RESEARCHERS' EXPERIENCES ON COLLABORATIVE RESEARCH: THE CASE OF THE UNIVERSITY OF NAMIBIA AND NAMIBIA COMMISSION ON RESEARCH, SCIENCE AND TECHNOLOGY

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Abstract

The study explored the experiences of the academic researchers at the University of Namibia (UNAM) and Namibia Commission on Research, Science and Technology (NCRST) on collaborative research projects. A total sample size of 15 researchers from UNAM and NCRST participated in this research project. Purposive sampling was applied in the selection of institutions and in the selection of key target participants. The study adopted qualitative methodology following a case study research design. Interviews were used to collect data, thematic analysis method was adopted, facilitated with Atlas.ti software to identify themes. The study adopted dependency theory and world-systems theory as guiding theoretical frameworks, in that both theories provide the understanding of researchers in the peripheral space(s) like the case of UNAM and NCRST where research funding, technological and scientific undertaking are relied on North partners. The results of this research on factors that influence the establishment of research collaborations showed that the most prominent factors lead to collaborative researches were need for funding, exchange of knowledge, strategic partnerships and projects that needed experts and experience in various fields of study. The results of the study further showed that external funders (mainly from the North) set the agenda. Agenda setting varies from one research project to another. The majority of participants revealed that they had good experience working in collaborative research projects and perceived it as expensive, involving, creates opportunities and capacity building for lecturers, platform for development and share knowledge, meaningful and rewarding, beneficial to the society and communities and also inform policy in the country. Challenges faced were classified as individual and institutional. These challenges included; misunderstandings, lack of fund, caliber of researchers, internal politics and bottlenecks, absence of policies to regulate how data sets and how data is owned and absence of national data base to curb scattered data in

Namibia. Therefore, the study recommended among other things, that research collaboration be encouraged on equal partnership between North-South. Furthermore, government of Namibia to increase research funding allocation on the GDP from the current 1% for research to something higher. The study also recommends that collaborative research be on 50/50 research funding to give southern researchers impetus in agenda setting. Lastly, this study recommends that, NCRST should embark on upskilling information, communication and technology (ICT) to curb scattered data to achieve data ownership in Namibia.

Key Words: Funded research, grants, partnerships, multidisciplinary, Research Agenda, Namibia

Table of Contents

Abstract ..... **ii**

Acknowledgements ..... **v**

Declaration ..... **vi**

Dedication ..... **vii**

List of Tables ..... **viii**

Table 1: Core and Periphery parallels in the world –system of knowledge production viii

Table 2: Participants Demography viii

List of Figures ..... **ix**

Figure 1. Study Summary ix

List of Acronyms ..... **x**

CHAPTER ONE: **1**

INTRODUCTION AND BACKGROUND **1**

1.0. Introduction 1

1.1. Background of the study 1

1.2. Statement of the Problem 3

1.3. Research Objectives 3

1.5. Significance of the Study 4

1.6. Limitations of the Study 4

1.7. Delimitation of the Study 4

1.8. Outline of the Thesis 4

CHAPTER TWO **6**

LITERATURE REVIEW & THEORETICAL FRAMEWORK **6**

2.1. Introduction 6

2.2. Theoretical framework of the study 7

2.2.1. Dependency Theory 7

2.2.2. Critics of Dependency Theory 10

2.2.3 World - Systems Theory 10

Table 1. Core and Periphery parallels in the world –system of knowledge production 12

2.2.4. Criticisms of World System Theory 13
2.3. Literature Review 14
2.4. What is Research Collaboration, Why Collaborating? 16
2.5. Research Collaboration within Africa 17
2.6. Research Collaboration in Namibia 18
2.7. North - South Research Collaboration 20
2.8. Agenda Setting in Research Collaboration 21
2.9. Experiences on Collaborative Research 24
2.10. Authorship, Gender and Power Relations in Research Collaboration 29
2.11. Epistemic Injustice and Collaborative Research 30
2.11.1 Epistemic Injustice: It's Historiography 32
2.12 Epistemologies of Global North and South 33
2.12.1 Decolonizing Epistemologies within Research Collaboration 37
2.13. Geopolitics of knowledge in Collaborative Research 39
2.14. Sociology of Knowledge 43
2.15. Challenges to knowledge production in Africa 45
2.16. Research Collaboration in the Context of COVID-19 47
2.16.1 International Research Collaboration During Covid-19 Pandemic 48
2.16.2. Research Collaboration within Africa during Covid-19 Pandemic 48
2.17. Research Collaboration using online Communication 49
2.17.1 Online Communication Tools in Research Collaboration 50
2.18. Bio piracy and Collaborative Research. 51
2.19. Ethics in Collaborative Research 53
2.20. Chapter Summary 56
CHAPTER THREE: **57**
METHODOLOGY **57**
3.1. Introduction 57
3.2 Research Design 57
3.3 Qualitative Research Methodology 58
3.4 Population 59
3. 5 Sample Size & Sampling Techniques 59
3.5. 1 Purposive Sampling Technique 59

3.6 Research Instruments 60
3.7 Procedure. 60
3.8 Data Analysis 61
3.8.1. Data Analysis Integrity, Reliability and Validity 63
3.9 Research Ethics/ Considerations 66
3.9.1 Informed Consent and Voluntary Participation 66
3.9.2 Anonymity and Confidentiality 67
3.9.3 Interview Session 67
3.9.4 Data Transcribing 67
CHAPTER FOUR 69
FINDINGS AND DISCUSSIONS 69
4.1. Introduction 69
4.2. Demographic Characteristics of Participants 69
Table 2. Participant's Demography 70
4.2.2. Participants' Work Experience 71
4.3. Factors that Lead to Research Collaborations 71
4.4. Agenda- setting in the collaborative research projects 78
4.5. Procedure for Contracting/Selection of Researchers to Participate in Collaborative Research 81
4.6. Dynamics of the Processes in Collaborative Research. 83
4.7. Researchers' Experiences in Collaborative Research 86
4.8. Researchers' Motivation for Collaborative Research 89
4.9. Challenges Faced by Researchers in Collaborative Research 92
4.9.1. Individual Challenges 93
4.9.2. Institutional Challenges 93
5.9. Study overview of Collaboration Network. 98
Figure 1: Study Summary 98
4.10. Chapter Summary 98
CHAPTER FIVE 101
RECOMMENDATIONS AND CONCLUSSION 101
5.1. Introduction 101
5.2. Study Purpose Review 101

5.3. Recommendations 102

5.3.1. Recommendations in Terms of Factors that Lead to Research Collaboration 102

5.2.2. Recommendations in Terms Agenda Setting Research Collaboration 103

5.2.3. Recommendations in Regards to Procedure for Contracting/ Selection of Researchers to Participate in Collaborative Research Projects 103

5.2.4. Recommendations in Terms of Dynamics of the Processes in Collaborative Research . 104

5.2.6. Recommendations in Terms of Motivations for Collaborative Research Projects 105

5.4. Conclusion 106

References..... 110

Appendix 1: Ethical Clearance Certificate……...135

Appendix 2: Research Permission Letter ……...136

Appendix 3: Interview guide for Research Collaboration projects……..137

UREC Annex 5F: Informed Consent for Qualitative Studies..... 141

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Declaration

I, **Joel C. Sapwe**, do hereby declare that the work in this study is solely mine. I further declare that this research has not been previously submitted at any other university and that all referencing from other works has been acknowledged.

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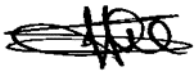


Signature: Date: October 2022

Dedication

This thesis is dedicated to my wife Melvis, who through it all has been my tower of strength. Secondly, to Dr Chola my daughter, many thanks to you for encouraging me during my studies. Shalom my Son, I am grateful for being there for me, and tolerating my absence from home whilst I was pursuing my studies and family members for the support and encouragement rendered to me during the course of my study.

List of Tables

Table 1: Core and Periphery parallels in the world –system of knowledge production

Table 2: Participants Demography

List of Figures

Figure 1. Study Summary

List of Acronyms

IRPC	Institutional Research and Publications Committee
NCRST	Namibia Commission on Research, Science and Technology
NGO	Non-government organization
NUST	Namibia University of Science and Technology
UNAM	University of Namibia
UNCSTD	United Nations Conference on Science and Technology for Development
UN	United Nations
RPO	Research & Publications Office

CHAPTER ONE:

INTRODUCTION AND BACKGROUND

1.0. Introduction

This thesis seek to explore researcher's experiences on collaborative research as in the case of University of Namibia and Namibia Commission on Research, Science and Technology. Firstly, the specific objective was to explain how researchers are contracted/ selected to participate in collaborative research projects; secondly, to assess how agenda setting is done in the collaborative research projects; thirdly, to examine the dynamics of research processes, and lastly, to explore the experiences of researchers on collaborative research projects. This case study approach made use of qualitative phenomenology to explore researcher's experiences in collaborative projects.

This chapter provides the overall background information of the research. The background is followed by the statement of the problem under exploration, the purpose of the study, the significance of the study, the research objectives and research questions. The chapter will be concluded by the classification of terms as they have been used in the study.

1.1. Background of the study

Since colonial times, Africa and indeed Namibia has witnessed an influx of researchers from different parts of the world. Among these researchers are those who seek research collaboration with research institutions or research entities like Universities in Namibia. Research collaboration, as argued by Katz & Martin (1997), means working together of researchers to achieve the common goal in producing new scientific knowledge. However, in line with the Vienna Program of Action, which was adopted at United Nations Conference on Science and Technology for Development (UNCSTD), North-South collaborative research should be

promoted and bear a number of characteristics (UN, 1979). These characteristics include but not limited to the following; keeping with development priorities determined by developing countries themselves, developing country participation, provide for joint participation and control and include training component.

According to Hatton & Schroeder (2007, pp.157-158), research collaboration have been hailed for being efficient, intellectually enriching, and conducive to capacity building. Ideally, they are mutually beneficial. Yet participants in North-South collaborative research attest to a more complex reality, shaped first and foremost by the fact that partnering is often the only way the research partners from countries in the South can have access to research funding. Alongside the benefits of partnership comes a range of obstacles, from language barriers and complex management structures, to inequitable access to financial resources, libraries, conferences, training, and publishing opportunities. Mismatched expectations, lack of face-to-face interaction, and different levels of methodological sophistication *and theoretical analyses* can also undermine partnership plans (Bradley, 2008).

The University of Namibia (UNAM) is a multi-campus public research university in Namibia, as well as the largest university in the country. It was established by an Act of Parliament on 31 August 1992 (UNAM, 2015). On the environs of Windhoek, the University of Namibia's main campus is nestled amongst heaving hills on the west side along the western by-pass road. It takes about five minutes' drive from central business centre (CBD) to the university main campus. Namibia Commission on Research, Science and Technology (NCRST) is an organisation that was established by government to regulate, promote, develop, and inform research, science, and technology in the country. Over the years, the university has experienced an influx in collaborative research projects between academic researchers from the University of Namibia and academic institutions from the Global North. Yet, no systematic research has been carried out so far to understand the experiences and perceptions of academic researchers

at both NCRST and the highest learning institution in the country, Namibia, so as to determine the validity of collaborative research. Therefore, this research project explores the experiences and perceptions of academic researchers based at the University of Namibia and researchers based at Namibia Commission on Research, Science and Technology on collaborative research projects.

1.2. Statement of the Problem

The central focus of this research project was to explore the experiences of researchers at UNAM and NCRST on collaborative research projects. Firstly, the problem guiding this research project emanated from what Kumar and Bahar (2019) reported that, research collaborations are oppressive, unethical and inequalities exist between North and South. Secondly, as Mignolo (2011) argued, collaborative research does not enhance capacity building or empower local population, but promote Western philosophies and Western agenda. Against these observations by the aforementioned scholars, this study sought to carry out a study with focal research institutions in Namibia, UNAM and NCRST to determine the authenticity and validity of the observations with respect to Namibia, a country where influx in collaborative research has taken central stage in recent years.

1.3. Research Objectives

The main objective of this research is to explore the experiences of the academic researchers at the University of Namibia and NCRST on collaborative research projects.

The specific objectives of the research area are:

i. To explain how the researchers are contracted/selected to participate in the collaborative researches.
ii. To assess how agenda- setting is done in the collaborative research projects;
iii. To examine the dynamics of research processes;

iv. To explore the experiences of researchers on collaborative research projects.

1.4 Research Questions

a) How are researchers contracted/selected to participate in the collaborative researches?

b) How is agenda setting done in the collaborative research projects?

c) What are the dynamics of research processes?

1.5. Significance of the Study

It is anticipated that the findings of this study would add to the body of knowledge on collaborative research at UNAM (and other such as African institutions) and engage policy makers on the calls towards decolonising research in Africa and in particular equity in collaborative research in Namibia. The study will also assist the University of Namibia in ensuring issues of research decolonial are publicly debated and addressed accordingly.

1.6. Limitations of the Study

The outbreak of COVID-19 and the restrictions that came with it rendered the process of data collection to be affected as a result. However, some participants were physically approached after appointments whilst other participants preferred Zoom video calls. The study was also limited to UNAM main campus and NCRST. As such, results may not be applicable to other research institutions and centres in the country and beyond.

1.7. Delimitation of the Study

This research focused only on collaborative research projects at the University of Namibia's Main Campus in the Multidisciplinary Research Centre, Faculty of Humanities and Social Sciences, Faculty of Science and NCRST.

1.8. Outline of the Thesis

The framework of the chapters is offered in an effort to give the reader a view of this thesis as a whole. Chapter one is a brief introduction of what the study entails. It also focuses on the

statement of the problem, the research objectives, research questions, significance of the study, and limitations of the study and the delimitations of the study.

Chapter two covers literature review. It reviews some of the literature on research collaboration, experiences of researchers in research collaboration projects, agenda setting and research dynamics processes. In chapter three, the research methodologies are outlined on how the research project was carried out including the procedures the researcher followed. In chapter four, brings out the presentation of research findings through data analysis.

In chapter five, the discussion of findings is presented, including the conclusion and recommendations are drawn about the study then followed by a list of references and annexes. In order to understand the experiences of researchers in research collaboration projects, purposive sampling technique was employed to select the research participants and using qualitative research method and data was thematically analysed guided by semi-structured interview guides of the research instruments.

However, the experiences of researchers at UNAM and NCRST provides a window into understanding research collaborations in Namibia. Furthermore, it gives a glimpse of complexities in research collaborations and overly dependence of researchers on external funding which to some extent lead to unequal power relations and inequalities.

CHAPTER TWO

LITERATURE REVIEW & THEORETICAL FRAMEWORK

2.1. Introduction

The primary importance of literature review and theoretical framework has been well conveyed and documented as the basis for any scholarly work. (Creswell, 2003; Kemoni, 2007; Ngulube, 2003). The literature review gives an understanding of the existing research and debates to the particular topic. As such, literature review will present that knowledge. As such, chapter two of this thesis reviews literature related to collaborative research / or research partnerships as well as theoretical framework. It further presents dynamics of research, agenda setting and the experiences of researchers in the Global South and their relationship with Global North researchers.

Additionally, this chapter presents two theoretical frameworks as relevant theories to the current study based on the research objectives at hand. Moreover, dependency theory and world-system are theories that fits in squarely in this study, as they help to explain how researchers and countries are categorised into core and periphery or North -South status.

Further, the theory proposes the idea of the North as the centre of knowledge and the South as periphery. Moreover, the theory exposes challenges researchers face in the global orientations that foster inequalities, which makes researchers irrelevant in their quest to attune themselves to the demands of international knowledge production on research and collaboration despite inequalities imposed by the core. The thesis extends dependency theory and world systems theory to focus on inequalities in research and knowledge practices at an international level.

2.2. Theoretical framework of the study

2.2.1. Dependency Theory

The central concept of this thesis are defined through available literature and theories, keeping in mind and focused on the research objectives and specific research questions. Therefore, the special focus was on the experiences of researchers on research collaboration in the case of UNAM and NCRST.

For the purposes of this research project, dependency theory as the theoretical framework was adopted. Theotonio Dos Santos, one of the founders of dependency theory, describes dependence as "a situation in which the economy of certain countries is conditioned by the development and expansion of another economy to which the former is subjected" (Dos Santos, 1970, p. 231). Dependency theory emerged in the 1950s in response to modernization theory (Matunhu 2011, p. 68; Herath 2008, p. 820). Wallenstein's work developed at a time when the dominant approach to understanding development, modernization theory, was under attack from many fronts, and he followed suit. He himself acknowledges that his aim was to create an alternative explanation (Wallerstein, 2000). He aimed at achieving "a clear conceptual break with theories of modernization and thus provide a new theoretical paradigm to guide our investigations of the emergence and development of capitalism, industrialism, and national states" (Skocpol, 1977, p. 1075). Criticisms to modernization include: the reification of the nation-state as the sole unit of analysis; assumption that all countries can follow only a single path of evolutionary development; disregard of the world-historical development of transnational structures that constrain local and national development; explaining in terms of a historical ideal types of "tradition" versus "modernity", which are elaborated and applied to national cases. In reacting to modernization theory, Wallerstein outlined a research agenda with five major subjects: the functioning of the capitalist world-economy as a system, the how and why of its origins, its relations with non-capitalist structures in previous centuries, comparative

study of alternative modes of production, and the ongoing transition to socialism (Goldfrank, 2000; Wallerstein, 1979).

Although dependency theorists and its proponents emphasised political economy when discussing dependency theory where political economy is the focus, however, political economy refers to manifold ways in which capitalist's economic structures and market processes influences and are influenced by political power at local, national and international level (Adler, 2014). Therefore, political economic forces, not only does it influence economic outcomes of any country, but often it acts as a determining influence. In this sense, political economy of each country Namibia included, acts as a playbook and shape how policies are formulated, influenced and influence policies and laws on various sectors of the economy including research and budgetary allocation on research collaborations from the national GDP.

Wallerstein (1974) as the father of world- systems, he expounded that it is a multicultural territorial division of labour in which the production and exchange of basic goods and raw materials is necessary for the everyday life of its inhabitants. He further explained that this division of labour refers to the forces and relations of production of the world economy as a whole and it leads to the existence of two interdependent regions: core and periphery. Furthermore, he stated that among the most important structures of the current world-system is a power hierarchy between core and periphery, in which powerful and wealthy "core" societies dominate and exploit weak and poor peripheral societies. Moreover, Friedmann (1963) expounded that core and periphery shows spatially how economic, political, and cultural authority is dispersed in core or dominant and the surrounding peripheral and semi-peripheral regions. Most dependency theorists use "the international system" or "world system" as a unit of analysis, with a particular focus on the role of the international capitalist system in the underdevelopment of the periphery (Sekhri, 2009, p.243; Kay 2011, p. 533).

Meanwhile, Tausch (2010, p.468) in his research drew a connection to dependency theory and concluded that "poverty and backwardness in the "periphery" and semi-periphery are caused by the very peripheral or quasi peripheral position that these nations or regions always had in the international division of labour since the beginnings of the world system in 1492." Based on the above understanding, dependence in the international system can be used as a measure for explaining global inequalities. In order to examine the usefulness of the concept of dependency theory for explaining global inequalities Farny, (2016) explains that `Periphery` or the `South` is characterized by socio-economic and political backwardness, measured against Western values and standards. Concisely, a country with poor health system, underdeveloped industry, and lack of technology, weaker state institutions, and a country that depends on developed nations (core) for financial support falls in peripheral space (see, Goldfrank, (2000), Chase- Dunn & Grimes, (1995). Namibia as other African countries are categorised as peripheral country (Chase-Dunn, Kawano & Brewer, 2000).In this light, it can be argued that as long as Namibia is in the peripheral sphere, researchers will be regarded as such by the core hence research collaboration may be aligned on asymmetrical of core.

Moreover, Kumar & Bahar (2019) argued that research collaborations are oppressive, unethical and characterised by inequalities between North and South, therefore, the biggest question would be how would researchers in the global South or periphery attune themselves and become relevant in the world system where exploitation of poorer countries is manifested greatly?

Dependency theory fits well in this study in that, Global South researcher's voices are situated in the periphery space, their work is considered peripheral. Meanwhile, Demeter (2019) argued hegemonic/ dominance is linked with the core over the peripheral, though peripheral are engaged in the discourses in the push for acceptance and meaning despite unequal power relations with the core or Global North. As espoused by the founder of the theory, Theotonio

Dos Santos, the feature that the countries of the periphery have in common is dependency on the core countries for technological, scientific and other developmental undertakings including research collaboration project or research partnerships. This is so; many poor countries cannot afford to fund research projects since their economies are constrained and sometimes simply because they lack political will and due to dependence syndrome of these countries.

2.2.2. Critics of Dependency Theory

Dependency theory like any other theory has not been left without criticism in international arena. Major opponents of the theory claim that what dependency theory scholars call to be dependent interstate relations are actually interdependent relations (Azizli, 2013). With the international trade relations and through global transactions, world is moving towards a more interdependent and closely tied international system (Azizli, 2013).

Another critical point discussed is the narrowness of the subject matter of the dependency theory: Focusing mainly on economic factors undermines the efficiency of the theory. Moreover, this economic factor has downplayed the effectiveness of dependency theory. Azizli (2013) gave an example of India and China that despite being exploited by the colonialists, their major economic prosperity and development actually diminished the popularity of the dependency theory in the late twentieth century.

2.2.3 World - Systems Theory

World-systems theory is in many ways is an adaptation of dependency theory (Chirot and Hall, 1982). Wallerstein draws heavily from dependency theory, a neo-Marxist explanation of development processes, popular in the developing world, and among whose figures are Fernando Henrique Cardoso, a Brazilian. Dependency theory focuses on understanding the "periphery" by looking at core-periphery relations, and it has flourished in peripheral regions

like Latin America. It is from a dependency theory perspective that many contemporary critiques to global capitalism come from.

Wallerstein (1974) posits a world-system as a social system, one that has boundaries, structures, member groups, rules of legitimation, and coherence. Its life is comprised of the conflicting forces, which hold it together by tension and tear it apart as each group seeks eternally to remould it to its advantage. It has the characteristics of an organism, in that is has a lifespan over which its characteristics change in some respects and remain stable in other. Life within it is largely self-contained, and the dynamics of its development are largely internal" (Wallerstein, 1974. p. 347). A world-system is what Wallerstein terms a "world economy", integrated through the market rather than a political centre, in which two or more regions are interdependent with respect to necessities like food, fuel, and protection, and two or more polities compete for domination without the emergence of one single centre forever (Goldfrank, 2000).

In his own first definition, Wallerstein (1974. p.347) said that a world-system is a "multicultural territorial division of labour in which the production and exchange of basic goods and raw materials is necessary for the everyday life of its inhabitants." This division of labour refers to the forces and relations of production of the world economy as a whole and it leads to the existence of two interdependent regions: core and periphery. These are geographically and culturally different, one focusing on labour-intensive, and the other on capital-intensive production. (Goldfrank, 2000). The core-periphery relationship is structural. Semi-peripheral states acts as a buffer zone between core and periphery, and has a mix of the kinds of activities and institutions that exist on them (Skocpol, 1977).

Among the most important structures of the current world-system is a power hierarchy between core and periphery, in which powerful and wealthy "core" societies dominate and exploit weak

and poor peripheral societies. Technology is a central factor in the positioning of a region in the core or the periphery. Advanced or developed countries are the core, and the less developed are in the periphery. Peripheral countries are structurally constrained to experience a kind of development that reproduces their subordinate status (Chase-Dunn and Grimes, (1995). The differential strength of the multiple states within the system is crucial to maintain the system as a whole because strong states reinforce and increase the differential flow of surplus to the core zone (Skocpol, 1977). This is what Wallerstein called unequal exchange, the systematic transfer of surplus from semi-proletarian sectors in the periphery to the high technology, industrialized core (Goldfrank, 2000). This leads to a process of capital accumulation at a global scale, and necessarily involves the appropriation and transformation of peripheral surplus.

In his research, Demeter (2019) provides detailed parallels as illustrated in the table below between core and periphery in the lenses of world-system dynamics in knowledge production.

Table 1. Core and Periphery parallels in the world –system of knowledge production

Core	**Periphery**
Overrepresented in terms of publication output	Underrepresented in terms of publication output
Overrepresented on editorial boards	Underrepresented on editorial boards and selection committees
Overrepresented on selection committees	Underrepresented on selection committees
Owns all international publishing houses	Lacks international publishing houses
Determines international standards	Must follow or break away from international standards
Ascertaining accepted theories	Must model or mimic accepted theories
Ascertaining accepted methods	Must model or mimic accepted methods

Awarding and winning international grants	Underrepresented in granting and winning international awards
Establishing, maintaining and chairing international associations	Being at most paying members of international associations
Ascertaining global language	Must master global language
Brain drain	Talent migration
Fast and strategic accumulation of academic capital	Academic capital flows towards the core

Source: Demeter (2019)

On the political side of the world system, a few concepts deem highlighting. For Wallerstein, nation-states are variables, and elements within the system. Class forces to pursue their interest, in the case of core countries, use nation states. Imperialism refers to the domination of weak peripheral regions by strong core states. Hegemony (*or dominance*) refers to the existence of one core state temporarily outstripping the rest (Demeter, 2019). According to Demeter (2019), hegemonic/ dominance referred to the presence of the core on the periphery countries. Hegemonic powers maintain a stable balance of power and enforce free trade as long as it is to their advantage. However, hegemony is temporary due to class struggles and the diffusion of technical advantages. Finally, there is a global class struggle.

In this research project, therefore, World-system theory fits in well in that the core/ periphery of knowledge is Western-centred, determined, and controlled and the South-based researchers are dominated and exploited by the West.

2.2.4. Criticisms of World System Theory

World-systems theory has attracted criticisms from its rivals; notably for being too focused on economy and not enough on culture and for being too core-centric and state-centric. Robinson

(2011), for instance, has criticized world-systems theory for its nation-state centrism, state-structuralist approach, and its inability to conceptualize the rise of globalization. Robinson (2011) suggests that world-systems theory does not account for emerging transnational social forces and the relationships forged between them and global institutions serving their interests. Robinson (2011) argued these forces operate on a global level, rather than, state system and cannot be understood by Wallenstein's nation-centred approach.

According to Wallerstein himself, critique of the world-systems approach comes from four directions: the positivists, the orthodox Marxists, the state autonomists, and the culturalists (Wallerstein, 2004). The positivists criticise the approach as too prone to generalization, lacking quantitative data and failing to put forth a falsifiable proposition (Wallerstein, 2004). Orthodox Marxists find the world-systems approach deviating too far from orthodox Marxist principles, such as by not giving enough weight to the concept of social class (Wallerstein, 2004). The state autonomists criticize the theory for blurring the boundaries between state and businesses. Further, the positivists and the state autonomists argue that state should be the central unit of analysis. Finally, the culturalists argue that world-systems theory puts too much importance on the economy and not enough on the culture (Wallerstein, 2004).

In short, most of the criticisms of world-systems analysis criticize it for what it explicitly proclaims as its perspective. World-systems analysis views these other modes of analysis as defective and/or limiting in scope and calls for rethinking them (Wallerstein, 2004).

2.3. Literature Review

Research collaboration is increasingly carried out in teams of individuals, institutions and countries (Bozeman & Boardman, 2003). All major sectors including the universities, research institutes, industry and government are part of collaboration (Sooryamoorthy, 2009). Research

institutes favour domestic collaboration whereas universities incline more towards international collaboration (Sooryamoorthy, 2013).

There has been tremendous growth of collaboration among nations and research institutions witnessed during the past few years through policy initiatives adopted by individual institutions, corporate world and government from different spheres (Melin & Person, 1998). Interaction among researchers has for long been the essence of scientific practices which evolve around observing research standards, ethics, documenting results, and practising strict honesty and openness with regard to contributions of partners, among other things.

According to Melin & Person (1998), researchers do not only communicate research results and information to each other, they also co-produce and co-report research results, and in short, they both communicate and collaborate. Research collaboration is an intense form of interaction that allows for effective communication as well as the sharing of competence and other resources. In many cases, research collaboration is the key mechanism for mentoring graduate students and postdoctoral researchers (Bozeman & Corley, 2004), and enhancing the productivity of individual researchers (Melin, 2000).

However, there is research collaboration within south- south but more research collaboration activities have been between the well-developed countries and less developed countries (Gaillard, 1994). This cooperation has bolstered developments in research collaborations, relationships and knowledge production in many areas for less developed countries. Nevertheless, research collaboration is dominated by centres of power with their own epistemic and research agenda (Mignolo, 2016), and matrix of power (Mignolo, 2011), and accepting hegemonic power in repackaging own culture for foreign consumption (Bennett, 2007). This research project answers questions as to how researchers collaborate and why do they collaborate.

2.4. What is Research Collaboration, Why Collaborating?

The Oxford South African Concise Dictionary (2010) defines collaboration as work jointly on an activity or project. Katz & Martin (1997) expounded research collaboration to be working together of researchers to achieve the common goal of producing new scientific knowledge whilst Agranoff (2006) defines research collaboration as the way of facilitating and operating in multi-organizational arrangements to solve problems that cannot be solved or solved easily by single organizations. This is to say, researchers working together to produce new scientific knowledge is pivotal. Collaborative research therefore, means to co-labour, co-produce and co-report in order to achieve common goals, often working across boundaries and in multi-sector and multi-actor relationships.

For the purposes of this research project, research collaboration is regarded as joint work between researchers from different disciplines, departments, North & South hemispheres and research institutions in order to achieve research objectives in order to create scientific knowledge. However, Huang (2014) discusses various reasons why researchers collaborate. Firstly, collaboration is necessary for researchers to address complex research issues that otherwise cannot be addressed by individual researchers. Due to the increased specialization in science, there is a need for individual researchers to keep their own activities focused and specialized (Bukvova, 2010; Katz & Martin, 1997). Such focus and specialization would allow researchers to make significant knowledge advancement in their respective fields and enhance scientific and knowledge creation (Bukvova, 2010).

The United Nations Office for Sustainable Development (2012) points out that in a knowledge economy, knowledge and capacity may be replaced or refreshed at a very fast pace through collaboration. Thus, continuous learning and knowledge transfer are critical for researchers to remain relevant in their respective fields in an ongoing knowledge creation process. Such learning and transfer may bring together researchers with culturally different ideas, which

create conditions for new knowledge creation. Thirdly, research collaboration may reduce research costs.

Bukvova's (2010) review on research collaboration finds that experimentalists tend to collaborate more than theoreticians do. In experimental research, the instrumentations required are getting increasingly complex. Bukvova claims, scientific instrumentation costs have jumped considerably with the successive generations of technology. Therefore, by working together in research collaboration, research costs and research facilities can be better optimized, shared and utilized (Bukvova, 2010).

Research collaboration may enable intellectual companionship as well. The goal of research is to expand the boundaries of knowledge. As researchers are specialized and focused, their advancement at the frontier of each research field can be lonely (Bukvova, 2010; Katz & Martin, 1997). An individual may partially overcome this intellectual isolation by collaborating with others and forming working relationships with them. Hence, research collaboration is organised within Africa to achieve tremendous results as will be highlighted below.

2.5. Research Collaboration within Africa

Governments within Africa utilise research collaboration as a policy instrument for knowledge transfer from abroad and as a means to improve diplomatic relations with other countries by creating goodwill in order to gain political capital (Wagner *et al.*, 2001). Governments allocate substantial resources in support of this objective. Russell (1995) and Wagner *et al*., (2001) suggest that international collaboration is replacing other models like lone effort research or solo effort as the preferred method of building scientific capacity in developing countries.

Researchers collaborate with each other for various reasons as seen in the previous paragraph above. However, research collaborations are focused within Africa in many areas. According to Pouris & Ho (2014), they argued that the research areas that are under-emphasised in Africa

include those underpinning modern technologies and economies (for example, engineering, physics, chemistry and materials science). This is in contrast to a country like China, which emphasises engineering, physics and chemistry.

Moreover, Africa's main research collaborating partners are the USA, Germany, France and UK. It is important to note that these countries are not only the most collaborative countries in the world (National Science Board, 2012), but also the largest funders of collaborative research in the biosciences, with a specific emphasis on medicine and agricultural sciences in Africa. Within Africa, researchers seeking collaborative work choose countries of focus and areas of collaborative research and Namibia is one of them.

2.6. Research Collaboration in Namibia

Namibia has a number of exceptional features including history, the landscapes, a diversity of cultures, and a small population, and including political stability (Kgabi 2011). Researchers are attracted to the country as it has a stable research environment. The need for research support structures and mechanisms, and multi-disciplinary research teams working across institutions within the country cannot be disputed.

The main structure coordinating research and indeed collaborative research in Namibia is the National Commission on Research, Science and Technology (NCRST). The Namibia Commission on Research, Science and Technology as charted in its mission, is to establish a national system that promotes, develops and informs research, science, technology and innovation through effective coordination to realize a knowledge-based society. All researchers seeking to collaborate with any research institution in Namibia start with NCRST. After such a researcher/s get ethical clearance then work can commence.

According to Kgabi (2011), the University of Namibia (UNAM) and Namibia University of Science and Technology (NUST) are the main institutions given their mandate of producing

the future research community. Owing to that, University of Namibia Research Report of 2015 revealed that there were 17 research projects under Namibia/ South Africa collaborative research programmes and a further 15 were funded under the NCRST to the tune of over N$ 8 million over a two-year period (UNAM, 2015).

However, there are several private and non-government organization (NGO) sector research institutions conducting contract, commissioned, and community awareness research within the country. Meanwhile, researchers in Namibia, source material for conducting research from a variety of scholarly outputs (Kgabi, 2011) that includes journals, conference papers, monographs, book chapters, books, working papers, research and technical reports and databases. However, journals remain the preferred means of communicating scholarly work (Kgabi 2011).

Houghton (2003) concludes that research as a mode of knowledge acquisition and transfer is increasingly characterized by greater emphasis on interdisciplinary, multidisciplinary, trans-disciplinary approaches; enhanced diversity in the locations of research activities. Sayed *et al*., (2008) discusses Vision 2030 for Namibia and recommended implementing the NDP3, which include:

- Increasing the supply of graduates in skill areas in high demand;
- Strengthening the institutional capacity and quality of tertiary education; and
- Increasing training of both undergraduates and postgraduates abroad in areas not available in Namibia. By doing so will increase the capacity for researchers in different fields and areas of expertise including research.

However, sources for research funding are mainly limited only to internal University budget, and research granting agencies outside Namibia (UNAM, 2011). The Research & Publications

Office (RPO) for University of Namibia, and the Institutional Research and Publications Committee (IRPC) of the Namibia University of Science and Technology administer budgets that cater for Research Projects, Conference attendance and Publication charges within their respective institutions. Therefore, Namibia and indeed University of Namibia and Namibia University of Science and Technology have become epi-centres for collaborative research activities within North-South, as it will clearly be discussed in detail in the paragraph below.

2.7. North - South Research Collaboration

Global North consists of richest countries and most industrialised countries, which are mainly in the Northern part of the world whilst Global South refers to less economically developed countries in the South. In this sense therefore, North-South partnerships refers to research partnership between researchers from the global North and researchers from the global South. Institutions drive North-South research collaboration or individuals who are expected to generate scientific papers in national and international journals that involve as co-authors both Northern and Southern researchers (Langer & Al, 2004).

However, due to inequalities and historical patterns of dominance, true partnership are likely to be controlled by the foreign partner in a semi-colonial fashion. Costello & Zumla (2000), for example, summarised the characteristics of foreign-led research model of North-South partnerships, and the implied negative concerns for scientific sustainability. Nevertheless, as Langer & Al (2004) pointed out, research papers in the field of public health and medicine are heavily concentrated in the USA and Western Europe, with an almost negligible presence of papers singularly authored by researchers from developing countries or Global South. This remains the case even though the developing world carries the overwhelming burden of the world's diseases.

Moreover, Jentsch & Pilley, (2003) argued that publications and authorship decision in North and South research collaborations could emerge where North influence is exerted and prevailed. Furthermore, Dahdouh-Guebas *et al*., (2003) reported in their research that, out of 1,601,199 papers published only 2,798 were done by least developed countries. Furthermore, Dahdouh-Guebas *et al*., (2003) findings revealed the following: To start with, almost 70% of research carried out on developing world by the industrialised country co-authorship was excluded. Furthermore, 60-70 % corresponding authors from industrialised countries failed to acknowledge collaborators from developing countries. Lastly, 40% of researchers in the global South were data collectors for the global North partners (Dahdouh-Guebas *et al*., 2003). These findings indicate what Dahdouh-Guebas *et al*., (2003) call a clear evidence of neo-colonial science, 'a spirit in science in which authors from the (industrialised) countries realise the importance of publications, 'recognise the contribution', but deliberately and systematically exclude co-authorship of developing countries. However, it can be argued, that the imbalances in North – South research collaboration could be attributed to many factors including agenda setting. The section below discusses agenda setting in more detail.

2.8. Agenda Setting in Research Collaboration

Lavrakas (2008) defines agenda setting as the ability to influence the importance placed on the topics of the public agenda. The intellectual father of agenda-setting theory is Walter Lippmann, whose book, *Public Opinion* (1922), began with a chapter titled 'The world outside and the pictures in our heads.' The central thesis of *Public Opinion* is that the news media are the primary bridge between the vast array of events in the external world and the truncated views of these events in our minds. As Lippmann noted, opinions and behavior are a response to these pictures in people's heads, not the larger outside world (Lavrakas 2008). However, agenda setting is the power to set and steer public opinion, leading to deliberation and formulation and to public opinion research. In the context of research collaboration, it speaks

to determining the most important problems for discussion, action, and research collaboration. Advocates of North–South research partnerships suggest that they are efficient, intellectually enriching, and conducive and enhance capacity building (Hatton and Schroeder, 2007). However, the agenda-setting process is a formidable obstacle in many research partnerships.

Hatton & Schroeder (2007) attest to a more complex reality, shaped primarily by the fact that research collaboration is often the only way for Southern researchers to access funding from the Global North. Alongside the benefits of partnership comes a range of obstacles, from language barriers and complex management structures, to inequitable access to financial resources, libraries, conferences, training, and publishing opportunities. Mismatched expectations, lack of face-to-face interaction, and different levels of methodological sophistication can also undermine partnership plans (Hatton and Schroeder 2007).

Bradley (2008) laments the continued domination of collaborative agendas by the interests of Northern donors and scholars, and almost invariably calls for even-handedness with South engagement in agenda-setting process. Bradley argued further that donor policies definitively shape agenda-setting processes, chiefly by requiring Southern researchers to form partnerships with Northern counterparts in order to receive (financial) support.

Bradley (2008) contended that although North–South partnerships can augment individual and institutional resources and skills, they are not a panacea for all the challenges associated with capacity building and the creation of knowledge to inform development. In the most extreme cases, donors completely preclude collaborative agenda negotiations by granting money to a Northern institution for collaborative research on a particular set of questions before a Southern partner is even identified, thus relegating Southern researchers to the role of mere ‘mercenaries’ (Bradley, 2008).

Furthermore, Bradley (2008) espoused that researchers in the Global South stoically accept this type of work as an inevitable part of making a living in cash-strapped Southern organisations, others rail against it as a cardinal example of the presumptuousness that undermines successful collaboration. Beyond these structural challenges, a number of other factors both enrich and complicate the agenda-setting process for Southern researchers (Bradley, 2008). For example, even when partners agree on the broad content of their research agenda, pinning down viable research questions is often difficult, as many partners have been schooled in different academic traditions and theoretical frameworks, depending on their linguistic, cultural, geographic, and religious backgrounds (Mignolo, 2011, 2016). Inter-personal chemistry (instant connection that exists) and strong character judgement are essential to Southern researchers who attempt to avoid or resolve disagreements over collaborative research agendas (Mignolo, 2016).

Mignolo (2016) observes that if Northern researchers decide to move on to new issues, they often 'take the money with them', limiting their former partners' ability to advance the research agenda independently. As the proverb says; '*he who pays the piper call the tune'* and the other one '*purse string'*, it simply means the funders have the biggest say. Mignolo (2016) points out the pervasive donor influence in the North-South partnership is due to advantaged developed economies and well-funded research programs.

According to many Southern researchers, where collaborative research agendas are concerned it is a 'buyer's market' (Bradley, 2008), in this sense therefore, it is the global North institutions/researchers who determine the terms of reference, they set conditions and topics to be researched since they have the resources. In short, Bradley (2008) argues, that Northern researchers seek out North – South partnerships principally in order to gain access to data and fieldwork opportunities, whilst the others are to publish in Northern journals and access to funds.

However, collaborative research initiatives are visible within African context and funds are availed or sourced, as experienced between University of Namibia and South Africa, (see, Unam Research Report, 2015). Therefore, research collaboration will be shaped by the type of the agenda setting adopted and developed or conceived by the organisers/ funders and less by the other partners who play no part in setting it leading to various experiences.

2.9. Experiences on Collaborative Research

The Oxford South African Concise Dictionary (2010) definition of experience is defined as practical contact with observation of facts or events or an event or occurrence, which leaves an impression on someone. In this sense therefore, this section brings out the way collaborative research has been experienced or in short, the lived experience of researchers in the collaborative research projects.

Lai and Li (2020), make the point clear when analysing the type of research collaboration in the Chinese mainland where scholars have found that there are three main types of collaborative research teams. With the three types of research collaboration where lecturers within a department form the first type, lecturers and students form the second type, and the third type is formed in relation to the task of a research project.

Concerning the first type, formed by lecturers within a department, the students want to take up opportunities to extend their social capital (guanxi) through research collaboration with leading professors (Luo, 2000). Regarding the type formed by lecturers and students, this kind of research collaboration tends to develop a patriarchal and parental nature. As for the one formed in relation to the task of a research project, because of its strong instrumental approach, this type of research collaboration tends to focus on mechanical work distribution, finishing in a short time and with the team disbanding immediately after finishing the task (Yan, 2013). However, Jiang, Fuo, Tan, & Guo, (2007) posits that, most of the research collaborative

projects do not have clear developmental aims and directions and the communications are mostly informal.

In describing the findings in Chinese Mainland, research collaboration Lai and Li (2020) reported a lot of unfair treatment in the research team, which resulted in research collaboration being deemed as parasitism. Parasitism refers to research collaboration or partnership not of equals but places where senior researchers take advantage of junior researchers (Lai and Li, 2020). Furthermore, the collaborative research team experienced unequal power relations that accelerated the exploitation of junior researchers. Junior researchers could only remain at the periphery, and be torn between the contradictory ideas of the leading professors and funding providers in the research collaboration (Macfarlane, 2017).

Moyi Okwaro and Geissler (2015) observed that increasingly clinical trials occur on a global scale, as industry and governments in wealthy countries in the North move trials to poorer countries in the South. Unethical scientific experiments have been conducted on enslaved persons, World War II prisoners, and even in post war period where cases of unethical experiments were reported on prisoners, mentally disabled, and ethnic minorities such as the Tuskegee Syphilis study (Jones, 1993) conducted between 1932 and 1972 in the United States.

In Africa, suspected unethical clinical trials have been reported. For example, in 2001, the pharmaceutical company Pfizer has been accused over informed consent issues and unethical trial in Nigeria during the meningitis epidemic in 1996 (Wise, 2001). Another example is that of Kenya as reported by Oller (2017) that infertility and abortions were common on women in Kenya who had taken family planning injection. However, not too far, two French doctors discussed on national television publicly to fact track COVID-19 vaccine and trails on Africans. Their main argument was that Africa ‘anyhow’ (Büyüm, 2020) does not have the capabilities to face this crisis representing therefore an opportunity to conduct experimentations

using real placebo and the vaccine BCG at large scale. The justification to target Africa and Africans for clinical trials because of weak capabilities such as the lack of masks, treatments and ventilator systems is ethically unacceptable. Some could ask why to prioritize Africa in clinical trials while it was not the epicentre of the disease? It is simply the hangover from a colonial mentality.

This process, sometimes referred to as 'globalization of clinical trials' (Parker and Bull, 2009), has received attention from anthropologists and sociologists because of their traditional geographical interests and attendant concerns with poor or vulnerable communities combined with the anthropological and sociological turn to science and technology (Cooper, 2008). Rottenburg (2009) noted that the intertwined geographies with class and gender emphasises polarities of economic value, power, exploitation and domination. The anthropological and sociological studies of globalisation or economic neo-liberalization underlie concerns with vulnerable populations on social value and justice so are experiences, reflections and debates about injustice and relations in collaborative research (Steeboom-Faulkner & Kumar, 2011).

In Africa, by contrast, the globalization of medical research for instance affects public health research funded mainly by not-for profit bodies and are targeted at local health level. (Geissler, 2015). African governments have become increasingly unable to or unwilling to fund scientific research and health care (Ferguson, 2006; Pfeifer and Chapman 2010). Northern governments, charities, and public–private consortia have simultaneously increased funding for collaborative research on diseases such as HIV/AIDS, malaria, and other neglected diseases responding to global academic interests and local medical needs (Crane, 2010).

Moyi Okwaro and Geissler, (2015) espoused that research collaborations are envisioned as predicated on the core moral values like freedom, autonomy, independence, and equality that pervade all levels of collaborative clinical trials: from participant-informed consent, through

peer group volunteering and staff contracting, to institutional and inter-governmental collaborative agreements. On the other hand, Nordling (2012) suggests there may be tensions even in a model, world-leading collaborative research program, where, apparently, African junior researchers instituted court proceedings against their management for what they referred to as scientific exploitation, even 'modern day slavery'.

Kalinga (2019) provides insight into the complexity, and issues of navigating global research collaboration in the Global South as an indigenous scholar. She highlights a wide range of troubling expectations and practices from her own experiences that tend to reinforce the power of those with the funding. African staff according to Kalinga are often overstretched to keep projects running despite the challenges of working with research-fatigued communities who never seem to benefit directly from the research.

Kalinga (2019) argues, research frameworks and timelines clash with trust-building processes and, due to the constraints of contracts and deadlines, many external research partners are often too impatient to understand the social codes that govern the relationship between the indigenous researchers, research participants, and communities. In Kalinga's view, there is a lot of potential in multi-country collaboration, but one has to take seriously the undesirable effects that the unequal power dynamics between the Global North and Global South systematically have on African scholars. She calls for equity in research collaboration where the Global North counterparts do not suppress the cultural concerns and constraints of Global South research collaborative partners it be in authorship, publication of scholarly articles, or gender exclusion and unlevelled power relations.

Moyi Okwaro and Geissler (2015) observed further that research collaboration is an encompassing and innovative social concept that is constructed, evolves, and take varying shapes depending on the contexts and the groups involved. Research collaborations in Africa

require sustained effort to bring and hold together layers of interdependent actors that is local and international researchers and their respective institutions, local researchers and their local collaborators, and research employees and trial participants. Despite frictions, disagreements, power differentials and potential risks for exploitation by some Northern researchers, Africa should not be used as outsourced station for scientific experiments (Moyi Okwaro and Geissler, 2015). This is academic capitalism.

Kauppinen (2015) defined academic capitalism as the multidimensional process of integration between higher education and the knowledge-based economy. Lai and Li (2020) explained that this integration creates an obscuring of frontiers between higher education, states, and markets. Academic capitalism involves the economic purposes of both producing knowledge and reducing state funding of higher education (Lai and Li, 2020). In this context, the vast majority of academics are experiencing overt pressure to revamp their scholarly toolkits to generate alternative revenue streams. Research that takes place in collaborative groups offers more potential for the accumulation of external funds (Lai and Li, 2020). Academic culture has been changed by the promotion of academic capitalism. Meanwhile, Sutherland (2017) espoused that academia has moved towards a more performative culture where elements able to be measured and counted have become the predominant indicators for success.

Additionally, Sutherland (2017) agree with Munch (2014) that to be successful in this game calls for strategies for securing a powerful position in the academic field to earn more research funds due to present recognition being based on prior publication and funding records. In the meantime, scholars have to master the language of the market to obtain various kinds of external research funding and to report according to the funding agencies' requirements and produce the right kind of knowledge in accordance with a market-orientated discourse in order to remain afloat in collaborative research (Brunila & Hannukainen, 2017).

2.10. Authorship, Gender and Power Relations in Research Collaboration

Oxford Dictionary (2021) defines authorship as the state of being the writer of a book, article or document, or the occupation of writing. A peer-reviewed document is co-authored if it has more than one author. It is institutionally co-authored if it has more than one author address suggesting that the authors come from various institutions, departments or other kinds of units. Crawford *et al*., (2021) discusses the gaps that exists between North and South research authors in terms of publication in the journal articles. They lamentably echoed that the scholars in African universities are disadvantaged in the Global North and South. The gaps are quite evident that the highest percentage of research authors are from Global North.

Briggs and Weathers (2016) highlighted a serious manifestation on power relations and upon analysing all research articles in *African Affairs and Journal of Modern African Studies, top-ranked Africanist journals in the English-speaking world*, over a period of twenty-one years (1993 to 2013). They observed that Africa-based research authors were publishing not only a small proportion of articles, but also a declining share in both journals (Briggs and Weathers, 2016).

Furthermore, in terms of gender, the findings were even astounding. Most articles written by Africa-based academics were by men, with Africa-based women publishing only twenty-one single-authored articles out of 935 articles in the database (Briggs and Weathers 2016, p. 474). In trying to understand this, Briggs and Weathers noted that, submission rates from Africa-based authors had actually increased, but acceptance rates were low and declining. It should be noted, that these findings do not reflect authorship and production of articles within global South context in that, the journals appear to be 'African' in their thrust and contribution.

Briggs and Weathers (2016) noted two reasons, editorial reviewer's biasness and low-quality submission. Justifying editorial biasness was in that majority of the reviewers were from Global

North Institutions. Briggs and Weathers further elucidated that this was the most common explanation proffered in informal conversations during the research. If there is any truth to this, then they suggested it related to the increased pressure on academics in African universities with rising student numbers coupled with declining levels of state support for tertiary education in many countries. It can be contested, that if the second reason can hold, then they must be a deliberate program for Governments in African universities or research institutions to increase the budgets for research and encourage authorship. The financial situation of African universities is likely to be part of the story hampering authorship and low rates in authorship.

Crawford *et al*., (2021) espoused asymmetrical power relation between scholars in the Global North and Global South in relation to accessibility to research funds. The sources of such funds are mainly Western governments and corporate foundations, and eligibility to apply is often restricted, especially to national government research council funds. Of course, research on countries in Africa has been a key focus of many funders, and this has required African partners. Whilst, some Global North researchers mean well but many others do not mean well for Africa. As long as accessibility to research funds are, and continue to be asymmetrical constructed, authorship and women contribution to research collaboration will be a pipe dream and this will lead to epistemic injustice (Fricker, 2017).

2.11. Epistemic Injustice and Collaborative Research

Epistemic injustice is "injustice related to knowledge" production and dissemination. It includes exclusion and silencing, systematic distortion or misrepresentation of ones meanings of contribution and distrust (Fricker, 2007). One would only understand epistemic injustice in the context of Africa and other such continents that experienced colonialism such as Latin America from the lenses of history. In that sense, one would understand research collaboration in terms of knowledges or knowledge creation. Goody (2006) argues Africa is one of those epistemic sites that experienced not only colonial genocides but also "theft of history"

(epistemicides, killing of indigenous people's knowledges) and linguicides (killing of indigenous people's languages) (see Ngugi wa Thiong'o, 2009a; Ngugi wa Thiong'o, 2009b). Therefore, African people's epistemic struggles are both old and new. They are old in the sense that they emerged at the very time of colonial encounters. They are new in the sense that they are re-emerging within a context of a deep present global systemic and epistemic crisis (Ndlovu- Gatsheni, 2018).

The history of knowledge generation and knowledge cultivation in Africa began with what Falola termed the 'traditional intellectuals/traditional elites' that comprised priests, kings, chiefs, magicians, praise poets, and merchants of the pre-colonial era (Falola, 2001, p.56). These people produced mainly oral knowledge that drove precolonial African societies. The advent of colonialism became very brutal to these African knowers. Kings were attacked, defeated, captured and decapitated. The decapitated heads of African kings were taken and transported overseas to decorate European Museums (Ndlovu-Gatsheni 2018).

Meanwhile, Fricker (2007) point out that due to the historic exclusion of some groups of people from activities such as scholarships, research and journalism, that shape the language people use to make sense of their experiences, epistemic injustices fundamentally affect what is included in a collective pool of knowledge. It leads to an underrepresentation of the understandings of marginalised individuals and groups, in turn affecting their ability to make sense of their proficiencies even in research works and research collaboration.

The unfair practices and advantages of those who are able to have their experiences represented in the body of knowledge and successfully communicate their experiences to other people lead to unfair advantage and set the stage to vulnerability and social discrepancies and social discrimination. Therefore, the silencing or otherwise exclusion of the voice of African

researchers from the Western world stage (*or in fact, global stage*) is epistemic injustice (Godrie & Dos Santos, 2017).

2.11.1 Epistemic Injustice: It's Historiography

Fricker (2007) claim epistemic injustice was not coined until 2007. May (2014) argued that sojourner Truth in the 1860s and Anna Julia Cooper in the 1890s anticipated the concept in claiming that black women were denied full and equal recognition as knowers. Injustice takes different forms; firstly, there is the injustice in terms of unequal access to resources and opportunities between scholars from the Global North and South. Secondly, there is the key issue of epistemic injustice and the question of whose knowledge counts, with many voices and perspectives remaining unheard and unrecognised, especially those from less powerful institutions and marginalised communities (Godrie & Dos Santos, 2017). This mean therefore, only the ones with voice can dominate research collaboration and dictate terms of reference.

Moreover, epistemicides has affected the learning institution. According to Keto (2003), universities and technical colleges are the modem institutional forms of process of knowledge production and dissemination and therefore there are supposed to be grounds for encouraging and nurturing knowledge production, language usage, writing and other verbal and non-verbal forms of systematic symbolism to support the growing knowledge heritage of humanity including research and research partnership initiatives.

The shove of Western education was to deny the colonised and the indigenous people of Africa useful and relevant social knowledge about themselves and their world. It furthered a culture that in itself embodied, designed to consolidate dependency. This in return undermined the colonised people's capacity for creativity in all the spheres of life (Lebakeng & Phalane, 2001a). It is not wrong to believe that Western discourse of knowledge about Africa and a black man is situated within a particular cultural, social system that needs to be decolonised.

Colonialism privileged the Western world-view, institutions, knowledge, languages, and value systems at the expense of African epistemologies (Olukoshi, 2007). That set the stage to what type of research can be done where and how much engagement can Africa and indeed researchers can collaborate.

2.12 Epistemologies of Global North and South

However, it is very imperative to unpack colonialism in relation to epistemology. In this sense, I draw parallels between Western epistemologies with Southern epistemologies and ontological position. Many authors have written about colonialism, in that backdrop I wish to quote de Sousa Santos (2016) as one them. In order to appreciate De Sousa Santos submission, his statement is quoted in details below:

> *"Colonialism as a system of naturalizing differences in such a way that the hierarchies that justify domination, oppression, and so on are considered the product of the inferiority of certain peoples and not the cause of their so-called inferiority. Historically, colonialism also means invasion and foreign occupation"* (de Sousa Santos, 2016, p. 19).

Colonial domination involves the deliberate destruction of other cultures the destruction of knowledge (besides the genocide of indigenous people) is what is called epistemicides - the destruction of the knowledge and cultures of these populations, of their memories and ancestral links and their manner of relating to others and to nature. Colonialism also creates a problem in relation to post colonialism, since it claims colonialism did not end with the end of historical colonialism. Occupation continues, not necessarily through foreign occupation, tutelage and the prohibition of a state formation through other ways (de Sousa Santos, 2016).

The reality of colonialism and post colonialism and its effects on the colonised as articulated by de Sousa Santos above cannot be denied. After all, to deny that culture, and indigenous

knowledge were wrecked by the colonisers would be naïve. However, de Sousa Santos (2016, p. 20) discusses epistemologies in the South in terms of abyssal lines. To be consistent with de Sousa Santos supposition, it is worth quoting him at length, he stated:

> *"A line that is so important that it has remained invisible. It makes an invisible distinction sustaining all the distinctions we make between legal and illegal, and between scientific, theological and philosophical knowledges. This invisible distinction operates between metropolitan societies and colonial societies. For the last five centuries, this abyssal line has been there and it has been so strong that the world has been divided into this side of the line and the other side of the line. All of our theories have been based and developed on the experiences from this side of the line. Our universalisms have been based on the realities of this side of the line; the other side of the line has remained invisible. This exclusion and silencing of the other side of the lines such that what happens there does not compromise the universality of our ideas, because they do not count as reality, because the people that live there do not count as humans in the modern understanding of humanity. The Western-centric conception of humanity is not possible without a concept of sub-humanity for instance, a set of human groups that are not fully human, be they slaves, women, indigenous peoples, migrant workers, Muslims"* (de Sousa Santos, 2016, p.20).

The Euro-centric or Western-centric view of line that denotes South as 'sub-human' or as 'inferior' is in agreement with de Sousa Santos (2016) and other authors. The question of whose knowledge matter confirms Eurocentric epistemological and ontological position of the South. Moreover, ontology is knowing what is the truth or reality and epistemology is about how can they/we know or simply knowledge. Therefore, Eurocentric understanding of ontological and epistemological position on the South is mischievous. Western-centricism should acknowledge that all knowledges are incomplete, and we will never reach complete knowledge; on the

contrary, engaging in intercultural translation means becoming more and more aware of the incompleteness of knowledge (de Sousa Santos, 2016).

Furthermore, Cusa & Hopkins (1985) wrote about the work of Nicholas of Cusa a philosopher and theologian, born in Germany in 1401. To be in consistent with Nicholas of Cusa, it is worth quoting him at length, as he submitted his work between 1438 and 1440, he wrote the work entitled *De Docta Ignorantia*.

> *"Confronted with the infinitude of God (whom he called the 'Absolute Maximum'), the author occupies in a reflection around the idea of knowledge in not knowing. The important thing is not to know, he argues; the important thing is to know that you do not know. "Indeed," says Nicholas of Cusa, "no greater knowledge can endow any man, even the most studious, than to discover himself supremely learned in his ignorance, which is proper to him, and he will be the more learned, the more ignorant he knows himself to be"* (Cusa, 1985, p.6).

What is new about Nicholas of Cusa is that he uses the excuse of God's infinitude to propose a general epistemological procedure that is valid for the knowledge of finite things the knowledge of the world. Since it is finite, our thought cannot think the infinite, there is no ratio between the finite and the infinite but it is limited even in its thinking of finitude, in its thinking of the world. All we know is subject to this limitation, hence, to know is, above all, to know this limitation. Hence, knowledge involves the acknowledgment of not knowing. The designation 'learned ignorance' may sound contradictory, for the learned person is, by definition, not ignorant (Cusa & Hopkins 1985).

In Nicholas of Cusa, there are two kinds of ignorance: ignorant ignorance, which is not even aware that it does not know, and learned ignorance, which knows what it is that it does not know (de Sousa Santos, 2016). Deliberating on Cusa's position, it fits well to defuse the notion

that western knowledge is superior and that their knowledge surpasses all. This philosophy is deceptive. Research collaboration projects with the South should be understood from the standpoint of 'learned ignorance' and acknowledging of 'not knowing'. It could be argued, that the West have a superior scientific knowledge but then the South is superior in the indigenous knowledge, in the end complimentary knowledges would work rather superiority knowledge. Scientific knowledge is important just as indigenous knowledge is important. We need scientific knowledge to go to the moon. Nevertheless, we do not need scientific knowledge to preserve hoodia or devils claw of Kalahari Desert of Namibia, instead we need indigenous knowledge from the indigenous person or people in this case the San or Bushman for instance.

For different purposes, we need different knowledges. In Africa, we have classic authors of knowledges in the likes of Nyerere, Nkrumah, Fanon and many others; they have penned their historical works, in fact very remarkable and outstanding work recognised by Occidental society (de Sousa Santos, 2016). Not only does Africa possess knowledges but also civilization with her. For instance, there were masters of geometry, medicine, astronomy and literature. As Asante (2003) asserts Africa stands at the door of knowledge in the West. Africa taught Europe in geometry, medicine, astronomy, philosophy, and literature. Africa was often the source and the method by which Europe got its information.

Moreover, Smith (1999) and Chilisa (2012) works takes us into the depth of the 'sacred' field of research and methodology and they excavate the dirty colonial history embedded in the very activities of researching. Smith brought the world of the indigenous people of New Zealand into the world of research; Chilisa brought the world of the indigenous people of Africa into the world of research. Smith (1999) boldly declared that 'research' was the 'dirtiest' word because it involved enquiring into the secrets and sacred lives of those who were its objects.

The convergence of Smith and Chilisa's work is on the call for decolonising research methodologies as a process towards achievement of epistemic freedom by those peoples whose knowledges remain marginalised. They both delved deeper into cultures, philosophies, histories, and power dynamics embedded in research collaborations and methodology.

Ndlovu- Gatsheni (2018) understood from a research and methodological perspective, decolonisation entails 'deconstruction and reconstruction. That is, "destroying what has wrongly been written for instance, interrogating distortions of people's life experiences, negative labelling, deficit theorising, genetically deficient or culturally deficient models that pathologises the colonized "Other" and retelling the stories of the past and envisioning the future" Chilisa, (2012, p. 17). At the centre of this process is recovery and discovery. In that sense, Smith (1999) was advocating for Africa to wake up from academic slumber, discover her potential, tell, and continue to retell her own stories in her African context and language not from the Western perspectives and Euro-centric lenses.

Decolonisation is self-determination and social justice that is, seeking legitimacy for methodologies embedded in histories, experiences, ways of perceiving realities, and value systems on the one hand. On the other, giving voice to the researched and moves from deficient-based orientation to reinforcing practices that have sustained the lives of the researched (Chilisa 2012, pp.17-18). Therefore, it is within the framework of decolonization of epistemologies that researchers in collaborative research in global South can achieve position and tell their story.

2.12.1 Decolonizing Epistemologies within Research Collaboration

According to Cull *et al*., (2018) decolonizing is the process of deconstructing colonial ideologies of the superiority and privilege of Western thought and approaches. On one hand, decolonization involves dismantling structures that perpetuate the status quo and addressing unbalanced power dynamics. On the other hand, decolonization involves valuing and

revitalizing indigenous knowledge and approaches and weeding out settler biases or assumptions that have affected indigenous ways of being.

De Rose (1991) espoused epistemology as a branch of philosophy that deals with questions concerning the nature, scope, and sources of knowledge. Therefore, decolonizing epistemology (decolonization of knowledge) in research collaboration centres on decolonial scholarship (Ndlovu-Gatsheni, 2013). Zavala, for example, remarks that the decolonial is also 'a project for epistemological diversity' that re-envisions and develops knowledges and knowledge systems (epistemologies) that have been silenced and colonised. He says it is 'an attempt to recover repressed and latent knowledges whilst at the same time generating new ways of seeing and being in the world' (Zavala, 2017). It seeks to construct and legitimize other knowledge systems by exploring alternative epistemologies, ontologies and methodologies (Dreyer, 2017).

Asante (1987) consistently and systematically pushed for 'Afrocentricity' not only as a direct challenge to Euro centricity but as another epistemology, that takes Africa as its departure point. Afrocentricity is 'the belief in the centrality of Africans in post-modern history' and a 'critical perspective placing African ideals at the centre of any analysis that involves African culture or behaviour including research'.

Additionally, Nabudere (2011) vocalised on issues of epistemological decolonisation. He boldly and directly confronted the limits of Eurocentrism and traced the historiography of African epistemology from the 'Foundation of Humanity', which is Africa. Nabudere emphasised that all sources of knowledge were valid within their historical, cultural and social contexts. He used the term 'Afrikology' to refer to an Africa-focused epistemology that fully took into account African history, culture, and context including research undertakings. The call to decolonize research collaboration is not new. Smith (1999) and many other researchers and authors advocated for decolonization of research collaboration. Furthermore, Smith

acknowledged the realities and challenges of indigenous researchers. She echoed that "while we should acknowledge that there are multiple sites where the struggle against oppression and exploitation might be taken up, indigenous research collaborators must set the agenda for change themselves, not simply react to an agenda that has been laid out for us by others" (Smith, 2000, p. 210).

As pointed out by Absolon and Willet (2005, p. 210), decolonization is a way for Indigenous people to "make sense of their own reality" instead of having non-Indigenous researchers defining it. Decolonizing research means decentring the focus from the aims of the non-Indigenous researcher to the agenda of the Indigenous people (Prior, 2007, p. 165) notably by adopting Indigenous perspectives, knowledge and methodologies and priorities. Meanwhile, Louis (2007, p. 134) calls for research agendas that are "sympathetic, respectful, and ethical from an Indigenous perspective."

Along that line, Hodge and Lester (2006, p. 49) suggest, linking community-driven agendas to appropriate and responsive research. Martin (2012) espoused two eye-privileging levels where indigenous and non-indigenous researchers are seen as complimentary and researchers from both sides be seen at vintage points as allies (Aveling, 2013). Moreover, Wayne Yang (2012, p. 35) warn that decolonization is not about rescuing a settler future but rather is accountable to Indigenous sovereignty and futurity. However, Asselin & Basile (2018) posits recognition of the complementarity between Indigenous and non-Indigenous worldviews is fundamental to the establishment of a dialogue central to participatory research.

2.13. Geopolitics of knowledge in Collaborative Research

The proponents of geopolitics like Mignolo underscored that the agenda of colonialism and its histories on the colonised marked the genesis of how one should understand geopolitics. Above all, Mignolo (2002) expounded on geopolitics of knowledge as it is organized around the

diversification, through history, of the colonial and the imperial differences. Moreover, Nyamnjoh (2011) posits that the production of knowledge has been subject to colonial blueprint and geopolitics that is Eurocentric. Most of these accounts discounted the existence of the 'other' knowledge's or silenced the sociology of the 'other'. Explicit or implicit in these accounts is the assumption that (African) societies should reproduce Western ideals and institutions regardless of feasibility or contextual differences. It can be argued, that collaborative research within the periphery space would be regarded and be looked at as 'other' knowledge or equally be treated as peripheral unless it bears the ideals and carry the values of the core.

Furthermore, authors like Mamdani (20110; Obeng-Odoom (2019) claim knowledge that is produced in Africa has been marginalised by academics in the Global North. Moreover, Mamdani (2011) posits knowledge produced in Africa is treated as inferior and Africa is relegated to material producer. Additionally, Mamdani (2011) claim Western knowledge production machineries tend to relegate Africa to providing raw materials (*or data*) to outside academics who process it and then re-export their theories back to Africa. Knowledge produced in Africa is marginalized by academics in the Global North. Just like many of the commodities of the continent, which are exported in their raw state or semi-processed, knowledge produced by Africa-based scholars is taken to be inferior. Obeng–Odoom (2019) coined inferiorisation of the knowledge of the South, as the process of production and the status of the producers arise when Southern-generated knowledge is considered inferior.

There is exportation of Western social sciences and definition of cultural values to the south through multiple ways ranging from educational aid, to social sciences grants. Moreover, Khoury and Khoury (2013) reported that, the US exported its social science sects abroad both by training social scientists in the homeland and by sending experts abroad. The West and Europe have been instrumental in training the so-called 'little helpers' (some African intellectuals) in order to inculcate Western values and Western agendas in them. To the

contrary, there has been political fallout in the early 1960s, when the late Nkrumah, Nyerere, Kaunda, Banda and many others were among some African intellectuals that comprised that failed project, upon returning to their respective countries advocated for independence, which later was gained at the cost of human life.

Likewise, Gareau (1987) questions the tendency of the American behaviourists to claim scientific superiority over all other perspectives in that America is and has been implicitly and explicit clear about its foreign policy as regards the periphery in areas of knowledge and its geopolitical stance. Furthermore, Quijano (2007) articulates this position best as he wrote:

> *"Outside the 'West', virtually in all known cultures, every cosmic vision, every image, all systematic production of knowledge is associated with a perspective of totality. Nevertheless, in those cultures, the perspective of totality in knowledge includes the acknowledgement of the heterogeneity of all reality; of the irreducible, contradictory character of the latter; of the legitimacy, i.e., the desirability, of the diverse character of the components of all reality and therefore, of the social. The idea of social totality, then, not only does not deny, but also depends on the historical diversity and heterogeneity of society, of every society. In other words, it not only does not deny, but it requires the idea of an 'other' diverse, different. That difference does not necessarily imply the unequal nature of the 'other' and therefore the absolute externality of relations, nor the hierarchical inequality, nor the social inferiority of the other* (p.177)."

Moreover, geopolitics of knowledge' or hegemonic sociological paradigms constantly treated Western societies as organic totalities, higher in the epistemological hierarchy, and employed central concepts and theories that depreciates and neglects the value of the 'other (Khoury & Khoury, 2013) and mostly how white culture serves as the foundation for counselling theory,

research and practice (see Katz,1985). Furthermore, Naidoo (1996) argued that Western outlook is still imbued with the (a) the Euro- American world view is the only or best world view; (b) positivism or neo- positivism is the only or best approach to the conduct of scientific inquiry; and (c) the experience of white middle-class males are the only or most valid experiences.

However, this arrogance and relegation of global South as periphery and the West and Europe as core was confirmed when WHO could not recognise *Artemisia* plant herb for covid-19 virus as medicine in Madagascar. During the interview France 24 (2020), Michel Yao (Emergency Operations Manager for Africa- WHO) said you cannot immediately say 'here is an effective drug' even if it has a historical, traditional medicinal use. It is absolutely necessary to set up a research protocol. Furthermore, he said, maybe they have identified something promising but there is not yet any evidence that can allow us to propose it or to recognise it as such.

Meanwhile, Economic Development Board of Madagascar (EDBM) on 4 September 2020 reported that Madagascar could succeed as long as a disparity exists within African market. Furthermore, Economic Development Board of Madagascar (2020) reported that, the two largest drug manufacturers in Africa, which are South Africa and Morocco, are 80% self-sufficient in pharmaceutical needs, while the rest of African countries import 99% from abroad. It can be argued, that the West and Europe could not recognise the *Artemisia* herb is the whole agenda of geopolitics. As long as, the efforts of research, collaborative research and scientific discoveries are within the periphery spheres the core will not recognise or accept it.

Moreover, Khoury & Khoury (2013) coined 'civilizing gaze' of reality as a tendency to treat societies as organic totalities and central concepts and theories in sociology are developed by and for white, middle-class people and routinely depreciates the value and usefulness of indigenous modes of thought or values. This 'civilizing gaze' is embedded in the paradigm of

civilization vs. barbarism (Khoury 2012). It is argued, that the critique of modernity is more complicated in non-Western countries due to the extra dimension of subordination and domination or dependency to a western dominated world. How then would the researchers in the Global South become relevant in the international scientific research? It is been argued however, that researchers in the periphery can either go along with the core or sink. The entrenched influence of the West and eurocentrism on the periphery including in science, technology and scientific research. Moreover, Smith (1999) recommended for an emancipatory kind of research where indigenous peoples themselves become the researchers and not merely the researched.

2.14. Sociology of Knowledge

Sociology of knowledge has been described as a discipline that reflected a new way of understanding knowledge within a modern and ideologically pluralistic setting (McCarthy, 1996). The sociology of knowledge examines the social and group origin of ideas, arguing that the entire ideational realm (knowledges, ideas, ideologies, mentalities) develops within the context of a society's groups and institutions. Its concepts address expansive sociological questions about the magnitude and bounds of social and group influence through a scrutiny of the social and cultural grounds of cognition and perception. Meanwhile, Mannheim (1936), summarily described as modernity, a world where knowledge and truth have many faces. McCarthy (1996) illustrated that what we believe that we know varies with the cognitive operations of human minds and these vary by community, class, culture, nation, generation, and so forth. Contemporary sociology of knowledge addresses a related but different set of concerns than those posed by its founders, and its subject matter extends beyond the problem of relativism and the social location of ideas and ideologies. Prominent among its current themes are the local features of knowledges and the study of their functions in everyday life. This redirection of the field from the study of conflicting ideologies to the study of the tacit

and taken-for-granted understandings of everyday life can be characterized as a shift from concerns with the truth-status of ideas and ideologies to the concerns of a cultural sociology of meaning.

Scheler (1980) and Mannheim (1952) echoed that the term sociology of knowledge was first used in 1924 and 1925. From its inception, it described a field of inquiry closely linked to problems of European philosophy and historicism, particularly the nineteenth-century German philosophical interest in problems surrounding relativism that were linked to the legacies of Karl Marx, Friedrich Nietzsche, and the historicists, whose cultural philosophy of worldviews was influential in German social science from the 1890s to the 1930s. For Scheler (1980), who offered the first systematic outline of the discipline, the forms of mental acts, through which knowledge is gained, are always conditioned by the structure of society. For this reason, sociology of knowledge is foundational to all specialized studies of culture and to metaphysics. Meanwhile, Scheler's original essays provoked commentary and debate, it was Mannheim's formulation of the discipline in Ideology and Utopia that defined the subject matter of the field for years to come. McCarthy (1996) argued that, the mental structure in its totality as it appears in different currents of thought and across different social groups the total conception of ideology examines thought on the structural level, allowing the same object to take on different (group) aspects. This understanding of ideology refers to a person's, group's, or society's way of conceiving things situated within particular historical and social settings. Resembling ideologies, utopias arise out of particular social and political conditions, but are distinguished by their opposition to the prevailing order (McCarthy, 1996). Utopias are the embodiment of wish images in collective actions that shatter and transform social worlds. Both concepts form part of Mannheim's broad design for a critical but non-evaluative treatment of ideology, one that supersedes the sociohistorical determinism and relativism of Marxism while moving toward a relationist notion of truth. Moreover, Ideology and Utopia established the benchmarks

for a valid knowledge, albeit a relational knowledge, of socio-historical processes. More important, it raised the problems surrounding the historicity of thought and did this within the newly emerging academic discourse of sociology. In the process, it gave legitimacy to a new set of methodological issues involving the problems of objectivity and truth for the sciences and the humanities (McCarthy, 1996).

More recently, the new sociology of knowledge (Swidler & Arditi, 1994; McCarthy, 1996) can be seen as part of this larger movement in the social sciences, distinguished by a turn away from materialism and social structure toward semiotic theories that focus on the ways in which a society's meanings are communicated and reproduced. Swidler and Arditi (1994) focus on how social organizations (e.g., the media) order knowledges, rather than examining social locations and group interests. In light of new theories of social power and practice (Foucault, 1975; and Bourdieu, 1984), they also examine how knowledges maintain social hierarchies and how techniques of power are simultaneously and historically linked to knowledges. They join others in pointing out that newer theories of power, gender, and knowledge depart from the economic, class, and institutional focus of the classical sociology of knowledge. Knowledges are no longer confined to the domain of superstructure. They operate across the full extent of society, from the realm of everyday affairs to the institutions of law, politics, art, and religion, to the various sites and fields where knowledges are produced (research collaboration). The new sociology of knowledge examines the observable properties of knowledges in texts, modes of communication, and forms of speech within specific institutional settings.

2.15. Challenges to knowledge production in Africa

Knowledge is an important constituent to social and economic development of any country and equally important is knowledge production, which is as a result of research collaboration. Scientific Knowledge helps, informs policy agenda and development in Africa. Without knowledge, people perish. However, Mkandawire (2011) espoused that a simple economic

model, knowledge has been treated as exogenous and readily available in shelves as a public good. The availability of knowledges in African societies has never been a problem. The challenge has been what kind of knowledges African societies possess.

Mkandawire (2011) helps us understand that during post-independence period universities became the most important institution in nation building in various African countries. Universities were viewed as among the major originators of scientific knowledge and as among the main drivers of social discourse. Universities were important in defining and establishing the post-independence developmental trajectory. However, according to Mkandawire (2011) many factors have influenced against the translation of this acknowledgement of knowledge as a catalyst to socio-economic development and setting Africa's development agenda.

To start with, Zeleza (2002) argued that African social scientists have been caught in the quandary of addressing African realities in borrowed languages and paradigms. The major cause of this veracity is that scholarship in some parts of Africa that emerged within the context of colonialism was not premeditated to serve Africa but "Europe and European purposes (Moore-Sieray, 1996, p. 35).

Secondly, as Olukoshi (2006) believes that decolonizing African education will mean African Studies will need to be better anchored locally in ways that are organic to the domestic priorities of African countries and' not conform to foreign standards and also permit full engagement of endogenous knowledge systems. As opposed to the prevailing situation, in which African Studies is primarily geared towards serving extra-African needs, whether it is in terms of policy, the training of personnel, or the generation of knowledge for strategic decision-making and research undertaking.

The perpetual furtherance of dominant Western ideas in Africa is maintained by the continuing global economic imbalance that still favours' the West. Mostly, the West has facilities and

financial resources that enable them to research and tell their stories. Epistemic oppression results from the epistemic injustice built into the global knowledge production project. An aspect of this injustice identified by Fricker (2007) is 'hermeneutical injustice', the situation where a significant aspect of an individual's social experience is obscured due to prejudicial flaws in shared resources for social interpretation. In the end, Nathan and Okpanachi (2012) argued that, the structural inequality that dependency theorists refer to has translated into epistemic inequality. A case where some 'knowers have more recognition and privileges than others, often racialized 'others.

2.16. Research Collaboration in the Context of COVID-19

Covid-19 pandemic had posed serious challenges to research and indeed to research collaboration initiatives and activities. The covid-19 has caused many difficulties in travelling between countries, people and indeed researchers all put together are experiencing hard time travelling. Research collaboration will be difficult as long as covid-19 rages on because researchers will not come into the country and local researchers will not go out to other areas to carry out research work. Despite the efforts to contain the spread of the virus, the battle rages on leading to huge loss of life and hospitalization in every country and changing the dynamics of research. Covid-19 pandemic has exerted a lot of economic pressure on fiscal and economic policies of every country in the world.

The covid-19 pandemic as it can be argued, it has shown the value of international cooperation and research collaboration, although, Bump *et al*., (2021) argue that powerful nations are not living up to their commitment to solidarity and equity and there is evidence of poorly managed economic and social costs, which is a shared fate and vaccine nationalism. Khan (2021) defined vaccine nationalism when he talked to Aljazeera as when governments sign agreements with pharmaceutical manufacturers to supply their own populations with vaccines ahead of them becoming available for other countries.

Despite repeated warning against vaccine nationalism by WHO (2020) as a "catastrophic moral failure", there is however, realities that call for scrutiny on research collaboration on international health and demand fresh attention to problems researchers are facing. Cragg *et al*., (1999) posits that drug discovery and development efforts have been and continue to be carried out through research collaboration with academic institutions, research organisation and pharmaceutical industry worldwide. Even in the face of covid-19, international research collaboration that engages even the researchers in the south would be the best way approach.

2.16.1 International Research Collaboration During Covid-19 Pandemic

Fry *et al*., (2020) showed that early covid-19 research featured significant levels of China–USA research collaboration, and that shortly into the initial weeks of the pandemic, researchers from UK joined China-USA international teams. Liu *et al*., (2020) called it "parachuting collaboration," since this was never seen before prior to the pandemic. The findings by Fry *et al*., (2020), suggest that the search and team formation patterns across the network changed to adapt to the needs of covid-19 research and Lee and Haupt (2020) reported the same findings. However, Liu *et al.,* (2020) found that covid-19 research papers were less likely to involve international collaboration than non-covid-19 papers during the same period.

2.16.2. Research Collaboration within Africa during Covid-19 Pandemic

The ongoing COVID-19 pandemic has profoundly affected the way scholarly research is conducted, published, and disseminated (Mbogning Fonkou *et al*., 2021). However, the COVID-19-related research focus, the scientific productivity, and the research collaborative network of African researchers during the ongoing COVID-19 pandemic remain to be elucidated (Mbogning Fonkou *et al*., 2021).

Meanwhile, UN (2020) emphasised research collaboration in order to combat covid-19. International collaboration in health and science has historically been a major success and

breakthrough in dealing with small pox and Ebola, as opposed if countries had gone into it alone (UN, 2020). The UN Secretary –General Mukhisa Kituyi emphasised there is strength in numbers and that we learn more and faster together and that international collaboration plays a critical role on the frontiers and technology (UN, 2020). Mukhisa Kituyi noted that international research collaboration was particularly important considering the gaps in research capabilities within developing countries, and the limited ability of many countries to undertake technological horizon-scanning, foresight and risk assessment. Alternatively, researchers have resorted to other means of research engagements due to covid-19 pandemic even through online research collaboration, as it will be discussed in the section below.

2.17. Research Collaboration using online Communication

Research collaboration via the internet has risen to great prominence in recent years, particularly with the rise of social networking, Web 2.0 and virtual worlds and due to covid-19 pandemic. However, there are disadvantages and barriers in spite of benefits derived from online communication and research collaboration. Additionally, issues in the area of trust and authority and more valuably researchers prefer to share research findings primarily through journal rather than social technologies (Jamali *et al.,* 2014). The online communication and research collaboration may suffer from a number of challenges, accessibility to findings and publishing, feedbacks, ethical issues, funding issues etc. However, it can be contested, that online research may not be sustainable particularly for many South partners including Namibia.

In discussing virtual platforms communication obstacles, DeRosa *et al.,* (2004) brought to light distance and differences in technology between research collaborators as a threat. On the other hand, virtual communication exploits the use of emotions and nonverbal cues (Garrison *et al*., 2000). Emotion indicates social presence, but in a text-based environment, representing feelings becomes difficult in virtual research communication (Garrison *et al*., 2000). Lack of emotions can impede communication when research collaborators are from different cultures

and rely on nonverbal cues and gestures to interpret interaction (DeRosa *et al*., 2004). Without social cues, online communication and research collaboration will frustrate the participants. Visual clues are a significant mode of communication in face-to-face situations and the lack of visual prompts may act as a barrier in virtual research collaboration, which can be perceived as mistrust.

According to DeRosa *et al*., (2004); Jarvenpaa & Leidner, (1999); Moore, (2006), trust is essential for successful virtual research collaboration. Trust and common purpose characterize successful collaboration experiences among professional learning communities (Moore, 2006). Of all of the influences required to create and maintain a positive experience in virtual research collaboration, trust maybe the most significant (Jarvenpaa & Leidner 1999). Trust also influences how much a participant shares and the attitude toward accepting others criticism (Hu *et al*., 2011). The lack of face-to-face interaction sometimes leads to heightened suspicions and lack of trust by research collaborators (Hughes *et al*., 2002). Therefore, researchers are employing every available tool to achieve online communication that embrace trust and reduce suspicion.

2.17.1 Online Communication Tools in Research Collaboration

The popularity of the Internet led to great advancements in terms of research collaborative tools. The advancements and variety of research collaboration tools on the Internet offer both advantages and disadvantages. However, Fichter (2005) noted that the large selection of internet tools is a disadvantage of successful virtual teamwork as too many tools might overwhelm research collaborators with their routine software complexity for instance Twitter. The researchers found that because of the limits of a 140-character message, the participants used Twitter as a place to make initial connections but moved their research collaboration to other venues (Alderton *et al.,* 2011).

However, there a good number of tools available to the researcher's choice on the market. Researchers offered one way to measure the usefulness of a virtual research collaborative tool by comparing the tool to traditional face-to-face communication as well as the amount of effort necessary to use the communication medium (DeRosa *et al.,* 2004). The study showed some of the benefits of virtual research collaboration.

The benefits of virtual research collaboration are similar to face-to-face to research collaboration benefit. One possible benefit of virtual research collaboration is the decrease in the sense of being isolated from peers (Scribner- Maclean & Miller, 2011). Another benefit of virtual research collaboration is social connectivity that online communities provide. Virtual research collaboration is an effective means for professional development among researchers and may help decrease isolation even in research collaborative initiatives (Dolan, 2011; Puzziferro-Schnitzer, 2005).

2.18. Bio piracy and Collaborative Research.

The plunder of knowledge is what Shiva (1997) refers to as bio piracy. Therefore, bio piracy involves exploitation of natural and biological resources and knowledge of indigenous communities through depravity of such communities of revenues. World Health Organization (WHO) and the United Nations Educational, Scientific, and Cultural Organization (UNESCO) draw international attention on the protection of indigenous knowledge in the context of intellectual property rights. The Declaration on the Rights of Indigenous People (UNDRIP) was launched by the UN General Assembly in 2007. Another important step in this development was the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity. The Nagoya Protocol contained rules to protect traditional medicinal knowledge and to compensate indigenous people for knowledge that is already being patented or being used in an inappropriate manner in the past (Efferth *et al*., 2016).

By creating incentives for the sustainable use of genetic resources, the Nagoya Protocol will not only foster research on genetic resources but will also contribute to the development of human well-being by utilization of biodiversity. Cementing it further, The European Parliament accepted the protocol (EU, No 511/2014) on 16 April 2014 and it became operational on 12 October 2014. Main principles are (a) informed consent of the country of origin of the resource and (b) the mutually agreed terms between indigenous peoples and collaboration partner. Regarding knowledge held by indigenous and local communities simply as raw material that, similarly to former colonialist models, are then used to manufacture goods produced in the West and with Western-based companies reaping the benefits from such industrial production (Efferth *et al*., 2016). The communities, which have been affected by cases of bio piracy, thus range from India and Madagascar to Africa and South-America (Efferth *et al*., 2016). Significantly, Western corporations granted most of the patents on traditionally used medical plants of indigenous communities in the 1990s. Research collaboration in areas of biodiversity should be fostered between local researchers and those coming from without (Efferth *et al.*, 2016).

However, the patenting of indigenous knowledge by Western corporations, indigenous researchers and communities have fought for being allowed to share at least a small percentage of the profit, which is then made through the commercialization of this knowledge. In South Africa, the *hoodia* plant found in the Kalahari Desert was discovered to be an appetite suppressant, a quality that had long been known to the San people in South Africa (Efferth et al., 2016). When in 1996, Unilever proceeded to manufacture a product based on *hoodia*, in collaboration with the South African Council for Scientific and Industrial Research, it was originally agreed that the San would not be included in the profit.

Nevertheless, in 2003, the South African San Council was successful in securing a share of 6–8% of the profit made through the sale of hoodia-related products (Efferth, *et al.,* 2019).

However, it can be argued and agreed with Shiva (1997) that there is plunder of nature and knowledge in Africa, and indeed Namibia cannot be excluded. Due to Global North researcher's deliberate policies that embrace the long held Western models of colonialism, it can be argued that colonialism is not a finished business. Smith (2005) contends that Western research is encoded in imperial and colonial discourses that influence the gaze of the researcher even those wearing the cap as researchers. The use of traditional knowledge by researchers or research organisation as argued above by various authors without permission, and exploiting indigenous cultures constitute Biopiracy. Rose (2016) argued, Bio piracy has been linked to colonialism, so much that, where formerly colonised countries have their resources forcefully removed, stolen (*or taken away*) by their former colonisers with impunity.

2.19. Ethics in Collaborative Research

Research ethics are moral principles that guide researchers to conduct and report research without deception or intention to harm the participants of the study whether knowingly or unknowingly. Meanwhile, Cochran *et al.,* (2008) argued research in many places have been a source of distress for Indigenous people because of inappropriate methods and practices. According to National Health and Medical Council (1991) on guidelines on ethical matters in Aboriginal and Torres Strait islander research reported '*researchers are like mosquitoes; they suck your blood and leave*'. This report reflects the fact that an extensive body of health-related research has been conducted about the indigenous populations around the world, but appears to have had little impact on their overall well-being. Why do many indigenous people view researchers with scepticism? The answer lies in the response Kemmis *et al.,* (2013) submitted that participatory research should be a collective self-reflective enquiry undertaken by participants in social situations in order to improve their own social practices. The above statement speaks volume on how researchers conduct their research in that part of the world. It talks to researchers as self or as actors to observe norms of research ethics and treat subjects or

research participants as equal partners. This is true in that; research contributes knowledge in social science and social action and involvement should be fostered in everyday life.

As Levitt (2015) argued that large, pharmaceutical companies and colonial researchers use Africa as sites for clinical trials. For example, Depo-Provera and Norplant contraceptives were administered to 'black' women without their consent at trial stage (Levitt, 2015). Research therefore, is not just a highly moral and civilized search for knowledge; it is a set of every human activities that reproduce particular social relations of power Smith (2005). Meanwhile, Mutambo (2015) emphasised, research collaboration and indeed research should not be degrading and malicious. Whilst Slattery and Rapp (2003) emphasised strong relationship between the researcher and the participants, Lincoln (1995, p.287) on the other hand, posits that relational ethics recognizes and values mutual respect, dignity, and connectedness between researcher and researched, and between researchers and the communities in which they live and work.

However, Ellis (2007) argues there are no definitive rules or universal principles that can tell you precisely what to do in every situation or relationship you may encounter, other than the vague and generic "do no harm." What seem to help as suggested by Adams (2005) are accumulating stories of research collaboration experiences that can help a researcher to think through the options. Gaining the approval of an institution's ethics review board or committee for example, suggests that the proposed research activity is ethical. However, review boards and committees operate on principles that assume that research collaborators are strangers to the researchers. Therefore, whilst giving guidance for procedural and situation ethics, the guidelines do not address the important issue of relational ethics (Ellis, 2007).

A case in point is the kind of issue that relational ethics seeks to address is offered by Medford (2006, p.855) when she expressed her sense of feeling "*diminished, silenced, erased"* when

her personal relationship with another academic was not acknowledged in an auto-ethnographic paper written by that former partner. This experience is a good illustration of the faint boundaries between personal and professional relationships. Ignoring the relational dimension of ethics in this situation caused personal anguish. This is perhaps an unusual situation, because in most cases participants are not likely to come across a paper written about them in an academic journal (Jones, 2007). Just because participants will not read what has been written about them, though, does not resolve the issue. Medford (2006, p 862) suggested that the primary ethical standard for academic writing should be to "write as if our subjects are/will be in our audience".

Another element of research ethics that affects the relationships is whether the conceptualisation of research is ethical and in what ways it is ethical. The dominant research paradigms of Western academia may "limit the unthoughtful spaces that (particular groups of people) could potentially inhabit as human beings" (Lincoln & Cannella, 2009, p. 280). However, Smith (1999) discusses that academic knowledge is organised according to disciplines and fields of knowledge that grounded in Western "ways of knowing" and are therefore inherently culturally insensitive. Going by Linda Smiths argument above, the ground and the ethical requirements are violated by the actors. As Rigney (1999) laments that in Australia, the indigenous researchers have claimed that the Western research has led to a continuing oppression and subordination of indigenous Australian in every facet of Australian society to the point that there is nowhere that we can stand that is free of racism. There is abuse, lack of respect, lack of relationship, no freedom and evidence of suppression of indigenous knowledge; it is largely the order of the day.

2.20. Chapter Summary

In summary, research collaborations are initiated to address complex issues that otherwise, an individual country, institution, individual persons, and organisation cannot manage to solve. It is a knowledge creation undertaking and often encourage companionship, on the other hand, and these partnerships are punctuated with challenging issues. The problems range from unequal power relations between the partners, power matrix, bio-piracy and imposition of Western agenda and philosophies on knowledge production to the extent that the Southern researchers are relegated to the position of data collectors (Ndlovu- Gatsheni, 2018) and marginalization of African researchers (Obeng–Odoom, 2019).

However, there are equally serious challenges associated with collaborative agenda setting where core and periphery system is promoted. Furthermore, there is dependency by the periphery on the core for almost everything including finances for research undertaking. However, a commitment to respecting Southern perspectives and priorities must encompass not only the substantive research agenda but also the modalities through which development-research Northern researchers' reflections on partnership often stop short of this conclusion, focusing instead on how partnerships may be modified, while retaining their place at the table as research partners in research collaboration.

CHAPTER THREE:

METHODOLOGY

3.1. Introduction

In research such as this one, several authors contend that it is essential to state the research design and methodology (Aina, 2002; Bless & Higson-Smith, 2000; Kemoni, 2007). Bless and Higson-Smith (2000) state that a research design and methodology is a plan that affords the complete framework for collecting data and allows the researcher to draw conclusions. The methodology as (Creswell, 2003, p. 5) rightly observes is the "strategy or plan of action that links the methods to outcomes. For the purpose of this study, a qualitative, phenomenological approach was used throughout the research process (Sepp & Embree, 2010).

The phenomenological approach in this study allowed the researcher to have an in-depth face-to-face interview and through Zoom video interviews. Participants expressed their own experiences and perception on research collaboration.

This chapter, thus, presents the research methodology of the study. The chapter focuses on the research procedure used; study population; data collection instruments; validity and reliability of the instruments; data collection procedures; problems encountered during data collection, processing and analysis of data; ethical considerations and evaluation of research methodology. The sections that follow discuss these in detail.

3.2 Research Design

Research design is the procedure for collecting, analysing, interpreting and reporting data in research studies (Creswell & Plano Clark, 2007, p. 58). In another words, the research design sets the procedure on the required data, the methods to be applied to collect and analyse this data, and how all of this is going to answer the research questions. A research design

incorporates sampling sources and procedures for data collection and the plan for data analysis (De vos et al., 2011). For the purpose of this study, a case study research design was used. This approach enabled the researcher to generate an in-depth, multi-faceted understanding of complex issues about the experiences of researchers at UNAM and NCRST on research collaborations.

3.3 Qualitative Research Methodology

The researcher employed qualitative research method. This method gave a deeper understanding of feelings, experiences and opinions of the participants. According to Yin (2009, p.18) this as an empirical inquiry about a contemporary phenomenon set within its real-world context. Thus, qualitative research uses a naturalistic approach to study and understand context in a specific setting (Golafshani, 2003), such as the "real world setting where the researcher does not attempt to manipulate the phenomenon of interest" (Patton, 2002 p. 39).

According to Van Maanen (1979) qualitative research is an umbrella phrase covering an array of interpretative techniques which seek to describe, decode, translate and otherwise come to terms with meaning of naturally occurring phenomenon in the social world, to locate existing sources and documents, the researcher uses to describe, analyse and interpret events that have already taken place. Moreover, Strauss and Corbin (1990, p. 11), for example, stated that, "By the term 'qualitative research', we mean any type of research that produces findings not arrived at by statistical procedures or other means of quantification.

Then, Flick (2014, p. 542) claimed that, "Qualitative research interested in analysing subjective meaning or the social production of issues, events, or practices by collecting non-standardised data and analysing texts and images rather than number and statistics." This definition stressed on how people make sense of something in the world. Therefore, the qualitative research is basically associated with multiple aspects It can refer to research about persons, lives, lived

experiences, behaviours, emotions and feelings as well as about organisational functioning, social movements, cultural phenomena and interaction between nations.

3.4 Population

According to Majid (2018), population in research refers to the sum of all the units valid for an investigation. The population of this research project were researcher from UNAM main campus from the Multidisciplinary Research Centre, School of Humanities, Society and Development, School of Science and researchers from NCRST.

3. 5 Sample Size & Sampling Techniques

The sample size of the research was fifteen (15). Twelve participants from Unam were as follows: four (4) researchers from Multidisciplinary Research Centre, four (4) researchers from School of Humanities, Society and development, four (4) researchers from the School of Science, and three (3) researchers from NCRST. The rationale for interviewing the researchers from these centres ultimately was homogeneity driven, these participants shared among other things characteristics in terms of the nature of work they do (research work) particularly in collaborative research.

3.5. 1 Purposive Sampling Technique

Purposive sampling technique was used to select the sample. The purposive sampling technique, also called judgment sampling, is the deliberate choice of a participant due to the qualities the participant possesses (Bernard, 2002). Simply put, the researcher decided what needed to be known and set out to find participants who could and who were willing to provide the information by virtue of knowledge or experience. As Creswell *et al.*, (2011) observed this approach involves identification and selection of individuals or groups of individuals that are proficient and well informed with a phenomenon of interest. The researcher employed this method simply because these participants were knowledgeable and experienced in research

collaboration projects, they had the ability to communicate their experiences and opinions in an articulate, expressive, and reflective manner, and that they had rich information in research collaboration projects.

3.6 Research Instruments

In this research, semi-structured interview guides were used to collect data. A semi-structured interview is a qualitative research method that combines pre-determined questions (questions that prompt discussion) with the opportunity for the interviewer (*or researcher*) to explore particular themes or responses further (Taylor, 2005). In this manner, the researcher follows the guide, but is able to follow relevant lines of enquiry in the conversation that may stray from the guide they feel this is appropriate. During the interview, the researcher engaged the participants formally as the conversation explored questions in more detail.

3.7 Procedure.

The following procedure in collecting data was observed. The participants were contacted either through the phone or through email. Interview dates and time were set and interviews were conducted at the most convenient place and time. A few participants chose to be interviewed through Zoom due to COVID-19 social distancing protocols whilst the majority agreed to face-to-face interview. Weekdays proved to be the most preferred as opposed to weekends. The interviews were less than an hour long for all of them according to the details from the consent form. The interviews were conducted one on one basis and no participants brought along another person to be part of the interview. The first few minutes in the interview were for introduction and collection of participant's personal details and thereafter, followed by the interview using interview guides. Permission was sort before using digital recording and simultaneously, notes were taken using a note pad and a pen.

3.8 Data Analysis

The data were qualitatively analysed through thematic analysis, which is a method of identifying, analysing and interpreting patterns of meaning within qualitative studies. Thematic Analysis (TA) is a descriptive presentation of qualitative data (Anderson 2007). Additionally, Braun & Clarke (2012) defined thematic analysis (TA) as a method for systematically identifying, organizing, and offering insights into patterns of meaning (themes) across a data set. Through focusing on meaning across a data set, TA allows the researcher to see and make sense of collective or shared meanings and experiences. Identifying unique and idiosyncratic meanings and experiences found only within a single data item is not the focus of TA. This method, then, is a way of identifying what is common to the way a topic is talked or written about and of making sense of those commonalities. What is common, nonetheless, is not necessarily in and of itself meaningful or important. The arrays of meaning that TA allows the researcher to identify need to be important in relation to the particular topic and research question being explored. In this sense, exploring experiences and perceptions of researchers in collaborative research projects. Qualitative data may take the form of interview transcripts collected from research participants or other identified texts that reflect experientially on the topic of study. TA is the most foundational of qualitative analytic procedures and in some way informs all qualitative methods (Anderson, 2007). In conducting a TA, the researcher's epistemological stance is objective or objectivistic. The researcher found, selected, appraised (made sense of), and synthesised data contained in the interviews and then organised into major themes, categories and made sense of them.

Braun & Clarke (2012) espoused phases in ensuring data collected is analysed when using thematic analysis (TA) method. The following are the steps the researcher adopted:

a) **Familiarizing one with the Data-** As researcher I immersed myself in the data by reading and rereading textual data (e.g., transcripts of interviews, and listening to audio

recordings), the researcher made notes on the data as I read and listened to the audio recordings. I highlighted items that were potentially of interest and took notes to help me to read the data as data. Reading data as data means not simply absorbing the surface meaning of the words on the page, but reading actively, analytically, and critically (Braun & Clarke (2012).

b) **Generating Initial Codes**- According to Braun & Clarke (2012), codes are the building blocks of the analysis of data. Codes were generated to help the researcher identify and provide a label for a feature of the data that was potentially relevant to the research question/ objectives. These codes helped the researcher mirror participants' language and concepts; others invoked the researchers' theoretical framework. As Braun & Clarke (2012) concludes, codes will usually be a mix of the descriptive and interpretative. Therefore, what was important for the researcher was to understand that codes were created to follow through each and every participant in the research project.

c) **Searching for Potential Themes-** theme "captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set" (Braun & Clarke, 2006, p. 82). The researcher had to search for themes to generate meaning of data. Braun & Clarke (2012) recommends searching for potential themes should not mean discovering them like archaeologists digging around, searching for the themes that lie hidden within the data but rather, analysing like sculptors, making choices about how to shape and craft their piece of stone (the "raw data") into a work of art (the analysis). This phase involves reviewing the coded data to identify areas of similarity and overlap between codes. This helped the researcher, whether to collapse or cluster codes that seemed to share some unifying feature together, so that they reflect and describe a coherent and meaningful pattern in the data.

d) **Defining and Naming Themes**- Braun & Clarke (2012) posit that when defining, naming themes one need to be able to clearly state what is unique, and specific about each theme whether you can sum up the essence of each theme in a few sentences is a good test of this. Braun & Clarke (2012) illustrated a list of things as a litmus for a good thematic analysis namely:

- Themes should ideally have a singular focus. Not doing too much.
- Themes that are not repetitive but related but do not overlap, although they may build on previous themes.
- Directly addressing the research question / staying focused to the objectives.

This phase helped the researcher define and name themes to ensure coherence of the overall story about the data. More or so, to ensure data with similarities were grouped together under such names and that data was correctly situated to avoid repetition and help easy identification.

e) **Producing the Report-** The purpose of this stage was to produce a report that will tell a compelling story about the data based on the data analysis. Braun & Clarke (2012) posits that the story should be convincing and clear yet complex and embedded in a scholarly field. The story centres on the experiences of researchers at UNAM main campus from two faculties and one centre namely school of Science, School of Humanities, Society and Development, Multidisciplinary Research Centre and Namibia Commission on Research, Science and Technology.

3.8.1. Data Analysis Integrity, Reliability and Validity

1). Qualitative Rigor

In qualitative research, the appropriate methods used to address the research question or research objectives should have desirable characteristics. Qualitative rigor refers to adherence

to high standard such as adequacy and solidarity of the research design as Tappen (2011, p.153) argued research project submitted without rigor would be worthless. Moreover, Neuman (2011) proposed that qualitative rigor should be seen in terms of its trustworthiness and evaluation against credibility, dependability, transferability and confirmability. Their brief definitions are given below, to provide evidence of validity, reliability of the research project.

a) **Credibility-** Credibility refers to the degree to which a study's findings represent the meanings of the research participants (Lincoln & Guba, 1985). Drisko (1997) suggests qualitative "interpretations must be authentic and accurate to the descriptions of the primary participants" (p. 191). Padgett (2008) explains that, to achieve credibility, qualitative research must manage the risk of research reactivity and bias. Research reactivity refers to the potential for the researcher or the study procedures to exert an impact on the participants thereby changing the findings of the study. To ensure credibility was achieved the researcher employed the following measures:

    - All participants were taken through similar guiding questions.
    - All interviews that were conducted were prolonged and exhaustive to ensure in-depth understanding of researchers experiences in collaborative research projects.
    - The interviews were transcribed within 48 hours of the interview to avoid missing vital verbal expressions and the transcripts are available.
    - The researcher consulted participants to ascertain whether the transcriptions were the true reflection of their shared experiences. The researcher made use of emails and phones to contact participants for further meetings to ascertain their transcriptions.

b) **Dependability**- All interview materials (transcript) were kept except for the recorded materials, which were deleted immediately after transcription as per consent form. These materials shall be availed to the supervisor for the purposes of conducting an audit trail.

c) **Transferability**- In this case, researchers from four Centres at UNAM main campus and researchers at NCRST were purposively selected to participate in this research project. The number of research participants is typically smaller than quantitative studies, because as researchers seek to study experiences in-depth, the quality and exhaustive nature of each case becomes more important than the number of participants (Polkinghorne, 1995). In addition, constructivists challenge the relevance of generalizability in qualitative research, "arguing that an emphasis on generalizing strips away the context that imbues a qualitative study with credibility" (Padgett, 2008, p. 182). Devers (1999) suggests for findings to achieve transferability, the contexts must be similar.

d) **Confirmable**- To achieve confirmability, a study demonstrates that the findings and data are clearly linked. The researcher achieved confirmability by documenting the procedures for checking and rechecking the data throughout the study.

e) **Audit trail**- in order to ensure this research project was transferable, this researcher utilized member checking as alluded to previously. For peer review, the researcher-coded transcriptions were reviewed by another colleague to check for errors and missed information. To increase dependability, mapping an audit trail was instituted. Lincoln and Guba (1985); Padgett (2008); Shenton (2004) define audit trail as keeping a detailed written account of the research procedures. The audio recordings were not included in the audit trail as there were destroyed after transcription was done as previously mentioned.

f) Member checking- Member checking is primarily used in qualitative inquiry methodology, it is defined as a quality control process by which a researcher seeks to

improve accuracy, credibility, and validity of what has been recorded during the research interview (Lincoln & Guba, 1985). This involves including participants in analysis or returning to a sample of participants to corroborate the findings. Member checking is also known as participant verification informant, feedback respondent validation, applicability and external validity and fittingness (Creswell, 2007). In short, the researcher during the interview restated or summarised information and the objectives of the research and then question the participants to determine accuracy. In this case, the participant agreed or disagreed that the summary reflected their views, feelings, expressions and perceptions and accuracy was affirmed to confirm credibility.

3.9 Research Ethics/ Considerations

The researcher primarily obtained ethical clearance certificate from the University Research Ethics Committee of UNAM before conducting the research. The ethical clearance certificate outlined the terms and conditions among other things that as a researcher followed and adhered to.

According to Arifin (2018), the protection of human subjects through the application of appropriate ethical principles is important in all research study. In a qualitative study, ethical considerations have a particular resonance due to the in-depth nature of the study process. In this research therefore, the following ethical considerations were strictly observed:

3.9.1 Informed Consent and Voluntary Participation

The process of obtaining consent consisted of the following: consent was given freely (voluntary), subjects (participants) understood what was being asked of them, and involved persons were competent to consent. This meant that, to participate in a research study, participants were sufficiently informed about the research; they comprehended the information and had a power of freedom of choice to allow them to decide whether to participate or decline.

The potential participants were approached individually and given an explanation of the purpose of the study and data collection process. They were given an opportunity to ask questions and address any concerns. It was explained that as their participation was voluntary, refusing to participate or withdrawing from the study while it was in progress would not affect participants in any way.

3.9.2 Anonymity and Confidentiality

The anonymity was achieved by ensuring records about the participants were secured by the use of password of protected files and on the other hand confidentiality of the participants was well maintained by not revealing their names but the use of pseudonyms and conceal their identity in the data collection, analysis and during reporting of the study findings.

3.9.3 Interview Session

Each interview was conducted individually in a private and quiet room; in that sense, no outsider had access to the conversation. On the part of the participants, the researcher asked the participants whether there were other people in the room so as to ensure the participant was secured and alone during the time of the interview. Secondly, during Zoom video call I ensured that my space was secured and closed off from intruders. The researcher was the only one who was able to match the identity of the participants and voice recordings.

3.9.4 Data Transcribing

Data transcribing was conducted in a private room to avoid the possibility of recordings being heard by other people. The identities of the participants were removed during data transcription, including their names or any significant aspect of identity. In presenting the findings of the study, the participants were referred to by their pseudonym in the verbatim quotes. Written consent or any document that contained the participants' personal details were kept in a locked cabinet with no access by anyone other than the researcher. The personal information about the participants will be destroyed in accordance with the University of Namibia research

governance procedures, which provides that such materials should be kept for five years and then be destroyed. All primary and secondary sources were acknowledged to avoid plagiarism.

CHAPTER FOUR

FINDINGS AND DISCUSSIONS

4.1. Introduction

This chapter now presents the empirical findings obtained from the target study population and discussions. As alluded to earlier, the main objective of this research was to explore the experiences of the academic researchers at the UNAM and NCRST on collaborative research projects. As indicated in Chapter one, this study specific objectives are:

- To explain how the researchers are contracted/selected to participate in the collaborative researches.
- To assess how agenda- setting is done in the collaborative research projects;
- To examine the dynamics of research processes and
- To explore the experiences of researchers on research collaboration projects.

This research project was limited to researchers at UNAM from two different faculties and Multidisciplinary Research Centre and NCRST researchers only who have been or are currently involved in research collaboration projects. The data were qualitatively analysed through thematic analysis, which is a method of identifying, analysing and interpreting patterns of meaning within qualitative studies (Anderson, 2007). As a researcher I found, selected, appraised (made sense of), and synthesised data and then organised it into major themes using Atlas.ti software.

4.2. Demographic Characteristics of Participants

The participants of the study were 15, of which 4 participants were researchers from Multidisciplinary Research Centre, 4 participants were researchers from School of Humanities,

Societies and Development, and 4 researchers from the School of Science, and three (3) were researchers from NCRST. These researchers have experienced or are experiencing how collaborative research is done; therefore, they gave an in-depth knowledge and expressed their feelings on how research collaborations have been conducted. Researchers (or participants) were selected across the two institutions under study. The table below gives a presentation of participant's demography.

Table 2. Participant's Demography

Code	Pseudonyms	Age	Gender	Title	Experience in Research collaboration
P1	Paul	47	M	Researcher	7 years at UNAM
P2	Betty	48	F	Researcher	6 years at UNAM
P3	Hope	50	F	Researcher	18 years at UNAM
P4	Purity	34	F	Researcher	10 years at UNAM
P5	Bob	37	M	Researcher	5 years at UNAM
P6	King	60	M	Researcher	10 years at UNAM
P7	John	44	M	Researcher	11 years at UNAM
P8	Peter	34	M	Researcher	5 years at UNAM
P9	Chico	47	M	Researcher	10 years at UNAM
P10	Pombe	44	M	Researcher	11 years at UNAM
P11	Best	46	M	Researcher	16 years at UNAM
P12	Kali	54	M	Researcher	19 years at UNAM
P13	Oscar	50	M	Researcher	5 years at NCRST
P14	Mwizukanji	47	F	Researcher	9 years at NCRST
P15	Ali	35	M	Researcher	5 years at NCRST

Sources: Table generated by the researcher (2021)

4.2.1 Age and Gender of Participants

Age and gender were deemed important criteria in determining factors contributing to the experiences of the academic researchers at the University of Namibia and NCRST on collaborative research projects. In a similar vein, despite the fact that both genders were represented, the majority (60 percent) of the participants were males, while the females counterparts were (40 percent). The reason for this disparity was that more male researchers (*or participants*) were available to give their experiences in research collaboration as opposed to female researchers from both research institutions (UNAM & NCRST)

4.2.2. Participants' Work Experience

In order to appreciate experiences of the academic researchers at the University of Namibia and NCRST on collaborative research projects, work experience among the respondents who worked for the two institutions was considered.

The participants consisted of specialisations from different fields of study. The study gives an impression that the participants were experienced enough to have a clear understanding of the experiences on collaborative research projects. The range of work experience that is 5-19 years' also had the potential to offer reliable information needed to answer the research questions of the current study. In this sense, the participants who had worked longer in research collaboration projects had much to say about their experiences.

4.3. Factors that Lead to Research Collaborations

Collaborative research projects are becoming increasingly popular among researchers and increasing in frequency (Sonnenwald, 2007). In fact, the statement has taken on the status of a 'mantra' (Metzger and Zare 1999; Klein, 2008). Interdisciplinary approaches are commonly viewed as a technique of developing new solutions (Jacob 2015), in which experts from several

fields contribute their experience to a research project, particularly where linkages to industry, business, and organizations are concerned (Carayol and Thi 2005).

Collaborative research, according to the current study, supports the formation of effective communication and relationships while also providing equal possibilities for team members. It respects and honors each member's personal and organizational style. Collaboration also improves ethical behavior by ensuring that honesty, integrity, justice, transparency, and confidentiality are upheld. As supported by many studies, research collaborations can save time and money, and that breakthrough research is more commonly achieved through collaborative research rather than using tried and proven approaches. Further law, industry, and academics fostered collaboration between the corporate sector and academia (for example, the Bayh–Dole Patent Reform Act of 1980 allowed universities to negotiate patent rights with commercial partners in the United States).

In Namibia and worldwide, there has been a shift toward developing research partnerships in order to improve the relevance and effect of research findings and facilitate their application in the real world over the last 15–20 years. Research funders in Canada, Australia, the United Kingdom, the Netherlands, and the United States have provided collaboration-based funding opportunities for Namibia and many other African countries.

In order to appreciate experiences of researchers regarding collaborative research, this study first attempted to establish factors that led to the formation of research collaborations especially with researchers at UNAM and NCRST. According to the responses from participants during an interview, factors that lead to research collaborations was the need for;

- **Knowledge transfer-** As researchers engaged with one another knowledge, (or is) transferred from the more experienced to junior researchers.

- **Expertise-** Engaging in research collaboration enabled researchers to gain the skill and become experts in the area as expressed by Hope who has been working as a senior researcher for 18 years at UNAM said;

  I started as a junior researcher who did not know anything in research, but after I interacted with other researchers, I have learnt the skill, and I know how it plays out.

- **Experience and technical exchange-** Experience is gained when engaged in doing something. All researchers interviewed indicated that they started from somewhere. None of them was born with the experience in research but through working with others who had different abilities and capabilities earned them the experience in research collaboration.
- **Research funding**- Researchers who were interviewed from UNAM and NCRST confirmed that most of their research funding came from research partners from the North since there are well funded.

The responses harmonised with what Bukova, (2010), Katz & Martin, (1997) that research collaboration enhances knowledge transfer among researchers, and secondly, as United Nations Office for Sustainable Development (2012) espoused that in knowledge economy, knowledge may be replaced or refreshed at a very high pace through research collaboration.

Meanwhile, research participants from the University of Namibia pointed out that such research collaboration were mutually exclusive. What this response seemed to suggest was that researchers from outside the country play their part as well as researchers from UNAM & NCRST do theirs. Furthermore, in responding to the question of what factors lead to research collaboration, Paul who has worked at UNAM as a senior researcher in the school of science stated:

"In the field of science, there is need for high tech or advanced laboratory equipment to conduct research but in most cases, there are no funds to acquire such equipment, repair or service, hence, we seek partnership with research institutions from outside who have the resources and financial capacity to help us".

In Pauls responses exposes underlying problem the department has been going through regarding the laboratory equipment and machinery and the inadequacies of finances by UNAM to service, replace old laboratory equipment, hence the department had to rely on external funding from collaborative partners. Additionally, Paul says:

"I had to send samples to Germany using my own money. Imagine the situation where you use your own money for the research project that will benefit UNAM and the country"

The above response goes a long way to show how some time the situation maybe desperate to UNAM researchers in their pursuit for research engagements in ensuring research project are completed even in cases where funds may not be available.

In answering the same question, Oscar who has been working for NCRST for 5 years suggested that;

"Research collaboration in most cases are project dependent, there are certain projects that needs experience, expertise and knowledge. In that case, we seek collaborations with institutions such as the University of Namibia that has the human resource that is needed as we engage with researchers from the North. I have engaged with senior researchers at UNAM on various research projects".

What Oscar seemed to say was that not only is there research collaboration between North and South, even South and South research collaboration exist. That has been evidenced by certain projects that have been done by researchers from local research institutions including UNAM. A good example given in the case of the collaborative research project between Namibia and Mozambique on Bengwera project. As confirmed by King who has had experiences working with researchers from UNAM;

> *"Research collaborations are part of the UNAM and NCRST as a strategic partnership with each other. Therefore, research collaborations are not something decided by individuals*."

The current study's findings, on the other hand, are consistent with Huang's (2014) findings, which explored several reasons why researchers collaborate. To begin with, teamwork is required for researchers to handle complicated research challenges that would otherwise be impossible to answer by a single researcher. The study also discovered that, as science becomes more specialized, individual researchers must remain focused and specialized in their own tasks (Bukvova, 2010; Katz & Martin, 1997). Such concentration and attention would enable researchers to achieve major advances in their respective domains (Bukvova, 2010).

Additionally, research collaboration was undertaken for researchers' sustainable development in scientific and knowledge creation. The United Nations Office for Sustainable Development (2012) points out that in a knowledge economy, knowledge and capacity may be replaced or refreshed at a very fast pace through research collaboration. Thus, continuous learning and knowledge transfer are critical for researchers to remain relevant in their respective fields in an ongoing knowledge creation process. Such learning and knowledge transfer may bring together researchers with culturally different ideas, which create conditions for new knowledge creation.

The current study, on the other hand, discovered that research collaboration could save research costs. Experimentalists collaborate more as compared to theoreticians, according to Bukvova's (2010) review of research collaboration. The instrumentation necessary in experimental research is becoming increasingly complicated. According to Bukvova (2010), the cost of scientific apparatus has risen dramatically as technology has progressed. As a result, research costs and research facilities can be better optimized, shared, and exploited by working together in research collaboration.

Another benefit of research collaboration that was discovered in this study is that it may allow for intellectual companionship. As Kali explained;

> *"Research collaboration has brought the researchers from other places, countries, disciplines and academic fields together with us. We have shared interests and values and have supported each other."*

The purpose of research is to push the limits of knowledge. Researchers' growth at the cutting edge of each scientific field can be lonely though specialized and dedicated (Bukvova, 2010; Katz & Martin, 1997). Collaborating with others and building productive ties with them can help an individual overcome some of their intellectual isolation. As a result, research collaborations are created inside Namibia to accomplish incredible outcomes, as suggested by participants in this study.

Furthermore, the factors that lead to collaborative research in the current study are consistent with Dos Santos' (1970, p. 231) adopted theoretical framework, in which dependency theory emphasized political economy. When considering dependency theory, research collaboration between North- South fits in firmly in that political economy of Namibia as a peripheral country depends so much on the core for technological, scientific and most of research funding. These findings are in harmony with Farny, (2016); Goldfrank, (2000) and Tausch, (2010) in whose

researches exposed the African countries depend on the core for research funding, scientific and technological support. Furthermore, the findings are consistent with Sekhri (2009, p. 243) and Kay, (2011, p. 533) research findings as they exposed the mentality of international capitalist system that further the interests of the Western powers over South in many areas including knowledge creation by ensuring the periphery countries rely on the West literally on everything. Betty explained;

> *"We need international partners in research collaboration since we do not have the financial muscle to fund these research projects."*

In adding their voice to the question about the factors that contribute to individual researchers to venture into research collaborations, Hope, Purity and Bob stated that research collaborations were necessary undertaking as they promoted a creation of a pool of knowledge from researchers in different field. The results of this research on factors that lead to research collaborations imply that the most prominent factors were need for funding, exchange of knowledge, knowledge transfer, strategic partnerships, acquisition of experience, exchange of technical expertise on projects that needed experts and experience in various fields of study. Hope vocalised;

> *"There has been exchange of technical expertise as I engaged in research collaboration. I started without knowing anything but now I can say I am an expert in this work."*

On the other hand, Purity echoed;

> "*These partnerships have enabled me to gain knowledge in various ways*."

Meanwhile, Bob emphasised;

"Without working with researchers I would have not gained the experience I have today. There are a lot of things I did not know that I know now through research collaboration."

4.4. Agenda- setting in the collaborative research projects

Agenda setting in collaborative research are ways or methods donors adopt in order to steer public opinion on research projects. Lavrakas (2008) posits that agenda setting as far as research collaboration is concerned is the way public opinion are shaped, steered on what is to be researched. Donors will have pre-knowledge of what they want to research on, as they look for research collaborators.

When researchers were asked about who was in-charge in agenda setting in research collaboration projects they participated in, the response from the majority was that researchers from the North in most cases set the agenda for collaborative research projects. For instance, researchers like Pombe stated;

"Researchers from the North set the Agenda. They know what they want and what they want to achieve."

According to information obtained from the participants on what constituted agenda setting, they noted that agenda setting was based on the research project that was being worked on, to see how much progress was achieved and if there were any projects adjustments needed to be made and what other things would be added.

Additionally, Oscar stated the following;

"Agenda setting is mainly for terms of references, timelines, interpretations, responsibilities; this is done through workshops and conferences. Agenda setting varies from one research project to another."

On the other hand, researchers like Chico said;

> *"The basis of the agenda is usually what issues need to be addressed where clarity on the project is needed and when something has to be added or subtracted. Meetings are called to address issues regarding the project."*

Meanwhile senior researchers from UNAM like Paul and Betty explained that the agenda depended on the challenges the researchers were facing and in terms of agenda setting research collaborators from the South cannot set the agenda on behalf of the research partner who has funded the project. Meanwhile, as and when meetings are organised based on what is supposed to be discussed and communicated to by the research partners. The duo stated that meetings were done from time to time to discuss the progress of the research project though there has been a change due to covid-19 pandemic where meetings are done using Zoom and other internet meeting and conference services.

The information availed by participants in the current study are in line with the agenda setting guidelines of the American Institutes for Research (2018). A research agenda setting workshop's goal is to involve participants (such as a state or local education agency or a research alliance) in a collaborative process to establish research goals and produce a collection of research questions that are compatible with those priorities. These priorities and questions will be combined to form a clear research agenda that drives the activity of that group for the next three to five years.

Collaboration between researchers at the University of Namibia and the NCRST is crucial for developing new information that can be used to inform development policy in Namibia. The agenda-setting process, on the other hand, is a major roadblock in many development research collaborations. One of the goals of this research is to see how bilateral donor tactics influence collaborative agenda setting.

The objective goes on to look at why academics join collaborative research partnerships, whether they were fully included in the agenda-setting process, and what techniques they use to ensure that research partnerships address their concerns. While strong research collaboration between the University of Namibia and the NCRST is best positioned to maximize the benefits of collaboration, donors and researchers should be aware of the limitations of this approach and use it with caution, because research partnerships are not always the best way to advance research agendas rooted in donor priorities (Bradley, 2008).

Agenda setting is a method of molding the future by directing large sums of money toward specified projects or topics of interest. Orienting research and innovation are difficult endeavor in and of itself, and conventional agenda-setting methods have been expert-driven because scientific information has long been thought to be the sole sort of knowledge adequate for, say, creating research agendas (Brummer, Könnölä & Salo, 2008).

Expert and stakeholder-based forecasting of future developments, identification of potential challenges and solutions, and framing of strategic decisions have all been incorporated into research programming (Haegeman, Spiesberger & Könnölä, 2017). However, this is a limited approach to shaping futures because it may overlook societal needs and values, and thus valid alternative futures.

In conclusion, agenda setting is northern researchers driven, as this is meant to safeguard their interests in the research collaboration projects. The findings are consistent with Lavrakas (2008) observation that research exposed Western researcher's domination in shaping research opinions and setting the agenda. The findings further expose that Northern researchers initiate, call for meetings, conduct seminars and workshops in order to make known their objectives regarding the research projects at hand. However, it was echoed by some researchers (*or*

participants) that agenda setting varies from one research project to another and not like one size fits all approach.

4.5. Procedure for Contracting/Selection of Researchers to Participate in Collaborative Research

One of the cornerstone of collaborative research is the quality, calibre and experience of the members of the research teams. In this regard, the current research probed the procedures used to select participants in most collaborative studies, selection of suitable members will facilitate the success of projects. The most prominent themes that were recorded during interviews were; experience, area of expertise, knowledge and through networks. The results on the inquiry on the selection process of members of the research team in collaborative research imply that, most of the researchers were selected on the basis of their networks. These networks where referral basis were researchers were contacted by their research networks. As Best recall;

> *"I have developed networks as I meet other researchers at different platforms, through that I receive emails and phone calls to participate in research projects quite often."*

Interestingly, there was a connection between networking, area of expertise and experience in such a way that, the more experienced a researcher was, the wider their network and the more their research engagements. On the other hand, experience in the process of selection was dependant on the area of expertise of a particular researcher, which gave them a chance to be considered. Kali who has worked as a researcher for UNAM for 19 years emphasised;

> *"Research collaboration goes with one's experience. Some research projects require experience to undertake."*

Meanwhile, Pombe with 11 years research experience at UNAM simply said*;*

> *"Experience matters."*

In the quest to find out the mode of communication researchers used to access information about collaborative research projects it was discovered that various modes such as email, phone calls, call for project, workshops, publications of work and recommendation from networks in the research circles were prominent. Interestingly, the results revealed that those researchers who had vast experience in their areas of expertise did not apply for any bid for project but were informed of projects through referral on phone by friends and colleagues in the research sector. The study further revealed that those who had few years of experience in their field of expertise found out about the research collaboration projects through call for projects and newspaper advertisements.

This section of the results suggest that, in collaborative research projects, the selection process of members of the research team is done on the basis of experience and area of expertise in a specific field. Furthermore, information about collaborative research projects were obtained through referrals, publications and through networking. Despite the fact that several studies have been undertaken on the drivers of and impediments to research collaborations, the existing literature gives scant insight into how individual academics choose to participate in various collaborative initiatives.

Individuals' knowledge, experience, and reputation are important in developing and publishing scientific knowledge, and the career stage is important for successfully performing various jobs within IRCs (Bozeman *et al.*, 2016, p.233). The current study's findings are consistent with those of Jeong and Choi (2015), who found that senior scientists had larger networks and resources. They have made a name for themselves and mentored younger researchers. Understanding varied job commitments, appropriately attributing contributions, and settling disagreements can help long-term cooperation stay creative and productive (Bozeman et al., 2016, p. 237). Long-term collaboration networks are built on existing contacts, repeated interactions, and intellectual synergies (Ulnicane, 2015, p. 433).

Furthermore, researchers must compete for funding in an academic environment dominated by factors such as academic excellence, high-impact journal articles, and collaborations with recognized academic partners (Blind *et al.,* 2018; Bozeman *et al.,* 2013; Sauermann and Roach 2016). Although researchers like Caibano *et al.* (2019); Dietz and Bozeman (2005); Sauermann and Stephan (2013); Wright *et al.,* (2014) suggest that collaborating with industry might help academic careers , such engagement is frequently seen as compromising traditional academic output and academic collaboration (Clark, 2011).

Finally, academics desire to engage with industry is influenced by their personal (intrinsic) motives and aims, such as contributing to sustainability or gratifying their curiosity (D'Este et al. 2018; Lam, 2011; Perkmann *et al*., 2013).

4.6. Dynamics of the Processes in Collaborative Research.

Researchers involved in collaborations have different experiences in their field; researchers explained the dynamics of the research process especially in collaborative research projects.

Participants explained that the dynamics in collaborative differ depending on the nature and objectives of a particular research project. For example, Pombe a senior researcher from UNAM expressed his view in the following statement;

> *"Collaborative research is done through calls where you respond to the requests, presentation and conferences, sometimes through attending workshops, published works and through networking, workshops, conferences and contacts, things begin to happen."*

In addition, Paul explained;

> *"Collaborative research process is done through having own research interest but you have no funding. You seek external partners through communications, through networking. Once you secure external researchers you to prepare a*

memorandum of understanding and signing formalities are done thereafter, you commence research work."

Purity also added her statement by noting that networking, attending workshops, published works, and contribution to book chapters are the prerequisites of research changing aspects in this case. However, Best maintained that researchers from two or more departments or institution can collaborate. In this case, no external funding is involved and work is divided reasonably equally between the two groups. In both instances, meetings are organised to review the progress of the research work. As part of the collaborative research dynamics Ali stated that proposals are sent to the various parties you would like to be involved in that project and the research collaboration and after agreements are made work commences

Contrary with the findings of the current study, Macrina (1995) argued that the discipline and context in which a researcher works would affect his or her philosophical beliefs about the nature of research. Even researchers working in the same discipline and in the same environment (university, government, or private enterprise) may not share the same assumptions due to their distinct research experiences. Moreover, Morse (1995) suggested that when conceiving a research project, the principal investigator(s) might seek the participation of each collaborator, regardless of how the cooperation is set up and among many duties the principal investigator are;

1) To set research goal(s),

2) To come up precise objectives of the research project;

3) Develop approaches/methodologies to attain the objectives and making sure they are agreed upon are similar to the findings of the current study.

The researchers who conceptualize the study should be able to draw on findings from relevant literature, perhaps from other domains, and organize them into a coherent and meaningful

whole in comparison to scholars from different fields; colleagues from the same or related fields are more likely to have a knowledge of a shared set of theoretical models and approaches.

One of the dynamics in the process of collaborative research is the aspect of conceptualization, which goes hand in hand with the actions involved in preparing a proposal for submission. Creswell (2003) suggests using a basic framework to guide all aspects of a study, from evaluating the general philosophical assumptions that underpin the inquiry to the specific data collection and analysis processes.

Understanding the scope of the research, organizing participant priorities, allocating resources, sticking to dateline, and demonstrating the capacity to execute the task at hand are all required for managing any collaborative engagement which were discovered in the current study. While each member of the collaborative team may have specific responsibilities, the primary investigator(s) is/are ultimately responsible for everything that occurs during the study.

The responsibility of principal investigator is to provide evidence to stakeholders and sponsors of a program's conformity to its coverage, treatment, legal, and fiscal requirements is defined as by (Rossi, Freeman, 1993). This implies that the person(s) in charge of the research project may be expected to be both a capable researcher and a capable manager. The principal researcher is in charge of delegating tasks and responsibilities and ensuring that all elements of the research are carried out responsibly.

The construction of an effective communication system is a crucial predictor of a successful collaborative relationship. Maintaining strong communication can help you respond quickly to crises, fix a broken protocol, avoid data loss, and consistently distribute essential information to all participants. A protocol for identifying persons responsible for gathering and sorting queries, referring or answering, and disseminating information could be included in the communication system (Shamoo & Resnik, 2003).

Scheduling and conducting meetings and reviews is another component of communication that was reported in this study. Meetings were held to discuss project status, highlight progress and obstacles, and share data and information. The discussions' outcomes could include suggestions for resolving issues, tweaking procedures, or even changing the research's focus. Meetings were held on a set schedule, with the option of limiting attendance to key researchers, Rossi and Freeman (1993) reported this observation.

The results of this research revealed that collaborations in research might range from starting a project with peers from the same discipline to working with a broad group of academics from various disciplines and places. In the latter situation, partners may present a variety of theoretical views and tactics while addressing study design issues.

4.7. Researchers' Experiences in Collaborative Research

Researchers had different experiences with regard to the collaborative research, which this section will reveal. The investigator took time to interact with the participants (researchers) through interviews to appreciate their personal experiences in participating in collaborative research in this case between the UNAM and NCRST with researchers from the North.

However, some of the participants revealed that they had a good experience working in collaborative research projects. However, these researchers were class conscious as it could be understood from Marx's point of view that, despite creating it, (in this case, research work) the worker (researcher) has no control over it, and it does not even represent their work. If anything, the product or service created is a symbol of one's bondage, rather than an achievement or source of fulfilment (Crossman, 2019). Moreover, these researchers justified their experiences by attributing it to a great learning experience, researchers from outside are good and well organised, a tool for capacity building and a platform for exchanging ideas across disciplines, learn new skills as well as have access to funding.

In relation to experiences in collaborative research projects Best contended that;

> *"Collaborative research projects enhanced communication skills and gave an opportunity to visit other countries and learn their way of research life."*

Collaborative research projects are very good, informative, and very enriching. New skills are imparted and increases the capacity to work with different kinds of people. Researchers stated that partners in collaborative research projects were very cordial. Peter stated;

> *"There is cordiality in research collaboration."*

Meanwhile, Chico smiled as he said;

> *"Because of research collaboration I have been able to travel to different countries and places."*

Apart from that, the three respondents confirmed that travelling overseas, to have better learning opportunities, methods and techniques that they could apply in their research project was part of their defined good experience. The three scholars added to their experiences in collaborative research projects that it allowed them to see new places and get to meet new people where they could get to find new collaborations.

Part of the experiences of participants in collaborative research was the aspect of being part of projects. According to their statements, they stated that collaborative research projects gave them a platform and opportunity to share their experience, expertise with other researchers as they were getting involved with local and international collaborators, they became part of the project. A researcher like Betty said;

> *"Collaborative research projects give an opportunity to learn how to write proposals through mentorship and training which are considered important to*

accessing funding. Collaborative research projects are also academically and financially beneficial."

Accessing research funds came out strong and louder as majority of the research projects were North-funded instead of locally. This was attributed to the fact that out of 1% allotted for research in Namibia from the GDP only 0.53 % funds are released to research institutions. However, the majority of the researchers stated that they had a good experience in being part of collaborative research projects others expressed mixed feelings. For instance, Nico said;

"Because the collaborative research environment is made up of professional from different institutions, they were not immune to disagreements and misunderstanding in most cases due to unclear terms of references. We cannot accept to be bullied. However, you overcome these challenges by understanding what causes these issues. Coping with challenges are no easy but once you know what you are doing and why you are doing, gives you hope to live on and continue.

Not all collaborations where successful as others were ended along the way due to withdrawal of investors. Depending on the number of partners and the subject itself, these projects can take a short or long period of time. Like in the case of NAFORA research project, it was funded by UNDP and it was done in conjunction with Ministry of Forestry in Namibia. As Betty recalls, it could have been beneficial if the funds kept coming to finish the project.

The experience by researchers in collaborative research in this section gives the current study an impression that their experiences were mixed and it was in consistent with Beaver (2013) argument that, research collaboration when the agenda is not clear draws mixed experiences among research partners.

4.8. Researchers' Motivation for Collaborative Research

Within the academic community, there are many different perspectives that motivate for joint research. Its worth within a discipline may differ from one institution to the other and even from one person to the next (Vandrick, 1997). Collaborative research between researchers is clear for a variety of reasons that motivates it (Beaver, 2001, 2013 & Sonnenwald, 2007).

Research organization and researcher repute, increased visibility, chances for transdisciplinary research, access to research money, and mentoring of younger researchers are some of the motivations (Conchi and Michels, 2014). Hope agreed with Conchi & Michels (2014) as she said;

> *"There is money in research collaboration."*

Meanwhile, Betty emphasized;

> "*I look at my share, how much money is there for me. That motivates me a lot."*

Researchers are encouraged to collaborate by the development of new methodologies and the sharing of knowledge, equipment, laboratories, or (big science) infrastructures, including data. Friendships with chosen colleagues, intrinsic motivation, or the desire to maximize personal scientific output are some of the more personal factors (Conchi and Michels 2014). I examined which reasons that further motivated participants in collaborative research projects, the following were most important in my case study;

- Industry practitioners as well as community stakeholders. Because of its multidisciplinary nature, research collaboration has the ability to promote synergy across disciplines, solve larger and more complicated issues, and perhaps boost the effect of research outputs. The above reasons were consistent with De-Hart (2017) findings that reported promotion of synergy and solution to large and complicated issues were motivating factors for researchers to engage in research partnerships.

- Collaborative projects can result in direct career advancement for researchers in the form of promotions and job possibilities.
- Furthermore, research collaborative efforts can lead to more interesting or higher-quality research than might otherwise be the case (Gazni and Didegah 2011; Goldfinch *et al.*, 2003). When a project provides a researcher with new facilities, equipment, data, or collaborative partners, this can happen (Beaver, 2001). If the chances provided by the project result in research findings, such projects may indirectly benefit an academic career. These advantages may entice and motivate academics who want to progress their careers as well as those who want to do intriguing research (Lam, 2011).

In order to answer the research question which aimed at finding out the views of researchers from the UNAM and NCRST on what motivates them in engaging into research collaboration projects various motivations were echoed however, not contradictory, for instance, Betty, Bob, John, Peter and Chico were of the view that collaborations shapes thoughts and feelings. John shared his experience as he said;

> *"I went in research collaborative projects with a certain mind-set that it is about 'one size fits all' I realised at the end my thinking and feelings were affected."*

They added that the undertaking required patience and aimed at building capacity for lecturers and students through research engagements, which were an interesting undertaking. Participants viewed being part of a research project under collaborations as an admirable thing and something that had the potential for financial and professional gain through promotions at the University of Namibia and NCRST.

Meanwhile, Bob argued that;

"Our research collaboration are supposed to be beneficial to our local communities instead. Research collaboration are supposed to be meaningful and rewarding."

As I asked on the why research collaboration should be beneficial to the community, they cited situations in the past where researchers from the North conducted their research on *hoodia plant* and *devils craw* medicinal benefits, both the data, findings and benefits were not beneficial to the local community e.g. The San and the Herero communities in Namibia.

On the other hand, Peter as a senior researcher at UNAM viewed collaborative research as an expensive venture, which needed funding. He perceived Collaboration to be good but full of responsibility as it gives exposure to new kind of working environment, ideas and technologies.

Meanwhile, Ali claimed as follows;

"Researchers in research collaboration from the North are very committed to their work."

Discussing the commitment of the researchers from the North in relation to the South was brought to the fore, firstly, could that have meant the researchers from the North were willing and gave all to the work of research or could it mean that researcher from South or more specifically researchers from UNAM and NCRST were lazy? Taking position on any one side of the two would imply biasness. Understanding what was implied by commitment was how researchers from the North stick to timelines or date lines in the whole process of collaborative research projects from the start until the end. Meanwhile, Mwizukanji argued that;

"Research in Namibia is still conducted academically just for the mere fact of obtaining qualification like masters and PhD. I want to see ground-breaking research in Namibia where knowledge created informs policy and helps communities to develop."

Mwizukanji's view above was critical in that it could not be supported by empirical evidence that many researchers those with PhD or and with Masters particularly in Namibia do not conduct ground-breaking research however, her views were not supported by other researchers from the same institution who were interviewed.

Information availed in this section suggests that researchers had various motivating factors regarding collaborative research. These views fall under themes of financial gains, promotions at work, beneficial career, opportunities opening, capacity building for lecturers and students, platform for development and share knowledge, meaningful and rewarding, benefit our society and our communities and inform policy in the country. Researchers viewed collaborative research as a mode of exposure to new kind of working environment, ideas and technologies. Since collaborative research is not immune to challenges, the next section will report on challenges faced.

4.9. Challenges Faced by Researchers in Collaborative Research

While funders are increasingly encouraging multidisciplinary research, it can be challenging (Gewin, 2014), and such collaborations can run into paradigmatic concerns (Frodeman, Klein and Mitcham, 2010). One challenge for collaborative and partnership research identified in this study is consistent with Huberman's (1994) findings, which include a range of perspectives on knowledge production and use, as well as the relationship between researcher and research funder, ranging from top-down to bottom-up, linear to interactive, and multidimensional. Depending on research tradition and/or experiences, basic assumptions regarding knowledge and learning can vary among researchers, but also among stakeholders (Nyström, *et al.,* 2013).

Role ambiguity, multiple roles, and role conflicts were found to impede social relationships by Sibbald *et al.,* (2014), who identified challenges such as role clarity, organizational change, and cultural differences in terms of expectations on research output and (positive) effects on

actual practice. Existing relationships, goal/objective alignments, talented and experienced researchers, and the utilization of regular, multi-modal communication were all factors that made collaboration easier. When both groups were asked about the challenges they faced in the relationship, the most common responses were "inadequate resources," "worry about the quality of the study," and "incompatibility of problem-solving techniques." Sibbald (2019) also reported on this revelation.

There are myriads of problems hindering collaborative research among researchers from the University of Namibia and Namibia Commission on Research, Science and Technology (NCRST). Such problems include; misunderstandings, lack of fund, caliber of researchers, internal politics and bottlenecks, absence of policies to regulate how data sets and how data is owned and absence of national data base to curb scattered data in Namibia. These challenges can be classified as individual and institutional.

4.9.1. Individual Challenges

4.9.1.1. Calibre of Some Researchers

Non-contribution by some members of the study group and joint research financing are two of the most common issues raised by senior researchers like Hope explained as follows;

> *"Trouble comes when dealing with researchers from within some African countries. These people cannot even answer emails sometimes. In research collaboration, there are sluggish researchers those who do not want to do anything but want money and their names to appear on the manuscript."*

However, the challenge of this nature was attributed to lack of training of researchers of which had the potential to compromise projects and the quality of research in the country.

4.9.2. Institutional Challenges

Because of differences in approaches among the collaborating partners. In this case, an institution of higher learning and a national research Centre (industry and institution),

disagreements do occur between objectives, different hypothesis, cultural differences and the issue of modern technology.

4.9.2.1. Misunderstandings

Research collaboration was recognized as an asset and a problem in the research constellations of the projects, particularly the interdisciplinary component, where team members may have differing perspectives and approaches to collaboration. Some revelations were that participants gained a better understanding of the necessity to combine multiple perspectives in order to comprehend the complexities of the issues at hand. Some researchers had to contend with a variety of terminologies, research approaches, lack of sharing information about budgets as argued by Cohen (2000) which posed as an impediment for some research collaboration projects. Other researchers had misunderstanding arising from different perspectives regarding what constituted a research goal, realistic tasks, and task completion periods. Misunderstandings were experienced and could not be ruled out. Shading light on misunderstanding Pombe echoed the following;

> "*Challenges during research collaboration projects are many for example: misunderstanding or disagreements are common among the researchers but it matters how best to handle them. Coping with them is all about understanding where the problems are coming from and what is causing those problems and try to figure out how to avoid them."*

Meanwhile, Purity said;

> *"Misunderstanding is due to unclear terms of references. We cannot accept to be bullied. However, you overcome these challenges by understanding what causes these issues. Coping with challenges are no easy but once you know what you are doing and why you are doing, gives you hope to live on and continue."*

Oscar had this to say;

> *"For example, if I work with this research partner and I know there will be conflict at a later stage, I should say but colleagues once we reach this stage I cannot join anymore because at that time I will have conflict with this aspect. I have to declare it and tell them. I have pulled out of the research project without giving them some kind of reason behind."*

4.9.2.2. Lack of Funding

The majority of participants (*or researchers*) confirmed that funding was a challenge in cases of collaborative research. Lack of funding was attributed to the fact that there was less budgetary allocation for research at UNAM and NCRST due to reliance on central Government hence, researchers depended on international researchers for funding. The reliance of Western funders for research funding was in consistent with the research Hatton and Schroeder (2007) said as the postulated that, the only way Southern researcher to have access to funding is to seek North-South collaborative research since many Southern researchers come from cash-stripped countries and research institutions. One would argue that the reason why there is less or little budgetary allocation for research at University of Namibia is that the University put more emphasis on teaching as compared to research. Chico had this to say;

> *"External funders set the agenda. They know what they want and what they want to achieve."*

In the meantime, Betty said;

> "*UNAM has less budgetary allocation for research"*

Furthermore, Paul decried the absence of research funds at UNAM when he said;

> *"UNAM put more emphasis on teaching than research."*

On the other hand, researchers from NCRST revealed though the institutions is sorely for research and regulatory oriented they also rely on funding from international partners because they budgetary allocation from the government of Namibia for research funding is less. Mwizukanji said;

> *"The funders set the tone. In terms of how things are done, it is our friends who have a bigger say."*

Furthermore, Ali explained;

> *"NCRST do not have all the money for research collaborative projects, international partners contribute more if not all depending on the type of the collaborative research project. The budgetary allocation from the government is 1% however, only a small fraction out of that is released for research."*

Furthermore, researchers revealed that because of lack of funding, most of the research in Namibia was theoretical in nature.

4.9.2.3. Internal Politics and Bottlenecks

Majority of the participants (*or researchers*) echoed internal politics in research collaboration. This was understood as how things are done and regulated by NCRST regarding ethical clearance and ownership of data constituted internal politics. Hope commented as;

> *"International partners apply for ethical clearance with NCRST, however, the protracted period it takes to get the ethical clearance does not signal well."*

In terms of internal politics and bottlenecks Peter elaborated;

"Every organization has internal conflicts or internal politics, all that is needed is to know how to settle them. However, the worst scenario is where some researchers want their names to be on the manuscript without doing anything."

As elucidated earlier NCRST is responsible for regulation research activities including ethical clearances for researchers as mandated by the law, never the less, researchers decried the absence of policies to regulate how data sets and how data is owned and absence of national data base to curb scattered data in Namibia. Chico explained;

"We do not own data in Namibia, data is owned by the funders"

What Chico seem to suggest is that there is a tendency in Namibia where researchers from elsewhere conduct their studies and do not have conform to any policy or rules. The researchers from outside own the data not Namibia

Further, Pombe added his voice as he said;

"Data sets are scattered in Namibia."

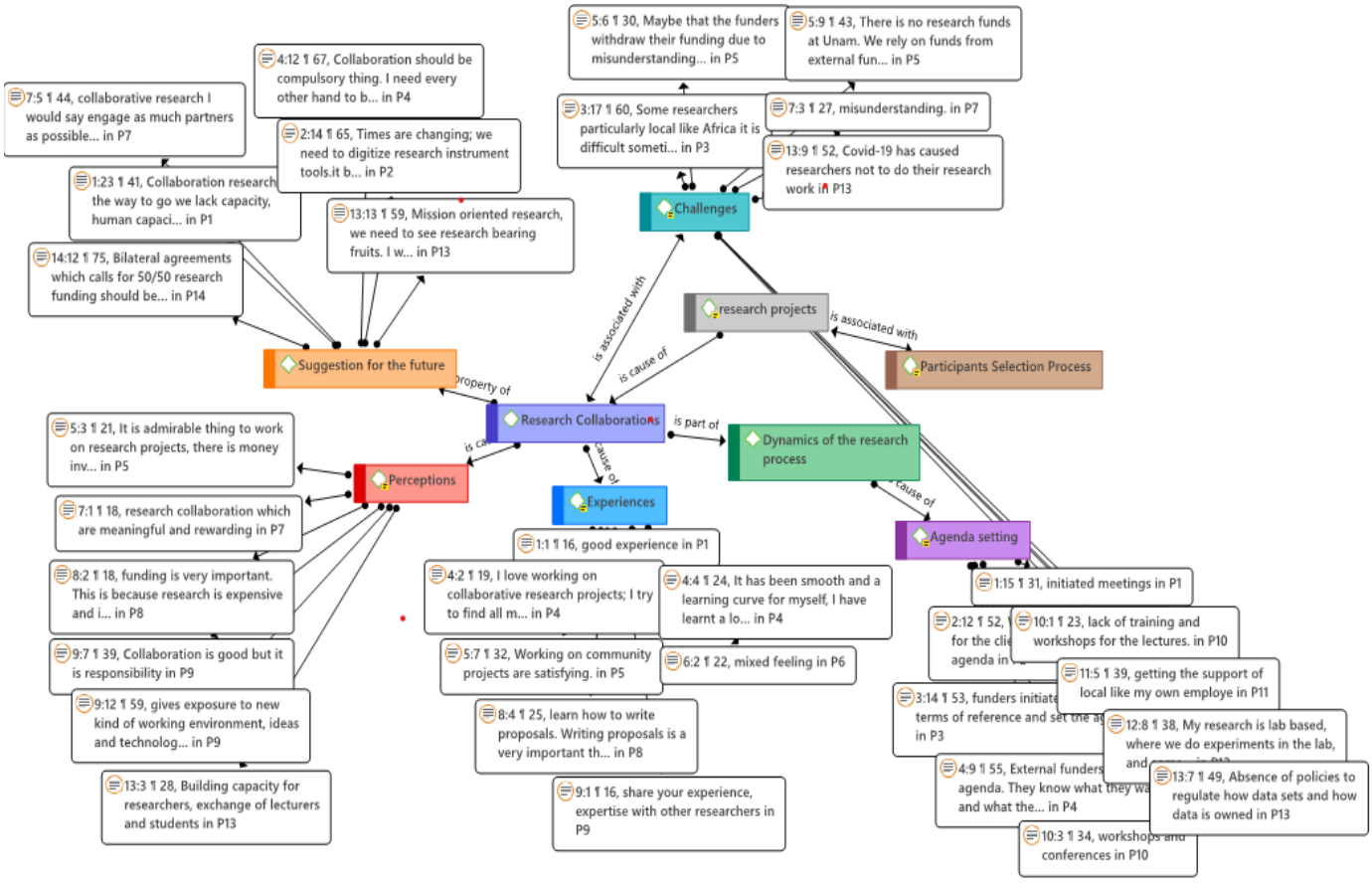
Pombe argued that NCRST should upskill on ICT infrastructure to curb scattered data.

The issue of management of research projects was highlighted to be coupled with bottlenecks such as lengthy ethical clearance and monopoly of projects by some researchers. As revealed by researchers from NCRST, for a long time the institution had no capacity technologically to handle scattered data and secure data ownership due to poor ICT infrastructure. However, Duque *et al.*, (2005) argued that research continues to demonstrate that the introduction of ICT that does not complement, or is incompatible with, existing policies and practices will not increase research collaboration. It was suggested that the quicker NCRST upskill and upgrade the ICT the better to facilitate data protection and enhance data ownership in the country.

Secondly, the issue of ethical clearance was stressed, researchers recommended for speeding up the process, as the sluggish process is an impediment to research collaboration spirit.

5.9. Study overview of Collaboration Network.

Figure 1: Study Summary



Sources: summary of study generated from Atlas.ti software (2021)

4.10. Chapter Summary

In this chapter, the findings of the study have been discussed. The discussion was done under themes emerging from the results of the study that are informed by the research objectives, research questions and theoretical framework as summarised below:

- Factors that lead to research collaboration- Creation of scientific knowledge and knowledge transfer, building of relationship, to enhance expertise and research funding.

- Agenda setting in research collaboration- steering of public of opinion on what should be researched, it was discovered that researchers from the North set the agenda that suits them. The agenda safe guide their own Western interests, however, it was discovered that setting the agenda in research collaboration may be a roadblock to research collaboration advancement as some terms of reference may not be supported by researchers from the South.
- Procedure for contracting/ selecting researchers in research collaboration- researchers in the South are contracted or selected through various methods like emails, published works, referrals etc. however, the criteria used is based on qualification of researchers to be engaged, experience in that that of research and area of expertise.
- Dynamics of the processes in research collaboration- Various methods are adopted and they differ from one research collaboration project to the other, engagements are done through networking using of digital platforms, workshops, seminars, conferences, through writing of research proposals and attending bids or advertisements for research collaboration.
- Researcher's experiences in research collaboration projects- Researchers undergo different experiences in research collaboration projects. Some of the researchers interviewed expressed that their experiences as cordial, educative, interactive and good. On the other hand, other researchers likened North-South collaboration as exploitative enterprise.
- Researchers motivation for research collaboration- Findings revealed that majority of the researchers are motivated due to financial gains that comes with research work, promotions at work, beneficial career, creation of research opportunity, capacity building, benefits the community and the country, researchers findings informs policy and meaningful and rewarding.

- Challenges faced by researchers in research collaboration projects- The findings revealed that challenges are enormous and varying like: misunderstanding between North- South on various issues during and after the research, lack of research funds for
- South based researchers, internal politics amongst South researchers, absence of clear policy to regulate how data is supposed to be kept, and data ownership.

- Relevance of theoretical framework to the study- Dependency theory and World-systems theory were used in this study. They provided their validity throughout the study in that, Namibia has been located in the peripheral sphere and it is a peripheral country which has depended on the core countries for technological, scientific and most of research funding. As such, researchers are subjected to peripheral treatment even in North-South research collaboration projects. One essential feature of the shared interests of all members of the proletariat are the fact that they are exploited. The Marxist theory of exploitation does not claim that people do not get paid; it claims that workers do not have a share in the value they create. They are paid for their time and effort, clearly, but through the labouring process, they create something valuable that the capitalist owns entirely.

In the next chapter, conclusions of the study and some recommendations based on the research findings are presented.

CHAPTER FIVE

RECOMMENDATIONS AND CONCLUSSION

5.1. Introduction

The aim of this research project was to explore the experiences of researchers on collaborative research projects as the case for UNAM and NCRST. Furthermore, this research project explored specific objectives namely:

- To explain how researchers are contracted/ selected to participation in research collaboration projects;
- To assess how agenda setting is done in research collaboration projects;
- To examine the dynamics of research;
- To explore the experiences of researchers in collaborative research projects.

Researchers were forthcoming in discussing their experiences in research collaborative projects. A qualitative phenomenological approach was adopted in the face-to-face interviews and through Zoom video calls with the researchers as they gave their lived experiences in research collaboration. Themes were selected with the help of Atlas.ti software and data was thematically analyzed as qualitative research method was used. Therefore, in this chapter, conclusions are drawn and recommendations made based on the findings of the research, discussions and literature review of previous chapters. Recommendations are made on the grey areas that were identified by the research and further research proposals and contributions of the study to the body of knowledge are presented.

5.2. Study Purpose Review

The main purpose of this research project was to explore the experiences of researchers on collaborative research projects as the case with UNAM and NCRST. The central problem that

was researched emanated from the study that research collaborative projects between North and South are oppressive, unethical and unequal (Kumar & Bahar,2019), secondly, that research collaborative projects does not enhance capacity building and empower local population but promote Western philosophies and Western agenda as argued by Mignolo (2011).

This chapter validates the study in terms of its purposes and objectives in the relation to the experiences of researchers at UNAM and NCRST on research collaborative projects. The study objectives were:

- To explain how researchers are contracted/ selected to participate in collaborative research projects;
- To assess how agenda setting is done in collaborative research projects;
- To examine the dynamics of research processes;
- To explore the experiences of researchers on collaborative research projects.

This chapter presents the study in terms of its purpose and objectives in relation to the experiences of researchers on research collaboration project; therefore, it provides recommendations concerning the findings of this research project.

5.3. Recommendations

5.3.1. Recommendations in Terms of Factors that Lead to Research Collaboration

The results of this research on factors that lead to research collaborations revealed that the most prominent aspects were need for research funding, exchange of knowledge, knowledge transfer, strategic partnerships, acquisition of experience, exchange of technical expertise on projects that needed expertise and experience in various fields of study. It is recommended that research fund allocation at UNAM and NCRST be increased in order to reduce the

dependence on the North for research funding. Funding for knowledge transfer may count towards income targets. In terms of exchange of knowledge, it is recommended that to encourage several forms of knowledge sharing. Furthermore, it is recommended that joint projects be encouraged and have open access to extensive datasets/ expertise/ equipment that would be either impossible or very expensive to obtain as a single entity or person.

5.2.2. Recommendations in Terms Agenda Setting Research Collaboration

Majority of the participants claimed that agenda setting is northern researchers driven, as this is meant to safeguard their interests in the research collaboration projects. The findings were consistent with Lavrakas (2008) observation that research exposed Western researcher's domination in shaping research opinions and setting the agenda. It is recommended that researchers in the South should be engaged in agenda setting and that can only happen if there is 50/50 contribution towards research funds.

5.2.3. Recommendations in Regards to Procedure for Contracting/ Selection of Researchers to Participate in Collaborative Research Projects

In this regard, the current research probed the procedures used to select participants in most collaborative projects. Selection of suitable participants/ researchers will facilitate the success of research projects. The most prominent themes that were recorded during interviews were; experience, area of expertise, knowledge and through networks. The results on the inquiry on the selection process of members of the research team in collaborative research imply that, most of the researchers were selected based on their networks and experience. These networks where based on referral basis where researchers were contacted by their research networks. It is recommended that researchers should increase their network capacity and utilise their opportunities in order to participate in research collaborative projects. Secondly, it further recommended that researchers at UNAM & NCRST should continue learning to increase knowledge.

5.2.4. Recommendations in Terms of Dynamics of the Processes in Collaborative Research

Majority participants explained that the dynamics in collaborative differ depending on the nature and objectives of a particular research project. However, the participants acknowledged that collaborative research projects are done through various method that include; attending workshops, through networking, and responding to calls. When attending workshops and conferences participants have the opportunity to connect with other researchers who may have research interests in ones area of interest. It is recommended that researchers at UNAM and NCRST should take advantage of networking tools and make best connections with researchers from outside the country. Secondly, researchers at UNAM & NCRST should undergo training on how to respond to research calls and take advantage when attending workshops to use them as a springboard for future engagements on research projects.

5.2.5. Recommendations in Terms of Researchers Experiences in Collaborative Research Projects

However, some of the participants revealed that they had a good experience working in collaborative research projects they were class-conscious in that they understood their position in the system of labour and exchange. Furthermore, other participants decried international funders set timelines, which become unconducive to work with, hence, research collaborative projects become unenjoyable. It is recommended that research collaboration be encouraged by self- emancipation and combine expertise and resources so that bigger and complex scientific questions are tackled and expand the breadth of the research. However, achieving capacity building in research collaboration projects are “risky, messy business, with unpredictable and unquantifiable outcomes, uncertain methodologies, and contested objectives” (Morgan, 1998, p6). Capacity building involves enhancing the abilities of individuals, organisations and systems to undertake and disseminate high quality research efficiently and effectively.

5.2.6. Recommendations in Terms of Motivations for Collaborative Research Projects

Majority of the participants hailed research collaborative projects that it acts like as a conduit for promotions at work and career advancements. On the other hand, majority participants viewed collaborative research projects as admirable and it opened doors for financial gain. However, some participants echoed concerns over lack of consideration for local community. In that sense, they recalled a research that was done where researchers from the North conducted their research on *hoodia plant* and *devils craw* medicinal benefits, both the data, findings and benefits were not beneficial to the local community eg The San and the Herero communities in Namibia. It is recommended that laws be put in place to regulate researchers on how they conduct their research and that all researches that are done in Namibia, both data and findings remain and benefit the community and the country. Secondly, partners in the collaborative research projects should address issues of mutual interest and expectations.

5.3. Areas of Further Research

a). More research is needed to explore experiences of researchers from other research institutions and universities.

b). Research is needed to understand the impact of research coloniality among researchers in the Global South.

c). A research is needed to establish research collaboration and data ownership in Namibia

d). More research is needed to explore agenda setting in research collaboration in other research institutions and universities in Namibia.

e). A research is needed to understand how scattered is data and data ownership in Namibia.

5.4. Conclusion

The aim of the current study was to explore the researchers' experiences in collaborative research projects as in the case of University of Namibia and Namibia Commission on Research, Science and Technology. Meanwhile, Katz & Martin (1997) defined research collaboration as working together of researchers to achieve the common goal of producing new scientific knowledge. However, the underlining problem that informed the study was the argument that collaborative research projects are oppressive, unethical, and inequalities existed between North and South researchers (Kumar & Bahar, 2019). Additionally, Mignolo (2011) argued research collaborative projects do not enhance capacity building for Southern researchers but only promote Western philosophies and Western agenda. In the quest to find answers to the problem, specific objectives were adopted as listed below:

- To explain how researchers from UNAM & NCRST are selected to participate in the research collaborative projects;
- To assess how agenda setting is done in research collaborative projects;
- To examine the dynamics of research process and
- To explore the experiences of researchers in research collaborative projects.

The findings from the research project revealed that majority participants hailed research collaboration as helpful and that it enhances knowledge creation, capacity building in the sense that, working on research collaborative projects fostered a sense of ownership and empowerment, and provide accessibility to research funding. Accessibility to research funding were consistent with Hatton and Schroeder (2007) research, which reported that, the only way Southern researchers have to access research funding.

Furthermore, factors that lead to research collaborations were probed, the findings revealed that, the need for research funding, exchange of knowledge, knowledge transfer, strategic

partnerships, acquisition of experience, exchange of technical expertise on projects that needed expertise and experience in various fields of study were the key factors.

The other aspect in this research project that was investigated was agenda setting in research collaboration projects. The results reveal and confirms Bradley's (2008) report that researchers from North or Western researchers are heavy-handed in setting research agenda. They do so to promote their own Western epistemologies and values. It was suggested by many participants that, in order to be involved in agenda setting, research budgetary allocation be increased from the current level of 1% of the GDP to something higher. This suggestion was informed by the fact that, Western /Northern researchers and research institutions provide research funding and dictate the agenda.

This research project examined the procedure for contracting or selecting of researchers to participate in research collaborative projects. The results of the research project revealed that, experience, area of expertise, knowledge and through networks were prominent factors that lead to researchers being selected to participate in research collaborative projects at UNAM and NCRST. These findings were consistent with Jeong & Choi (2015) who found out that senior researcher/ scientist with experience have larger networks and resources, and are selected to participate in research collaborative projects.

The dynamics of the processes in research collaboration were explored and the findings revealed that collaborative research projects differ in nature and objectives, and as such, various methods are utilised for instance; attending workshops, networking, and responding to calls. When attending workshops and conferences participants have the opportunity to connect with other researchers who may have research interests in ones area of interest.

The research investigated researchers experience in collaborative research projects. Though the findings show that some participants had a good experience working in collaborative research

projects, these participants may have been suffering from class-consciousness. As they lacked understanding as to the motives that drives core and periphery of knowledge is Western centred. Furthermore, some participants indicated they experienced hard times due to international research funders' timelines, exploitation, and other differences, which rendered research work not enjoyable. However, majority participants indicated working in research collaborative projects was a great learning curve, a tool for capacity building, a platform for exchanging ideas and access to funding. To some participants, working in collaborative research projects allowed them to travel overseas; it gave them the opportunity to see new places and meet different people.

Finally, this research project probed the factors that motivates researchers to participate in collaborative research projects. The results specified career advancement, need for promotion at work, research knowledge enhancement and financial gains or benefits were motivating reasons. Furthermore, the findings reported that research collaboration gives the opportunity for growth in research and builds research capacity. Additionally, research collaboration provides a platform for research knowledge sharing, meaningful repute and rewarding.

However, the study revealed there are glitches in research collaborative projects. These hitches range from individual to institutional. In terms of individual challenges, some researchers who were engaged in research collaborative projects exhibited laissez faire attitude towards research work. It was pointed out that some researchers do not contribute much however they would want their names to appear on the manuscript. It was argued that the problem that lead to this kind of behaviour was lack of training on the part of the researchers. Institutional challenges centred on disagreements surrounding issues on objectives, hypothesis, modern technology and cultural differences. Lack of research funds was echoed emanating from two fronts; firstly, less research budgetary allocation. It was clear that both institutions (UNAM & NCRST) do not

have all the funds needed for research collaborative projects. Secondly, senior researchers at UNAM argued they is more emphasis on teaching than research.

This study adopted dependency theory and World-systems theory as appropriate theoretical frameworks. The findings of this research project are consistent with both theories. In that, the Western philosophies and agenda toward the South are exploitative and demeaning so much that peripheral countries like Namibia remain backwards and continue to rely on the core for technological, scientific and research funding. As evidenced in the findings, researchers (participants) confirmed their reliance on the North collaborators (core) for research funding in most of the research projects they participated. Moreover, North research partners have advanced economies, a well supported technological and scientifically positioned as compared to the peripheral countries like Namibia. To avoid reliance on the core countries or Northern researchers or institutions for research funding, it was advocated that researchers at UNAM and NCRST should get involved on research collaborative projects on 50/50 research funding basis.

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Appendix 1

UNAM
UNIVERSITY OF NAMIBIA

ETHICAL CLEARANCE CERTIFICATE

Ethical Clearance Reference Number: UNAM-DEC-HSS/12/04/2021 **Date:** 31/05/2021

This Ethical Clearance Certificate is issued by the University of Namibia Decentralised Research Ethics Committee (DEC) in accordance with the University of Namibia's Research Ethics Policy and Guidelines. Ethical approval is given in respect of undertakings contained in the Research Project outlined below. This Certificate is issued on the recommendations of the ethical evaluation done by the DECs at the Faculty/Centre/Campus/Unit.

Title of Project: AN EXPLORATION OF THE EXPERIENCES AND PERCEPTIONS OF RESEARCHERS AT THE UNIVERSITY OF NAMIBIA MAIN CAMPUS & NCRST ON COLLABORATIVE RESEARCH PROJECTS

Nature/Level of Project: MASTERS (NON HEALTH)

Researcher: JOEL C. SAPWE

Student Number: 201411319

Supervisor: DR ARTWELL NHEMACHENA

Faculty: HUMANITIES AND SOCIAL SCIENCES

Take note of the following:

(a) Any significant changes in the conditions or undertakings outlined in the approved Proposal must be communicated to the DEC. An application to make amendments may be necessary.
(b) Any breaches of ethical undertakings or practices that have an impact on ethical conduct of the research must be reported to the DEC and the CRP.
(c) The Principal Researcher must report issues of ethical compliance to the DEC (through the Chairperson of the Faculty/Centre/Campus/Unit Research Ethics Committee) at the end of the Project or as may be requested by DEC and the CRP.
(d) Approval is valid for a period of one year from the date of issue.
(e) A mid-year report to be submitted to DEC (where applicable), thereafter to the CRP
(f) The DEC retains the right to:
    (i) Withdraw or amend this Ethical Clearance if any unethical practices (as outlined in the Research Ethics Policy) have been detected or suspected,
    (ii) Request for an ethical compliance report at any point during the course of the research.
    (iii) *Cognizance and the observation of Namibian's Research Science and Technology Act of 2004 which makes it compulsory for Non-Namibian Based researchers to obtain the compulsory Research Permit from the National Commission on Research Science and Technology (NCRST) FIRST, BEFORE the research can commence.*

The DEC wishes you the best in your research.

Prof. T. Kalusopa, DEC Chairperson - FHSS

Appendix 2

CENTRE FOR RESEARCH SERVICES
Office of the Pro-Vice Chancellor: Research Innovation and Development
UNIVERSITY OF NAMIBIA, Private Bag, 13301 Windhoek, Namibia
340 Mandume Ndemufayo Avenue, Pioneers Park, Office F224

UNAM
UNIVERSITY OF NAMIBIA

RESEARCH PERMISSION LETTER

Date: 20/09/2021

Student Name: JOEL C. SAPWE

Student Number: 201411319

Programme: MASTER OF ARTS (SOCIOLOGY)

Approved Research Title: AN EXPLORATION OF THE EXPERIENCES AND PERCEPTIONS OF RESEARCHERS AT THE UNIVERSITY OF NAMIBIA MAIN CAMPUS AND NCRST ON COLLABORATIVE RESEARCH PROJECTS

TO WHOM IT MAY CONCERN

I hereby confirm that the above mentioned student is registered at the University of Namibia for the programme indicated. The proposed study met all the requirements as stipulated in the University guidelines and has been approved by the relevant committees.

The proposal adheres to ethical principles as per attached Ethical Clearance Certificate.
Permission is hereby granted to carry out the research as described in the approved proposal.

Best Regards

CENTRE FOR RESEARCH SERVICES
Office of the Director
2021 -09- 20
University of Namibia
UNAM

Dr. AEE Shikongo
Head: Postgraduate Support Services
Tel: +264 61 206 3129
E-mail: aeshikongo@unam.na

Appendix 3: Interview guide for research collaboration projects

Dear Respondent,

You have randomly been chosen to take part in this research whose aim is to explore the experiences and perceptions of the academic researchers at the University of Namibia and NCRST on collaborative research projects. Your views, experiences and suggestions as a respondent will provide the necessary information which will help research with much needed information and influence policy making in future. To insure confidentiality, anonymity of the respondent is assured and all responses are sorely for academic and research purposes as they shall be treated with strict confidentiality they deserve.

Name of the interviewer/ Researcher- **Joel C. Sapwe**

Date of interview ----------

Section A

Participant's information

1. Name of area/ location: ----------

2. Age of respondent: ----------

3. Sex of respondent:----------

4. Occupation of respondent: ----------

5. Name institution/ place of work of respondent: ----------

6. Kind of work engaged of respondents: ----------

7. How would you describe the years you have you worked here and for how long?

Section B

1. How would you describe working as a researcher in collaborative projects? And for long have you worked on collaborative research project?

2. How are your thoughts and feelings working on research collaboration projects? How many research collaboration projects have you worked on so far?

3. As you look back on the research collaboration you participated, are there events that stand out in your mind? Could you describe it? Describe how you got to know about the research collaboration projects?

4. Describe how you experienced working with other researchers on collaboration project/s. a good experience working with other researchers.

5. What were the most important lesson did you learn working on research collaboration project?

6. Explain to me how successful were those research collaboration projects and how long was it taking to complete one collaborative research project?

7. Tell me which part interested you most during collaborative research project and why? Working with other researchers was of interest to me. I had the opportunity to learn from others.

Section C – Experiences in research collaboration projects

1. How are meetings initiated? How often where you having meetings with your research collaborative partners?

2. Describe to me, how those meetings were organised? What agenda items dominated those meetings? What items stood out for you?

3. Explain how research collaboration are done? How is work distributed?

4. What were some of the challenges you met during engagement in collaborative research project? How did you cope with them?

5. Describe your experiences and perception before and after collaborative research projects.

6. After having these experiences, what advice would you give to researchers dealing in collaborative research projects in Namibia?

Section D – Agenda-setting in Research collaboration projects

1. What, if anything, did you know about the research collaboration proposal?

2. Tell me about your thoughts and feelings when you learned about those research collaborative projects? Kindly explain events that led up to research collaboration project to be carried out.

3. How do research collaboration projects organised? What was going on in your mind at the time this collaborative research projects was initiated?

4. Looking back then, how would you describe agenda setting for collaborative research projects? How engaged were you?

5. How would you describe the whole process of agenda setting?

Section E- Dynamics of research process

1. Explain how the whole process of collaborative research projects is done

2. Tell me if anything, how you were selected to participate in collaborative research projects? Did you influence the selection process?

3. How is your experience working with collaborative researchers from elsewhere?

4. Is there anything that you might not have thought about before that occurred to you during this interview.

5. Is there anything else you think I should know to understand collaborative research projects in Namibia?

6. Is there anything you would like to ask me?

Thank you very much for your time!

Informed Consent Form

UREC Annex 5F: Informed Consent for Qualitative Studies

Informed Consent for Researchers at the University of Namibia Main campus who have worked or working in collaborative research projects and NCRST. I am inviting you to participate in research titled "**An Exploration of Experiences and Perceptions of Researchers at the University of Namibia Main Campus and NCRST on collaborative research projects".**

Name of Principal Investigator:	Joel C. SAPWE
Name of Sponsor:	N/A

This Informed Consent Form has two parts:

• Information Sheet (this section, to share information about the study with you)

• Certificate of Consent (for signatures if you choose to participate)

You will be given a copy of the full Informed Consent Form.

PART I: INFORMATION SHEET

Introduction

I am **Joel C. SAPWE** pursuing a Master's degree at the University of Namibia. I am doing research on experiences and perceptions of researchers on collaborative research projects at

Unam main campus and NCRST. I am going to give you information and invite you to be part of this research. You do not have to decide today whether or not you will participate in the research. Before you decide, you can talk to anyone you feel comfortable with about the research. This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can ask them of me.

Purpose of the Research

Collaborative research projects between Western researchers have since gained prominence in Africa and indeed in Namibia. For instance, Unam receives a good number of Western researchers wanting to collaborate with local researchers on a number of research subjects/ issues. However, in this research project I want to understand how the process of selecting collaborative researchers is done. Secondly, I want to understand how beneficial these research collaboration projects are to the country and local researchers and institutions. Lastly, I believe you will help me with your experience in research collaboration projects and how these research projects work.

Type of Research Intervention

This research will involve your participation on one on one question interview and a semi-structured interview questionnaire will be used. Precisely, an hour will be enough to complete the interview.

Participant Selection

You are being invited to take part in this research because I feel that your experience and an in-depth knowledge as a researcher at Unam / or at NCRST will help me understand research collaboration projects better.

Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate, all the services you receive at this institution will continue and nothing will change. Should you choose to participate and later you change your mind you are free to discontinue without any problem.

Procedures

Brief introduction.

I am asking you to help with information on how research collaboration projects are contracted. I am inviting you to take part in this research project. If you accept, you will be asked to answer a few questions during the interview; I will sit down with you in a comfortable place at the office or any place convenient to you. If it is better for you, the interview can take place in your home or a friend's home. If you do not wish to answer any of the questions during the interview, you may say so and I will move on to the next question. No one else but I as an interviewer will be present unless you would like someone else to be there. The information recorded is confidential, and no one else except myself will have access to the information documented during your interview. The entire interview will be recorded, but no one will be identified by name in the recording. The recording will be stored in a safer place. The information recorded is confidential, and no one else except **Joel C. SAPWE** will have access to the recordings. The recordings will be destroyed after 5 years.

Duration

The research interview will take place at your convenient place for the duration of one hour. Moreover, should you choose the interview to be done away and you need transport, I will pick you up myself.

Risks

There is a risk that you may share some personal or confidential information by chance, or that you may feel uncomfortable talking about some of the topics. However, I do not wish for this to happen. You do not have to answer any question or take part in the discussion/interview/survey if you feel the question(s) are too personal or if talking about them makes you uncomfortable.

Benefits

There will be no direct benefit to you, but your participation is likely to help me find out more about collaborative research projects.

Reimbursements

You will not be provided any incentive to take part in the research. Your participation is purely voluntary.

Confidentiality

I will not be sharing information about you to anyone outside of the research team. The information that I collect from this research project will be kept private. Any information about you will have a number on it instead of your name. Only the researchers will know what your number is and I will lock that information up with a lock and key. It will not be shared with or given to anyone except Dr Artwell Nhemachena who is my supervisor in this research project.

Sharing the Results

Nothing that you tell us today will be shared with anybody outside the research team, and nothing will be attributed to you by name. The knowledge that we get from this research will be shared broadly through academic publications and seminars/ conferences.

Right to Refuse or Withdraw

You do not have to take part in this research if you do not wish to do so, and choosing to participate will not affect your job or job-related evaluations in any way. You may stop participating in the discussion/interview at any time that you wish without your job being affected. I will give you an opportunity at the end of the interview/discussion to review your remarks, and you can ask to modify or remove portions of those, if you do not agree with my notes or if I did not understand you correctly.

Who to Contact

You are free to contact the person/s named below if you have questions or for any information regarding this research project. Details of an authorised individual by the University of Namibia.

Details:

Joel C. SAPWE, email: joelsapwe@gmail.com, Cell: 0816892881

This research has been reviewed and approved by the relevant Ethics Review Committee at the University of Namibia, which is a committee whose task it is to make sure that research participants are protected from harm. The committee reports to the University's Centre for Research Services. If you wish to contact this Centre, please call +264 61 206 4673 or send an e-mail to research@unam.na.

You can ask me any questions about any part of the research study if you wish to. Do you have any questions?

PART II: CERTIFICATE OF CONSENT

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

……. ……

Name of Participant (print) Signature of Participant

……

Date (day/month/year)

If illiterate

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

…….

Name of Witness (print)

Thumbprint of Participant

……

Signature of Witness

……

Date (day/month/year)

Statement by the Researcher/Person taking Consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:

1) That the researcher shall be sticking to the purpose of the research project, which is to understand among other things how the process of collaborative research projects are contracted.

2) That the participant has been selected because of experience and in-depth knowledge in collaborative research projects.

3) That the participant selected works at **Unam Main Campus or NCRST** that the participant has an experience in research collaboration projects.

4) That the intervention will be as follows; the research project will be done on one on one basis, semi-structured interview guide will be used and the interview will be not more than 1 hour.

5) That the researcher will maintain participant's information in confidentiality in that no information shared during this research project will be shared outside the research team.

6) The interview will be conducted at the participant's place of choice. Furthermore, the interview will be recorded using a video/ audio voice recorder, whereas, if permission is denied the researcher will resort to notetaking.

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the participant.

Joel C. SAPWE joelsapwe

Name of Researcher/Person taking Consent (print) Signature

12/04/2021

Date (day/month/year)

If Assisted by an Interpreter: Statement by Interpreter

I have accurately interpreted the information sheet to the potential participant in …….. (insert name of target language), and to the best of my ability made sure that the participant understands that the following will be done:

1.

2.

3.

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been interpreted correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

I declare that I will not divulge any information that I interpret during this research intervention to a third party outside this study.

……. ……

Name of Interpreter (print) Signature

……

Date (day/month/year)