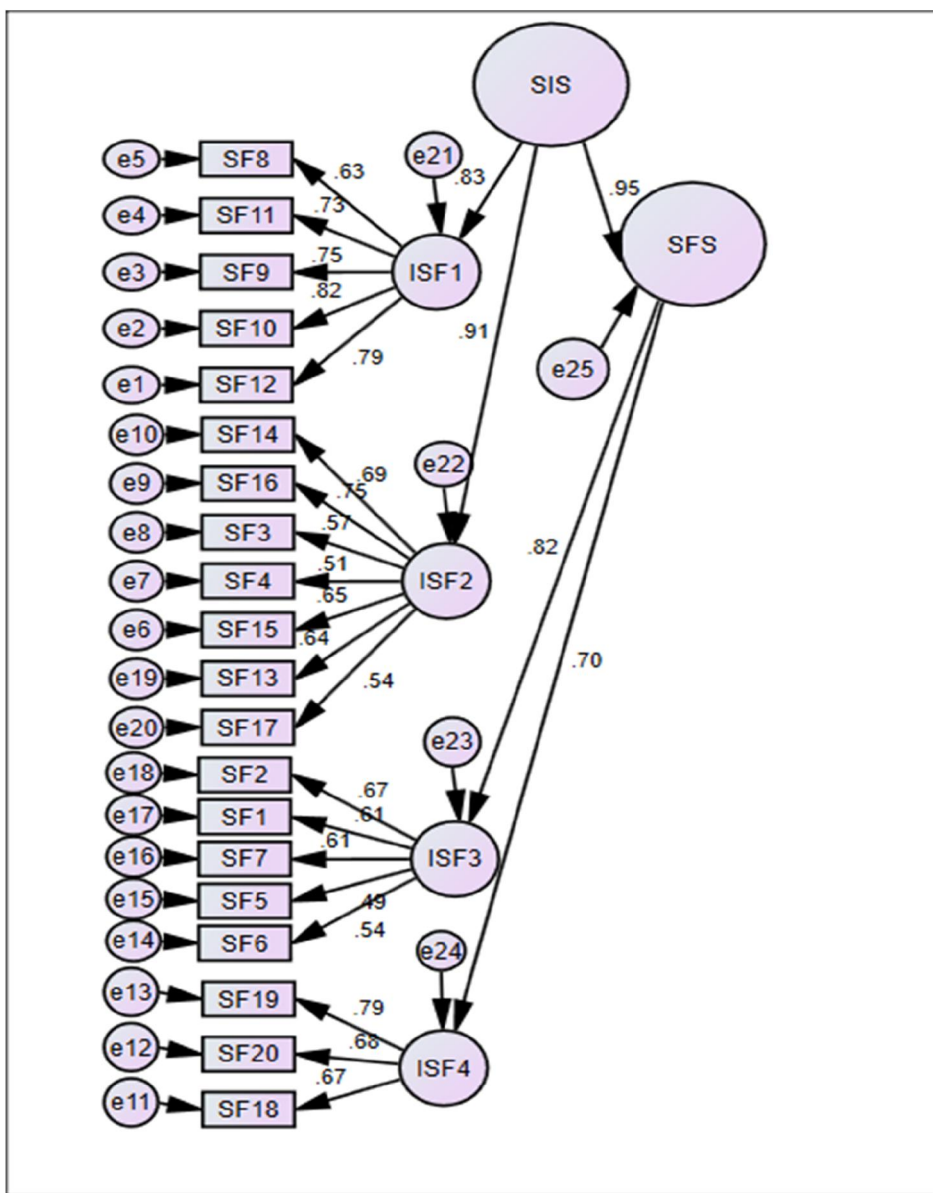


Figure 5.3 ISF Model Fit

Figure 5.3 presents the results from the ISF model fit. AMOS modelling iterations were used to test the hypothesis that Kalali, et al., (2011)'s four factors may actually represent strategic plan phases. The resultant model fit suggests that it is plausible to categorize these four factors into strategic formulation factors and strategy implementation factors. As such, the study develops the SFS factor to represent factors that affect the strategy formulation success (SFS), while the SIS factor represents the factors that would affect the strategy implementation success (SIS). The model fit measures of this model are presented in Table 5.10.

Table 5.10 ISF Model Fit Measures

Measure	Estimate	Threshold	Cutoff Criteria*			Interpretation
			Terrible	Acceptable	Excellent	
CMIN	311.289	--				--
DF	165	--				--
CMIN/DF	1.887	Between 1 and 3	>5	>3	>1	Excellent
CFI	0.904	>0.95	<0.90	<0.95	>0.95	Acceptable
SRMR	0.067	<0.08	>0.10	>0.08	<0.08	Excellent
RMSEA	0.066	<0.06	>0.08	>0.06	<0.06	Acceptable
PClose	0.012	>0.05	<0.01	<0.05	>0.05	Acceptable

*Hu & Bentler (1999) as applied in the Gaskin and Lim, (2016) AMOS Model fit measures Plugin

Table 5.10 presents the model fit measures of the final ISF model from numerous iterations guided by the cut off criteria and validity concerns. The ISF model fit was acceptable and did not have any validity concerns.

Implementation Failure Factors (IFF)

The 17-item Implementation Failure Factors (IFF) scale based on Kalali *et al.*, (2011) was evaluated using Pallant's (2010) Principal Axis Factoring with Varimax rotation. However, the extraction was terminated by SPSS; it could not extract the 6 factors with eigenvalues of exceeding 1.0. Therefore, EFA was rerun by changing the EFA method, in order to extract four fixed factors or dimensions. However, for this study the factor loadings were not consistent with those found in the literature, as Table 5.11 will show.

Table 5.11: Results of the Factor Analysis on IFF Scale

Variable Description	Context	Operational	Content	Structure
FF_4_Divergent_views	.632			
FF_3_Poor_Communication	.599			
FF_6_Disharmony	.537			
FF_5_Envrionmental_Uncertainty	.486			
FF_8_Lack_Leadership_guidance	.476			
FF_13_Ineffective_operational_arrangement		.814		.301
FF_14_Non_convergence_varied_aspects_2strategy		.665		
FF_15_Lack_of_commitment_decisionmakers		.483	.309	
FF_16_unclear_ambiguous_strategy			.559	
FF_17_Strategy_not_patient_centered			.460	
FF_12_Divergent_organisational_culture		.310	.403	
FF_11_Non_acceptor_organisational_culture			.393	
FF_1_Resource_Limitation			.317	
FF_10_Unclear_success_targets			.463	.522
FF_9_Lack_executive_support				.499
FF_7_Lack_capable_staff				.441
FF_2_Failing_Culture				
Eigenvalue	3.880	1.905	1.321	1.252
% of Variance	22.825	11.208	7.770	7.366
Cumulative %	22.825	34.034	41.804	49.169

Table 5.11 shows the significant factor loadings, bolded, FF-13, FF-15, FF-12 and FF-10 cross-loaded but were included because they would be included in the CFA/SEM analysis.

The results also show that four distinct factors emerged which explained a cumulative variance of 49.169 percent in the Implementation Failure Factors (IFF) scale. Although, the results were consistent with the four dimensions suggested by Kalali *et al.*, (2011) and Sial *et al.*, (2013), in terms of factor loading. The factor grouping was done using the definitions of the four dimensions (Sial *et al.*, 2013). The CFA/SEM model fit procedure was carried out for the confirmation and validation of the IFF scale. Figure 5.4 and Table 5.12 presents the results.

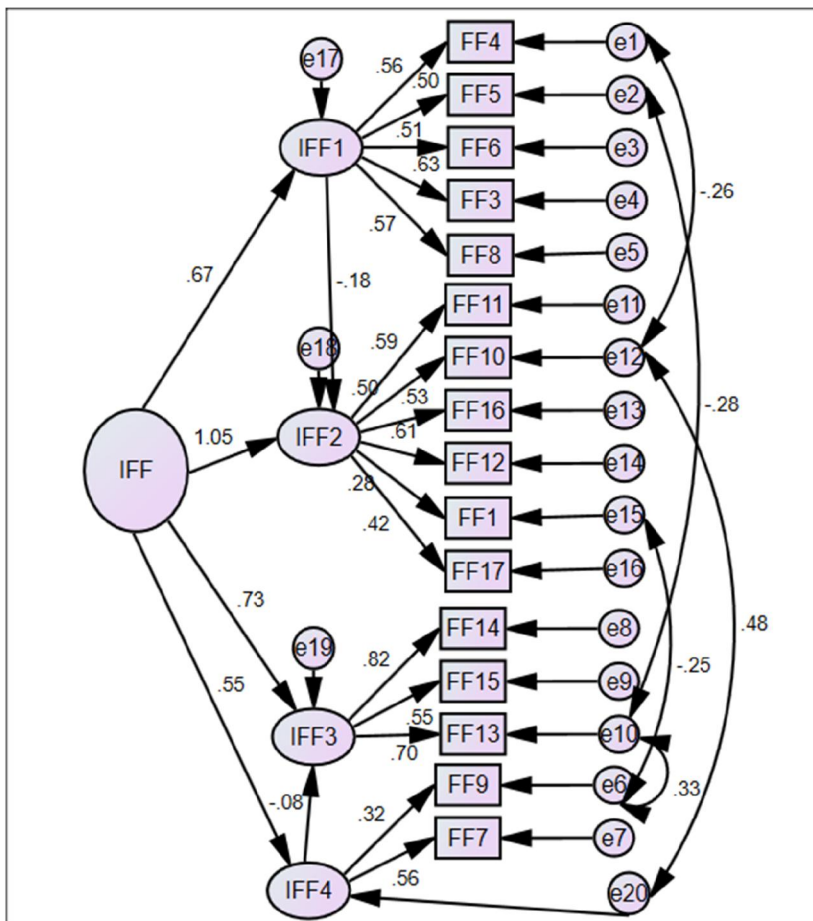


Figure 5.4 IFF Model Fit

Figure 5.4 presents the results from the IFF model fit. According to Cohen (1988) correlational effects less than 0.3 are interpreted small or weak, with 0.3 to 0.6 as mild or moderate and values above 0.6 as strong relationships. The CFA/SEM analysis highlights poor correlational effects but strong covariance among the factors. This could be the reason for inconsistent factor loadings with those of Kalali, *et al.* (2011) and Sial, *et al.* (2013).

There is consistency in factor loadings of Sial, *et al.*, (2013) and Kalali, *et al.*, (2011). For both studies, FF10, FF16, FF15, FF4 and FF9 loaded on 'content'. The content dimension was used on factors involving strategy formulation. While, FF11, FF14, FF2 and FF5 loaded on 'context'. The contextual dimension included the internal and external environmental factors for the strategy implementation in public sector organizations (Sial, *et al.*, 2013; Kalali, *et al.*, 2011). The structural dimension was for factors covering organizational structure, power, and responsibilities. These were FF12, FF6, and FF7 loaded on 'structure'. Lastly, the operational dimension grouped factors that happen in the operational levels during the strategy implementation. FF13, FF3, FF1 and FF8 loaded on 'operational' (Sial *et al.*, 2013).

The model fit measures of the IFF model are presented in Table 5.12.

Table 5.12 IFF Model Fit Measures

Measure			Cutoff Criteria*			Interpretation
	Estimate	Threshold	Terrible	Acceptable	Excellent	
CMIN	148.196	--				--
DF	94	--				--
CMIN/DF	1.577	Between 1 and 3	>5	>3	>1	Excellent
CFI	0.914	>0.95	<0.90	<0.95	>0.95	Acceptable
SRMR	0.064	<0.08	>0.10	>0.08	<0.08	Excellent
RMSEA	0.053	<0.06	>0.08	>0.06	<0.06	Excellent
PClose	0.364	>0.05	<0.01	<0.05	>0.05	Excellent

*Hu & Bentler (1999) as applied in the Gaskin and Lim, (2016) AMOS Model fit measures Plugin

Table 5.12 presents the model fit measures of the final IFF model, guided by the cut off criteria and validity concerns. The IFF model fit was excellent and did not have any validity concerns.

Demography Control Variables

The Demography control variable (DCV) scale includes 6 items consisting of Age group, Gender, Region, Experience in Years, Occupation and Current Position. The 5-item Demographic control variable (DCV) scale is evaluated using Principal Component Analysis with Direct Oblimin rotation. This analysis explained a total variance of 83.353 percent of the variance in DCV (factor loadings: $0.868 < r < 0.984$). Table 5.13 presents the results.

Table 5.13: Results of the Factor Analysis on DCV Scale

Item Description	Management Level	Years	Region
Position in Organisation	-,957		
Level in Management	-,956		
Sex of the Participant	,453	,320	
Age Category		,950	
Years of working experience		,941	
Region under study			,984
Organisation Name			,868
Eigenvalue	2,470	2,044	1,320
% of Variance	35,290	29,204	18,859
Cumulative %	35,290	64,494	83,353

Table 5.13 shows the significant factor loadings in bold. The table show that the demographic and career variables have virtually identical content. Therefore, one should be dropped. AMOS was used to estimate the interrelationships between the variables and the result is presented in Figure 5.5. Figure 5.5 shows that ‘work experience’ is dependent on the ‘region’. While, ‘management level’ is dependent on ‘work experience.

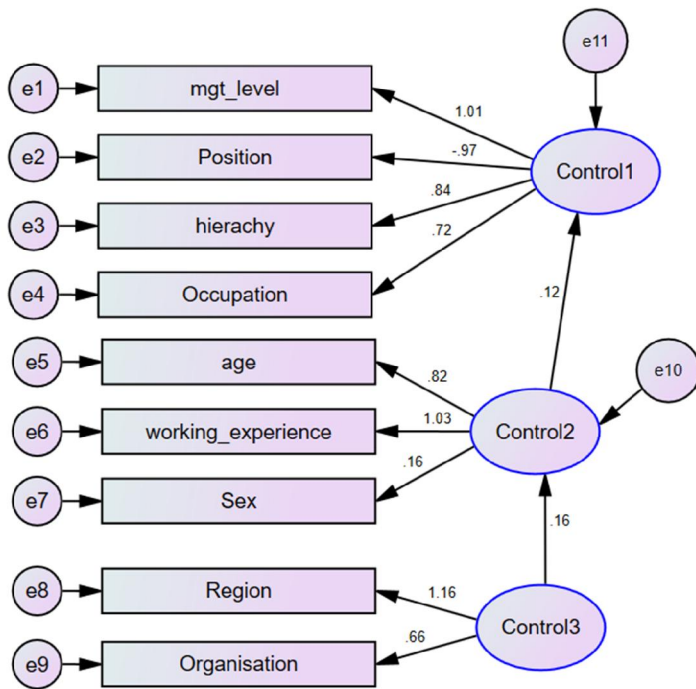


Figure 5.5 DCV Model Fit

5.5 Structural Equation Modelling (SEM)

SEM is used to test the conceptual model suggested in section 3.8 (Figure 3.3). For this research, three implementation constructs were first validated by conducting CFA (refer to section 5.4). Secondly, the model adequacy was evaluated by means of goodness-of-fit measures for the overall structural model. Maximum likelihood estimation with residual moments and modification indices was used for the model estimation and structural path coefficient. The SEM estimates using PHO staff perceptions the structural relationships between the implementation satisfactions constructs of EIS (represented by PHO, MoHSS, and PSE), ISF (represented by ISF1, ISF2, ISF3, ISF4) and IFF (represented by IFF1, IFF2, IFF3, IFF4). Figure 5.6 presents the results.

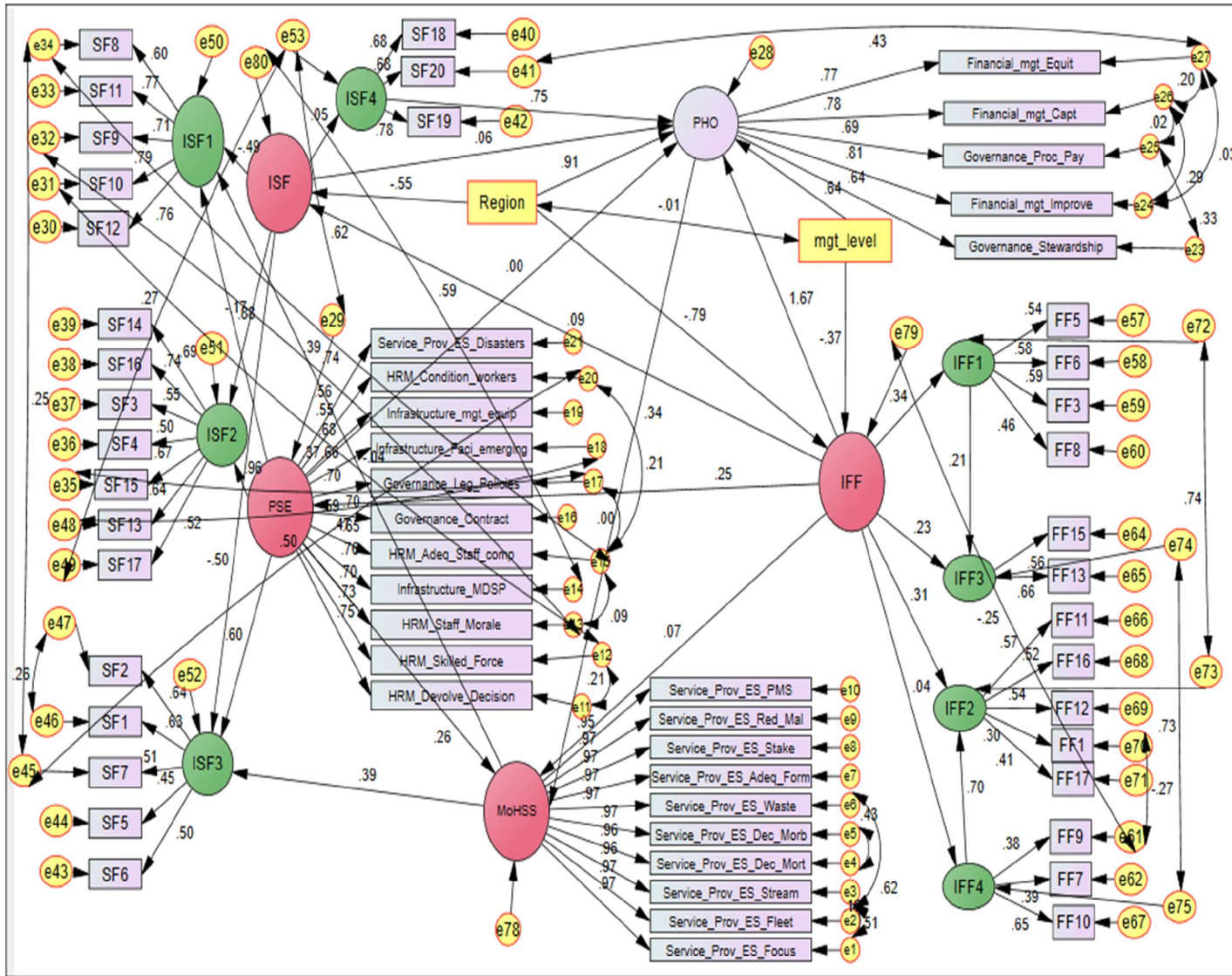


Figure 5.6 Final SEM Model

The Final SEM model fit measures are presented in Table 5.14.

Table 5.14 Final SEM Model Fit Measures

Measure			Cutoff Criteria*			Interpretation
	Estimate	Threshold	Terrible	Acceptable	Excellent	
CMIN	2877.016	--				--
DF	1776	--				--
CMIN/DF	1.62	Between 1 and 3	>5	>3	>1	Excellent
CFI	0.896	>0.95	<0.90	<0.95	>0.95	Need More DF
SRMR	0.087	<0.08	>0.10	>0.08	<0.08	Acceptable
RMSEA	0.055	<0.06	>0.08	>0.06	<0.06	Excellent
PClose	0.014	>0.05	<0.01	<0.05	>0.05	Acceptable

Table 5.14 shows that most of the fit indices indicate acceptable to excellent fit, the CFI (Comparative Fit Index), is marginally at the acceptable cut off of 0.9 (0.896). The final model fit was affected by covariance and modification indices were used to improve the model fit without removing any variables. The logic used in improving the model was that of keeping all the original items for interpretation. The factors and path relationships that do not align with any plausible theory will be omitted.

5.6 Interpretation of the CFA/SEM Models

Using MS Excel, the research sought to interpret the CFA and SEM model in the context of the research, as well as highlight some contributions and discoveries made in the study. The standardized regression weights of the fitted models were exported to MS Excel and arranged to reflect the overall regression weight values of the model fit paths. The revised regression weights were then sorted in descending order. The factors were then categorised into strategy formulation success factors (SFS) and strategy implementation success factors (ISF).

Expected Implementation Satisfaction (EIS)

Table 5.17 presents the interpretation of the EIS model factors and their standardized regression weights on the final SEM model.

Table 5.15 Interpretation of EIS factors

Dependent	Independent	Standardized	PHO	MoHSS	PSE
Governance.Stewardship	Hospital_Mgt (PHO)	0.64	0.64	0.22	0.00
Financial_mgt_Improve	Hospital_Mgt	0.81	0.81	0.28	0.00
Financial_mgt_Capt	Hospital_Mgt	0.78	0.78	0.27	0.00
Financial_mgt_Equrt	Hospital_Mgt	0.77	0.77	0.26	0.00
Governance_Proc_Pay	Hospital_Mgt	0.69	0.69	0.23	0.00
Ministry_Health_SS	PHO or PSE	0.34	0.34	1.00	0.26
Service_Prov_ES_Focus	Ministry_Health_SS (MoHSS)	0.97	0.33	0.97	0.25
Service_Prov_ES_Fleet	Ministry_Health_SS (MoHSS)	0.97	0.33	0.97	0.25
Service_Prov_ES_Dec_Morb	Ministry_Health_SS (MoHSS)	0.97	0.33	0.97	0.25
Service_Prov_ES_Waste	Ministry_Health_SS (MoHSS)	0.97	0.33	0.97	0.25
Service_Prov_ES_Adeq_Form	Ministry_Health_SS (MoHSS)	0.97	0.33	0.97	0.25
Service_Prov_ES_Stake	Ministry_Health_SS (MoHSS)	0.97	0.33	0.97	0.25
Service_Prov_ES_Red_Ma!	Ministry_Health_SS (MoHSS)	0.97	0.33	0.97	0.25
Service_Prov_ES_Stream	Ministry_Health_SS (MoHSS)	0.96	0.33	0.96	0.25
Service_Prov_ES_Dec_Mort	Ministry_Health_SS (MoHSS)	0.96	0.33	0.96	0.25
Service_Prov_ES_PMS	Ministry_Health_SS (MoHSS)	0.95	0.32	0.95	0.25
Infrastructure_mgt equip	Public_Sector_Effect (PSE)	0.68	0.00	0.18	0.68
Infrastructure_M DS P	Public_Sector_Effect (PSE)	0.76	0.00	0.20	0.76
HRM_Devolve_Decision	Public_Sector_Effect (PSE)	0.75	0.00	0.20	0.75
HRM_Skilled_Force	Public_Sector_Effect (PSE)	0.73	0.00	0.19	0.73
HRM_Staff_Morale	Public_Sector_Effect (PSE)	0.70	0.00	0.18	0.70
Governance_Contract	Public_Sector_Effect (PSE)	0.70	0.00	0.18	0.70
Governance_Leg_Policies	Public_Sector_Effect (PSE)	0.70	0.00	0.18	0.70
Infrastructure_Faci_emerging	Public_Sector_Effect (PSE)	0.66	0.00	0.17	0.66
Service_Prov_ES_Disasters	Public_Sector_Effect (PSE)	0.56	0.00	0.15	0.56
HRM_Condition_workers	Public_Sector_Effect (PSE)	0.55	0.00	0.14	0.55
Hospital_Mgt	Management level	0.64	0.64	0.22	0.00
Hospital_Mgt	Region	0.91	0.91	0.31	0.00
Ministry_Health_SS	IFF	0.07	-0.12	0.07	0.02
Public_Sector_Effect	IFF	0.25	-0.42	0.02	0.07
IFF	Management level	-0.37	0.62	-0.03	-0.10
ISF	Region	-0.55	-0.50	-0.17	0.00
IFF	Region	-0.79	-0.72	-0.24	0.00
IFF	Hospital_Mgt	-1.67	-1.67	-0.12	0.00
ISF	IFF	0.09	-0.15	0.01	0.02

Table 5.16 shows that the PSE does not have a direct effect on the PHOs. Therefore, the MoHSS acts as mediator in the relationship. This implies that the PSE institutions like MWT who own the hospital infrastructure do not have any direct interactions with the

hospitals. This could explain the poor state of Hospital infrastructure in the country. The no effect relations with PSE institutions like the PSC and MoF also affect the human resources and financial management functions. There is need for shared accountability with respect to hospital service quality, as the underlying factor affecting effective implementation involves a number of public sector players. The results also show a 1:2 mediation effect from the MoHSS. This implies that PHOs carry out a third (33%) of the MoHSS mandates such as reduce malnutrition, decrease mortality and morbidity.

The results also show that region or organisational name (0.91) had a very strong effect on the satisfaction perceptions of the staff. Management level (0.64) had moderate positive effects on the staff satisfaction with implementation.

Implementation Success Factors (ISF)

According to Oreku, Mtenzi and Al-Dahoud (2013) regression analysis model take the form of an equation, which contains a coefficient (b) for each predictor. The estimates for these b values indicate the individual contribution of each predictor to the model (Field, 2009; Oreku et al., 2013). The b values tell us about the relationship between dependent variable (PHO/MoHSS/PSE) and each predictor (ISF). If the value is positive, it implies that there is a positive relationship between the predictor and the outcome, while, a negative coefficient represents a negative relationship (Oreku et al., 2013). The ISF predictors for the ISF model and the final SEM model are presented in Table 5.16.

Table 5.16 Interpretation of ISF factors

Variable	Category	ISF Model		Final SEM Model			
		SFS	SIS	Standardized weight	PHO	MoHSS	PSE
ISF_Operational	Strategy Implementation	0.34	0.70	-0.49	0.03	-0.04	0.88
CSF_10_HRM_Edu_Tr	ISF_Operational	0.28	0.57	0.79	0.02	-0.03	0.70
CSF_12_HRM_SP_Imp_Tools	ISF_Operational	0.27	0.55	-0.17	0.01	0.25	0.96
CSF_9_HRM_Internal_Com	ISF_Operational	0.26	0.53	0.76	0.02	-0.03	0.67
CSF_11_HRM_Compt_Com	ISF_Operational	0.25	0.51	0.71	0.02	-0.03	0.62
CSF_8_HRM_Inter_Coop	ISF_Operational	0.22	0.44	0.77	0.02	-0.03	0.68
ISF_Context	Strategy Implementation	0.23	0.46	0.74	0.01	0.18	0.71
CSF_16_Governance_Ext_Cons	ISF_Context	0.19	0.38	0.60	0.02	-0.02	0.53
CSF_14_Infra_Dev_Mgt_Competitive_Loc	ISF_Context	0.17	0.35	0.69	0.01	0.17	0.66
CSF_15_Governance_Legal	ISF_Context	0.16	0.33	0.67	0.01	0.17	0.64
CSF_13_Infra_Dev_Mgt_Competitive	ISF_Context	0.16	0.33	0.64	0.01	0.16	0.61
CSF_3_Service_Prov_Emp_cult	ISF_Context	0.14	0.29	0.55	0.01	0.14	0.53
CSF_17_Governance_Inf_Tech	ISF_Context	0.13	0.28	0.52	0.01	0.13	0.50
CSF_4_Service_Prov_Social	ISF_Context	0.13	0.26	0.50	0.01	0.12	0.48
ISF_Structural	Strategy Formulation	0.95	0.47	0.05	0.75	0.26	0.07
CSF_19_Financial_Mgt_Fin_Cont	ISF_Structural	0.75	0.37	0.78	0.59	0.20	0.05
CSF_20_Financial_Mgt_Proj_Mgt	ISF_Structural	0.65	0.32	0.68	0.51	0.17	0.05
CSF_18_Governance_Ins_Lea	ISF_Structural	0.64	0.31	0.68	0.51	0.17	0.05
ISF_Content	Strategy Formulation	0.75	0.37	-0.50	0.03	0.39	0.60
CSF_2_Service_Prov_Comm_Corp	ISF_Content	0.50	0.25	0.64	0.02	0.25	0.38
CSF_1_Service_Prov_Org_Core	ISF_Content	0.46	0.22	0.63	0.02	0.25	0.38
CSF_7_HRM_Top_Mgt	ISF_Content	0.46	0.22	0.51	0.02	0.20	0.31
CSF_6_Service_Prov_CI_Dr	ISF_Content	0.41	0.20	0.50	0.02	0.20	0.30
CSF_5_Service_Prov_Incitive	ISF_Content	0.37	0.18	0.45	0.01	0.18	0.27

Table 5.16 shows that the strategy implementation success (SIS) factors the developed from the ISF Model, have high regression weights (bolded) on contextual (light blue) and operational (blue) dimensions. In addition, these SIS factors were also significant in the Final SEM model with moderate to strong standard regression weights. The results show that the operational and contextual SIS factors have a strong effect on the Public Sector Effect. This was to be expected, since all operational SIS are related to human resources functions, which are functions of the Public Service Commission. Whereas, the contextual SIS factors include factors such as external consultants, legal norms and infrastructural development which are also done by government agencies, departments and ministries other than the MoHSS. The findings show that there is need for improved integration within the government institution. As such, the public sector effect from Ministries such as MoF, MWT, PSC, affects the successful implementation of healthcare strategies in

Namibia. Consequently, these agencies and ministries should be held responsible and accountable for the public healthcare service delivery, together with MoHSS and the state hospitals. There is need for inter-agency hospital boards or steering and standing committees tasked with the running of the hospitals. As the model results show a missing link to the effective running of the hospitals.

From Table 5.16, the public healthcare organisation (PHO) has significant regression weights on the strategy formulation success (SFS) factors. The results are confirming that the intermediate hospitals do not have their own strategies, instead they implement the MoHSS national strategies. As a result, the regression weights show moderate effects on the MoHSS and PSE. However, there are small to no effects on content of the strategy for the PHOs. Therefore, the model suggest that the hospitals focus on the structural SFS factors that would ensure improved financial management, budgetary control and hospital autonomy. The PHOs need to be given more say on their labour, maintenance and capital budgets, which are currently being managed by PSC, MWT and MoHSS respectively.

Implementation Failure Factor (IFF)

Table 5.17 presents the interpretation of the IFF model fit and its implications on the final SEM model.

Table 5.17 Interpretation of IFF factors

Variable	Category	Standardized regression weights	Final SEM Model		
			PHO	MoHSS	PSE
IFF_Content	Strategy Implementation	0.31	-0.52	0.02	0.08
FF_11_Non_acceptor_organisational_culture	IFF_Content	0.57	-0.30	0.01	0.05
FF_12_Divergent_organisational_culture	IFF_Content	0.54	-0.28	0.01	0.04
FF_16_unclear_ambiguous_strategy	IFF_Content	0.52	-0.27	0.01	0.04
FF_17_not_client_centered	IFF_Content	0.41	-0.21	0.01	0.03
FF_1_Resource_Limitation	IFF_Content	0.30	-0.16	0.01	0.02
IFF_Operational	Strategy Implementation	0.23	-0.38	0.02	0.06
FF_13_Ineffective_operational_arrangement	IFF_Operational	0.66	-0.25	0.01	0.04
FF_15_Lack_of_commitment_decisionmakers	IFF_Operational	0.56	-0.22	0.01	0.03
IFF_Context	Strategy Formulation	0.34	-0.57	0.02	0.09
IFF_Operational	IFF_Context	0.21	-0.12	0.00	0.02
FF_3_Poor_Communication	IFF_Context	0.59	-0.34	0.01	0.05
FF_6_Disharmony	IFF_Context	0.58	-0.33	0.01	0.05
FF_5_Envrionmental_Uncertainty	IFF_Context	0.54	-0.31	0.01	0.05
FF_8_Lack_Leadership_guidance	IFF_Context	0.46	-0.26	0.01	0.04
IFF_Structure	Strategy Formulation	0.04	-0.07	0.00	0.01
IFF_Content	IFF_Structure	0.70	-0.05	0.00	0.01
FF_7_Lack_capable_staff	IFF_Structure	0.39	-0.03	0.00	0.00
FF_10_Unclear_success_targets	IFF_Structure	0.65	-0.04	0.00	0.01
F F_9_Lack_executive_support	IFF_Structure	0.38	-0.03	0.00	0.00

Table 5.17 shows the results of the IFF model and also supports the categorizing of the four dimensions into strategic formulation factors and strategy implementation factors. Figure 5.4 (IFF model) shows that there are their dependency relationships IFF1 - IFF2 and IFF4 - IFF3. These relationships imply that IFF1 (context) and IFF4 (structure) are strategy formulation failure factors. Consequently, IFF2 (content) and IFF3 (operational) factors are strategy implementation failure factors. Therefore, it stands to reason that operational factors affect strategy implementation, while structural factors affect strategy

formulation. In line with the conceptual framework and the ISF model, the content and contextual factors interchangeably affect strategy formulation and implementation depending on the success or failure perspective.

The results show that the IFF structural factors (0.04) had little to no effect on the effective strategy implementation. While, contextual (-0.57) and content (-0.52) had moderate negative effects. The negative implies that the failure factors can be interpreted as success factors. For instance, an improving communication in PHO will result in a reduction in FF3 Poor communication (-0.34). Furthermore, the results show that context and content factors are very important to the effective implementation of strategic interventions in PHO.

The study results also show that the Kalali *et al.*, (2011)'s failure factor scale (Table 5.17) is contrastingly different from the Farzin *et al.*, (2014)'s critical success factor scale (Table 5.16). Although, the two instrument scales agree that operational factors affect implementation effectiveness, while structural factors affect strategy formulation. However, they do not agree on the context and content factors with ISF factors supporting the notion that content factors are influenced by structural factors during strategy formulation. Whereas, the IFF factor model suggests that the content of the strategy depends on the strategic context. At the same time, effective implementation depends on the operational factors, which are influenced, by structural factors during strategy formulation stage.

5.7 Discussion of the Findings

The findings are discussed through the research propositions, which were made within an active implementation framework of the research's conceptual framework. The study's conceptual model employs a determinant framework that sought to identify the implementation success and failure factors in complex settings such as the public healthcare service sector (Helfrich, *et al.*, 2010).

Rycroft-Malone (2010) highlighted that active implementation frameworks play the dual role of providing hands-on support to implement strategy and identifying determinants for its evaluation. As such, this study employed three models that complied with the action implementation framework's dual roles. The EIS model provided the hands on support to the implementing strategy role by retrospectively focusing on the 2009-2013 MoHSS Strategic plan implementation. While, the ISF model and IFF models were used to identify the determinants for its evaluation.

Proposition 1

The research proposed that effective strategy implementation in Public healthcare organisations (PHOs) is directly affected by the public sector institutions it interacts with in providing healthcare services. In this study, the PHOs are the Intermediate Hospitals that implement the National strategies and mandates of the Ministry of Health and Social Services (MoHSS). As well as, other public sector institutions such as the Ministry of Finance (MoF), Ministry of Works and Transport (MWT) and the Public Service Commission (PSC).

The study found no direct link between PHOs and the public sector institutions such as the Ministry of Finance (MoF), Ministry of Works and Transport (MWT) and the Public Service Commission (PSC). However, there is a 1:2 mediation effect facilitated by the MoHSS and the PHOs are responsible for implementing 33% of the mandates of the Ministry of Health and Social Services (MoHSS).

Proposition 2

The study proposed that several determinants exist, which mediate the implementation relationships between PHOs and the ministry or department of health. The study determinants refer to the different factors affecting implementation outcomes. These include the content of the strategy, contextual, structural, and operational factors.

The study contrasted two determinant models using Kalali *et al.*, (2011)'s failure factor scale and Farzin *et al.*, (2014)'s critical success factor scale. The study found that the two models (ISF & IFF) agree on the effects of operational factors on implementation effectiveness, as well as the effect of structural factors on strategy formulation. However, they could not agree on the effects of context and content factors on either strategy formulation or strategy implementation. As such, the study concludes that content and context factors are interdependent such that the content of the strategy depends on the strategic context. At the same time, effective implementation depends on the operational factors which are also influenced by structural factors during strategy formulation stage.

These findings are consistent with Olivier's (2015) conceptual model on closing the strategy execution gap in the Namibian public sector. Olivier (2015) emphasizes that strategy formulation and implementation aims is to find the best way of responding to opportunities and threats appearing in its external environment or context. Thereby, defining context as the environment, atmosphere or conditions within which an organisation operates and performs.

Proposition 3

The study used the staff perceptions to measure and validate the implementation relationships that affecting public healthcare organisation's (PHO) service quality and intervention strategies. Using Meena and Thakkar's (2014) interpretive structural modelling (ISM) approach, the study was to develop a map of the complex relationships between many elements involved in complex decision situation such as in PHOs. ISM is often used to provide fundamental understanding of complex situations, as well as to put together a course of action for solving a problem. The ISM process transforms unclear, poorly articulated mental models of systems into visible, well-defined models useful for many purposes (Meena & Thakkar, 2014).

The study used an integrated structural modelling (ISM) to simplify the three CFA/SEM models and interpret the Final SEM model. As such, Figure 5.7 presents the simplified version of the Final SEM model.

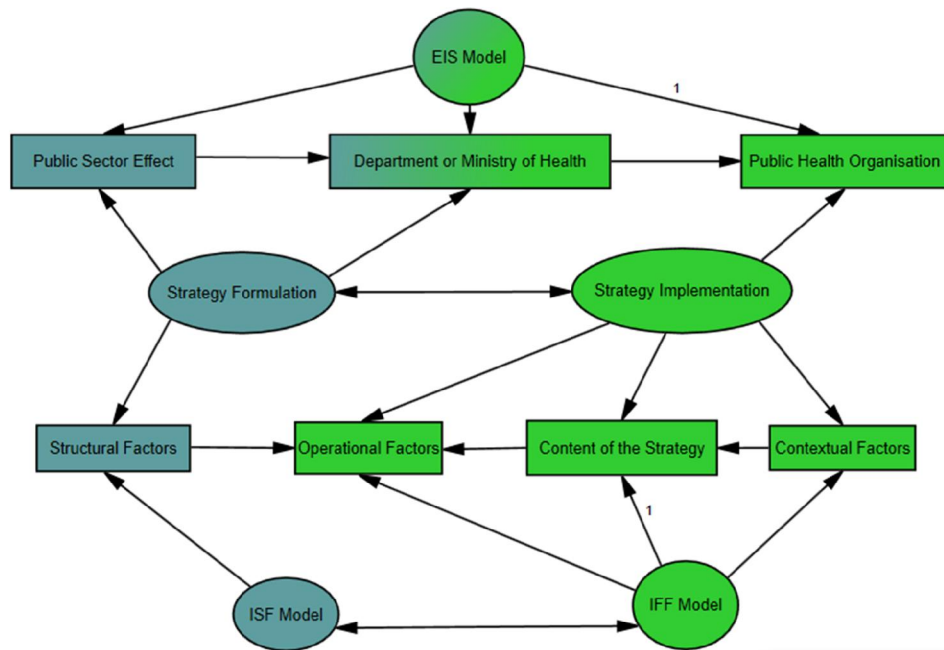


Figure 5.7: Research Model

Source: Author's own work

Figure 5.7 presents the formulated research model for the successful measurement of healthcare service quality in public healthcare organisation based the perceptions of healthcare staff.

5.8 Summary

This chapter presented, analysed and interpreted the research findings. The findings were compared and contrasted to the findings of numerous prior studies presented in Chapters 2 and 3. Explanations for outcomes between the results of this study and previous literature were deliberated on. This was followed by the answering of the research propositions

listed in Chapter 3. Next was the presentation of the emergent research model. The next chapter presents conclusions of the study and recommendations.

CHAPTER 6

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

The aim of the study was to develop a deterministic framework for the successful measurement of healthcare service quality in public healthcare organisations, focusing on the staff members' satisfaction levels with the 2009 - 2013 strategic plan implementation in the three Namibian State hospitals. This chapter concludes the study and makes recommendations. The chapter will address the research objectives of the study using the findings and analysis given in the previous chapter.

6.2. Conclusions

The study makes its conclusions by addressing the research objectives, which were:

- a) To determine the effective factors contributing to the failure of implementation of strategic decisions in public healthcare organisations, particularly among the Namibian state hospitals.
- b) To explore the staff members' satisfaction levels with the 2009 - 2013 strategic decision implementation in the three intermediate public hospitals in Namibia.
- c) To determine the interrelationships between the different factors related to the implementation failure and healthcare staff's satisfaction levels with the 2009 - 2013 strategic plan implementation.

- d) To formulate a deterministic framework for the successful measurement of healthcare service quality in public healthcare organisations based on the perceptions of healthcare staff.

6.2.1. Effective factors contributing to the failure of strategic plan implementation

The study found the following 13 effective factors contributing to the failure of strategic plan implementation:

Content Factors

- Non-accommodative organisational culture;
- Divergent organisational culture;
- An unclear and ambiguous strategy;
- Strategy not patient centered;
- Resource limitations;

Operational Factors

- Ineffective operational arrangements;
- Lack of commitment of decision makers;

Contextual Factors

- Poor communication;
- Disharmony;
- Environmental uncertainty;
- Lack of clear leadership and guidance;

Structural Factors

- Lack of inspirational leadership;
- Poor financial control and planning optimization;
- Poor project management skills.

6.2.2. Satisfaction level with strategic decision implementation

The study explored the staff members' satisfaction levels with the 2009 - 2013 strategic decision implementation in the three intermediate public hospitals in Namibia. Overall, the study found that the MoHSS staff were not satisfied with the implementation of the Strategic Plan, especially, that part relating to service provision.

The study concludes that the poor satisfaction levels were a result of the organisational structure and bureaucratic processes of healthcare service provision in Namibia, where, public sector effects (PSE) affect service provision by both MoHSS and the state hospitals. The PSE emanate from the fact that hospital buildings are owned and managed by Ministry of Works and Transport, while, the Public Sector Commission (PSC), manages PHO's human resources and financial management is effected through the Ministry of Finance (MoF). The study concludes that PSE made it challenging for the hospital management teams, to implement any strategic interventions.

6.2.3. To determine the interrelationships between the different factors related the implementation failure and healthcare staff's satisfaction level

The study used research propositions to determine the interrelationships between the different factors related to the implementation failure and healthcare staff's satisfaction levels. As such, the study proposed that the public sector institutions it interacts with in providing healthcare services directly affect effective strategy implementation in Public healthcare organisations (PHOs).

The study's PHOs are the three intermediate hospitals that implement the National strategies and mandates of the Ministry of Health and Social Services (MoHSS). As well as, other public sector institutions such as the Ministry of Finance (MoF), Ministry of Works and Transport (MWT) and the Public Service Commission (PSC). The study concludes that no direct link between PHOs and the public sector institutions such as the Ministry of Finance (MoF), Ministry of Works and Transport (MWT) and the Public Service Commission (PSC). However, there is a 1:2 mediation effect facilitated by the MoHSS and the PHOs are responsible for implementing 33% of the mandates of the Ministry of Health and Social Services (MoHSS).

Furthermore, the study proposed that several determinants exist, which mediate the implementation relationships between PHOs and the ministry or department of health. These determinants affect the implementation outcomes and were categorised into strategy formulation factors and strategy implementation factors guided by Kalali, *et al.*, (2011)'s four dimensions, which are content of the strategy, contextual, structural, and operational factors. As such, the study concludes that content and context factors are

interdependent such that the content of the strategy depends on the strategic context. At the same time, effective implementation depends on the operational factors, which are also influenced, by structural factors during the strategy formulation stage.

To formulate a deterministic framework for the successful measurement of healthcare service quality in PHOs

The study used the staff perceptions to measure and validate the implementation relationships that affect a public healthcare organisation's (PHO) service quality and intervention strategies. Using Meena and Thakkar (2014)'s interpretive structural modelling (ISM) approach, the study mapped the complex relationships between many elements involved in implementation of healthcare strategies by PHOs and the ministry or department of health. Consequently, the study formulated a research model (see Figure 5.7) for the successful measurement of healthcare service quality in public healthcare organisations based on the perceptions of healthcare staff.

6.2 Recommendations

The study sought to develop a deterministic framework on the 'how to' components of a successful and sustainable healthcare system, contextualized within the Namibian public healthcare system. The study through the framework found two success pathways, one based on strategy implementation and another based on strategy formulation. As such, the study recommendations were guided by these two pathways:

Strategy Formulation

The study found that strategy formulation, public sector pressures and implementation success expectations are all centralised on the Ministry of Health and Social Services. The model found that strategy formulation was done mainly at the Ministry level, with little or no input from the hospitals, with the Hospitals only receiving a ministerial level strategic plan to implement. The researcher found this not to be sustainable and leading to certain failure as highlighted in the implementation failure model. In addition, the study found that 33% of the Ministry's mandate in their strategic plan is implemented by the hospitals. Furthermore, these three hospitals have different needs and challenges, which require targeted and unique strategies. Therefore, it is recommended that:

- Hospitals should have their own financial management strategies backed by an independent budget and which incorporates the national strategies and policies.
- Since, 33% of the Ministerial mandate is implemented by the hospitals, the government should allocate 33% of the Health Budget to the running of the Hospitals.
- This budget can also be part of the government's contribution and engagement for Public Private Partnerships, similar to the approach taken by the British government's 30 year Private Finance Initiative for National Health Services.
- Under this approach, the government can commit to a fixed budgetary allocation to the hospitals, while, the hospitals will commit to providing quality service at a government regulated pricing mechanism. This has worked in the UK and can ensure long term and sustainable strategies for national health care at a fixed budget.

- For instance, the government, would allocate a fixed budget to the Hospitals over the next 30 years, while the private sector partners run the hospitals' administration under contract.
- The study also concluded that content and context factors are interdependent. As such, the content of the strategy depends on the strategic context. With this in mind, the study recommends that strategy formulation of the MOHSS, should be contextualised to address the healthcare system imbalances, as a matter of priority.
- For instance, the Ministry of Health does not have criteria for resource allocation according to the different hospital classes. This results in an over-resourced National referral hospital putting pressure on under-resourced intermediate hospitals. The study recommends that budgetary allocations be based on need and distributive justice.
- It does not make logical sense for patients to be referred from Katima or Rundu Intermediate hospital to Katutura Intermediate Hospital in Windhoek, which sees patients travelling about 1,000km in an ambulance. As such, there is need to fully resource regional intermediate hospitals to be at par with Katutura Hospital, so that all referrals from these hospitals will be directed towards Central Hospital.
- There is also need for hospital level resource allocation and risk management policies, aligned with quality assurance and management programs that should be adequately financed as proposed in the framework.

Strategy Implementation

The study found that several determinants exist, which mediates the implementation relationships between PHOs and the ministry of health. These determinants include the

content of the strategy, contextual, structural, and operational factors. Moreover, the study found that the strategy implementation effectiveness is dependent on operational factors, while, strategy formulation relied on structural factors. At the same time, effective implementation depends on the operational factors, which are also influenced, by structural factors during the strategy formulation stage. Therefore, this study recommends that:

- The Public Service Commission, which is responsible for the human resources function of the hospitals, should second senior human resource managers, who will have the autonomy and authority to facilitate the human resource functions as suggested by the strong regression effects on PSEs.
- The same can be said of other public sector agencies and ministries such as the Ministry of Finance (Finance management), Ministry of Works and Transport (Operations and Maintenance).
- There should be separate performance agreements with penalties between the hospitals and the government agencies, as the study found that improving the public sector effect (PSE) would result in improved implementation success rates through efficiency and timeliness.
- Consequently, these PSE agencies and ministries should be held accountable for the public healthcare service delivery, together with the MoHSS and the state hospitals. There is need for inter-agency hospital boards or steering and standing committees tasked with the running of the hospitals, as the model results show a missing link to the effective running of the hospitals.

6.3 Further Research

There is need for further research on how accreditation programs can influence strategy implementation. There is also a need for a follow up study that will test the proposed model at different levels of the public health sectors such as clinics and district hospitals. The model would also need to be tested in private sector PHOs that have full control of their human resources, infrastructure and financial management. There is also need to test this model in other public sector areas other than health and for its applicability.

REFERENCES

- Ahmed, A., Bwisa, H., Otieno, R., & Karanja, K. (2014, June). Strategic Decision Making: Process, Models, and Theories. *Business Management and Strategy* , 5(1), 78-114. doi:10.5296/bms.v5i1.5267
- Alexander, J. A., & Hearld, L. (2012). Methods and metrics challenges of delivery-systems research. *Implementation Science*, 1-11.
- Alexander, L. D. (1991). Strategy implementation: nature of the problem”, . (D. Hussey, Ed.) *International Review of Strategic Management*, 2(1), 73-96.
- Alotaibi, Y., & Liu, F. (2016). Business process modelling framework derive and implement IT goals:a case study. *Int. J. Industrial and Systems Engineering* , 22(2), 161–190.
- Aquilani, B., Silvestri, C., Ruggieri, A., & Gatti, C. (2017). A systematic literature review on total quality management critical success factors and the identification of new avenues of research. *The TQM Journal*, 29(1), 184-211.
doi:http://dx.doi.org/10.1108/TQM-01-2016-0003
- Askim, J. (2004). Performance management and organizational intelligence. *International Public Management Journal*, 7(3), 415–438.
- Bryson, J. M. (2004). *Strategic planning for public and nonprofit organizations : a guide to strengthening and sustaining organizational achievement* (3rd ed.). San Francisco, CA: John Wiley & Sons, Inc.
- Card, D., Dobkin, C., & Maestas, N. (2009). Does Medicare Save Lives? *Quarterly Journal of Economics*, 597-636.

- Chawla, M., & Govindaraj, R. (1996). *Improving Hospital Performance through Policies to Increase Hospital Autonomy: Implementation Guidelines*. Health Care Financing and Private Sector Development portfolio, AFR/SD/Health and Human Resources for Africa (HHRAA) Project. Washington: USAID/.
- Clark, C. E. (1962). A Pert Model for the distribution of an activity. *Operations Research*, 405-406.
- Clements, B., Coady, D., & Gupta, S. (2012). The economics of public health care reform in advanced and emerging economies. In B. Clements, D. Coady, & S. Gupta, *The economics of public health care reform in advanced and emerging economies* (pp. 3-23). Washington D.C: IMF.
- Cohen, J. (1988). *Statistical Power Analysis For The Behavioural Sciences* (2nd ed. ed.). (J. Cohen, Ed.) Hillsdale, NJ: Erlbaum.
- Connolly, J. (2016). Contribution analysis as an approach to enable public managers to demonstrate public value: the Scottish context. *International Journal of Public Sector Management*, 29(7). doi:<http://dx.doi.org/10.1108/IJPSM-12-2015-0225>
- David, F. R. (2011). *Strategic management: concepts and cases* (13th ed.). New Jersey: Prentice Hall.
- Davies, P., Walker, A., & Grimshaw, J. (2003). Theories of behavior change in studies of guideline implementation. *Proc Br Psychol Soc.*, 11(120), 120.
- De Vos, A. S., Strydom, H., Fouche, C. B., & Delpont, C. S. (2011). *Research at grass roots: For the social sciences and human service professions*. (4th ed.). Pretoria: Van Schaik Publishers.

- Dreveton, B. (2013). The advantages of the balanced scorecard in the public sector: beyond performance measurement. *Public Money & Management*, 33(2), 131-136. doi:10.1080/09540962.2013.763425
- Ekpe, E., Eneh, S., & Inyang, B. (2015). Leveraging Organizational Performance through Effective Mission Statement. *International Business Research*, 8(9), 135.
- Evans, J. M., Brown, A., & Baker, G. R. (2015). Intellectual capital in the healthcare sector: a systematic review and critique of the literature. *BMC Health Services Research*, 15(556). doi:10.1186/s12913-015-1234
- Fältholm, Y., & Nilsson, K. (2010). Business Process Re-Engineering and Balanced Scorecard in Swedish Public Sector Organizations: Solutions for Problems or Problems for Solutions? *International Journal of Public Administration*, 33, 302–310.
- Farzin, M. R., Kahreh, M. S., Hesani, M., & Khalouei, A. (2014). Knowledge, A survey of Critical Success Factors for Strategic Management implementation: applications for Service Sector. *2nd World Conference On Business, Economics And Management-WCBEM2013*, 109, pp. 595-599.
- Gaskin, J. E. (2017, February 7). *Confirmatory Factor Analysis: Validity and Reliability* . Retrieved from statwiki.kolobkreations.com:
http://statwiki.kolobkreations.com/index.php?title=Confirmatory_Factor_Analysis

- Gaskin, J., & Lim, J. (2016). *Model Fit Measures, AMOS Plugin*. Retrieved from Gaskination's StatWiki:
<https://drive.google.com/drive/folders/0B3T1TGdHG9aEbFg1eEpqOWtrR3c>
- Goshtasebi, A., Vahdaninia, M., Gorgipour, R., Samanpour, A., Maftoon, F., Farzadi, F., & Ahmadi, F. (2009). A, Goshtasebi; M Vahdaninia; R Gorgipour; A Samanpour; F Maftoon; F Farzadi; F Ahmadi 2009 Assessing Hospital Performance by the Pabon Lasso Model. *Journal of Public Health, 38*(2), 119-124.
- Gravetter, F., & Forzao, L. (2012). *Research Methods for Behaviour Sciences*. Wadsworth: Cengage Learning.
- Grigoroudis, E., Orfanoudaki, E., & Zopounidis, C. (2012). Strategic performance measurement in a health care organization. *Omega, 40*, 104-119.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2013). *Multivariate Data Analysis* (7th ed.). USA: Pearson Prentice Hall.
- Hanson, K., Atuyambe, L., Kamwanga, J., McPake, B., Mungule, O., & Ssenooba, F. (2002). Hospital performance in Uganda and Zambia: reflections and opportunities for autonomy. *Health Policy, 61*(1), 73-94.
- Hazelton, P. T., Steward, W. T., Collins, S. P., Gaffney, S., Morin, S. F., & Arnold, E. A. (2014). California's "Bridge to Reform": Identifying Challenges and Defining Strategies for Providers and Policymakers Implementing the Affordable Care Act in Low-Income HIV/AIDS Care and Treatment Settings. *PloS one, 9*(3), e90306.

- Helfrich, C. D., Damschroder, L. J., Hagedorn, H. J., Daggett, G. S., Sahay, A., Ritchie, M., . . . Stetler, C. B. (2010). A critical synthesis of literature on the promoting action on research implementation in health services (PARIHS) framework. *Implementation Science*, 5(82). doi:10.1186/1748-5908-5-82
- Hernon, P. (2002). Quality: New directions in the research. *The Journal of Academic Librarianship*, 28, 224-231.
- Hoffman, S. (2011). *Student Voices 2: Assessing Proposals for Global Health Governance Reform*. Hamilton, Canada: McMaster Health Forum. Retrieved from www.mcmasterhealthforum.org
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55. *Structural equation modeling: a multidisciplinary journal*, 6 (1), 1-55.
- Ivančić, V. (2013). The biggest failures in managing strategy implementation.
- Jakab, M. (2007). *An Empirical Evaluation of the Kyrgyz Health Reform: Does It Work for the Poor?* Harvard School of Public Health, Department of Health Policy and Management. Cambridge, MA: Harvard University.
- Johansen, A. S. (2015). *Strategic planning for health: a case study from Turkey* . Copenhagen, Denmark : WHO Regional Office for Europe.
- Joumard, I., Andre, C., & Nicq, C. (2010). Health Care Systems: Efficiency and Institutions. *Economics Department Working Paper No. 769* . Paris: Organization for Economic Cooperation and Development.

- Kalali, N. S., Anvari, M. R., & Dastjerdi, A. A. (2011). Why does strategic plans implementation fail? A study in the health service sector of Iran. *African Journal of Business Management*, 5(23), 9831.
- Kathora, H., & Strauss, E. (2012). *A follow-up report of the Auditor-General on performance audit study on MoHSS– referral system for the financial years 2008, 2009 and 2010*. Windhoek: Office of the Auditor-General.
- Kitson, A., Harvey, G., & McCormack, B. (1998). Enabling the implementation of evidence based practice: a conceptual framework. *Quality in Health Care*, 7(3), 149-158. doi:10.1136/qshc.7.3.149
- Kline, P. (1994). *An Easy Guide For Factor Analysis* . New York, USA: Routledge.
- Kobus, M. (2013). *First Steps in Research* (13th ed.). Pretoria: Van Schaik Publisher.
- Kork, A.-A., & Vakkuri, J. (2016). Improving access and managing healthcare demand with walk-in clinic. *International Journal of Public Sector Management*, 29(2), 148 – 163. doi: <http://dx.doi.org/10.1108/IJPSM-07-2015-0137>
- Kotas, M. (2015, August). Identifying of critical success factors of social services organizations in the public sector. *The Business and Management Review*, 6(4), 84-94.
- Kumar, R. (2011). *Research methodology: A step-by-step guide for beginners*. London: Sage Publication.

- Latif, B., Gohar, F. R., Hussain, A., & Kashif, M. M. (2013). Barriers to Effective Strategic Planning. *International Journal of Management & Organizational Studies, 1*(2), 16-21.
- Lau, A. T. (1999). Making sense of contemporary strategic implementation: towards a conceptual model. *Public Administration & Management: An Interactive Journal, 4*(4), 494-507.
- Lawrence, S., & Sharma, U. (2002). Commodification of Education and Academic Labour—Using The Balanced Scorecard in A University Setting. *Critical Perspectives on Accounting, 13*, 661–677.
- Leedy, P. D., & Ormrod, J. E. (2010). *Practice Research: Planning and Design*. New York: Pearson.
- Lega, F., Longo, F., & Andrea, R. (2013). Decoupling the use and meaning of strategic plans in public healthcare. *BMC Health Services Research, 13*(5). Retrieved October 28, 2015, from <http://www.biomedcentral.com/1472-6963/13/5>
- Lovaglio, P. G. (2011). Model building and estimation strategies for implementing the Balanced Scorecard in Health sector. *Qual Quant, 45*, 199-212.
doi:10.1007/s11135-010-9364-2
- Low, A., de Coeyere, D., Shivute, N., & Brandt, L. (2001). Patient referral patterns in Namibia: identification of potential to improve the efficiency of the health care system. *International Journal of Health Planning and Management, 16*.
- Mahadevan, B. (2007). *Operations Management: Theory & Practice*. London: Pearson Education.

- Malhotra, K. N., & Dash, S. (2011). *Marketing Research an Applied Orientation*.
London: Pearson Publishing.
- Marcinko, D. E., & Hetico, H. R. (2014). *Financial Management Strategies for Hospitals and Healthcare Organizations: Tools, Techniques, Checklists and Case Studies*.
Boca Raton, FL: CRC Press.
- Meena, K., & Thakkar, J. (2014). Development of Balanced Scorecard for healthcare using Interpretive Structural Modeling and Analytic Network Process. *Journal of Advances in Management Research*, 11(3), 232 - 256.
- Mehregan, M., Razavi, S. M., & Akhavan Anvari, M. R. (2012). Identification and evaluation of strategic decisions in Gas industry using DEMATEL method. *Iranian Journal of Management Studies*, 5(5), 49-65.
- Meyer, V. (., Pascucci, L., & Murphy, J. P. (2012, May). Implementing Strategies in Complex Systems: Lessons from Brazilian Hospitals . *BAR*, 9(Special Issue, art. 2), 19-37.
- MoHSS. (2000). *Demographic and Health Survey*. Windhoek: Ministry of Health and Social Services.
- MoHSS. (2004). A study of the Technical efficiency of Public Sector district hospitals in Namibia. Windhoek: Ministry of Health and Social Services.
- MoHSS. (2007). *Demographic and Health Survey*. Windhoek: Ministry of Health and Social Services.

- MoHSS. (2008). *Health and Social Services System Review*. Windhoek: Ministry of Health and Social Services.
- MoHSS. (2009). *2009 - 2013 Strategic Plan*. Windhoek: Ministry of Health and Social Services.
- MoHSS. (2010). *National Health Policy Framework 2010-2020* . Windhoek: Ministry of Health and Social Services. Retrieved from <http://www.healthnet.org.na>
- MoHSS. (2013). Report of the Presidential Commission of Inquiry. Windhoek: Ministry of Health and Social Services.
- MoHSS. (2013a). *National Referral Policy*. Windhoek: Ministry of Health and Social Services.
- MoHSS. (2014a). Report of the National HIV Sentinel Survey. Windhoek, Namibia: Ministry of Health and Social Services.
- MoHSS. (2014b). *Namibia Child Survival Strategy 2014-2018*. Windhoek: Ministry of Health and Social Services.
- MoHSS. (2015, June). *Namibia 2012/13 Health Accounts Report* . Windhoek, Namibia: Ministry of Health and Social Services.
- MoHSS/NSA. (2013). *Namibia Demographic and Health Survey*. Windhoek: Ministry of Health and Social Services/Namibia Statistics Agency.
- MoHSS-ICF. (2011, February). Health Facility Census (HFC) 2009. Windhoek: Ministry of Health and Social Services (MoHSS) and ICF Macro.

- Murante, A. M. (2010). Patient satisfaction: a strategic tool for health services management. *Doctor of Philosophy Thesis*. Scuola Superiore Sant'Anna.
- Myers, L., Margaritis, J., Hlahla, D., Jones, C., Lukes, D., Rodriguez, M., . . . Wilson, R. (2013). *Feasibility Assessment of Merging Windhoek Central and Katutura Intermediate Hospitals to Create a National Academic and Referral Hospital in Namibia*. Bethesda, MD: Health Systems 20/20 Namibia Project, Abt As.
- Nilsen, P. (2015). Making sense of implementation theories, models and frameworks. *Implementation Science, 10*(53), 1-13. doi:10.1186/s13012-015-0242-0
- Nisson, K. (2010). Expectations from administrative reforms: an attempt to implement the balanced scorecard in a public sector organization. *International Journal of Public Administration, 33*(14), 822-831.
- Northcott, D., & Taulapapa, T. M. (2012). Using the balanced scorecard to manage performance in public sector organizations Issues and challenges. *International Journal of Public Sector Management, 25*(3), 166-191.
- Nowicki, M. (2004). *The financial management of hospitals and healthcare organizations*. Chicago: Health Administration Press.
- NSA. (2012). *Namibia 2011 Population and Housing Census*. Windhoek: Namibia Statistics Agency (NSA).
- Office of the President. (2013). *Presidential Commission of Inquiry on Health and Social Services*. Windhoek: Government Printer.

- Olivier, A. J. (2015). Closing the Strategy Execution Gap in the Public Sector:A Conceptual Model . *PHD Thesis*. Stellenbosch University.
- OPM. (2003). Being a Public Servant in Namibia: Pocket Guide. Windhoek: Office of the Prime Minister, Government of Namibia.
- OPM. (2005). *A PERFORMANCE MANAGEMENT SYSTEM FOR THE PUBLIC SERVICE OF NAMIBIA:PRINCIPLES AND FRAMEWORK*. Windhoek: Office of the Prime Minister, Government of Namibia.
- Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS*. England: Open University Press.
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Refinement and reassessment of the SERVQUAL Scale. *Journal of Retailing*, 67, 420-450.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research . *Journal of Marketing*, 49(4), 41-50.
- Pleguezuelo, R. H., Pérez, J. G., & Rambaud, S. C. (2003, January). A note on the reasonableness of PERT hypotheses. *Operations Research Letters*, 31(1), pp. 60-62. Retrieved from [http://dx.doi.org/10.1016/S0167-6377\(02\)](http://dx.doi.org/10.1016/S0167-6377(02))
- Pomp, M., & Vujic, S. (2008). Rising Health Spending, New Medical Technology, and the Baumol Effect. *Discussion Paper No. 115*. The Hague: Netherlands Bureau for Economic Policy Analysis.


- Porter, M., & Teinsberg, E. O. (2006). *Redefining healthcare: creating value-based competition on results*. Boston: Harvard Business School Press.
- Proctor, E. K., Powell, B. J., & McMillen, J. C. (2013). Implementation strategies: recommendations for specifying and reporting. *Implementation Science*, 8(139). Retrieved February 12, 2017, from <http://www.implementationscience.com/content/8/1/139>
- Reyes-Alcázar, V., Torres-Olivera, A., Núñez-García, D., & Almuedo-Paz, A. (2012). Critical Success Factors for Quality Assurance in Healthcare Organizations. In M. Savsar, *Quality Assurance and Management* (pp. 267-289). Rijeka, Croatia: InTech Europe. Retrieved August 20, 2015, from <http://www.intechopen.com/books/quality-assurance-and-management/critical-success-factors-for-qualityassurance-in-healthcare-organisations>
- Ross, J., Stevenson, F., Lau, R., & Murray, E. (2016). Factors that influence the implementation of e-health: a systematic review of systematic reviews (an update). *Implementation Science*, 11:146 (146), 1-12. doi:10.1186/s13012-016-0510-7
- Rothberg, A. F., & Morrison, C. (2012). *Performance measurement: understanding critical success factors*. Southern California: Resource Planning Solutions Corporation.
- Rugg, G., & Petre, M. (2010). *The Unwritten Rules of PHD Research* (2nd ed.). New York: Open University Press.

- Rycroft-Malone, J. (2010). Promoting Action on Research Implementation in Health Services (PARIHS). In J. Rycroft-Malone, & T. Bucknall, *Models and Frameworks for Implementing Evidence-Based Practice: Linking Evidence to Action* (pp. 109-136). Oxford: Wiley-Blackwell.
- Saunders, C. (2014). *Introduction to Research and Research Methods*. Bradford: University of Bradford.
- Saunders, M., Lewis, P., & Thornhill, A. (2005). *Research Methods for Business Students*. Harlow, England.
- Savedoff, W. (2007). What Should a Country Spend on Health Care? *Health Affairs*, 26(4), 962–970.
- Shilimela, R., & Naimhwaka, E. (2005). The Budgetary process and Economic Governance in Namibia. Windhoek: NEPRU Working Paper No. 105.
- Sial, A., Usman, M. K., Zufiqar, S., Satti, A. M., & Khursheed, I. (2013). Why Do Public Sector Organisations Fail In Implementation of Strategic Plan in Pakistan. *Public Policy and Administration Research*, 3(1), 222-573.
- Tafti, M. M., Mahmoudsalehi, M., & Amiri, M. (2017). Critical success factors, challenges and obstacles in talent management. *Industrial and Commercial Training*, 49(1), 15-21.
- Thakkar, K. M. (2014). Development of Balanced Scorecard for healthcare using Interpretive Structural Modeling and Analytic Network Process. *Journal of Advances in Management Research*, 11(3), 232-256.

- Thompson, J. M., Buchbinder, S. B., & Shanks, N. H. (2012). An overview of healthcare management. . In S. B. Buchbinder, & N. H. Shanks, *Introduction to Health Care Management* (pp. 1-16). Jones and Bartlett Inc.
- Vaidya, K., Sajeev, A. S., & Callender, G. (2006). Critical Factors That Influence E-Procurement Implementation Success In The Public Sector. *Journal of Public Procurement*, 6(1&3), 70-99.
- Walford, V., & Grant, K. (1998). *Health sector reform, improving hospital efficiency*. London: Health Resource System Center.
- Webster, T. R., Mantopoulos, J., Jackson, E., Cole-Lewis, H., Kidane, L., Kebede, S., . . . Bradley, E. H. (2011, April 30). A brief questionnaire for assessing patient healthcare experiences in low-income settings. *International Journal of Quality Health Care*, 23(3), 258-268.
- Wegner, T. (2010). *Applied Business Statistics: Methods and Excel-based Applications*. Cape Town, South Africa: Juta & Co. Ltd.
- Welman, C., Kruger, F., & Mitchell, B. (2010). *Research Methodology*. South Africa: Oxford.
- Welman, C., Kruger, F., & Mitchell, B. (2014). *Research Methodology*. Oxford: Oxford University Press.
- WHO. (2010). *The World Health Report 2010 - Health Systems: Improving Performance*. Geneva: World Health Organization (WHO).

- World Bank. (2010, May 22). *Namibia Health Sector Note (P110113)*. Health, Nutrition and Population, Southern Africa Country Department I. Washington D.C: World Bank.
- Wynen, J., & Verhoest, K. (2015). Do New Public Management type reforms lead to a cultural revolution within public sector organizations. *Public Management Review, 17*(3), 356-379.
- Yang, L., Guohui, S., & Eppler, M. J. (2008). Making Strategy Work: A Literature Review on the Factors influencing Strategy Implementation . *ICA Working Paper 2*. Institute of Corporate Communication.
- Zelman, W. N., Pink, G. H., & Matthias, C. B. (2003, Summer). Use of the balanced scorecard in healthcare. *Journal of Health Care Finance, 29*(4), 1-16.
- Zere, E., Mandlhate, C., Mbeeli, T., Shangula, K., Mutirua, K., & Kapenambili, W. (2007). Equity in health care in Namibia: developing a needs-based resource allocation formula using principal components analysis. *International Journal for Equity in Health, 6*(3), 1-7. doi:10.1186/1475-9276-6-3
- Zikmund, W. G., & Babin, B. J. (2010). *Essentials Of Marketing Research* (4th ed.). Mason,OH: South-Western, Cengage Learning.

APPENDIX A: PERMISSION LETTER

Rec/19/4/16
 CC: BMS
 Matron
 Please facilitate and assist the Candidate as authorised to conduct the study


REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

Private Bag 13198
 Windhoek
 Namibia
 Ministerial Building
 Harvey Street
 Windhoek
 Tel: 061 - 233 2510
 Fax: 061 - 222558
 E-mail: e@hms@msh.gov.na

OFFICE OF THE PERMANENT SECRETARY

Ref: 17/3/2
 Enquiries: Ms. EN. Shaama

Date: 7th January 2016

Mr. Abner K. Shopati
 P.O. Box 50001
 Rachtirecht
 Windhoek

Dear Mr. Shopati

Re: Identifying the critical success factors in the implementation of strategic plans in the public health care system in 3 hospitals in Namibia.

1. Reference is made to your application to conduct the above-mentioned study.
2. The proposal has been evaluated and found to have merit.
3. Kindly be informed that permission to conduct the study has been granted under the following conditions:
 - 3.1 The data to be collected must only be used for completion of your Doctoral of Business Administration (DBA);
 - 3.2 No other data should be collected other than the data stated in the proposal;
 - 3.3 Stipulated ethical considerations in the protocol related to the protection of Human Subjects' information should be observed and adhered to, any violation thereof will lead to termination of the study at any stage;
 - 3.4 A quarterly report to be submitted to the Ministry's Research Unit;

- 3.5 Preliminary findings to be submitted upon completion of the study;
- 3.6 Final report to be submitted upon completion of the study;
- 3.7 Separate permission should be sought from the Ministry for the publication of the findings.

Yours sincerely,


 Andrew Nuvumbola (Dr)
 Permanent Secretary



"Health for All"

APPENDIX B: COVER LETTER

Informed Consent Letter

**P.O.BOX 50301
Bach Brecht
Windhoek
12 April 2016**

Dear Respondent

TO WHOM IT MAY CONCERN

My name is Abner Kukeyinge Shopati pursuing a Doctoral Degree in Business Administration (DBA) with the University of Namibia.

I am conducting a study titled: Identifying the implementation success factors in the implementation of strategic plans in public healthcare systems in 3 hospitals in Namibia. The information from this data collection is valuable for the researcher to be awarded a degree as well as for both future planning and for future scientific research in the health sector. Therefore, your response to interview questions and/or questionnaires is very important to this study because it represents hundreds of others who are not part of this sample. Everything you tell the researcher will be strictly confidential. Your name will not, be connected to the findings of this important study. Furthermore, your participation in this study is voluntary and you can withdraw from this study at any stage prior to or during interviews or during the process of responding to the questionnaire.

Thank you for your time and valuable support.

Yours sincerely

.....
A.K. Shopati (Mr.)

Section B: Implementation success factors required for ensuring success of the MOHSS strategic plan objectives for 2009- 2013

Critical Success Factor	Minimum Required (Expectation)									Desired (Maximum Expectation)									Judgment /Rating based on the current situation												
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
Organisational Alignment to Strategy and values consistent with core business .																															
Community involvement in corporate decision -																															

Section C: Failure Factors/Barriers to the MOHSS strategic plan objectives for 2009- 2013 Implementations

SA=Strong Agree, A=Agree, N=Neutral , SD=Strongly Disagree, D=Disagree						
	Select only one answer	SA	A	N	SD	D
1	Limited resources cause to implement or accomplish strategic plan					
2	Your hospital can't implement strategic plan for the reason that it is public healthcare hospital					
3	Strategic plans implementation failed due to deficient communication system of your ministry					
4	The difference of opinion among you and your higher management in the way of objective affects performance of your hospital/region					
5	New problems may occur while implementing the strategic plan					
6	The people who execute the plan may agree to another plan too					
7	The people who are assigned to execute the strategic plan must have education and expertise in strategic plan modelling					
8	Lack of leadership or instructions of leadership cause failure of the strategic plan implementation					
9	The Executive of organization may help you in implementation of the strategic plan					
10	Before implementation of the strategic plan all material or important information is necessary to be achieved					
11	After completion of the strategic plan formulation, opinion of the operational staff must be obtained for its rejection or acceptance before its implementation					
12	The structure of the hospital may become a barrier in implementation the strategic plan					
13	Whatever the strategic plan is, it must be prepared in accordance to information of the objectives					
14	The strategic plan must be prepared in accordance to the system of an organization					
15	The managers must adopt strict attitude to implement the strategic plan once developed					
16	Before implementation these strategic plan, duties and nature of assignments of each manager must be clearly defined					
17	Client's satisfaction rating on services rendered by your hospital shall be the critical determinant factor for the success of strategic plan implementation					

APPENDIX D: NBS COVER LETTER



25 September 2015

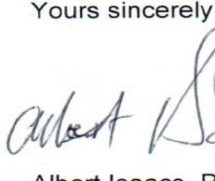

To whom it may concern

Mr Abner Kukeyinge Shopati of student number 9512713 is registered for a fulltime Doctorate in Business Administration at the University of Namibia through the Namibia Business School.

This letter serves to confirm that Mr Shopati is required to do full time research in the field for his doctorate dissertation. He will conduct his research in the Khomas, Kavango East and Oshana Regions and it is imperative that the student fully participates in the research process.

If you have any queries please do not hesitate to contact the Business School at the University of Namibia.

Yours sincerely

Albert Isaacs, PhD
Associate Dean
Namibia Business School
University of Namibia
Tel: +246 61 413 500
Fax: +246 61 413 512
Email: albert.isaacs@nbs.edu.na

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340 MandumeNdemufayo Ave. – Private Bag 16004 – Pionierspark – Windhoek – Website: www.nbs.edu.na
Tel: + 264 (61) 413500 – Fax +264 (61) 413512 – E-mail: info@edu.na – Trust reg. no T263/05