EXPLORING FACTORS AFFECTING KNOWLEDGE SHARING AT NATIONAL INSTITUTE FOR CRIME PREVENTION AND REINTERGRATION OF OFFENDERS IN PIETERMARITZBURG.

By Nosipho Phumzile Mkhwanazi

Student number: 216075822

Submitted in partial fulfillment of the requirements for the degree of

Master of Commerce (Human Resource Management)

College of Law and Management Studies

School of Management, Information Technology and Governance

Supervisor: Dr. Given Mutinta

2016

DECLARATION

Student number: 216075822

I declare that this research project on Exploring Factors Affecting Knowledge Sharing at the National Institute for Crime Prevention and Reintegration of Offenders (Nicro) in Piertermaritzburg is my own work and that all the sources that I have either used or quoted have been indicated and acknowledged through complete references.

Nosipho Mkhwanazi

Date: December 2016

ACKNOWLEDGEMENTS

I would like to express my gratitude to my supervisor for the useful comments, remarks and engagement throughout the learning process of this master thesis. Furthermore, I would like to thank the participants in my survey, who have willingly shared their precious time during the process of interviewing. I also would like to pass my sincere thanks to the management of the organisation studied for allowing me to use their organisation for the study.

My sincere appreciation is also due to my family who has been very supportive throughout my research process, especially my Mother. I attribute the attainment of my Master's degree to her encouragement and support, and without her this dissertation would not have been completed.

I am especially grateful to my Prince who understood when I had to spend time studying and working on my research, rather than being home with him.

Above all, praise and glory belongs to the Great God Almighty, the author of knowledge and wisdom for giving me the strength to fulfil and exceed my capabilities.

Table of Contents

List of Figures

Appendices

Abstract

Fast changes in business and innovation are driving organisations to learn and adapt to changes at an extraordinary rate. Most of them understand that unless information gathering and exchange happens quicker they will not have a competitive advantage, as they will be at risk of losing the significant resource of knowledge through knowledge erosion.

This study is about exploring factors influencing knowledge sharing in a non-governmental organisation called the National Institute for Crime Prevention and Reintegration of Offenders (NICRO). This is a qualitative study where interviews were used as a data collection technique and thematic analysis used as a data analysis method. Explorative research design was used in this study to explore a variety of factors impacting knowledge sharing. The targeted population was the employees of NICRO and the purposive sampling method was used to select a sample. The sample size consisted of five employees with different professions and roles in the organisation.

The findings indicated that there were a variety of individual, organisational as well as technological factors which influenced knowledge sharing at NICRO. Individual factors such as awareness, personality, altruism and self-efficiency were key determinants of knowledge sharing in the organisation studied. The trust and rewards system was a predominant organisational factor that impacted employees' behaviour with respect to sharing knowledge, followed by factors such as organisational culture, leadership and organisational structure. The study also ascertained that technological factors played a significant role in influencing knowledge sharing in the studied organisation.

On the basis of the research findings, the study recommended that the management of NICRO review and improve their reward system in order to encourage employees to engage in knowledge sharing. The study also recommended that employer and employees reestablish a trustworthy relationship among themselves in order to create favourable conditions for sharing knowledge.

KEY WORDS:

Individual factors, knowledge sharing, organisational factors, technological factors.

CHAPTER ONE

INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 Introduction

This first chapter presents the background of the study on factors affecting knowledge sharing at NICRO. This is followed by the research problem, research objectives and questions, the aim and purpose of the study. The importance and limitations of the study are also presented in this chapter. Then the chapter presents a summary of the research design underpinning the study, definitions of the main terms and the summary of the chapters in this dissertation. The chapter then concludes with a summary of the themes that evolved in this study.

1.2 Background of the study

A variety of studies have revealed that many organisations have realised the significance of knowledge management in their organisations. Knowledge is considered a significant resource in every organisation that needs to be sustained and managed effectively. According to Tiwani (2001 as cited in Ismail & Yusof ,2010).), knowledge management is essential for making business value, creating a competitive advantage, accomplishing organisational objectives and enhancing the value of the fundamental know–how of the organisation. Knowledge management is an umbrella term, consisting of different elements. According to Hendricks (2004), knowledge sharing is among the important elements of knowledge management. In order to give an unblemished background on this construct, the following passage will look at the concept of knowledge in the organisation.

Prusak (1998 as cited in Evans, 2012:45) perceives "knowledge as an evolving mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information". Knowledge includes experience, logical data and master closing that gives structure to the assessment and use of new information and recently gained encounters. Nor & Ismail (2012) articulate that knowledge is the asset of an organisation that does not rely on the individual, and the main goal of knowledge administration

is to adopt resources to ensure that the knowledge is shared between staff members and throughout the organisation at large. Knowledge is said to be power and the most vital asset in today's cooperate and non-cooperate world.

For the purpose of this study, knowledge can be grouped into two classes, namely explicit and tacit knowledge. According to Quintas (2005), tacit knowledge is the kind of knowledge which is implicit and kept in the minds of the employees, and has not been codified or made explicit. It is unexpressed information that is more installed in social connections and is essentially transmitted by direct social cooperation and watched conduct. Tacit knowledge is the organisation's competitive advantage since it cannot be easily 'stolen' by competitors.

Explicit information is contained in the databases and open archives of the organisation. It is the codified or explicit information that can easily be accessed. Duffy cited by Bradshaw et al., (2015:59) describes explicit knowledge as "knowledge that is documented and public; structured, fixed-content, externalised, and conscious" and tacit knowledge as "personal, undocumented knowledge; context-sensitive, dynamically-created and derived, internalised and experience-based; often resides in the human mind, behaviour and perception." Knowledge is a primary asset that organisations need to manage in order to maintain the competitive standard and also to achieve their organisational goals.

Knowledge management is the way an organisation distinguishes and influences information, keeping in mind the vision of the organisation, and it is the skill of using information or knowledge that the employees possess in the organisation. Knowledge management is a cognisant push to get the right learning to the right individuals at the opportune time, with the goal that it can be shared and applied without hesitation (Mathis & Jackson, 2010). Hence Alvai & Leidner (2001 cited by Noor, Hashim & Ali, 2012) assert that knowledge sharing is a central element of knowledge management. This proves that knowledge sharing is one of the most critical knowledge management tools that is utilised to capture and secure the tacit and explicit knowledge possessed by employees in an organisation. Knowledge sharing will also be discussed briefly in the following passage.

According to Schwartz (2006 cited by Yiu & Law, 2012), knowledge sharing is defined as the exchange of knowledge between and among individuals, and within and among groups,

subdivisions of the organisation and between organisations at large. Noor, Hashim & Ali (2012) add that knowledge sharing begins with two individuals, one who communicates knowledge and the other who receives and incorporates it. Here the emphasis is on human assets as well as communication between persons. Information sharing is considered as a procedure in which the interior (tacit) knowledge of an individual is changed over into intelligible, and for all intents and purposes, appropriate information for others.

1.3   Research problem

As a developing country, South Africa is faced with numerous challenges such as the lack of job opportunities, high rates of poverty, a shortage of skills, high crime levels and a heightened variety of social ills (Tobin & Volavsek, 2006). The above-mentioned challenges put a serious strain on non-governmental or nonprofit organisations (such as NICRO) because they have limited resources at their disposal and high competition because many organisations are created in this regard. Employees enter and exit these organisations because they are not satisfied with their jobs, due to unsatisfactory remuneration and other unpleasant conditions. According to Tobin & Volavsek (2006), most non-profit organisations' employees work under pressure because the ratio of duties per employee is higher than their income and they hardly enjoy the benefits that are enjoyed by government employees; hence non-government organisations' employees always seek greener pastures in the private sector or in government institutions. These organisations also suffer as a result of high competition and a lack of funds as their sponsors struggle to fund them due to the tight status of the economy. The non-government organisations are therefore faced with a number of challenges that affect their performance and productivity, and this calls for these organisations to start implementing effective knowledge management strategies in order to survive and retain knowledge within the organisation, even if knowledgeable employees exit the organisation.

Knowledge sharing, as a center of discussion, is reported to be very poor among individuals in organisations as they tend to operate in silos (Mannie, Van Niekerk & Adendorff, 2013). Poor implementation of knowledge sharing has an unfavorable effect as it leads to unsuccessful knowledge management in the organisation. According to Babcock (2004 as cited in Mannie, Van Niekerk & Adendorff, 2013), businesses spent from $2.7 billion in 2002 to $4.8 billion by 2007

on implementing knowledge management projects alone. Chihab (2009) reports that by 2007, knowledge management software was a $73 billion market and it was predicted that knowledge management spending would grow by nearly 16 per cent to an average of $1,224 per employee by 2008. Chihab (2009) thus emphasises that organisations invest immensely in establishing knowledge competence and in attaining an economical advantage. This is because many organisations affirm that knowledge sharing remains a significant tool for improving efficiency and competency levels in every workplace.

According to Kruger (2013), South Africa has additional challenges that threaten knowledge management in South African companies. South Africa is distinguished by the influx of different cultural pressures that need to be integrated if businesses want to compete in the global economy. Moreover South Africa is unique because of its social, political and economic history. In contrast to other culturally diverse countries, South African companies are required to abide by policies that are aimed at addressing political injustice and imbalance in the distribution of resources that was the result of the apartheid government. These policies include the Employment Equity Act (No. 55 of 1998), the Skills Development Act (No. 97 of 1998), Affirmative Action policy and other relevant acts. According to Kruger (2013), such policies impact on recruitment, retaining employees, training of employees and knowledge management in South African organisations. South Africa is also faced with the challenge of a shortage of skills, which poses a great threat to organisations. Thus South African companies are faced with multiple challenges, giving them no choice other than proper knowledge management in order to maintain their competitive advantage.

With regards to NICRO, the regional manager (Chetty, 2016) reports that the organisation spends R30 000 plus in training current employees and sharpening their skills so that they are knowledgeable and can provide quality services, but a critical problem is that there is a heightened loss as employees exit the organisation. In 2016 alone, more than 15 key employees left the organisation, including managers and senior social workers. This is a huge concern and loss as the organisation spends a lot of money on training employees. Chetty (2016) reports that the organisation cannot prevent employees from leaving because the benefits of working for the private sector and government institution far outweigh those of working for the non-profit organisation. In light of the above problems, the feasible solution for organisations, especially non-

profit organisations, is to focus on enhancing their knowledge management strategies, with knowledge sharing a priority in order to combat knowledge erosion and to maintain their competitive advantage.

1.4   Aim of the study

According to Wagner (2012), the primary focus of the research project is usually expressed in terms of aims and objectives. It is further elucidated that aims are the researcher's intentions or aspirations about what he or she hopes to achieve at the end of the project (Wagner, 2012). The aim of this study is to explore the individual factors that influence knowledge sharing at NICRO, to discover the organisational factors that impact on knowledge sharing at NICRO and also to identify and deliberate on the technical factors that influence knowledge sharing at NICRO.

1.5 Purpose of the study

Avdimiotis, Kokkinis & Kamenidou (2012) report that limited research has been done on the factors influencing knowledge sharing, especially in non-governmental organisations (such as the one being studied). Bakhari & Zawiyah (2012) further confirms that there are limited studies on knowledge management and knowledge sharing in public organisations, therefore, the purpose of this study is to extend the body of knowledge by researching the factors affecting knowledge sharing in non-governmental organisations, using NICRO as the study site. This study was initially triggered by NICRO's problems that are mentioned in the problem statement above. It is also important to note that urgency of this study is derived from the fact that all organisations, including NICRO, are prone to losing knowledge due to knowledge erosion; where key or knowledgeable employees leave the organisations. Successful knowledge sharing will prevent high levels of knowledge loss through knowledge exit in the organisation, hence knowledge retention through knowledge sharing is necessary in all organisations

1.6   Significance of the study

The literature survey reveals that organisations have been paying much attention to attracting and retaining educated employees, executing IT applications or frameworks to gather and store explicit knowledge, and on universal research directed at information administration models and measures,

with some advancement being made towards determining information administration benchmarks. In any case, there has been extremely little research regarding these issues in South Africa (Tobin and Volavsek, 2006). There has not been much concentration on the maintenance of knowledge that may be lost because of individuals leaving the organisations and it has been proposed that when individuals leave, their knowledge leaves with them (Pickett, date cited in Noor, Hashim & Ali, 2012). Organisations, therefore, need to discover methods for retaining relevant knowledge before the significant and knowledgeable individuals depart from the organisations.

According to most of the literature, it is clear that every company has a couple of key individuals whose knowledge is of utmost importance to the survival of the company. Leonard (2005) makes an example with the 'Charge Gates Company'; that if 20 of Microsoft's key employees were to leave, the organisation would be susceptible to impoverishment. Likewise, each company has a number of key individuals whose flight would decimate operations, thus knowledge sharing is an important precaution which ensures that significant knowledge is transferred and retained within the organisation, to safeguard it against knowledge erosion.

Martins & Martins (2011) remark that the difficulty confronting companies is to distinguish between factors that can lead to knowledge forfeiture and those that can promote knowledge retention in the workplace, so as to hinder the growing knowledge loss and erosion that is affecting companies. Martins & Martins (2011) claim that knowledge and aptitude of workers ought to be viewed as vital assets and as significant resources in upholding the competitive advantage of the company. According Quinta (2005), knowledge has turned into the most vital element in monetary life. It is the central element of what we purchase and offer, the crude material with which we work. Knowledge is further understood to be the intellectual capital which is not a natural asset, apparatus or even monetary capital, but has turned into an imperative resource of every organisation.

Frank, Finnegan & Taylor (2004 cited by Martins & Martins, 2011) remark that the research conducted in the United States by Talent Keepers at 240 companies reveals that the most perceptible impact of worker turnover on companies is lost knowledge (78%), rather than cost effectiveness (54%). It is reported that the most costly outcome of worker turnover is the dispersal

of an organisation's lavishly gained learning and experience (Martins and Martins, 2011). Martins & Martins (2011) further report that the consequence of the turnover of employees with the most expensive price tag is the dispersal of an organisation's expensively acquired knowledge and experience, and this clearly shows that the loss of the company's significant knowledge will have a key effect on the business.

According to the South African study done by Kruger (2013), grouping organisations according to their sizes and knowledge management maturity or success; small organisations achieved an average knowledge management (KM) maturity of 43.51 per cent (155.76/358), while organisations with between 101 and 2000 employees (medium-sized organisations) averaged 50.03 per cent. Large organisations (2001–25 000 employees) scored a bit lower than medium-sized organisations with a 48.87 per cent average. Organisations with more than 25 000 employees (extra-large organisations) consistently outperformed all other organisations, scoring on average 53.75 per cent. Although some companies are at an average range of knowledge management maturity, these findings also show that some companies are still struggling with knowledge management as they perform below 50 per cent. NICRO has been selected as an additional South African organisation, in order to explore the factors that influence knowledge sharing so that they can contribute towards the development of strategies that are aimed at enhancing the knowledge management at NICRO.

The findings of the different studies above imply that it is imperative to explore the factors that influence knowledge sharing, in order to combat information loss and promote knowledge retention within organisations. DeLong (2004 cited by Bakhari & Zawiyah, 2013) confirms this by saying that successful knowledge management strategies play a significant role in preventing knowledge erosion, especially in knowledge- based organisations.

1.7 Research questions

a) What are the individual factors that influence knowledge sharing at NICRO?
b) How do organisational factors influence knowledge sharing at NICRO?
c) How do technical factors influence knowledge sharing at NICRO?

1.8 Research objectives

a) To explore the individual factors that influence knowledge sharing at NICRO.

b) To determine the organisational factors that influence knowledge sharing at NICRO.

c) To identify the technical factors that influence knowledge sharing at NICRO.

1.9 Research design

In this study the researcher uses exploratory research design to determine the phenomenon studied. The motive behind the use of explorative design is because the researcher wants to determine the different existing and new factors influencing knowledge sharing.

The study uses qualitative research methodology because it is good at exploring the nuance of the research problem. Qualitative research is typically used to dig deeper into the views of participants regarding a specific notion (Creswell, 2013). The target population for this research is the employees of the company being studied (NICRO). The sample size of this study consists of of five NICRO employees (a manager, two social workers and two social auxiliary workers). Purposive sampling is used to select participants to answer the main research questions. Data will be collected using semi-structured interviews and analysed using thematic analysis.

1.10 Literature review

The literature review in this study takes the explanatory approach by presenting descriptive information on organisational knowledge and a variety of factors influencing knowledge sharing in organisations. Primarily it presents the background information and evolvement of knowledge management and knowledge sharing in the organisation in a broader perspective. It describes types of knowledge in general, as well as specific knowledge found in the organisational context. The literature further provides detailed information on the current writings pertaining to the factors affecting knowledge sharing in organisations. These factors are divided into three themes which are the individual, organisational and technological factors influencing knowledge sharing.

1.11 Theoretical framework

The theory underlying this study is the theoretical framework which classifies factors influencing knowledge sharing into three categories. Those categories are individual factors, organisational

and technological factors, as cited by Bakhari & Zawiyah (2012). These factors are reported to be enablers or inhibitors of knowledge sharing in the organisation. This theoretical framework was chosen because it is the integrated model that combines the study of different factors affecting knowledge sharing.

1.12 Limitations of the study

There are a number of limitations that the researcher faces in executing the study. These range from availability of the employees, limited time resources and the fact that the researcher is focusing solely on one organisation.

The researcher will be challenged by the employees' availability, since they are occupied by their professional duties throughout the day. This will be challenging because the researcher needs the participation of service providers who are most often unavailable, mainly because the organisation has a limited number of employees, and these employees have a large community to serve. In order to work around this limitation, the researcher has drawn up a schedule and planned interviews with each employee according to the time they have available.

The researcher planned to interview eight participants, however the availability and interest of employees is a challenge as some are not available, while others are not interested in the study. The researcher will thus be able to work with five participants who will make themselves available and who have given written consent to participate in the study, and the data given by these participants will be sufficient to complete the study.

The other challenge faced by the researcher is the limited time resource. There is limited time available while there is a lot of work that needs to be done, especially since this is a qualitative study. Nevertheless the researcher will capitalise on time management skills and work according to the research plan.

The other limitation faced is the fact the researcher is only studying one organisation across the country. Although the findings of the study cannot be generalised and will mostly benefit just the organisation being studied, these findings could be a useful resource to other non-government organisations who might be interested in the subject studied. This can be considered as an area of improvement so that the next researchers can widen the study and include other non-government organisations in future.

1.13 Definition of terms

1.13.1 Knowledge

Evans (2012:69) describes knowledge as "the potential of an activity, situated within a socially constructed domain and bounded by the developmental capacity of the individual." Nonaka & Takeuchi (1998 cited by Scott & Davis, 2015:145) consider knowledge as "a dynamic human process of justifying personal belief towards the 'truth'".

1.13.2 Explicit knowledge

Explicit knowledge is consistently defined as knowledge that can be communicated formally using some system of symbols or formal systematic language (Evans, 2012). "Knowledge that has been translated into words and numbers and shaped legitimately and methodically into data, information, specifications and manuals" (Abdullah et al., 2005:29)

1.13.3 Tacit knowledge

Tacit knowledge is defined by Meso & Smith (2006 cited in Naicker, 2010:7) as the type of "knowledge that lies within individuals and is learned informally in an unstructured way, which helps to create the knowledge-intensive organisation to compete successfully, responsibly and without discriminating. This provides users with the efficient access to past experiences and new ideas from various sources". According to Tsoukas (2005:98), "Tacit knowledge consists of a set of particulars of which we subsidiary know as we focus on something else. Tacit knowing is sectorial: we know the particulars by relying on our awareness of them for attending to something else".

1.13.4 Procedural and declarative knowledge

According to Kogut (year cited in Haji, 2006:37) "declarative knowledge is descriptive in its nature, whereas procedural knowledge is the knowledge of knowing how things are done." Declarative knowledge refers to factual knowledge and information that a person knows while procedural knowledge is knowledge that is oriented towards skills, strategies, or processes and it is developed over time by knowing how to perform certain activities (Ten, Berge & Van Hezewijk year, cited in De Clercq, Dimov & Thongpapanl, 2013).

1.13.5 Data

According to information systems terminology, data is considered as inputs and outputs from a system, for example numbers, characters, images etc. (Evans, 2012). According to Naicker, (2010:24) "data refers to the description of raw facts, ideas and instructions for processing or communicating by humans or by automatic methods".

1.13.6 Information

Nonaka (2002 cited in Scott, 2015:123) defines information "as a flow of messages that establishes a relationship between things and agents." Information is also defined as the collection of data and facts that have been translated into a form that is more convenient to move or process (Choo, 2000 cited in Evans, 2012).

1.13.7 Knowledge management

"Knowledge management is an integrated, systematic approach to identifying, managing, and sharing all of an enterprise's information assets, including databases, documents, policies, and procedures, as well as previously unarticulated expertise and experience held by individual workers" according to Nonaka (2000 cited in Scott, 2015:56).

1.13.8 Knowledge sharing

Knowledge sharing can be conceptualised as an action that gives an exchange and trade of information in different structures between individuals in the organisation (Evans, 2012). Information sharing is a process in which the interior (tacit) knowledge of an individual can be changed over into intelligible and, for all intents and purposes, appropriate information for others (Haji, 2006). According to Bakhari & Zawiya (2010), knowledge sharing can be defined as the practice of transmitting knowledge among employees within the organisation.

1.14 Structure of the dissertation

This study is organised into five chapters.

Chapter One: Introduction and Background to the Study

This chapter presents the background to the study, the problem statement, the significance and contribution of the study, and the aim and purpose of the study. This is followed by the research questions, as well as the objectives that underpin the study, and then the limitations and the relevant research terms are defined.

Chapter Two: Literature Review

This chapter presents the brief background information on organisational knowledge, followed by a detailed discussion of a variety of factors that are found to influence knowledge sharing in the organisation. These factors are divided into three categories, namely individual, organisational as well as technological factors influencing knowledge sharing in organisations.

Chapter Three: Research Methodology

This chapter presents a discussion of the research methodology and design used to conduct the study. The study presents the study site, target population, accessible population, sampling method, and sampling size. Then the data collection instrument and the data analysis method are discussed, and the measures employed to ensure data quality control are elucidated. The ethical considerations addressed are also discussed.

Chapter Four: Data Presentation

This chapter presents the dataset generated in this study. This chapter presents the collected data in terms of the three themes that emerged. These themes includes the individual factors affecting knowledge sharing, the organisational factors influencing knowledge sharing, as well as the technological factors affecting knowledge sharing in the organisation under study.

Chapter Five: Data Analysis

This chapter presents a discussion and analysis of the findings of the study. The aim of this chapter is to establish the answers to the research questions underpinning the study and suggest

conclusions that can be used by organisations when drawing up strategies to improve knowledge sharing in the organisation being studied, as well as other organisations.

Chapter Six: Conclusion and Recommendations

This chapter presents the key findings of this study, supported by previous studies. Recommendations and conclusion are also discussed here, followed by an outline of future areas of research informed by the findings in this study.

1.15 Conclusion

This chapter provides the overview of the study in terms of the background and significance of the study, the research aims and objectives, problem statement, literature review, limitations and the summary of the research study. The next chapter will discuss the conceptualisation of the study and deliberate on the literature review pertaining to factors influencing knowledge management in the organisation.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The previous chapter presented the introduction and background of the study. This chapter presents the literature review by exploring the background of the organisation studied (NICRO), the background of organisational knowledge, as well as knowledge sharing using the explanatory approach. It describes types of knowledge in general as well as specific knowledge found in the organisational context. The chapter then further provides descriptive information on the current writings pertaining to factors affecting knowledge sharing in the organisation. These factors are divided into three themes which include individual, organisational and technological factors influencing knowledge sharing.

2.1.1 Introduction and background of NICRO

NICRO is an acronym for the National Institute for Crime Prevention and Reintegration of Offenders. NICRO is a South African non-governmental and non-profit organisation which was founded in 1910 (Chetty, 2016).This organisation specialises in social crime prevention and offender reintegration. NICRO also promotes the respect of human rights, the reformation of juvenile justice and innovative criminal justice. NICRO renders social services to approximately 12 000 to 15 000 direct beneficiaries and touches the lives of between 40 000 and 50 000 South Africans annually (Peterson, 2015).

Services offered by NICRO include crime prevention by preventing vulnerable youth from being involved in crime; diverting child, youth and adult (mainly first-time) offenders away from the formal criminal justice system into specialist developmental and therapeutic programs providing constructive and effective alternatives to imprisonment for those convicted of less serious, non-violent crimes; providing transformation and personal development opportunities for prisoners and former offenders, facilitating former offenders' rehabilitation and their successful reintegration into society (Peterson, 2015). NICRO also engages in lobbying and advocacy, capacity building, direct service delivery, as well as research.

The above introduction and nature of the services offered by NICRO clearly depicts that NICRO is a knowledge based organisation. According to Tocan (2012), a knowledge-based organisation is defined as an organisation that depends on the ability of employees to create, obtain and apply knowledge to produce products or services. In such organisations, learning, continual accumulation and retention of knowledge are vital parts of the organisation's work Tocan (2012). The above explanation clearly shows that knowledge management is the key to the success of organisations such as NICRO, therefore, this study is a necessity in this organisation in order to enhance knowledge sharing by means of ascertaining the factors which influence knowledge sharing at NICRO. In relation to the above-mentioned research problem of knowledge erosion, this study is needed by this organisation so they can improve their knowledge sharing and knowledge management strategies and maintain their competitive advantage.

2.2 Introduction to organisational knowledge and knowledge sharing

2.2.1 Distinguishing knowledge from information and data

Information and knowledge are intertwined terms; however it is important to note the difference between these concepts as they are often used in the organisational context. According to Haji (2006), every organisation that aims to achieve knowledge management needs to identify the dissimilarities between knowledge and information. Al-Alawi, Yasmeen & Mohammed (2007) add that knowledge, information and data must not be mistakenly considered synonyms. This is because if this does happen it could lead to individuals mistaking knowledge for information. Brown & Duguid (2004 cited in Haji, 2006) also emphasise that it is a 'mistake' to consider these concepts as synonyms as this postulates that knowledge is managed in the same way as information.

Literature signifies a difference between knowledge and information, based on a variety of explanations. Nonaka & Takeuchi (2002 as cited in Scott, 2015:142) articulate that the dissimilarity between knowledge and information is that "information is a flow of messages, while knowledge is created by that very flow of information, anchored in the beliefs and commitments of its holder". "Knowledge builds on information that is extracted from data" add Nonaka & Takeuchi (2002 cited in Scott, 2015:142). Leonard (2005:21) argues that "knowledge is a subset of information", while information is mainly organised data. Furthermore, Wiig (2012:14)

articulates that the important dissimilarity between knowledge and information is that "knowledge is for action and information is for description".

Data is regarded as raw actualities, capacities and figures, while knowledge is considered to be much more complex than information. Data is the outcome of sorting information into significant structures (Al-Alawi, Yasmeen & Mohammed, 2007) whereas knowledge is the consequence of translating data in light of one's understanding; it is affected by the identity of its holder since it depends on judgment and instinct; information consolidates convictions, outlook and conduct (Al-Alawi, Yasmeen & Mohammed, 2007).

2.3 Types of knowledge

There are different forms of knowledge that are distinguished in the current body of knowledge. These types of knowledge are dissimilar and some may not be applicable in this study, therefore it is essential to discuss these differences so that it is easy to understand which one is applicable in this study. Haji (2006) remarks that it is essential to understand that knowledge symbolises a standardised concept that can be categorised into diverse categories. Fernandez (2004 cited in Yiu & Law, 2012) explains that knowledge is categorised into different types, which are mainly suggested by explicit and tacit knowledge, as well as procedural and declarative knowledge

2.3.1 Explicit knowledge

According to Fernandez (2004 cited in Haji, 2006:21) "explicit knowledge refers to knowledge that can be expressed in words and numbers". Evans (2012) defines explicit knowledge as knowledge that can be communicated formally using some system of symbols or formal systematic language. Presentations and written manuals are reported to be suitable illustrations of explicit knowledge (Fernandez, year cited in Yiu & Law, 2012). Explicit knowledge is easily transferable and shared, and is well administered. From a high-tech viewpoint, the present elucidation of knowledge management is mostly of the explicit type of knowledge (Noor, Hashim & Ali, 2012).

Explicit knowledge is further divided into object-based and rule-based knowledge by Evans (2012). "Object-based explicit knowledge is embedded into artifacts and is usually represented using a string of symbols, or is embodied in the entity itself" (Choo, year cited in Haji, 2006:39).

Some examples given by these researchers are products, patents, software codes, computer databases, technical drawings, tools, prototypes, photographs, voice recordings, and films. "Explicit knowledge is rule based when it takes the form of rules, routines, or operating procedures, and other examples of explicit knowledge include documents, pictures, stories, diagrams and narratives" Brown & Duguid (year cited in Evans, 2012:75).

2.3.2   Tacit knowledge

As per the writings of Nonaka (2009), tacit knowledge is a constant activity, which grows through action and response. According to Choo (2000 cited in Evans, 2012:65)," tacit knowledge is attained through extended periods of experiencing and doing a task, during which the individual develops a feel for and a capacity to make intuitive judgments about the successful execution of the activity". Literature shows that tacit knowledge is the type of knowledge that is not easily shared with others. Fernandez (2004 cited in Noor, Hashim & Ali, 2012) also reports that it is not easy to share this type of knowledge with other individuals, resulting in people knowing more than they can actually share with others. "Practical examples of tacit knowledge, could be when a mechanic can tell the health of an engine from the sound it generates, or a when a bank manager develops a hunch that a client would be a bad credit risk after a short conversation with the customer" indictes Choo (2000 cited in Haji, 2006:24).

2.3.3   Procedural and declarative knowledge

Procedural and declarative knowledge are other forms of knowledge that are often used in psychology, and Haji (2006) affirms that the concepts declarative and procedural knowledge are also often utilised in the artificial intelligence community. According to Kogut and Zander (2004 cited in Haji, 2006:37) "declarative knowledge is descriptive in its nature, whereas procedural knowledge is knowledge of how things are done."

These classifications of knowledge are blindingly similar to those proposed by Gilbert Ryle; namely 'know that' and 'know how', where 'know that' is akin to abstract information and 'know how' is similar to experience report Brown and Duguid (2000 as cited in Yiu & Law, 2012). In addition to that, Haji (2006) reports that these kinds of knowledge should not be considered

autonomous but rather co-dependent, and emphasises this with his well-used example "that knowing the rules of chess (i.e. know that) does not necessarily mean you know how to effectively play chess (i.e. know how). Essentially, to make 'know that' useful it must be linked with the relevant 'know how' type of knowledge" (Haji, 2006:36).

2.4 Knowledge in the organisation

Knowledge is one of the most essential resources that is reserved and utilised by every organisation. Knowledge is a highly valued and expensive necessity that is required to maintain the competitive advantage of each organisation. According to Haji, (2006:21) knowledge is regarded as "the glue that holds organisations together", contending that it is not "just one aspect of the game – it is the game". According to Bakhari & Zawiya (2010), knowledge is the most critical asset of an organisation that makes it different from other organisations. Knowledge that is possessed by the employees in each organisation is the key that distinguishes the successful from the unsuccessful organisation. Kigut (2008 as cited in Bakhari & Zawiya, 2010) further explains that successful sharing and transfer of knowledge within an organisation will lead to improved performance and productivity as the company gains a competitive advantage among its competitors.

Knowledge is an integral and cherished resource that must be well managed and circulated among personnel for the continued survival and success of every organisation. It is reported that service providing organisations rely heavily on the distinctive knowledge of their workers for their success, compared to organisations that produce goods (Bakhari & Zawiya, 2010). Moreover, knowledge is said to be the competitive driver globally. Avdimiotis et al. (2012) further mention that knowledge sharing and transfer are critical elements impacting modernisation and competitiveness of the organisation. However the main obstacle for organisations is capturing and preserving the tacit knowledge which people possess within them, such knowledge includes experience, skills and expertise of all types relating to their jobs. Hence successful capturing and assimilation of knowledge of individuals is influenced by a number of individual, organisational and technical factors. It is of utmost importance for the management of organisations to identify the factors that influence knowledge sharing and come up with strategies to enhance those with

positive influence and work against those with negative influence in sharing knowledge (Avdimiotis et al., 2012).

2.5 Knowledge sharing in the organisation

First and foremost, in order to comprehend the concept of knowledge sharing it is important to understand the primary term of sharing. Generally, sharing is the practice where something is offered by a giver to a receiver (Haji, 2006). This is affirmed by Berends (2005:37) who explains that people interpret knowledge sharing to be the "transfer of knowledge from a source to a recipient". This definition can be construed in a way where knowledge sharing is viewed as a one-way process that leads to the advantage of one person. Nonetheless, Fernandez (2004 cited in Noor, 2012:44) contends that knowledge "increases in value when shared with others, leading to both parties benefiting". This implies that the more individuals engage in knowledge sharing, the greater the value of benefit to the parties involved. Therefore, in order to understand this one needs to understand the concept of knowledge sharing and how the process takes place.

There are however numerous definitions of knowledge sharing that are discussed by different authors. According to Davenport & Prusak (2004 cited in Bakhari & Zawiya, 2010) knowledge sharing can be defined as the practice of transmitting knowledge among employees within the organisation. Gibbert (2007 as cited in Bakhari & Zawiya, 2010) defines knowledge sharing as the readiness of employees in an organisation to share the attained and generated knowledge with fellow employees. According to Bain (2004 Kim & Lee, 2006:371) there are four mechanisms for knowledge sharing which include "(1) contributing knowledge to organisational databases, (2) sharing knowledge in formal interactions within or across teams or work units, (3) sharing knowledge in informal interactions, and (4) sharing knowledge within practice communities."

In an attempt to understand this process, it is important to understand how it occurs and who is involved. Knowledge sharing is the active process that takes place between two or more parties. The practice of knowledge sharing starts with a source or knowledge giver outlining their knowledge in a way that can be received by a recipient (Sharratt, & Usoro, 2003 cited in Hew & Hara, 2007). The knowledge receiver does not obtain it as knowledge, as it is in the mind of the source, but receives it as information which he/she frames according to his/her own frame of

reference. Van Beveren Haji (2006) further explains that the outcome is new knowledge being generated in the mind of the recipient.

Previous studies found that knowledge sharing is a significant process that benefits all the parties that are involved, which includes the sender, receiver and the organisations that employs them. Knowledge sharing is part of knowledge usage and enrichment of all the parties involved, thus it not only benefits the receiver, it becomes useful to the sender and the receiver of such information as well. Noor & Salim (2012) confirm that knowledge becomes more useful when it is shared because it enhances occupational performance and assists in creating new knowledge which ultimately benefits the sender of the information, the recipient and the organisation at large. Khesal et al. (2013) emphasise that sharing knowledge between novice and experienced employees will contribute greatly to the development of those individuals and eventually benefit the entire organisation.

Knowledge sharing is not only the responsibility of the employees in the organisation but it is the responsibility of every member of the organisation because it benefits both individuals and the organisation itself. The benefits of improved knowledge management are clarified by Chihab (2009) who introduces a number of justifications for organisations to invest in knowledge management. Chihab (2009:54) states that knowledge management is highly valued because it "(i) provides a competitive advantage by allowing organisations to solve problems and seize opportunities, (ii) increases the organisations' responsiveness and innovation, (iii) saves costs, (iv) supports decision making processes, (v) facilitates collaboration, (vi) increases the employees' productivity levels, and (vii) reduces the unfavourable impact resulting from the erosion of knowledge, i.e. knowledge loss when employees leave their jobs." Such validation clearly implies that the failure of knowledge management strategies, especially knowledge sharing, gradually leads to the deterioration of the organisation. Knowledge sharing is thus clearly a critical strategic tool for the success of every organisation.

Literature has made it clear that knowledge becomes useless in the organisation if it is not shared and used. Therefore knowledge needs to be shared with others so that it becomes useful and assists in achieving organisational goals and objectives (Evans, 2012). Small & Sage (2006) claim that knowledge seems to have no or less value if it's not shared and utilised. This implies the necessity

for active sharing of knowledge in the organisation so that it contributes to the holistic organisational goals and Noor & Salim (2012) assert that the main goal of every organisation is to achieve its objectives by means of enhancing organisational performance. The achievement of business objectives calls for the successful management of the company's assets such as finances, technology, equipment, employees and most importantly the knowledge that is possessed by employees in the organisation. For this reason Elenkov (2008 cited in Noor & Salim, 2012) reports that the most imperative management strategy is the successful and efficient practice of knowledge sharing among the employees in the organisation.

Previous studies emphasise that the significance of information and knowledge can only be realised once it is shared and able to enhance job performance. Bakhari & Zawiyah (2013) state that knowledge that is created and stored in the human mind has little value to the organisation if it is not shared. In addition to that, Zangh (2010 cited in Bakhari & Zawiyah (2013) report that knowledge sharing in the organisation serves four purposes, which are "increasing intellectual capital structure in the organisation, changing individual competitiveness into organisational competitiveness, minimising organisational dependence on individuals, as well as reducing the cost of gathering information in the organisation compared to that available in the market". The procedure of generating intellectual resources includes the sharing of knowledge between workers, divisions and even between different organisations if it is to accomplish organisational objectives, according to Schwartz 2006 cited by Evans, 2012). This procedure is acknowledged through the likelihood of creating new organisational knowledge emerging from the procedure of knowledge sharing.

In an attempt to understand the process of sharing knowledge it is necessary to note that knowledge sharing is a social process that takes place among people. It therefore requires people's interest and motivation in order to take place. Haji (2006) remarks that knowledge offers individuals the ability to perform, while knowledge sharing is plausibly the practice where people grow with each other's innovative capabilities to accomplish the process. Literature also suggests that "sharing knowledge occurs when people are genuinely interested in helping one another to develop new capacities for action" (Riege, 2005). Hence, in order to enhance the knowledge sharing process,

people need to be interested and willing to share their knowledge for the benefit of those around them and the organisation at large.

Knowledge sharing is not an automatic practice but rather an effortful and thoughtful process that requires favourable conditions in order to take place. There are favourable conditions that could facilitate the occurrence of the process and unfavourable circumstances that could prevent it from happening. Haji (2006) remarks that a friendly environment, where knowledge sharing takes place, is predominantly influenced by the governmental, traditional as well as the institutional arrangements. Haji (2006) further reports that in order for companies to successfully enable knowledge sharing, they must provide an encouraging physical and psychological atmosphere within which it can take place. There are numerous social and technical enablers and obstacles that can be considered by organisations in this endeavor.

Although studies have found that promoting the knowledge sharing process in the entire organisation is not a trouble-free exercise, they also emphasise that it is indeed a fruitful and laudable practice that needs to be done for the sustainability of every organisation. As per the findings of Davenport & Volpel (2001 cited in Yiu & Law, 2012) in research about knowledge management at an electronics company called Hewlett-Packard (HP), the study ascertains that facilitating knowledge sharing throughout the whole organisation is a major challenge. This challenge is due to the fact that knowledge sharing is regarded as a social process (Allee, 2000 cited in Chebbi, Bradshaw & Oztel, 2015). The social process is the way in which individuals and groups interact, adjust and establish relationships and patterns of behaviour which are modified through social interactions. Thus knowledge sharing being regarded as a social process implies that knowledge is reliant on certain social contexts being created to allow the flawless flow of information within the organisation. For knowledge sharing to become a common practice, organisations need to pay attention to "multiple, overlapping and ongoing social relationships" (Lang, 2004 cited by Evans, 2012:89).

2.6 Individual factors influencing knowledge sharing

Individuals are key role players and facilitators of knowledge sharing in every organisation, and there are a variety of individual or personal factors that have been noted to influence knowledge

sharing in organisations. Bakhari & Zawiyah (2012) report that numerous research studies have focused on the role of technology in facilitating knowledge sharing, leaving out the human factor which is considered to be the key role player in implementing knowledge sharing in the organisation. Oye, Mazleena & Noorminshah (2011) report that tacit knowledge is possessed by the individual therefore it depends on his or her willingness - whether they want to share that information to contribute towards the needs of the organisation or to help others who might need it, and there are a variety of factors that either encourage employees to share knowledge or discourage them from sharing their expertise which they understand to be their personal belonging.

It is imperative to note that individuals are the key drivers of knowledge sharing in the organisation and that their attitude towards sharing knowledge has an impact on their knowledge sharing behaviour. According to Evans (2012), achievable sharing and conveyance of knowledge throughout the organisation has an immediate positive effect on the feasibility and performance of organisations, and it can clearly be seen that examining and comprehension of workers' conduct regarding their eagerness to offer information can have noteworthy ramifications for organisations and their performances. Literature attests that organisations cannot efficiently utilise knowledge without their workers having a proactive state of mind towards sharing knowledge among themselves and others (Noor & Salim, 2012).

The literature of today presents a variety of theories and models that talk about the individual factors that influence knowledge sharing. As per the research findings of Riege (2005), there are 17 possible individual elements that influence employees' knowledge sharing behaviour: These are the absence or availability of time for engagement and knowledge sharing; personal perception of risk involved in knowledge sharing; awareness; dominance in sharing explicit knowledge over tacit knowledge; the employee's job satisfaction level; distribution of power and the individual's role; collection of information; appraisal; criticism; personal engagement; the employee's job expertise; interpersonal relationships and communication skills; confidence in the individual's oral/transcribed communication; the individual's social skills; variance of age; gender; the availability of a social network; the individual's education levels; a sense of ownership by the company; the level of altruism; the individual's culture and racial group, personal values and

beliefs. The following passages will look at the most prominent individual factors that are believed to influence knowledge sharing in organisations, as suggested by Bakhari & Zawiya (2012).

2.6.1 Awareness and individual perception

Awareness and individual perception are factors that serve as barriers or enablers of knowledge sharing. Bakhari & Zawiya (2010) explain that awareness is one of the fundamental factors that influence the knowledge sharing process, as the individual first has to be knowledgeable about knowledge sharing and its necessity so that they can start sharing knowledge. Furthermore, the person's perception of knowledge sharing will determine whether they share knowledge or not. Bakhari & Zawiya (2010) suggest that all employees should be aware of the significance of knowledge sharing, and this includes managers so that they can create an encouraging atmosphere and facilitate a knowledge sharing culture. Ismail & Yusof (2010) adds that employees who are not aware of the necessity of knowledge sharing will not be motivated to share their knowledge, and the same applies to employers; if they are not aware of the contribution of knowledge sharing they are not likely to promote it.

Literature shows that the preliminary awareness stage is imperative for the success of knowledge sharing in organisations (Argani, 2009 as cited in Ismail & Yusof (2010)). In addition Bakhari & Zawiyah (2012) reports that awareness is the initial step to knowledge sharing and requires that every member of the organisation (employees and managers) become aware of the importance of sharing knowledge. In order to start transferring and distributing information, employees need to be aware of the significance of sharing information and how it will benefit them and the organisation at large.

In current times, knowledge is seen as a commercial asset and this is evident by the statement that claims that knowledge is power. Employees have different perceptions regarding the necessity of sharing knowledge; while some perceive it as a loss others may think it's a way of expanding their own knowledge. Yiu & Law (2012) explains that knowledge sharing is influenced by how the individuals perceive the necessity of sharing knowledge, as knowledge ownership is acknowledged by the individuals and the organisations that employ them. Yiu & Law (2012) report that studies show that personnel perceive their knowledge as the source of their power and that transferring the possessed or acquired knowledge will make them feel less valuable. For that reason, some employees may perhaps feel they have lost supremacy and knowledge possession

because of sharing knowledge. Szulanski (2010 cited in Yiu & Law, 2012) concludes that this might result in the personnel responding innately and hoarding their knowledge instead of conducting themselves in a way which shares knowledge. Awareness and an employee's discernment of knowledge sharing thus impacts on the knowledge sharing practice in organisations.

2.6.2 Personality

"Personality is a set of psychological traits and mechanisms within the individual that are organised and relatively enduring and that influence his or her interactions with, and adaptations to, the intra psychic, physical, and social environments" according to Larsen & Buss (2005:99). Van den Brink (2003) further defines personality as referring to the individual's distinctive thoughts, morals, mind-set, temper, feelings and behaviours that persevere over a period in a variety of circumstances. Personality is reported to be noteworthy and influential on an employee's comportment towards sharing knowledge in their place of work. Award (2009 cited in Bakhari & Zawiyah, 2012) articulates that personality is one of the inhibitors or enablers of knowledge sharing as an employee's level of self-confidence, openness, extrovertedness or introvertedness, values and moods are likely to influence their knowledge sharing behaviour. As such, the next discussion will be on how personality contributes to the employee's knowledge sharing behaviour in organisations.

Gupta (2008) reports that human beings exhibit five types of personalities, in which a range of traits are incorporated. Those categories are well known as the 'big five personality model' and include conscientiousness, neuroticism, agreeableness openness, and extraversion. These types of personalities will be discussed briefly regarding their level of influence on knowledge sharing behaviour.

a) Extraversion

An Extroverted personality is believed to sway knowledge sharing because extroverted persons tend to be more involved in knowledge sharing compared to introverts (Gupta, 2008). Personalities who are extroverts possess a predisposition to being friendly, robust, whole-hearted, and have a positive perspective in most instances (Besser and Shackelford, 2007). Studies reveal that extroverts are optimistic and sentimental, so consequently they tend to have positive feelings,

become good team players and are satisfied by their involvement and contribution to the group (Yong et al., 2011). Since extrovert personalities are inclined to affirmative feelings and are fulfilled by teamwork, they tend to participate in knowledge sharing and encourage others so that the group stays worthwhile; Yong et al. (2011) thus establish that a positive relationship exists between extraversion and the person's boldness to engage in sharing knowledge.

In contrast, persons who are introverts are characterised by a tendency of being reserved, self-centred and are nervous to participate in group settings and problem solving discussions with others (Gupta, 2008). According to Awad and Ghaziri (2009 cited in Noor & Salim, 2012) extroverts are confident and tenable persons who are more likely to share their knowledge and expertise than introverts and egocentric individuals. Gupta (2008) therefore concludes that employees or persons who score highly in extrovert personality traits tend to engage in knowledge procurement and sharing practice more than introverts.

b) Agreeableness

An agreeable personality is believed to have a positive relationship with knowledge sharing behaviour. Agreeableness designates the personality's inclination to be satisfying and pleasurable when they are interacting or mingling with other people (Besser & Shackelford, 2007). Barrick & Mount (2009 cited in Yong et al., 2011) report that persons who rate highly on agreeableness tend to be warm hearted, magnanimous, considerate, accommodating, jovial and supportive. Actually people with this type of personality have proven to impact job performance in cases where their roles require teamwork and mutual support (Yong et al., 2011). Employees with an agreeable personality enjoy interacting with others and this makes it easy for them to share their knowledge with colleagues. Therefore their personality traits further enable them to successfully participate in teamwork and provide mutual support (Gupta, 2008). For the mere fact that knowledge sharing involves a certain level of kindness, teamwork, synergy and requires assertiveness and good interpersonal ability, personnel with high agreeableness are reported to be more likely to share knowledge with others (Yong et al.2011).

c) Conscientiousness

Persons who scored highly for conscientiousness are very devoted, reliable, accountable, well ordered and diligent, as per the writings of Barrick & Mount (2009 cited in Yong et al., 2011). It is reported that in circumstances that require cooperation and sound interactive ability, individuals with a high level of conscientiousness tend to be successful as they are cooperative and get along well with others compared to those with low scores for conscientiousness (Le Pine and Dyne, 2001 cited in Riggio, 2015). Thomas & Moore (2010 cited in Yong et al., 2011) mention that the conscientiousness trait is associated with characteristics connected to reliability, success positioning and determination and therefore conclude that high conscientiousness has a positive influence on knowledge sharing, as conscientious individuals lean towards frequent partaking in knowledge sharing accomplishments. Gupta (2008) is also in agreement with these findings, asserting that human beings high in conscientiousness are much more engaged in knowledge sharing activities compared to less conscientious beings.

d) Neuroticism

According to Gupta (2008), neuroticism is one of the big five higher-order personality traits. Individuals with neurotic personality traits are more likely than average to be moody and to experience feelings of anxiety, worry, fear, anger, frustration, envy, jealousy, guilt, depressed mood and loneliness (Yong et al., 2011). It is commonly understood and accepted that the neurotic type of personality has a negative relationship with knowledge sharing due to their traits and typical behavior. People who are very neurotic are more inclined to be insecure and are self-minders (Yong et al., 2011). They commonly experience undesirable affects such as panic, sorrow, humiliation, resentment, blame, as well as hatred, which seem to be central to the neurotic personality (Gupta, 2008). On that note, Gupta (2008) reports that individuals with high scores for neuroticism hardly engage in knowledge sharing activities.

e) Openness

Openness to knowledge encompasses wide-ranging features like being inquisitive, even-tempered and being inventive (Thomas & Moore, 2010 cited in Yong et al., 2011). It is also said that openness to familiarity indicates the person's autonomous, considerable, as well as courageous

behaviour. Conversely, distinct dissimilarities regarding openness to experience remain centred on a variety of cultures (Yong et al., 2011). This implies that an individual's openness in relation to knowledge sharing can be well interpreted in relation to the individual's culture as it influences how open they become to new experiences. Hence people who come from cultures that encourage collectivism are likely to be open to experiences and interested in sharing knowledge, compared to those who come from cultures that encourage individualism (Yong et al., 2011). Gupta (2008) suggests that persons with low openness are less keen to engage in knowledge acquisition and sharing due to their personality traits. Hence it is concluded that individuals with a high level of openness are more motivated to engage in knowledge sharing compared to those who exhibit low level of openness (Gupta, 2008).

2.6.3 Self-efficacy

According to Bandura (1998 cited in Hsu et al., 2006:11) self-efficacy is defined as "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives." self-efficacy refers to beliefs about one's ability to perform specific tasks successfully. Self-efficacy is a form of self-evaluation that influences decisions about what behaviours to undertake, the amount of effort and persistence to put forth when faced with obstacles, and finally the mastery of the behaviour (Hsu et al., 2006). Self-efficacy influences how people feel, think, motivate themselves and behave is thus one of the personal factors that influences their behaviour as employees in sharing knowledge.

Individuals with high self-efficacy are likely to share treasured knowledge with others because they trust their capabilities and also believe that their sharing could benefit other people and improve the organisation's performance as a whole (Noor et al., 2014). The extent of a person's self-confidence and the extent to which they believe in their efforts and contribution relates to the way in which they act for the benefit of other people and the organisation (Bandura, 1998 cited in Yiu & Law, 2012). In contrast, people with low self-efficacy do not think that their behaviour will positively contribute to others or the organisation itself, so they hardly engage in sharing knowledge. Bock (2005) affirms that self-efficacy is an important factor that influences employees to be self-motivated in sharing knowledge. If employees do not believe in their ability to perform successfully they are not likely to share knowledge because they do not believe that they can help

others with their contribution. Kolekofski & Heminger (2002 as cited by Bock, 2005) confirm that persons with high self-efficacy tend to share their knowledge and expertise more keenly as they express an optimistic view on their abilities and are highly motivated, compared to those with low self-efficacy.

2.6.4 Altruism

Noor & Salim (2012) define altruism as the satisfaction that a person gets from assisting others. Kerry, Smith & Feldman (2004e:59) describe altruism as "generally understood to be a kind of behaviour that benefits others at a personal cost to the behaving individual". According to Bandura (1998 cited in Yiu & Law, 2012) assisting others by sharing knowledge can upsurge self-esteem and yields intrinsic fulfillment without expecting any materialistic reward in return. People with altruism tend to find satisfaction and fulfillment (intrinsic benefit) by assisting others or willingly sharing information with other people. Hence satisfaction derived from helping or sharing information with others is considered as one of the contributing factors in knowledge sharing because it will eventually determine the individual's willingness to share knowledge with others (Bock, 2005). These people end up experiencing self-worth and self-reliance as they continuously engage themselves in knowledge sharing. Yiu & Law (2012) report that some employees are motivated to share knowledge with colleagues because of the intrinsic benefits or motivation.

Likewise, a philanthropic act of granting with no expectation of any benefit is very peculiar and shows the individual's true character. These humane personalities do things according to their subjective objectives to assume particular inventiveness, and social cognitive theory similarly contends that an individual's aptitude to display specific behaviour is grounded on the triadic features, which show individual aims as a factor (Okyere-Kwakye & Nor, 2011).

The research findings of Wasko & Faraj (year cited in Noor & Salim, 2012) emphasise that some personnel are motivated to share knowledge because such engagement in intellectual search and problem solving is exigent or flattering due to their innate pleasure in assisting others. Helping others by sharing knowledge provides an opportunity for growth and development for the giver and the receiver of the information and is independently satisfying, hence employees who enjoy

this are likely to engage with others and become more orientated to knowledge sharing (Noor & Salim, 2012). In a nutshell, this discussion implies that the factor of altruism can either positively or negatively influence knowledge sharing in the organisation. Altruistic individuals are likely to share knowledge while non-altruistic employees are less motivated to engage in this process.

2.7 Organisational factors influencing knowledge sharing

The organisation plays a substantial role in enabling and disabling knowledge sharing among employees in the organisation. There are several factors that are considered to influence knowledge sharing and these factors will be discussed in this section. Lin & Lee (2005) report that a number of studies have found that organisational modernisation on knowledge sharing is highly influenced by the workers' capabilities, management approaches and management styles, organisational policies and employee behaviour. Noor et al. (2014) add that other factors that influence knowledge sharing include employee and management participation, teamwork, and compensation, integration of high-ranking and new personnel and a reliable working atmosphere.

The organisational factors include the impact of the organisational culture, leadership style, structure of the organisation, office layout, integration between knowledge management and duties performed, and the objectives of the organisation. According to Leopold et al. (2014), the centralisation of power and decision making is one of the factors that limit knowledge sharing among employees in the organisation. Senior management involvement and support in facilitating the sharing of knowledge in the organisation has been concluded as one of the essential tools for the success of knowledge sharing in the organisation (Holsapple & Joshi, 2000 cited in Easterby, Smith & Prieto, 2008), whereas Bakhari & Zawiyah (2012) report that organisational structure and organisational culture has the most impact on knowledge sharing in the organisation. According to Noor et al. (2014), the organisational culture is inclusive of factors like trust, leadership, communication, reward system, information system, and the organisation's structure, which collectively influence knowledge sharing in organisations.

Different studies reveal a number of factors that impact organisational knowledge sharing, however Leopold, Pittke & Ahrend (2014) assert that there are four factors that affect knowledge sharing in the organisation. These factors are trust, decision structures or senior management

support, motivation, as well as organisational structures. These factors can hinder or promote knowledge sharing behaviour, depending on how it is manipulated by the organisation. Kim & Lee (2006) add that perfect managerial vision and objectives develop a productive influence on the employees' ability and keenness to share knowledge. The following passages will comprise a brief discussion on the findings of different scholars with regards to the above-mentioned organisational factors and how they influence knowledge sharing behaviour in organisations.

2.7.1 Trust

Trust is regarded as the leading factor believed to impact knowledge sharing in organisations. Social trust in others' capacities, kindness, as well as trustworthiness upsurges the willingness to offer and get information, bringing about the enhanced routine of dispersed groups, which ultimately makes and upholds give-and-take interactions. According to Jones Bakhari & Zawiya, (2010) trust is regarded as the manifestation of assurance among people during any interchange, where it is hoped not to bring harm or threat to any party. According to Al-Alawi et al. (2007), in most circumstances trust develops when a past filled with great communication results in the positive anticipation of future cooperation. Davenport (2002 cited in Bakhari & Zawiya, 2010) therefore indicates that trust is the basic intrinsic factor that enables or disables knowledge sharing among employees in an organisation. This means that the existence of trust among employees is one of the fundamental requirements for knowledge sharing to occur.

In actual fact, trust is seen as the leading factor that influences knowledge sharing in the workplace, according to knowledge management literature (Yiu & Law, 2012). Nonetheless, Pardo (2006) reports that trust is one of the most difficult things to be achieved between employees, however it is one of the most effective drivers that promotes knowledge sharing in organisations. Trust needs to be achieved between those that share and those who receive information during sharing. It is one of the preliminary conditions that workers need to maintain for them to be at ease with sharing knowledge among themselves.

If employees possess an innate desire to reserve the knowledge they have acquired, then ultimately there is no reasonable motive to share knowledge with other employees unless there are rewards or reasonable forms of recognition for doing so (Covey & Merrill, 2006). Chua (2003 cited in Bakhari & Zawiyah (2013) asserts that it is human nature to be reluctant to share knowledge, due

to the fact that knowledge is considered as the most treasured asset of the individual in their professions. It therefore requires extra effort for the organisation to create a favourable organisational culture to encourage employees to share knowledge and create a trustworthy relationship between employer and employees, as well as among the employees themselves.

There are two types of trust that are contributory in knowledge sharing and these are benevolence-based trust and competence-based trust (Cross & Levin, 2004). Benevolence-based trust occurs when the individual hopes that he or she will not be harmed or harm others when sharing knowledge, whereas competence-based trust is a rapport in which the involved parties believe that another person is knowledgeable about the matter being shared. Abrahams (2012 as cited in Bakhari & Zawiyah, 2013) further clarify that the staff member can trust that a colleague knows the information that he or she needs (competence), but the other employee may not trust that he will be approaching at the correct time when information is sought (benevolence). The employee can be confident that there may be other people who are enthusiastic to assist them (benevolence), but these individuals might not have the acquaintance or expertise needed (competence). It is thus concluded that knowledge sharing is more operational if the knowledge beneficiary beholds the knowledge source as being equally benevolent and competent (Cross & Levi, 2004).

Trust is considered as the most cost effective method to intensify knowledge sharing inside an organisation (Okyere-Kwakye & Noor, 2011). On the basis of trust individuals often risk, hoping that the parties involved will protect rather than hurt them. A trustworthy relationship among employees facilitates knowledge sharing as people become less suspicious and trust that they are safe among each other. This implies that absence of trust between employees inhibits knowledge sharing as employees cannot risk by sharing information if there is a lack of social security. The presence of trust signifies the tendency of increased teamwork and a guarantee of maximum participation among the personnel, according to Molm (2003 cited in Robbins, 2009). Trust is said to be the uppermost human condition and is considered as the key driver of 'strong ties' in every organisation; it is actually considered a prerequisite for knowledge sharing by Covey & Merrill (2006). Individuals with a high level of trust tend to work competently and find it less difficult to share knowledge with fellow employees. Furthermore, the empirical study of Van Acker (year cited in Noor et al., 2014) found that trust is allied to purposeful and genuine sharing of knowledge, while self-efficacy is believed to be a significant predictor of intended knowledge sharing.

The current body of knowledge clearly emphasises that trust is a prerequisite condition that has to be present for knowledge sharing to occur in the workplace. Abrams et al. (2013) state that the most valuable knowledge in organisations is usually experimental and difficult to classify, so competence-based trust plays an important role when tacit knowledge sharing is the most significant to the organisation. Nevertheless, benevolence-based trust is said to be instrumental in sharing both tacit and explicit knowledge, according to Abrahams et al. (2013).

It is typical of human behaviour to protect possession, unless a person is going to get something valuable in return. The same thing applies to employees when they expect to be acknowledged and trusted after sharing knowledge, and they tend to feel less motivated to share knowledge with other employees unless there are reasonable forms of recognition for such actions (Chua, 2009 as cited in Bakhari & Zawiyah, 2013). There thus has to be a trustworthy relationship among workers for them to be encouraged to share knowledge with each other, just as there needs to be a trustworthy relationship between the employer and employees so that they are encouraged to share knowledge.

Trust is earned through effective communication and reliability among workers and it will influence the level of knowledge sharing in the organisation. Bakhari & Zawiya (2010) add that trust among employees starts with face-to-face interaction that is characterised by harmony and empathy between the interacting parties. In disparity, von Krogh (2008 cited in Bakhari & Zawiya, 2010) reports that a lack of trust among employees can obstruct knowledge sharing and openness among the employees. Khesal et al. (2013) confirm that if people don't feel good and lack trust among each other, they are less likely to share knowledge.

A trustworthy relationship between employers and employees motivates staff to share knowledge for the benefit of the organisation. Trust is not only essential among employees but also important between employees and employers for knowledge sharing to transpire Khesal et al. (2013). Consequently, trust between employees is influenced by a variety of factors such as motivation, rewards, acknowledgement and recognition of their ideas and input. (Khesal et al., 2013). Likewise, the findings of a study undertaken by Noor et al. (2014) on the role of trust and knowledge sharing suggests that inter-organisational trust leads to enhanced inter-organisational teamwork and knowledge sharing.

It is essential to note that trust between employees and the organisation is established if employees are certain that their engagement will not leave them at risk; rather that it is likely to benefit them. Lack of trust in the organisation, on the other hand, can result in employees refraining from knowledge sharing if they are hesitant about the possible gains inform Okyere-Kwakye & Nor (2011). Molm (2003 cited in Robbins, 2009) adds that a high level of trust will increase cooperation and oneness among the employees and in the organisation itself.

Studies show that the management of organisations has the central responsibility to create and maintain a trustworthy relationship and environment to promote knowledge sharing in the workplace. For that reason, Van den Brink (2003) recommends that organisations ought to create a reassuring atmosphere that allows workers to trust each other, work collectively and be encouraged to share knowledge and engage often. Khesal et al. (2013) further claim that team building and more engaging activities should be held in order to enhance trust and confidence among fellow team members as it tends to minimise conflict and creates cohesion among team players. Managers should thus present strategies that will break barriers and promote trust and long term relationships among employees, which will then benefit their organisations by improving knowledge sharing behaviour (Robbins, 2009). Close to trust is the concept of communities of practice, which is the next point of discussion as it is also reported to impact knowledge sharing.

2.7.2 Communities of practice (CoP)

The preceding literature made it clear that knowledge sharing is a social process that takes place among people, for people and predominantly by people, therefore individuals and groups in organisations are key role players in the knowledge sharing process. Haji (2006) states that literature is showing mounting emphasis on the role of communities of practice in enabling knowledge sharing. Wenger & Snyder (2000 cited in Haji, 2006:39) regard communities of practice as a new "organisational form that can radically galvanise knowledge sharing". Communities of practice are fundamentally described as "groups of people informally bound together by shared expertise".

The notion of communities of practice acknowledges that within organisations there are groups, which are made outside the formal structures, around shared practice and interest. This concept of communities of practice was invented by Wenger & Lave (2004 cited in Haji, 2006). In other

instances these groups are not on the management's 'radar'; rather they exist invisibly. Cross (2002 cited in Yiu & Law, 2012) argues that these informal networks are progressively essential for knowledge based organisations. This is due to the fact that informal relationships between the individuals, driven by their common interests, cultivate an atmosphere that is conducive to knowledge sharing (Haji, 2006).

Communities of practice can be also considered as groups of people that promote the interest of organisational learning. It becomes a channel and context where people can share knowledge without any push to do so. A community of practice is a factor that has materialised as a powerful metaphor to drive knowledge sharing. Stata (2004 cited in Haji, 2006:71) argues that it exists "through shared insight, knowledge and mental models". As communities of practice nurture shared insight, Wenger (2005 cited in Haji, 2006:80) considers them as the "social fabric of learning organisations".

The inventiveness of learning is somewhat embodied in the famous Chinese proverb "Tell me and I will forget; show me and I may remember; involve me and I will understand". It shows that learning is best accomplished through involvement (Bakhari & Zawiyah, 2013:11). This strikes an accord with the research of Teece (1994 cited in Hew & Hara, 2007:39) who found that "what individual's learn always reflects the social context in which they learn it and in which they put it into practice". As communities of practice are formed as a result of practice, not only do they have the potential of being social facilitators of knowledge sharing, they are a mechanism that drives organisational learning. The following discussion will be on social capital, as this is also considered as a significant factor of knowledge sharing.

2.7.3 Social capital

Modern writings acknowledge that every workplace is characterised by a network of relationships and personal contacts among the people in the organisation, and these networks are found to have a substantial role in facilitating the sharing and transfer of knowledge in the workplace. According to Inkpen and Tsang (2004 cited in Haji, 2006) social capital is defined as the organisation's set of relationships. Social capital's essential declaration is that networks of relationships between persons or inside the organisation can be a source of value (i.e. capital). Cohen & Prusak (2001

cited in Yiu & Law, 2012) suggest that social capital is one of the key factors that impacts knowledge sharing, as it is seen in the daily functioning of every organisation. Principally, they maintain that all the practical effort in organisations is done by people tapping into networks of relationships and personal contacts, which later become channels of sharing knowledge (Hoffman, Hoelscher & Sherif, 2005).

Social capital is regarded as a feasible and less cheap means of smoothing the progress of knowledge sharing among people in an organisation. Social capital requires good interpersonal relationships and opportunities for employees to socially and informally engage with each other, and share knowledge in the process. Haji (2006) articulates that social capital is noted to have important implications for knowledge sharing, as knowledge sharing is considered as a social process. According to Hoffman, Hoelscher & Sherif (2005:50) with regards to social capital and its significance in knowledge management, "social capital can enhance the entire knowledge management process because it makes collective action more efficient; because it becomes a substitute for formal contracts, incentives, and monitoring mechanisms that are necessary in systems with little or no social capital among organisational members".

Social capital has separate entities that are considered to be noteworthy role players in knowledge sharing. Hoffman, Hoelscher & Sherif (2005) report in their research on social capital that it can be divided into four different dimensions, namely information channels, social norms, obligations and expectations, as well as identity. Haji (2006) reports that all these subdivisions of social capital are distinct, however Hoffman, Hoelscher & Sherif (2005:34) explain that "they are mutually dependent on each other for their development". These aspects of social capital will be briefly discussed below.

Information channels, as implied by the name, are the tools through which information flows. In companies, information channels are one of the most noticeable indicators of social capital (Haji, 2006). Hoffman, Hoelscher & Sherif (2005:29) explain that information channels in an organisation signify the "personal relationships that people develop with each other through a history of interaction" and it is through these channels that knowledge is shared within the organisation. The presence of such channels facilitates knowledge transfer and circulation within

the organisation, while the absence of such channels inhibits the flow of information and knowledge among the employees in the organisation.

Social norms, as part of social capital, are said to symbolise what is normally known as socially accepted behaviour (Haji, 2006). Nahapiet & Ghoshal (1998 cited in Haji, 2006) elucidate that a norm represents a "degree of consensus in a social system". Hence if social norms like teamwork exist in the organisation they can prove to be influential practices of social capital that enhance knowledge sharing. This implies that the commonly accepted behavioural norms within the organisation are likely to influence people's behaviour pertaining to knowledge sharing (Hoffman, Hoelscher & Sherif, 2005). For example, collective behaviour, cooperation and teamwork are likely to enhance knowledge sharing compared to individualisation, emphasis on uniqueness and a lack of collaboration which often inhibit knowledge sharing.

Reciprocity has been noted as part of social capital, where employees share knowledge as a result of being motivated by certain expectations. This implies that when colleagues share knowledge, it brings about the expectation of reciprocity. Regularly meeting these expectations encourages communal confidence, which ultimately promotes knowledge sharing behaviour based on trust and reciprocity (Haji, 2006). Nahapiet & Ghoshal (1998 cited in Haji, 2006) explain that obligations and expectations can be exemplified in the idea that 'there is no such thing as a free lunch', therefore, reciprocity drives knowledge sharing behaviour.

Identity is considered as the fourth dimension of social capital. As per the writings of Nahapiet and Ghoshal (year cited in Haji, 2006:39), identity is defined as the "process whereby individuals see themselves as one with another person or group of people". This identity is something that is facilitated by participation, add Evans (2011). This sense of unity and single identity among employees implies that they feel no need to hide knowledge from each other because they have a common sense of belonging. Haji (2006) articulates that a lack of information channels, which reveal the interpersonal relationships that people develop, indicates the absence of opportunity for the expansion of social norms and for the formation of identity. Furthermore, Hoffman, Hoelscher & Sherif (2005) highlight that the absence of resilient social norms subsequently leads to the

absence of opportunities to grow a system of commitments and anticipation, thereby impeding knowledge sharing occurrence.

2.7.4 Motivation and extrinsic rewards

According to the Social Exchange theory (SET), human beings are commonly motivated to exchange or give anything in return for reward (Yiu & Law, 2012). This theory proposes that the exchange between people is often based on the principle of cost and benefit. It is commonly accepted that human beings tend to seek personal benefit whenever they are expected to give (Molm, 2003 cited in Yiu & Law, 2012), hence the evaluation of cost versus benefit applies in knowledge sharing, where employees can be motivated to share their knowledge when there is less or no cost and more benefit in return. This means that employees tend to measure the cost and benefit risk before attempting to share knowledge; implying that where there is more cost and less benefit, employees are likely to refrain from knowledge sharing, while they are motivated in cases where the benefits outweigh the costs. External motivation and rewards are therefore believed to be influential factors in knowledge sharing.

The presence of rewards such as incentives, promotion, bonuses and other types of acknowledgement are likely to improve workers' enthusiasm to share knowledge. Consequently, it is the responsibility of employers to see to it that they encourage knowledge sharing by means of incentives, rewards and other sorts of remuneration. According to Syed-Ikhsan & Rowland (2005 cited in Al-Awil et al., 2007) employees require a solid spark with a specific end goal to distribute knowledge. It is seemingly implausible to expect that all workers are willing to offer knowledge without considering what might be gained or missed as a consequence of such engagement.

Employees' enthusiasm for knowledge sharing is further explained by the Theory of Reasoned Action (TRA). This theory asserts that people tend to weigh the outcomes of their actions before they decide to behave in a certain way (Yiu & Law, 2012). These contemplations are summarised in the distinction among the opinions, attitudes, intents, as well as performances, where the person's choice to behave a certain way is regulated by their intent to behave. To apply this theory to this study; the theory claims that employees first consider the possible consequences of knowledge sharing before they embark on it (Yiu & Law, 2012). This means that if the

consequences (rewards) of knowledge sharing are not pleasing to employees then they refrain from sharing knowledge, and the opposite is also true. Noor et al. (2014) report on research by Cockrell & Stone on the impact of culture on 'pseudo-knowledge sharing', where they measured participants from several businesses. The outcomes indicate that monetary enticements and the eminence of knowledge-sharing enthusiasm entirely arbitrate the outcome of the business on pseudo-knowledge sharing.

Motivation based on rewards and expectations is also confirmed by Vroom's Theory of Expectancy, which claims that people are motivated to perform (share knowledge) if their expectations (benefits or rewards) will be met at the end (Lunenburg, 2011). This theory proposes that an individual's drive to act is motivated by three principles, namely expectation, instrumentality and valance (Lunenburg, 2011). These principles imply that employees have personal goals or expectations that they want to achieve, therefore they will put extra effort in for better performance, merely because the rewards or benefits to be gained are valuable to them (Parijat & Bagga, 2014). The content of these theories implies that employees can be motivated to share knowledge (perform) on condition that their expectations (rewards) will be met and they can be discouraged from sharing knowledge if there are no rewards or if they are not happy about the reward provided. Parijat & Bagga (2014) add that the expected rewards may vary from one employee to the other, and for that reason it is important for the employer to provide an individualised or most preferred reward system.

The Expectancy Theory implies that workers make conscious and rational choices about the effort they put into their jobs in order to get rewards such as increased benefits or praise (Oye, Mazleena & Noorminshah, 2011). For example, because most workers have the goal of maximising their incomes, the organisations can use this goal to increase productivity and willingness to share knowledge. This means that individual employees may not engage in knowledge sharing if they foresee no cost benefit involved, but may be motivated to share knowledge if they expect to benefit monetarily from their act.

The Social Exchange Theory is also related to the principle of reciprocity, and implies that people tend to expect future gain or benefit in recognition of their effort. Thus with regards to knowledge sharing, employees expect their employer to reciprocate and reward them when they share their

acquired and created knowledge. Conferring with the work of Davenport & Prusak (2000 cited in Yiu & Law, 2012), the idea of knowledge market and reciprocity are key factors influencing knowledge sharing in an organisation. Okyere-Kwakye & Nor (2011:29) describe reciprocity as "actions that are contingent on rewarding reactions from others and that cease when these expected reactions are not forthcoming".

Multiple studies indicate that knowledge sharing in organisations is expedited by a strong sense of reciprocity (Wasko & Faraj, 2005; Yiu & Law, 2012). The relationship between reciprocity and knowledge sharing is also confirmed by Bartol & Srivastavaas (2009 cited in Yiu & Law, 2012), where they assert that the reciprocal rewards impact the employee's attitude towards knowledge management. Okyere-Kwakye & Nor, 2011) explain that people who share knowledge often evaluate whether the beneficiary or knowledge receiver has the capability of returning the desired reward. Individuals have a tendency to measure others' abilities before they share their possessions; they expect not to lose in the process of sharing so they won't share their insight with somebody who has nothing to offer. Based on this, it can be presumed that mutual reciprocity has a positive influence on knowledge sharing behaviour.

The above scholars basically confirm that knowledge sharing is influenced by the principle of reciprocity, as reported by numerous theories. This implies that organisations and individuals are expected to give something in return to the knowledge sharer, in order to promote this conduct. Thus the absence of positive gain is said to hinder knowledge sharing as employees are not willing to share if they will get nothing in return, and the expected rewards may take the form of praise, acknowledgement, incentives and so forth. Islam, Hasan & Sarwar (2011) therefore conclude that a good reward system, with a specific end-goal, is crucial to encourage workers to share their knowledge with others.

2.7.5 Organisational culture

Numerous scholars consider knowledge as an essential component when describing culture, indicating that the meaning of knowledge is inadequate without mentioning culture (Hendricks, 2004). In the applied range of situations the relationship is portrayed by mutuality, which implies that knowledge characterises culture and culture characterises knowledge (Hendricks, 2004); therefore there is a relationship between the organisational culture and knowledge.

Each organisation has its distinctive culture, which grows after a while to represent the organisation's distinctiveness in two measurements: discernible and indiscernible (Al-Alawi, Yasmeen & Mohammed, 2007). The noticeable extent of culture is reproduced in the embraced qualities, theory and mission of the organisation, while the indiscernible measurement lies in the implicit arrangement of qualities that guide the employees' behaviour and discernments in the workplace.

Culture is defined as a "set of basic tacit assumptions about how the world is and ought to be that a group of people share and that determines their perceptions, thoughts, feelings, and, to some degree their overt behaviour" (Haji, 2006:68). According to Park & Ribiere (2009 cited in Islam, Hasan & Sarwar, 2011:39), organisational culture is defined "as the shared, basic assumptions that an organisation learnt while coping with the environment and solving problems of external adaptation and internal integration that are taught to new employees as the correct way to solve those problems." Brache (year cited in Islan, Hasan & Sarwar, and 2011:137) defines culture as the "values, rules, practices, rituals and norms through which an organisation conducts business".

Organisational culture is one of the main factors that influence knowledge sharing. The study done by Noor et al. (2014) ascertains that the forms of organisational culture have optimistic and sometimes undesirable impacts on knowledge sharing behaviour. There is a type of organisational culture that can discourage employees from engaging in knowledge sharing while an optimistic organisational culture promotes employees who engage in knowledge sharing. Culture also plays a role in defining the appropriateness of a specific organisational structure, which in turn influences knowledge sharing. Hendricks (2004) explains that the organisational culture ought to provide the required conditions for knowledge advancement and transfer. Culture is similarly believed to influence the way knowledge processes develop in the organisation, as well as the employees' interaction pattern.

2.7.6 Communication

The communication pattern in an organisation is considered to be influenced by the organisational culture, hence, if used successfully communication can be an effective method that facilitates knowledge sharing in the organisation. Both formal (training, meetings and workshops) and

informal communication between employees are said to contribute to knowledge sharing (Kim & Lee, 2006). Formal interactions or communications such as training programs and other formal gatherings are believed to enable knowledge sharing as employees interact with each other. Nonetheless Truran (year cited in Kim & Lee, 2006) indicates that social gatherings or informal webs inside the organisation play a significant role in knowledge sharing because people feel much more at ease to share knowledge without hindrance or fear of risk. The means of distributing knowledge within networks are inclusive of electronic correspondence, discussions, as well as discrete or collective relations which maintain and reassure knowledge-based personnel undertakings (Hendricks, 2004).

2.7.7 Organisational leadership

Leadership refers to the way of impacting others to accomplish some fancied objectives of the group or organisation (De Jong & Hartog, 2007). In addition to this, Kerry & Clegg (2007) articulate that managers are front runners of the organisation, who are expected to set a good example for the process of knowledge sharing and creating motivations for this undertaking. An organisation leader's role is to facilitate knowledge sharing in the organisation by means of creating useful structures, facilitating cooperation, teamwork, as well as creating platforms for knowledge sharing in the organisation, hence leaders or managers are considered as useful persons who either enhance or prevent knowledge sharing in the organisation (Islam, Hasan & Sarwar, 2011). Nonaka (year cited in Islam, Hasan & Sarwar, 2011:8) contends that leaders ought to adjust the chaos regarding meaningful knowledge conception by attesting that they should provide a "conceptual framework that helps employees make sense of their own experience". Consequently, managers are expected to monitor and transform corporate plans for their subordinates.

The significance of management in influencing knowledge sharing in companies is further supplemented by Oliver & Kandadi (2006:68), who assert that "senior management should be actively involved in the evangelisation process and convey that knowledge creation and knowledge sharing is highly valued in organisations". Outcomes of the research presented by Certo & Certo (2011) point out the indispensable part played by leaders in merging the cultures which enable the sharing of knowledge by demonstrating different management styles. The management style used in organisations differs from one manager to the other, and a variety of leadership styles influence knowledge sharing in a negative or positive manner. According to Certo & Certo (2011:18), "a

leadership style is the behaviour a leader exhibits while guiding organisational members in appropriate directions".

A collective or mixed leadership approach is considered to be the most operational in facilitating knowledge sharing in an organisation (Bradshaw, Chebbi & Oztel, 2015). A study executed by Chen (year cited in Bradshaw, Chebbi & Oztel, 2015) ascertains that a transformational management style is a significant indicator of in-house knowledge sharing, while conditional remuneration management practices are associated with both internal and external knowledge sharing. According to Crawford (2006:31), a transformational management style is defined as a practice in which "leaders and followers raise one another to higher levels of morality and motivation". Chen (2008) explains that a transactional management style stresses the exchange or transaction that happens among managers, coworkers, and supporters. This interchange depends on the manager conversing with others regarding what is mandatory and determining the conditions and benefits these others will get if they do what is required of them.

Nevertheless, other research findings by Politis (2001 as cited by Cebbi et al, 2015) indicate that general self-administration and transformational and transactional management styles are decidedly related to knowledge sharing and acquisition, therefore Chen (2008) concludes that a transactional and transformational management style has a substantial impact on knowledge sharing. Conversely, a *laissez-faire* management style is reported to have a negative relationship with external knowledge sharing behaviour, according to Chebbi et al. (2015).

Management styles influence how knowledge is shared in the organisation. This implies that leaders and those who make decisions should be informed so that they perceive the constructive outcome of flawless encouragement, persuasive inspiration, scholarly incitement, and individualised thought on the sharing of tacit knowledge (Oliver & Kandadi 2006). Managers that convey a vivid organisational vision and foresee a successful tomorrow tend to enhance information sharing, especially to those individuals who express clear anticipation and take cognisance of organisational issues (Chen , 2008). In addition, it is reported that managers who encourage cautious problem solving and offer individual consideration of employees' problems are also believed to advance knowledge sharing in the organisations (Certo & Certo, 2011). The above discussion shows that leadership and management styles can either enable or disable knowledge sharing behaviour in organisations.

2.7.8 Organisational structure

Organisational structure is defined as "the formal structure through which the management of the organisation by identifying lines of authority and communication between superiors and subordinates, it is a system of authority and accountability relationships between organisational units which determines the shape and nature of the work required for the organisation, arrangement of mutual relations between the parts and functions of the organisation" (Alawamleh & Kloub, 2013:39). This conception is about the order of authority or power within an organisation that is used for the achievement of the organisational objectives. Other definitions of organisational structure refer to it as the management of different organisational departments, specialty in job context, the existence of particular responsibilities, a range of management with rankings of expertise and power, accountability, and administrative positions with regards to domination and devolution (Alawamleh & Kloub:2013).

Old fashioned organisational structures are typically portrayed by muddled layers and lines of accountability, with specific particulars of reporting systems and processes (Al-Alawi, Yasmeen & Mohammed, 2007). However, in this day and age, most leaders understand the detriments of bureaucratic structures in decelerating procedures and increasing limitations on the movement of information. This implies that complicated organisational structures tend to work against knowledge sharing because it takes time for information to move from one level to the other, while flat and less complicated organisational structures work in favor of knowledge sharing as it is easy to pass information to different levels (Al-Alawi, Yasmeen & Mohammed, 2007).

Other findings claim that centralisation of power through flat organisational structures can lessen the inventiveness that a department can have in interdepartmental interchanges, consequently decreasing curiosity in knowledge-sharing activities in relation to other departments within the company (Kim & Lee, 2006). O'Dell & Grayson (2004 cited in Kim & Lee, 2006) assert that organisational structures need to encourage flexibility and transparency as a method of promoting teamwork and involvement of employees in internal and external knowledge sharing. Wagner (2004 cited in Kim & Lee, 2006) explains that 'hands-on' supervision practices stabilise the participation of leaders and their juniors in data-handling, basic leadership, or problem solving endeavors, which contribute to knowledge sharing behaviour. Thus Syed-Ikhsan & Rowland (2005

cited in Al-Alawi, Yasmeen & Mohammed, 2007) maintain that knowledge sharing flourishes through organisational structures that facilitate flawless knowledge movement, with fewer restrictions among departments and levels within the organisation.

2.8 Technological factors influencing knowledge sharing

Technological factors are believed to have a positive, and sometimes a negative impact on knowledge sharing behaviour. The description of knowledge sharing behaviour often emphasises the prominence of organisational strategies or tools that are used to share knowledge (Noor et al., 2014). The old-fashioned methods used by organisations comprise of direct engagement, training, and unpacking of the organisational documents and policy handbooks. Conversely, technological improvements have yielded several strategies and tools that are used in organisations to share knowledge. Chebbi et al. (2015) articulate that these technological means have brought about significant changes in knowledge sharing among employees in the organisation. Lin & Lee (2005) mention the internet, intranet, social media and computer equipment as some of the technological equipment and platforms that impact knowledge sharing in the workplace. According to Haji (2006), technology is one of the imperative facilitators of knowledge sharing.

Information and communication technology plays a significant role in facilitating knowledge sharing in organisations. Bakhari & Zawiyah (2012) attests that information and communication technology (ICT) is a significant role player in knowledge management, and classifies ICT tools into five subdivisions, namely office applications (e.g. emails, messaging, calendaring and scheduling); group ware (such as the discussion of databases, application sharing and electronic meeting systems); work process systems; analytical systems and knowledge systems such as portals, e-learning, and knowledge sharing. Thus, the successful use of these tools is likely to enable knowledge sharing among employees in organisations.

Technical infrastructure and other resources are needed by employees so they can use them to access updated information and share it whenever necessary. For this reason information technology has a crucial impact on information sharing behaviour. Leopold et al. (2014) report that IT skills and technological infrastructure influence employees' tendency to share knowledge among themselves, while Ander, Spek & Spijkervet (1997 cited in Evans, 2012) articulate that

information technology and communication technology are complex tasks with achievable skills and have marvelous outcomes in enhancing knowledge sharing and the efficient performance of knowledge exercises. In a nutshell, the availability of the necessary resources and organisational infrastructure promotes knowledge sharing among employees in the workplace.

The existing body of knowledge denotes three foremost technologies that facilitate knowledge sharing and these include corporate intranets, data-warehousing/knowledge repositories and groupware (Haji, 2006), hence this study will also deliberate on these types of technologies.

2.8.1 Corporate Intranets

Corporate intranets are intra-organisational web innovations that are moderately straightforward and less expensive to use. When used accurately they have the potential of being significant devices and tools for knowledge sharing. Most companies own these corporate intranets, which are data assets for employees (Haji, 2006); however Stenmark (2005:49) remarks that intranets are underused in most companies, arguing that in order for the "intranet to serve as a knowledge sharing apparatus, high participation is required". Stenmark (2005) notes that the problem is that some employees are not competent enough to use the intranet or internet to access and share information as they should. The introduction of wikis has assisted in overcoming this challenge by making the technology user friendly and having many options to facilitate the capturing, transferring and sharing of information and knowledge (Haji, 2006).

2.8.2 Databases/ knowledge repositories

Throughout the primary phases of Knowledge Management activities, companies have been found to create knowledge databases (Haji, 2006). According to Ritter (2005 cited in Haji, 2006:35), these are "platforms that provide a repository of codified knowledge", and these databases allow data to be kept and dispersed among employees. Sure (2003 cited in Noor et al., 2012) argues that when the volume of data in the organisation increases, the responsibility of transforming it into helpful information turns into a critical issue, so some organisations prefer to use person-to-person communication as the means of sharing knowledge. As a means of encouraging knowledge and information sharing, some companies have created databases called business index or yellow pages, which record data about individuals and their work. The availability and usage of databases

or knowledge repositories therefore enable knowledge sharing with people who are inside and outside the organisation. These channels facilitate and encourage employees to share knowledge with each other and with those who might be interested in the organisation (Haji, 2006).

2.8.3 Groupware

Groupware is considered as one of the technological innovations that influence knowledge sharing in the workplace. Groupware is a term that sums up various innovations that support person-to-person coordinated effort (Haji, 2006). These incorporate innovations like email, instant messenger, video conferencing and most broadly, lotus notes. Sure as cited by Kim & Lee (2006) mentions that groupware are instruments that encourage the sharing of ideas in a much more free-flowing manner than repositories. Haji (2006) further adds that the improvement of groupware reflects a positive change towards utilising computers to encourage human cooperation, which is one of the conditions required for the occurrence of knowledge sharing. Basically, this means motivating individuals to consolidate the utilisation of groupware into their working environments, and groupware are considered as instruments that positively drive knowledge sharing behaviour in organisations (Sure, 2003 cited in Kim & Lee, 2006).

2.8.4 Role of technology

Many Scholars highlight that using information technology in the workplace enhances innovation, creativity, increases the employees' knowledge base and facilitates communication within and outside the organisation (Lin & Lee, 2005). Information technology may help staff members to tap into new and updated information and share it with each other at a faster rate. For instance, workers utilise computers for communication methods such as email, intranet, Skype, and other group practices to stay updated with new information, so that they can maintain the competitive advantage of their organisation (Lin & Lee, 2005).

2.8.5 Information technology and technological equipment

Infrastructure such as the web, the intranet and electronic media has been proven to enable the sharing of knowledge for everyone in the company, and literature further indicates that a lack of

knowledge sharing infrastructure such as the internet and computers can be a noticeable hindrance to knowledge sharing Kim & Lee, 2005). Most studies therefore conclude that technological infrastructure and information technology give workers the capacity to share, get criticism, and generate work related thoughts. Additionally, another momentous factor noted to influence knowledge sharing is the socio-technological method, which considers both social and technological issues as similarly imperative for making knowledge sharing possible (Lin & Lee, 2005). Communication patterns, working relationships, organisational culture, organisational infrastructure as well as information technology may therefore positively or negatively influence knowledge sharing in the organisation, according to the findings of Chias (year cited in Lin & Lee, 2005).

2.8.6 Electronic communication methods

Electronic resources are regarded as enablers and hinderers of knowledge sharing as they have the potential to enable or disable employees from communicating often (Al-Alawi, Yasmeen & Mohammed, 2007). This implies that the presence of electronic communication methods enables knowledge sharing while the absence of electronic methods of communication makes it difficult for employees to communicate. In support of this thought, Al-Alawi, Yasmeen & Mohammed (2007) also remark on the prominence of electronic communication between people in the organisation to make knowledge sharing possible.

The use of social media is also reported to have a positive relationship with knowledge sharing. Noor et al. (2014) mention the use of social media in the organisation as one of the noticeable means that positively impacts knowledge sharing in companies. The research findings reported by Noor et al. (2014) show that the fundamentals of social media use consider components such as altruism, perceived online attachment motivation, and perceived online relationship. Chai, Das & Rao (2014) report that blogs are used by many companies to facilitate knowledge sharing among employees and beyond. It is explained that blogs assist by means of building social connections and serve as knowledge sharing channels among persons who might not be able to reach the office directly. Chai, Das & Rao (2014) explain that employees who use blogs tend to give-and-take tacit knowledge by means of contacts and postings to uphold that online community.

2.8.7 Facilitating communication

The findings of many scholars accentuate the importance of information technology tools in connecting organisational data with knowledge sharing (Kim & Lee, 2006), and information technology and technological equipment have a positive influence on knowledge sharing as they facilitate communication among employees. This is also confirmed by Alavi & Leidner (2001 cited in Noor et al., 2014) who articulate that information technology has a positive relationship with knowledge sharing by spreading a person's extent more than official communication can. For instance, computer systems, electric communiqué boards and conversation groups expedite communication between persons seeking knowledge and those who share or give information (Alavi & Leidner, 2001 cited in Noor et al., 2014).

2.8.8 Competency using technological equipment and software

Computer literacy and the nature of computerised programs have a positive and negative impact on knowledge sharing. Irrespective of the modernisation through technology, information technology schemes and software inventers need to create intelligible and easy to use devices which encourage their recognition and utilisation (Kim & Lee, 2006). This is of utmost importance because non-user-friendly technological equipment and software will obstruct knowledge sharing in the organisation.

High levels of computer literacy among employees improves and facilitates knowledge sharing, while a lack of computer literacy becomes a barrier to knowledge sharing. Branscomb (2004 cited in Kim & Lee, 2006) argues that the presence of technological equipment and an information technology system is not sufficient to facilitate knowledge sharing if employees or users are not knowledgeable and skilled in how to use the equipment. Haji (2006) further explains that even though technology enables knowledge sharing, skills and ability are necessary to produce the desired results. In the absence of skills, technology cannot be considered as a favourable factor for knowledge sharing. Similarly, complicated or non-user friendly devices, technological equipment and software might discourage and prevent employees from attempting to share and transfer information through modern means.

Successful knowledge sharing therefore requires the presence of accessible and user friendly technological infrastructure, as well as skilled or competent users to implement the process (Alavi & Leidner, 2001 cited in Noor et al, 2014). Kim & Lee (2006) conclude that the employees' perception of utilising information technology and equipment is proven to impact knowledge-sharing behaviour in the workplace. The degree of perceived ease of IT application use has a positive effect on employee knowledge-sharing capabilities. Those employees who perceive IT applications as complex tend to refrain from using them as a means of knowledge sharing. Ruggles (year cited in Haji, 2006) remarks that "if technology solves your problem, yours was not a knowledge problem". Accordingly, technology is perceived as a crucial necessity for prosperous knowledge sharing but is an independent role player in enabling knowledge sharing in the workplace.

2.9 Conclusion

This chapter presented the writings of other authors pertaining to the factors influencing knowledge sharing in organisations. The researcher discussed the findings of the contemporary literature and how they relate to the subject being discussed. In the next chapter the researcher will look at the methodology to be used in undertaking this study.

CHAPTER THREE

METHODOLOGY CHAPTER

3.1 Introduction

This chapter is about the research methodology that was used by the researcher in the execution of this study. It discusses the exploratory research design that was used in this research, the qualitative research methodology, the study site, as well as the target population of this study. This chapter also looks at the sampling strategies that were used to select the participants, the sample composition and the sample size that was selected for this study. Data collection methods and data analysis methods are also discussed in details in this section, lastly followed by the ethical considerations and the conclusion of this chapter.

3.2 Research design

Research design is the outline or blueprint that shows the structure of the study (Wagner, Kawulich & Garner, 2012). Wagner, Kawulich & Garner (2012) further accounts that there are different types of research designs that could be used to execute qualitative study. Those designs include ethnography, action research, grounded theory, phenomenology, exploratory, descriptive and explorative research design.

There are predominantly three main purposes of research, and these include explaining how a new problem can be structured and identified, describing how a solution to a problem can be developed and assessing how feasible a solution is to a given problem by providing empirical evidence (Robson, 2004 cited in Haji, 2006). These three research design methods are named exploratory, descriptive and explanatory (or empirical) research design.

Hence the research design used in this study was exploratory design. The foremost purpose of exploratory research design is to find out about the limitations of the context where the phenomenon occurs, to identify the conditions of interests and to recognise variables that might be found and be applicable to the study (Richi & Lewis, 2005).

3.3 Research methodology

There are three types of research methodologies namely qualitative research methodology, quantitative research methodology as well as mixed method (Wagner, Kawulich & Garner, 2012). This study was conducted using the qualitative research methodology because it is aimed at developing an in-depth understanding of the social phenomenon in its context. Hancock, Ockleford & Windridge (2009) articulate that the aim of qualitative research is to delve deep into the explanation of social happenings. In other words, it assists the researcher to explore and find out about the social world and the motives behind what is observed in the social world. Qualitative research could also be used if the event studied has to be understood from the vantage point of an individual or group that occupies a singular or highly specialised role in the society.

The qualitative method is used in cases where the phenomenon is not well defined or when that matter being studied is genuinely seated in the individual's individual knowledge and experiences (Ritchie & Lewis, 2005). Hence this was the suitable methodology for this study as it meets the required conditions for using qualitative research. According to Haji (2006), the research methodology reflects the general orientation through which the research is conducted. In broad terms, the difference between a quantitative and qualitative research approach is that "quantitative research emphasises on quantification in the gathering and analysis of data, whereas a qualitative strategy emphasises on words" (Bryman, 2004 as cited in Wagner, Kawulich & Garner 2012:61).

The research approach discussed above is the basis for how data is collected while methodology deals with how theory is generated or tested (Haji, 2006). Research can be conducted using two methods: deductive and inductive. The inductive method relies on instruments like interviews, where theories and hypotheses occur after the gathering and analysis of data (Robson, 2004 cited in Haji, 2006), while the deductive method relies on instruments like surveys and experiments. Deductive reasoning is used in research that is deduced from theory that needs to be tested. The remarkable distinction between the two methods is that the deductive method tests theory and the inductive method generate theory. In this study the researcher used a primarily inductive approach, implying that the meaning was established from the interview responses and case study findings, but this was combined with a deductive approach to validate the findings of the study.

3.4 Study site

This study was conducted in Pietermaritzburg, the capital and second-largest city in KwaZulu-Natal province, South Africa. Pietermaritzburg is located in the Msunduzi Local Municipality. The study was conducted in a non-government organisation called NICRO, located in Pietermaritzburg.

3.5 Target population

The target population is defined as the entire group of people or objects to which the researcher wishes to generalise the study findings (Haji, 2006). The target population was staff members of the organisation being studied (NICRO) which consists of nine employees and includes social workers, social auxiliary workers, a supervisor and administrative staff members.

3.6 Sampling strategies

Sampling is defined as the process of selecting a sample that is going to participate in the study (Wagner, Kawulich & Garner, 2012). There are two main sampling techniques, namely the non-probability sampling (qualitative sampling) and probability sampling (quantitative sampling) methods (Wagner, Kawulich & Garner, 2012).

This study used nonprobability sampling which is a process where the selection of research participants depends entirely on the researcher's judgment. Wagner, Kawulich & Garner (2012) further explain that non-probability sampling includes random sampling, systematic sampling, stratified sampling and cluster sampling.

The sampling method that was used in this study is called purposive sampling, where the researcher purposefully selected the possible participants to be included in the study.

3.7 Sample

A sample is a subset of the entire population selected to participate in the study and it provides the data needed to understand a research problem (Sekaran & Bougie, 2010).

The researcher selected five participants for the study, and the sample included a variety of professionals i.e. social workers, social auxiliary workers and a supervisor (management) in order

to find out about their perception of factors influencing knowledge sharing in their organisation. To select the participants, the researcher used her own judgment and selected those whom she thought would be available and would have enough experience regarding the topic studied.

3.8 Sample population and sample size

Figure 3.1: Sample population and sample size
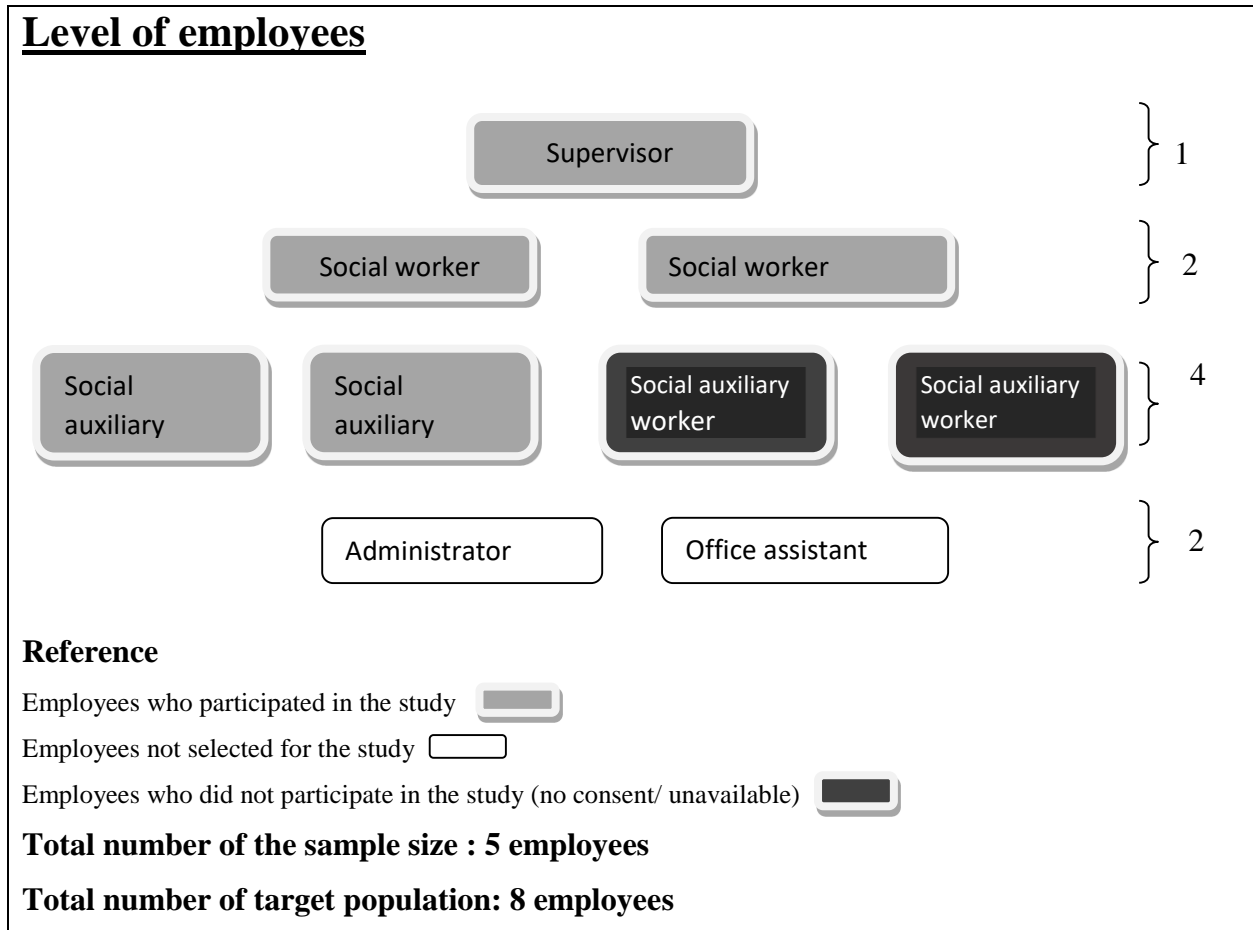
Source: designed by the researcher

3.9 Data collection techniques

Data is "what the researcher sees or hears, and comprises that which is collected or recorded" states Holliday (as cited in Richi & Lewis, 2005:54). Data collection is defined as the systematic process of collecting data to help the researcher to answer the question. There are different forms of data

collection in qualitative study; these include interviews, focus groups, observations, document or artifact analysis and projective techniques assert Wagner, Kawulich & Garner (2012). According to Haji (2006), qualitative methods concentrate primarily on what the participants tell the researcher and the reality they bring to the research experience, and this insight enables the researcher to understand the meaning of what is going on. Wagner, Kawulich & Garner (2012) further state if researchers choose qualitative interviewing, they will be interested in the participants' insights, meaning their knowledge, their views, understandings, interpretations, experiences, feelings and interactions.

The data collection method used in this study was semi-structured interviews, where the researcher designed a set of open and closed-ended questions that were used during the interviews. Wagner, Kawulich & Garner (2012) clarify that open-ended questions often outline the topic being studied and allow both interviewer and interviewee to converse on the finer points of the topic. During data collection, the researcher used a tape recorder to record the data and later transcribed the content of the interviews.

3.10   Data analysis

Data analysis in qualitative research is an ongoing process; as initial observations, conversations, and interviews are collected the researcher analyses and codes them, in order to discover the nuances of the context, the perspectives and the beliefs of the participants (Creswell, 2003). According to Wagner, Kawulich & Garner (2012:61) data analysis is defined "as a process that requires analytical craftsmanship, and has the ability to capture the understanding of the data in writing. A competent qualitative researcher is required to capture the understanding of data in writing".

Qualitative data analysis is defined as "working with data (which are textual, non-numerical and unstructured), organising it, breaking it into meaningful units, synthesising it searching for patterns, discovering what is important and what is to be learned, and deciding what to tell others." (Creswell, 2000:150)

In a nutshell, qualitative data analysis is all about 'taking apart' or de-contextualizing, sifting or sorting masses of information acquired during the process of data collection and organising or re-contextualising it in such a way that the themes or categories and interpretations that emerge from

this process address the research problems and the ensuing question posed at the outset of the research (Creswell, 2000:154).

In this study the researcher used thematic analysis to analyse the collected data, as thematic data analysis is used to analyse qualitative data (Sekaran and Bougie, 2010). Thematic analysis is a process of reviewing data, making notes and sorting the data into categories. Thematic analysis helps researchers to move from handling crude data to discovering patterns and developing themes, add Braun & Clarke (2006). Six thematic analysis phases were followed in this study, as discussed below:

Phase one: Familiarisation with the data
This was the initial phase the researcher used to familiarise herself with the data by creating potential codes (Braun & Clarke, 2006).

Phase two: Generating initial codes
In this stage the researcher generated an initial list of items from the data set that had a reoccurring pattern. This coding was informed by the research question (Braun & Clarke, 2006).

Phase three: Searching for themes
The researcher searched for themes and ascertained the themes that worked and the themes that did not work. Codes were analysed and combined to form main themes in the data. This enabled the researcher to have a list of themes (Braun & Clarke, 2006).

Phase four: Reviewing themes
The researcher, in this stage, expanded and revised the main themes as they developed. This allowed the researcher to have potential themes with some of them collapsing into each other, while others were condensed into smaller units (Braun & Clarke, 2006).

Phase five: Defining and naming themes
In this stage, the researcher identified the themes demonstrated and how each theme affected or impacted on the entire picture of the data (Braun & Clarke, 2006).

Phase six: Writing the final report

This stage allowed the researcher to write the final report after ascertaining the main themes and subthemes. The researcher decided on the themes to be reported on, especially those that allowed her to answer the main research questions underpinning the study (Braun & Clarke, 2006).

3.11 Data quality control

There are different ways to ensure the quality of the data, such as by ensuring its credibility, transferability, dependability and confirmability, and this study mainly employed the credibility measure.

Credibility

The concept of credibility relates to whether the findings of a study are believable. Researchers must take steps to ensure that their findings are accurate and supported by the data. To ensure the quality and credibility in this study, the researcher provided enough details and supporting evidence to meet the standards for credibility. Participants' checks were employed as they are considered to be very effective in evaluating integrity and quality in a qualitative study. In this study, the participants were asked to confirm the findings based on their experiences and perceptions as they were better qualified to verify the plausibility of the research findings since they provided the data. The researcher also used current literature to confirm the findings of the study.

3.12 Ethical considerations

Strewing & Stead (2001) state that research ethics guide the researcher's actions during the study in order for it to be more ethically acceptable.

Ethical approval for this research was obtained from the University of KwaZulu-Natal Ethics Committee. A gatekeeper's letter was also obtained from NICRO (company being studied). Human dignity was maintained by seeking informed consent from the participants and they participated in the study based on the adequate knowledge they were given of the study. Privacy and confidentiality were upheld as the participants were reminded of their right to limit access to

their private information and keep from the public certain information about themselves. All participants remained anonymous and no names except pseudonyms were used in this study.

3.13 Conclusion

This chapter provided detailed information regarding the research methodology that was used in the study. This chapter included a discussion of the research design used in the study, the research methodology, sampling and sampling strategies, data collection and the data analysis method. This chapter concluded with ethical issues that were cautiously considered during the study.

CHAPTER FOUR

DATA PRESENTATION

4.1 Introduction

In the preceding chapter the study presented the research methodology used to underpin the study, and this chapter now presents the data collected in this research. The presentation is separated into three segments, where the first one deals with the individual factors affecting knowledge sharing at NICRO, the second one covers the organisational factors influencing knowledge sharing at NICRO and the third part presents the technical factors influencing knowledge sharing at NICRO. The chapter ends with a conclusion on the factors influencing knowledge sharing discussed on this chapter.

4.2 Research objectives

a) To explore the individual factors that influence knowledge sharing at NICRO.
b) To discover the organisational factors that influence knowledge sharing at NICRO.
c) To identify the technical factors that influence knowledge sharing at NICRO.

4.3 Theme One: Individual factors influencing knowledge sharing at NICRO

Questions six, seven and nine of the interview guide addressed this theme.

The research participants shared diverse opinions on the individual factors that impacted their sharing of knowledge. The interviews generated a number of individual sub factors that were believed to influence knowledge sharing in the organisation studied. These sub factors emerged though the use of the thematic data analysis method and by comparing these themes with the literature. The sub factors that emerged during the study were inclusive of the importance of the employees' awareness about knowledge sharing, the impact of personality traits on their ability to share knowledge, as well as the role of self-efficacy and altruism in enabling employees to share knowledge. Motivation and job satisfaction also emerged as factors that swayed the individual's

behaviour to share knowledge in the workplace. The following sections will discuss the themes generated (sub factors) and it will be divided into subsections to present the collected data.

4.3.1 Sub theme one: Awareness

The participants shared common insights with regards to the role of awareness as a factor that influenced knowledge sharing at NICRO. There was a clear pattern of acknowledgment that awareness of the necessity of knowledge sharing played a key role in determining whether people would share information or not.

This was well noted from a participant's response stating that:

> *"Another important factor is the basic one of being conscious or aware about knowledge sharing and how important it is. If people are not aware of the importance of knowledge sharing, they will often feel a need to keep what they know only as their personal resource"* (Interviewee Five, 2016).

Another participant supported this idea by articulating that:

> *"Besides the absence of knowledge to be shared, they actually do not know the necessity of sharing knowledge, just as their management doesn't. So they are not aware of such (a) thing as knowledge sharing (and) its necessity to themselves, other employees and the organisation itself"* (Interviewee Three, 2016).

4.3.2 Sub theme two: Personality

Most of the research participants reported that an individual's personality had a direct impact on his or her ability to share knowledge with others in the organisation. This was depicted in a response by one of the participants:

> *"I think people's personality has to do with their willingness and ability to share knowledge with other workers. This is because there are people who have a very extrinsic personality, who are outgoing and very good in initiating and maintaining interpersonal relationships with co-workers, and those people tend to be easy going and well able to share knowledge compared to those who are very intrinsic and reserved, who hardly*

interact with co-workers, and those types of people are hardly involved in knowledge sharing" (Interviewee One, 2016).

This opinion was further supported by other participants who also claimed that:

"*Those people who are agreeable and outgoing are easy to engage with each other and share knowledge compared to those who hardly engage and find it less satisfying to engage with other people in any way. So the type of personality that the person has tends to influence their behaviour towards knowledge sharing*" (Interviewee Two, 2016).

Another participant was also in agreement with this, sharing that:

"*In most cases people who are generous, caring, loving and person-centred in nature tend to find it easy and pleasant to share knowledge with others because they understand that it does not take anything away from them. Whilst other types of people are more self-centred and greedy with information and they feel like it is the source of their power and recognition*" (Interviewee Four, 2016).

The above data shows that most participants were in agreement with the belief that an individual's personality always influenced and impacted on their involvement in knowledge sharing behaviour. Their personality either helped them to be forthcoming with knowledge sharing or in others it actually prevented them from engaging in the process of knowledge sharing.

4.3.3 Subtheme Three: Self-efficacy and altruism

The participants shared common ideas regarding self-efficiency and altruism as determining factors for knowledge sharing behaviour. They believed that an employee's willingness to give without expecting anything in return could influence that individual's behaviour regarding knowledge sharing. The respondents also shared a similar perception regarding an individual's confidence to offer what they were expected to and how it impacted their knowledge sharing behaviour.

This common articulation is represented in the response of the participant who reported that:

"*Loving people and (a) willingness to serve people also influences the knowledge sharing behaviour because those people who are passionate about the empowerment and growth of other people find it easy to share knowledge with others, because they are satisfied by*

such deeds… while those who have no interest in serving human nature are likely to shy away from sharing knowledge and tend to be more self-centred" (Interviewee Two, 2016).

Another participant agreed with this argument by further stating that:

"People who are well established in who they are often feel fascinated to be given the opportunity to share knowledge. Those who feel more comfortable about themselves hardly hesitate to share information. In other words, they find it self-edifying to share knowledge they have because they care the least about people's approval of who they are" (Interviewee Five, 2016).

Another participant added further insight to this thought by saying that:

"The employee who believes in collective gain, such as the concept of Ubuntu, understands that 'I am because we are, because we are therefore I am'. Hence this influences his or her behaviour to share knowledge because he understands that whatever he has does not belong to him alone; it is for the benefit of the whole group" (Interviewee Three, 2016).

4.3.4 Subtheme Four: Motivation

Motivation was another factor that transpired as one of those that impacted on the employee's behaviour to share knowledge at NICRO. The participants established both positive and negative relationships with this factor and knowledge sharing by reporting that it either worked for or against knowledge sharing behaviour. This was depicted in the participant's perceptions below:

"Motivation is one of the factors that influence knowledge sharing because you tend to find that well-motivated employees and employers are always keen to share organisational knowledge with colleagues because they want to see them growing and also contributing to the growth of the organisation. Whether they are personally motivated in general or they are more motivated to do their work, their keenness makes it easy for them to share knowledge with others" (Interviewee One, 2016).

This assumption was further supported by another participant who also articulated that:

"Intrinsically motivated people tend to be able to share knowledge with co-workers because they are motivated by their intentions and aspirations and think that other employees may also be interested in getting that knowledge that they find fulfilling to have" (Interviewee Two, 2016).

Another participant agreed by saying that:

"Furthermore, being motivated and goal driven are key factors to knowledge sharing because it takes courage to approach other people with the aim of giving them your knowledge, regardless of the negative response you might get. Hence the person needs to be intrinsically motivated and keen to do their work" (Interviewee Three, 2016).

This articulation was further supported by another participant who reported that:

"Intrinsically motivated individuals often engage in knowledge sharing without fail. It actually stems from them that they just feel like this type of information or knowledge is beneficial to them so it can do the same to others and so they start sharing it with colleagues. Such types of people often engage in the process, not because they have been told to but simply because they feel satisfied by the act of imparting knowledge to others. Yet the opposite happens in people who are less motivated, not open minded and find it difficult to engage with colleagues" (Interviewee Five, 2016).

4.3.5 Subtheme Five: Job satisfaction

Job satisfaction was found to be among the trending dynamics which impacted on the individual's tendency to participate in knowledge sharing, as revealed by the research participants. It was also depicted that an individual's level of job satisfaction could either enable or disable them from sharing knowledge in the organisation.

This was well stated by the participant who responded that:

"Lack of an individual's satisfaction with their job will influence knowledge sharing as such a person doesn't see the point in sharing that knowledge as they anticipate no better future, either in their careers or within the organisation. Less motivated and less satisfied employees hardly share knowledge with others. I guess they find themselves in a state where they don't know what needs to be shared. Even those who are experts and well

experienced in their jobs tend to pass on their negative energy or dissatisfaction about the job rather than sharing significant knowledge that will benefit others" (Interviewee One, 2016).

This argument was supported by another participant who reported that:

"Individuals who lack satisfaction with their jobs are often less encouraged to share knowledge because they don't have a drive and motive for so doing. Individuals who are satisfied are actively involved in the process because they feel like it contributes to their satisfaction as well as improving performance" (Interviewee Three, 2016).

4.4 Theme Two: Organisational factors influencing knowledge sharing

The research participants articulated interrelated opinions on identifying organisational factors which influenced the sharing of knowledge at NICRO. During the interviews a number of organisational sub factors were acknowledged and discussed as having influence on knowledge sharing at NICRO. These sub factors or sub themes emerged though the use of the thematic data analysis method and by comparing these themes with the literature. The sub factors that emerged as drivers of knowledge sharing during the interviews were inclusive of the roles of organisational culture, management support and leadership style, trust, rewards and extrinsic motivation, communication and the organisational structure at Nicro. The following section will demonstrate the emergence of these organisational sub factors and how research participants believed it influenced the sharing of knowledge in the organisation studied.

This theme was derived from the answers to questions seven, eight and eleven of the interview guide.

4.4.1 Subtheme One: Organisational culture

Data showed that participants believed that organisational culture was an important factor that played a pivotal role in facilitating knowledge sharing at NICRO. They believed that it could either curb or enable knowledge sharing among employees.

These findings were well implied in the response cited below where the participant said that:

"The organisational culture sets a standard for whatever type of behaviour is witnessed in the organisation. Therefore, for knowledge sharing behaviour to become a norm among all employees, it needs to be encouraged, praised and acknowledged by the management. Firstly, I think for the organisation to have heightened knowledge sharing behaviour, there needs to be a learning culture in the organisation where everybody is encouraged to learn and become open to new experiences. Therefore a learning culture needs to be instilled and enforced so that everybody finds a need to seek and embrace new knowledge, so they can later share that information where necessary" (Interviewee Two, 2016).

These findings were further supported by another participant who claimed that:

"Motivation to learn is the important factor that encourages people to share knowledge. This is because the more they study and learn new information, the more they are motivated to seek more updated information and share it at a later stage. For example, if the organisation had to introduce financial study aids or benefits for those who want to further their education, then (a) learning culture will most probably be instilled to everyone and they will be encouraged to seek and share knowledge" (Interviewee Five, 2016).

On the same note, another participant concluded that:

"A learning filled organisational culture that is characterised by minimal conflicts and more teamwork is likely to facilitate knowledge sharing within the organisation" (Interviewee Three, 2016).

4.4.2 Subtheme Two: Management support and management style

The data collected showed that management style and the type of support provided by office managers to the staff members contributed to knowledge sharing behaviour. It was believed that certain types of management styles enabled knowledge sharing while others obstructed it.

In support of this statement, a participant was quoted saying that:

"Management plays a great role in facilitating knowledge sharing because they serve as role players whom every employee should look up to. If they are not knowledgeable and

*have less desire to share knowledge employees are less likely to share knowledge. If the organisation management is motivated, open to experiences and always eager to see development that they initiate, then it's possible for employees to play a role in knowledge sharing too" (*Interviewee Two, 2016).

This assumption was further supported by another respondent who said that:

"Management style impacts knowledge sharing among employees. If it is more of an autocratic leader then no employee will be willing to share knowledge because they already have much to talk about regarding the management's autocratic style they are led with (typical of senior management of this organisation). If the management style is very much of a lazes fare then again only keen and motivated employees will share knowledge; the rest will not bother, as is the case with the regional management of this organisation… While (an) authoritative and accommodating leadership style will definitely facilitate knowledge sharing because everyone is willing to share and to know something new" (Interviewee Four, 2016).

The finding above was reinforced by the response below:

"The management of this organisation also need to understand the necessity of knowledge sharing and encourage it among employees. This is because management serve as leaders and exemplars of the required behaviour; so if management does not understand and does not encourage knowledge sharing then employees will have no basis of encouragement" (Interviewee Three, 2016).

4.4.3 Subtheme Three: Trust

The findings revealed that trust was the most fundamental factor that enabled or disabled knowledge sharing at NICRO. Trust between the employer and employees, and between employees was central for facilitating knowledge sharing at NICRO.

Reflecting what was said by other participants, a respondent was quoted as saying:

"Another factor that influences knowledge sharing in this organisation is lack of cohesiveness and good interpersonal relationships among employees. This becomes a

noticeable barrier to knowledge sharing because the workplace that is characterised by conflicts cannot be expected to have employees that share knowledge in any way. This is because employees don't trust each other at all, so any form of interaction requires caution so that they avoid any possible cost and risk they may suffer as a result of sharing any information" (Interviewee Four, 2016).

In light of the above another participant agreed with these findings by saying that:

"The role of management is of most importance in creating (an) inspiring and calm working environment in order to promote good relationships among employees. This is because, in the absence of good interpersonal relationships among employees, knowledge sharing is sure to be absent too. This is mainly because for people to share knowledge they have to be guaranteed that it won't put them at any risk, instead it will work (to) their benefit. Therefore sound relationships need to be established among employees so that it is easy for them to engage and share knowledge whenever possible" (Interviewee Two, 2016).

In the same vein, another participant said that:

"Unity and oneness among staff members is also important among employees because it is the main driver of knowledge sharing, as it might be well understood that knowledge sharing takes place among people who have good interpersonal relationships. Therefore, a good interpersonal relationship among employees is (a) necessity for knowledge sharing" (Interviewee Five, 2016).

The finding above was reinforced by the response that:

"A lack of good relationships among employees themselves has an inhibiting effect because they can't relate well and share knowledge if they are not on good terms and they don't trust each other. So trust among employers and between employer and management is the foremost requirement for sharing knowledge" (Interviewee Four, 2016).

4.4.5 Subtheme Four: Organisational structure

The study found that organisational structure was among the key organisational dynamics which had an impact on the sharing of knowledge at NICRO. This was mainly because NICRO had a hierarchical structure from the top management down to the supervisors. There was minimal communication between staff members and people in management, and in addition to that decision making was normally through a top down approach. The hierarchical structure was therefore believed to lessen knowledge sharing in this organisation, and this was well depicted by the respondent below who articulated that:

> *"Flat organisational structures are (more) favourable to knowledge sharing than hierarchical and complicated structures. This is because flat structures are less complicated (and) lead to viable communication compared to hierarchical structures. Moreover, management itself has to be supporters of knowledge sharing and need to understand the necessity of sharing knowledge so that they can acknowledge and encourage it among their subordinates, and here it does not seem to be the case"* (Interviewee Two, 2016).

4.4.6 Subtheme Five: Rewards

With regards to rewards, the study found that it was very important for the organisation to grant rewards and incentives to employees who were actively involved in knowledge sharing. The availability of rewards and incentives was said to encourage employees to engage in knowledge sharing while the absence of such served as a barrier to knowledge sharing.

This outcome was depicted in the response of a participant who said that:

> *"People come to work mostly for money and other benefits compared to self-actualisation, therefore management needs to introduce some types of rewards and acknowledgements or incentives for those people who successfully involve themselves in knowledge sharing behaviour. This is because people often check the benefit of their behaviour before they engage in it. So we need to be assured that good benefits are guaranteed if we share knowledge with others"* (Interviewee Three, 2016).

In agreement with the above, a respondent stated:

> *"Another important factor is the fact that people pay a lot of money for the knowledge and education they possess, so having to share such information for free is not reasonable. We also spend a lot of time transferring that information into our knowledge through learning; therefore there must be a big reason why employees have to share such a personal, valuable and expensive resource with others"* (Interviewee Four, 2016).

In the same line of thought, another participant said that:

> *"Giving incentives or rewards for encouraging knowledge sharing among people who are engaged in knowledge sharing is very important. This is because people are encouraged to go (the) extra mile only if they know they are going to receive something in return. Therefore (the) organisation should introduce some form of acknowledgement or reward in order to encourage that knowledge sharing behaviour. Naturally no one wants to do anything without expecting something in return. So if it's more than their job description then there should be means that encourage them to engage in such behaviour"* (Interviewee Five, 2016).

These findings regarding rewards and extrinsic motivation were finally reinforced by the participant who reported that:

> *"In this organisation there is minimal knowledge sharing because employees lack motivation to engage in such activities. They are very dissatisfied about their salaries so there is nothing that encourages them to go (the) extra mile in executing duties such as sharing knowledge because they have no reason to. So if employees are already dissatisfied about their daily duties, they find no reason to go (the) extra mile and share knowledge that they don't (get) acknowledged or rewarded for"* (Interviewee One, 2016).

This study made it clear that even though employees were engaged in knowledge sharing, it was not optimal because employees were discouraged due to the lack of incentives and acknowledgement, and unsatisfactory salaries.

4.4.7 Subtheme Six: Communication

The study found that knowledge sharing began with social interaction taking place between employees, which implied that communication influenced the behaviour of sharing knowledge at NICRO. The data collected proved that efficient communication among employees facilitated knowledge sharing while minimal communication disturbed the process.

In support of this finding, a participant reflecting the views of other participants stated that:

> *"The frequency of face-to-face communication among employees in the organisation is very important because that is where we get the opportunity to build and enhance rapport with each other. The more we have good interpersonal relationships among ourselves, (the) more we will share knowledge as we know each other, (our) needs as well as strengths*" (Interviewee One, 2016).

Another participant further added to this finding by saying that:

> *"Lack of teamwork, cooperation and collaboration impedes knowledge sharing from taking place because employees find it difficult to work together due to a number of group dynamics"* (Interviewee Three, 2016).

In agreement with the above, another respondent said that:

> *"Other important factors include communication and (the) physical set up of the office environment. Physical setting of offices need to be structured in such a way that everybody is able to communicate with (each) other, so that they establish and maintain good relationships which will pave (the) way to knowledge sharing in future. This is mainly because physical barriers can serve as psychological barriers where people are not able to reach to each other"* (Interviewee Four, 2016).

4.5 Theme 3: Technical factors affecting knowledge sharing.

Questions eight and ten of the interview guide addressed this theme.

The research participants shared correlated views on the role of technological factors in impelling the sharing of knowledge in organisations. The interviews generated technological sub factors that

were believed to influence knowledge sharing in the organisation studied. These sub factors or sub themes emerged though the use of the thematic data analysis method and by comparing these themes with the literature. The sub factors that emerged during the study were inclusive of the importance of information technology and technological equipment, groupware as well as the necessary skills for using technological equipment. The following section will demonstrate the emergence of technological sub factors and how the research participants believed it influenced the sharing of knowledge in the organisation studied.

4.5.1 Subtheme One: Information technology and technological equipment

The data collected indicated that a positive connection existed in relation to information technology, technological equipment and knowledge sharing. Data showed that the available information technology and technological equipment enhanced knowledge sharing behaviour at NICRO.

This was well depicted in the following participant's response, remarking that:

> *"Things like computers, telephones, fax machines and other forms of electronic equipment facilitate communication in the organisation, which ultimately leads to (the) achievement of knowledge sharing. Therefore the presence of such technical resources makes it easy for everybody to communicate and share knowledge, regardless of the physical distance that exists between the communicator"* (Interviewee Two, 2016).

On the same note another participant agreed to the usefulness of information technology and technological equipment in facilitating knowledge sharing, by saying that:

> *"Here at work we tend to have in-service training where employees are given tasks to research and share specific knowledge with other colleagues, pertaining to their work. Now it becomes easy to firstly seek more information on the issue you are required to present before you add it to what you already know and present it in a training session or topic that has been allocated to you. Therefore, availability and accessibility of technological resources facilitates knowledge sharing"* (Interviewee One, 2016).

Another participant added to the perspective on this issue by noting that information technology could be so good that it made people over- dependent on it; in fact more so than they depended on each other as colleagues. This participant said that:

> *"However one should also tentatively mention that technical resources and information technology obstructs the traditional and healthy way of sharing knowledge because people tend to rely on technology to get information rather than approaching other employees. They are very hesitant to contact each other in pursuit of finding information from their colleagues and they mostly prefer to use information technology by means of (the) inter/ intranet to find information they are looking for"* (Interviewee Two, 2016).

In support of the above findings, another participant further reported that:

> *"Although there is information that you don't find in technological resources, but can (obtain) from the experts in the profession who have much experience and knowledge as they (have) mastered practical skills in conjunction with the theory they have learnt. Meaning that although technological devices are necessary for sharing knowledge, (they) doesn't reach or surpass the significance of human beings as key role players who facilitate knowledge sharing"* (Interviewee Five, 2016).

The data presented on this section proved that information technology and technological equipment use was very essential for knowledge sharing but that it should be used with caution to ensure that it didn't replace employees' engagement in the workplace, which was equally vital for facilitating knowledge sharing.

4.5.2   Subtheme Two : Groupware

Groupware is a term that incorporates various innovations that support person to person coordinated effort, such as email, instant messenger, videoconferencing, lotus notes as so forth. (Haji, 2006).

The data collected revealed that groupware was necessary for knowledge sharing behaviour in the organisation. Participants reported that there was a good relationship between the use of groupware at NICRO and knowledge sharing behaviour.

One participants was quoted saying:

"Not long ago in this organisation the internet was taken away because of being misused by employees. That on its own was a barrier and demotivated us from sharing any knowledge. It is much easier to share knowledge because it's an easy task that doesn't require much effort when using technology. Even if you want to find further information it's (easier) to Google than to approach manuals and booklets and read (them)" (Interviewee One, 2016).

In support of this, another participant was quoted saying*:*

"In fact, electronic equipment actually serves as reserves and sources of information because we use it to retrieve and store information and later share it with other people. Therefore it serves a good job of allowing easy circulating and sharing (of) knowledge among ourselves. This is because our daily schedules are always occupied and we can't afford to meet daily and share whatever we want to share; but with the aid of technology you can always use emails to drop that information that you wanted to pass without waiting for the convenient time and date to meet in person. It actually saves time that can be used in physical knowledge sharing engagements when it's done using electronic devices" (Interviewee Five, 2016).

Another participant concluded that:

"Computers, internets and intranets play a significant role towards knowledge sharing in this organisation because it makes it easy to communicate and transfer information from one person to the other without any fuss""(Interviewee Four, 2016).

These outcomes therefore showed that groupware played a significant role in knowledge sharing at NICRO. This was made possible by facilitating communication and making use of fast, reliable and conducive communication methods to share information and knowledge to any employee, regardless of the distance. Groupware overcame the challenge of meeting time, distance, the

reliability of the information sent and the speed at which knowledge could be transferred and retained.

4.5.3 Subtheme Three: Competency in using technological equipment and software

Computer skills and competency was seen to be an important factor that influenced knowledge sharing at NICRO. Data collected in this study showed that information technology competency among employees was very important as it influenced the use of technological equipment and programs.

A participant asserted that:

> *"It is true that although 95 per cent of the staff members can use computers, some of them find it difficult to use the newly developed software and programs that are sometimes presented by the organisation, with the aim of computerising everything and doing away with paper work. Hence such programs and software hinder knowledge sharing because those without skills find it intimidating to use it, let alone attempting to share knowledge with it. Thus, availability of such skills can make it easy to share knowledge among employees while it makes it difficult among those who lack the skills"* (Interviewee One, 2016).

This finding was further supported by the participant's response below:

> *"The ability or skill to use technological devices can be a barrier because not everybody knows how to use it effectively to obtain, capture and share knowledge among each other. Thus it is necessary that even though new technology is introduced for the sake of improving knowledge sharing, training and technical support should supplement it because otherwise other employees might feel that knowledge sharing is not theirs if it involves using technological equipment that they (don't know how) to use"* (Interviewee Four, 2016).

Another participant further agreed to these findings by saying that:

> *"Old fashioned or middle-aged employees tend to become resistant to any new technological improvements introduced in the organisation because they fear failing to use*

it. Hence this might impact knowledge sharing because any new technological improvements introduced for the purpose of facilitating knowledge sharing will be a challenge to them as they might not have courage to learn something new that younger employees already master. Hence I can conclude that technological factors have minimal contribution to knowledge sharing compared to humans" (Interviewee Three, 2016).

Another participant added another perspective to this subtheme by reporting that:

"Using technology as (a) standard means of communication and knowledge sharing can also be a barrier to those who are not conformable with the use of computers and other forms of electric communication methods" (Interviewee Four, 2016).

Data presented regarding this factor showed that if employees possessed sufficient skills in using information technology and computer programs, they stood a better chance of using the technology to share knowledge. Conversely, a lack of such skills hindered the process of knowledge sharing at NICRO, as those employees who lacked the skills found it hard to use technological equipment and programs or new software that were introduced by the organisation.

4.4 Conclusion

This chapter presented the findings of the study. The succeeding chapter will discuss the outcomes of this research in relation to the current body of knowledge, and the findings will be analysed, discussed and supported by the contemporary literature found.

CHAPTER FIVE

ANALYSIS AND DISCUSSION OF FINDINGS

5.1 Introduction

In the preceding chapter this dissertation presented the data collected in this study. This chapter presents the discussion and interpretation of the data presented in chapter four. The discussion and interpretation is divided into three sections, namely the individual factors affecting knowledge sharing at NICRO, the organisational factors influencing knowledge sharing, as well as the technical factors impacting knowledge sharing behaviour among the employees at NICRO. The chapter ends with a conclusion on the findings discussed.

5.2 Research objectives

  I.   To explore the individual factors that influence knowledge sharing at NICRO.
  II.   To discover the organisational factors that influence knowledge sharing at NICRO.
  III. To identify the technical factors that influence knowledge sharing at NICRO.

5.3 Individual factors influencing knowledge sharing at NICRO.

This section discusses and interprets data on the factors influencing knowledge sharing at NICRO.

5.3.1 Awareness

According to the data collected during the study, awareness was found to be one of the critical factors that influenced the sharing of knowledge. The study suggested that being aware of the behaviour of sharing knowledge, and of its significance to the individual and the company would definitely influence the employees' behaviour in favour of sharing knowledge. Bakhari & Zawiya (2010) argued that all employees, including managers, should be aware of the significance of knowledge sharing so that they could create an atmosphere conducive to knowledge sharing and a knowledge sharing culture.

The findings of the study indicated that if employees were not aware of knowledge sharing and its necessity, they would not engage in the act of sharing knowledge. In agreement with these findings,

the study by Ismail & Yusof (2010) also ascertained that employees who lacked awareness and an understanding of knowledge sharing would not be motivated to share their knowledge. Similarly, if an organisation's management or the employer did not understand the importance of knowledge sharing, it became impossible for them to promote it among their employees. A preliminary awareness stage was therefore imperative for the success of knowledge sharing in organisations (Argani, 2009 as cited in Ismail & Yusof (2010).

These findings were also established by Brown (2009 in Yiu & Law, 2012), who added that knowledge sharing was influenced by how the individuals perceived the necessity for sharing knowledge, as knowledge ownership was acknowledged by the individuals and the organisations that employed them. Knowledge was seen as a commercially valuable asset, as evidenced by the well-known statement that 'knowledge is power'. Employees had different perceptions of the necessity for sharing knowledge; some perceived having to share their knowledge as a personal loss while others viewed it as a way of expanding that knowledge. Some employees were reluctant to share their knowledge because they considered it as personal intellectual property, to be kept as their source of power, while others believed in the necessity for sharing knowledge (Yiu & Law, 2012). Reluctance to share knowledge would ultimately negatively affect the employees' ability to achieve organisational goals.

If, however, they were aware of what knowledge sharing was and how it benefited both them as individual employees and the organisation, then it became their first step in the journey of continuous sharing of knowledge. These findings were confirmed previously by Den Brink (year cited in Bakhari & Zawiyah, 2012), who reported that awareness was the initial step to knowledge sharing and that every member of the organisation (employees and managers) was required to become aware of how necessary it was to share knowledge. In order to share information employees needed to be aware of the significance of sharing information and how it would benefit them and the organisation at large.

This study done at NICRO made it clear that some employees were possibly not involved in knowledge sharing because they were simply not aware of it; but those who knew about it were engaged in the process of sharing. Awareness was thus the initial necessary factor for knowledge sharing behaviour to commence and grow.

5.3.2 Personality

This study found that personality was one of the prominent individual factors affecting knowledge sharing in the organisation studied. The study found that persons with an extrinsic personality shared knowledge with minimal reservations. In full agreement with these findings, a study by Watson & Clark (2009 cited in Yong et al., 2011) revealed that extroverts were optimistic and sentimental, consequently tended to have positive feelings and became good team players, satisfied by their involvement and contribution to the group. Since extroverted individuals were inclined to have positive feelings and were fulfilled by teamwork, they tended to participate in knowledge sharing and encouraged other affiliates so that the group stayed worthwhile. Yong et al. (2011) thus established that a positive relationship existed between extraversion and the person's confidence to share knowledge.

Conversely, persons with an introverted personality were found to be less involved in knowledge sharing as they hardly engaged with other people and were generally not interested in participating in social interactions with other employees. In support of these findings, Gupta (2008) explained that introverted persons were characterised by a tendency of being reserved, self-centred and nervous to participate in group settings and problem solving discussions with others. An introverted personality therefore tempered with an employee's knowledge sharing tendency as they were predisposed to refrain from organisational social activities such as knowledge sharing.

Agreeable personalities were also found to be mostly involved in knowledge sharing as they had traits that allowed them to form good relationships with other people and had no problem with initiating and maintaining social interactions with colleagues. These finding were confirmed by Besser & Shackelford (2007) who suggested that agreeableness designated the personality's inclination to be satisfying and pleasurable when they interacted or mingled with other people. In addition, Gupta (2008) found that employees who scored high on agreeableness showed increased eagerness to share their knowledge with fellows, which showed their typically generous personality.

Openness as personality type was found to sway knowledge sharing among the employees of the organisation being studied. The study found that employees who showed an open temperament were often engaged in knowledge sharing because of the personality traits they possessed. Thus

the current literature confirmed that persons with low openness were more likely not to be interested in learning new experiences, consequently they might not engage in knowledge acquisition and sharing while individuals with higher scores on openness tended to be motivated to share knowledge compared to those who exhibited low levels of openness (Gupta, 2008).

5.3.3 Self-efficacy and altruism

This study suggested that employees who were well established in themselves and confident about who they were and what they could do tended to be more involved in knowledge sharing compared to less knowledgeable and less self-esteemed individuals. This meant that self-confidence and high self-esteem proved to be necessary personal conditions to allow knowledge sharing to take place. These findings were confirmed by Bandura (1998 cited in Yiu & Law, 2012), where they reported that the extent of a person's self-confidence and the extent to which they believed in their efforts and contribution related to the way in which they acted for the benefit of other people. This meant that self-sufficient persons with high self-efficacy had a habit of being more affianced in sharing treasured information with others because such people trusted their capabilities and also believed that their sharing could benefit others and improve the organisation's performance as a whole.

Employees with low self-esteem and less self-confidence were found to be less interested in sharing knowledge. Noor et al. (2014) agreed with these findings by articulating that non-self-sufficient people did not think that their behaviour will contribute to others so they were less likely to share knowledge. In consequence Bock (2005) affirmed that self-sufficiency was the main factor that influenced employees to be self-motivated in sharing knowledge.

The study also ascertained that employees who showed love and appreciation for their jobs were more probable to share knowledge than those who did their job as part of their daily chores. The study revealed that those individuals who showed interest in their professions seemed to find satisfaction and pleasure in their jobs, which served as a motive and motivation for sharing knowledge. These employees were less selfish and were not primarily motivated by materialistic benefit; rather they were driven by the self-satisfaction that they derived from their good and courageous acts such as sharing knowledge with other employees. This implied that employees

with a higher degree of satisfaction and optimistic views were more likely to engage in knowledge sharing.

These findings were in agreement with the findings of (Bock, 2005) who articulated that there were people who found satisfaction and fulfilment (intrinsic benefit) by assisting others or willingly sharing information with other people. Hence satisfaction derived from helping or sharing information with others was considered as one of the contributing factors in knowledge sharing because it would eventually determine the individual's willingness to share knowledge with others. These people therefore ended up experiencing self-worth and self-reliance as they continuously engaged themselves in knowledge sharing.

In support of the above findings, additional research outcomes by Wasko & Faraj (2004 cited in Noor & Salem, 2012) further emphasised that some personnel were encouraged to share knowledge because such engagement in knowledgeable search and problem resolving was exigent and flattering due to the innate pleasure they derived from assisting others. Thus it became clear that helping others through sharing knowledge provided the opportunity for growth and development for the giver and receiver of information which was independently satisfying,

In a nutshell, this discussion implied that the factor of self-efficacy and altruism could either positively or negatively influence knowledge sharing in the organisation being studied; meaning that persons with high self-efficacy and altruistic individuals were more engaged in knowledge sharing while those with less self-efficacy and non-altruistic employees were less interested in this act. The more the individual shared knowledge, the more they analysed and mastered that knowledge and this allowed them to benefit from the process too.

5.3.4 Motivation and job satisfaction

This study found that both intrinsic and extrinsic motivation swayed the employee's behaviour to share knowledge in the organisation studied. The study indicated that self-motivated individuals were generally seen as leaders in the process of knowledge sharing. Their inward and self-generated motivation served as their drive to good conducts such as knowledge sharing in the workplace.

The findings of the study also established a positive relationship between high job satisfaction and knowledge sharing behaviour. The study suggested that those employees who were satisfied with their jobs were mostly involved in knowledge sharing behaviour compared to those who were generally less satisfied with their jobs. Bakhari & Zawiyah (2012) confirmed this by explaining that factors such as motivation and individual job satisfaction also influenced knowledge sharing in the organisation because for an employee to transfer knowledge, they generally needed to be satisfied with their daily job.

5.4 Organisational factors influencing knowledge sharing

5.4.1 Organisational culture

The study found that the organisational culture of NICRO had an impact on the employees' behaviour of knowledge sharing. In support of these findings, the study done by Noor et al. (2014) indicated that organisational culture was one of the main role players or factors that swayed knowledge sharing. The type of organisational culture either promoted knowledge sharing behaviour or it discouraged the practice.

The study revealed that if a learning and knowledge based culture was practised in the organisation; the employees were likely to be encouraged to behave according to the well accepted culture of the organisation. In support of these findings, literature also reveals that the level of knowledge sharing was very much reliant on the culture of the organisation (Ford & Chan, 2003 cited in Noor & Salem, 2012). The way of doing things as well as the organisational ethos often impacted the process of knowledge sharing (McDermott & O'Dell, 2001 cited in Naicker, 2010).

This study also ascertained that although employees shared knowledge at NICRO, their involvement was minimal because the culture practised in the organisation did not encourage or acknowledge such behaviour. It was therefore clear that the organisation lacked a learning orientated culture and this had an impact on knowledge sharing. The current organisational culture of the organisation studied was proven to be less knowledge based and that had a negative impact on knowledge sharing. In agreement with this, literature proved that knowledge sharing became a

challenge within organisations that had very different cultures compared to those that shared strong and similar or unified cultures (Haji, 2006).

5.4.2 Management support and management or leadership style

This study found that management style and management support enabled and sometimes disabled knowledge sharing behaviour in the organisation being studied; since the organisation had experienced different management styles as organisation managers changed from time to time. Employees reported that they had witnessed a variety of management styles which variably impacted on their knowledge sharing behaviour.

The outcome of the study revealed that employees believed that managers and/or employers needed to take a leading role in information and knowledge sharing behaviour. They believed that if management or leadership showed a positive influence on such behaviour then employees would surely be encouraged and follow them; implying that managers could also serve as enablers or barriers to knowledge sharing in the workplace. In agreement with these findings, Kerr and Clegg (2007) asserted that managers were front runners of the organisation who were expected to set a good example for the process of knowledge sharing.

The study revealed that a *laissez faire* type of management style with minimal or no support for staff members yielded poor results with regards to knowledge sharing. It became clear that if employees didn't feel supported and encouraged to share knowledge they became less encouraged to share. Thus Chebbi et al. (2015) proved to be in agreement with this view when they remarked that a *laissez faire* management style negatively impacted on knowledge sharing behaviour. In the same line, autocratic behaviour discouraged knowledge sharing behaviour and made employees more resistant towards doing good.

This study found that authoritative and accommodating (assertive) leaders who were supportive of knowledge sharing behaviour were likely to yield better results in this matter because employees felt welcomed and motivated to take the initiative and share what they knew. In support of this view, the study by Chen (2010 cited in Chebbi et al., 2015) suggested that a transformational management style was a noteworthy indicator of knowledge sharing while conditional reward

management systems were altogether and emphatically associated with knowledge sharing that tooks place within and outside the organisation.

Management support was found to influence how knowledge was shared in the organisation. The study suggested that maximum support and encouragement from managers were enabling factors that encouraged employees to engage in positive acts such as knowledge sharing. This implied that leaders who were well informed, who practiced constructive criticism, who offered flawless encouragement, persuasive inspiration, scholarly incitement, and provided individualised supervision were guaranteed to motivate knowledge sharing. Chen et al. (2008) confirmed this by stating that managers who conveyed a vivid organisational vision and foresaw an optimistic tomorrow tended to enhance information sharing with the individuals who showed clear enthusiasm and took cognisance of organisational issues.

5.4.3 Trust

This study found that trust was the most essential factor that influenced knowledge sharing behaviour at NICRO. This finding was confirmed by the writings of Davenport (2002 cited in Bakhari & Zawiya, 2010) who explained that trust was a basic intrinsic factor that enabled or disabled knowledge sharing among employees in an organisation. In actual fact, trust was seen as the leading factor that influenced knowledge sharing in the workplace in knowledge management literature (Yiu & Law, 2012).

The employees of NICRO believed that trust was the main driver of knowledge sharing behaviour in their workplace because it was necessary to maintain a trustworthy relationship among employees and also between the employer and the employees. In support to this view, the writings of Ann (2010 cited in Khesal et al., 2013) explained that trust was not only essential among employees; it was also of utmost importance between employees and employers for knowledge sharing to transpire. A trustworthy relationship between employers and employees motivated staff to share their knowledge for the benefit of the organisation.

Ann's study (2010 cited in Khesal et al., 2013) also ascertained that a negative and positive relationship existed between trust and knowledge sharing behaviour, as seen within NICRO. Such an outcome meant that the presence of a trustworthy relationship among employees and between

the employer and its employees would result in a positive outcome in knowledge sharing. Conversely, lack of trust impacted badly on the employees' keenness to share their knowledge because they had a tendency to mind their own business and avoid risk by all means. Von Krogh (year cited in Bakhari & Zawiya, 2010) also reported that lack of trust among employees obstructed knowledge sharing and openness among employees.

The outcomes of the study suggested that there was a lack of trust among the employees of the organisation being studied, which had a negative impact on knowledge sharing behaviour because the employees withdraw from such engagement in pursuit of their safety and security. The study suggested that the heightened level of conflicts among the employees also negatively impacted their working relationships and knowledge sharing. This finding was confirmed by that of Pardo (2006), who reported that trust was a difficult thing to be achieved between employees, but that it tended to be one of the most effective drivers of knowledge sharing in an organisation. Trust needed to be achieved between those who shared and those who received information during sharing

Evident in this study was the finding that a trustworthy relationship between employees and their employer was lacking. This was mostly due to the employees' dissatisfaction regarding the rewards system in the organisation and the recent changes which made them uncertain of their jobs in the near future. Trust also proved to influence employee's motivation to share knowledge because the employees did not trust that they would be appropriately rewarded for their good acts. In support of these findings Okyere-Kwakye & Nor (2011) asserted that employees tended to refrain from knowledge sharing if they were hesitant about the possible gains; meaning that trust between employees and the organisation was established if they were certain that their engagement would not leave them at risk and was likely to benefit them.

5.4.4 Rewards and extrinsic motivation

The findings of the study showed that a rewards system and extrinsic motivation was a contributing factor to knowledge sharing at NICRO. Employees were motivated by the availability of satisfying rewards and benefits which encouraged knowledge sharing behaviour. In agreement with these findings, the Social Exchange Theory (SET) explained that human beings were commonly motivated to exchange or give anything in return for a reward (Yiu & Law, 2012). This theory

proposed that the exchange between people was often based on the principle of cost and benefit and it therefore validated the above-mentioned behaviour where employees were said to be motivated by the availability of rewards in order for them to engage in knowledge sharing.

As per the outcomes of the study, it was found that most employees were discouraged from engaging in knowledge sharing because they didn't think that the expected benefit (rewards) was worth the extra effort they put into doing their everyday jobs and sharing personally gained knowledge. This had a negative impact on their involvement in knowledge sharing because they tended to refrain from sharing knowledge as they saw it as a waste of effort and personal knowledge. These empirical findings were further validated by multiple studies which affirmed that sharing knowledge in organisations was expedited by mutual benefit (Wasko & Faraj, 2005; Yiu & Law, 2012).

The relationship between reciprocity and knowledge was also confirmed by Bartol & Srivastavaas (2008 cited in Yiu & Law, 2012) where they asserted that reciprocal rewards could possibly influence an employee's attitude towards knowledge sharing. Individuals had a tendency to measure others' abilities before they engaged in any behaviour, especially in cases where they were expected to give. Employees often avoided any form of loss; therefore they wouldn't partake in sharing with individuals who couldn't benefit them in return. It could therefore be concluded that mutual reciprocity encouraged an employee's tendency to share knowledge. Employees expected their employer to reciprocate with them when they shared their learned and experience related knowledge with others. Referring to the work of Davenport & Prusak (2002 cited in Yiu & Law, 2012), the idea of a knowledge market and reciprocity were leading factors impacting the behaviour of sharing knowledge within organisations. Moreover, Okyere-Kwakye & Nor (2011) add that shared reciprocity is among the leading contributory factors of knowledge sharing.

Likewise, the motivation based on rewards and expectations was confirmed by Vroom's Theory of Expectancy, which claimed that people were motivated to perform (share knowledge) if their expectations (getting benefits or rewards) were met at the end (Lunenburg, 2011).This theory proposed that an individual's drive to act was motivated by three principles, namely expectation, instrumentality and valance (Lunenburg, 2011). These principles simply implied that employees

had personal goals or expectations that they wanted to achieve, and they only put in extra effort for better performance if the rewards or benefits to be gained were valuable to them (Parijat & Bagga, 2014).

5.4.5 Communication

This study also found that communication was among the prominent elements that influenced knowledge sharing at NICRO. The communication channels available were believed to assist employees to socially interact with each other, and to get to know one another and build a rapport, depending on how often they communicated. In agreement with this point, Kim & Lee (2006) asserted that both formal (trainings, meetings, workshops) and informal communication among employees contributed to knowledge sharing; however formal interactions or communication platforms and arranged team work more positively enabled knowledge sharing.

The study revealed that the level of communication that NICRO employees maintained contributed positively to knowledge sharing behaviour. Both formal and informal ways of communication assisted them to communicate well which each other. Their communication channels included morning gatherings in the kitchen to make tea, informal team building activities, formal training sessions, meetings, group supervision sessions, as well as the use of electronic communication methods such as emails, telephones etc. These communication platforms and channels positively contributed to their communication levels and the knowledge sharing process. In support to these findings, Truran (2004 cited in Kim & Lee, 2006) alluded that social gatherings or informal webs inside the organisation played a significant role in sharing knowledge as persons felt at ease sharing information without the hindrance or fear of risk. The means of sharing in networks was inclusive of electronic correspondence, discussions, as well as discrete or collective relations which maintained and inspired knowledge based employee activities (Hendricks, 2004).

5.4.6 Organisational structure

This study found that organisational structure had an indirect impact on knowledge sharing and flat organisational structures were more preferable for knowledge sharing than hierarchical and complicated structures. This was because employees felt that flat structures were less complicated and had simple lines of reporting. The study further suggested that flat organisational structures facilitated communication and sped up decision making processes, which indirectly impacted the

feasibility of knowledge sharing. NICRO was said to have a more flat organisational structure, which worked well for knowledge sharing within the organisation.

In support of these findings, Al-Alawi, Yasneem & Mohammed (2007) articulated that old fashioned organisational structures were typically portrayed by muddled levels and lines of accountability regarding specific particulars of the reporting processes. In this day and age, however, most leaders understood the detriments of bureaucratic structures in decelerating procedures and increasing the limitations on the information movement within their organisations. Moreover, such structures were recognised to lengthen the amount of time taken for information to channel through and reach every level. This thus implied that complicated organisational structures tended to work against knowledge sharing because it took time for information to move from one level to the other, while flat and less complicated organisational structures worked in favour of knowledge sharing as it was easy to pass information to different levels (Al-Alawi, Yasneem & Mohammed, 2007).

In conclusion, Syed-Ikhsan & Rowland (2000 cited in Al-Alawi, Yasneem & Mohammed, 2007) concluded that knowledge sharing flourished when organisational structures facilitated rapid movement of knowledge with fewer restrictions among departments and levels in the organisation.

5.5 Technical factors affecting knowledge sharing

5.5.1 Information technology and technological equipment

This study found that NICRO employees perceived information technology and technological equipment as positively contributing to knowledge sharing behaviour. Haji (2006) confirmed these findings by suggesting that technology was one of the imperative facilitators of knowledge sharing. Furthermore, literature also proved that instituting different types of information sharing infrastructure such as the web, intranet, and electronic media enabled sharing of knowledge for everyone in the company.

One of the outcomes of the study was the establishment of positive and negative relationships between information technology, technological equipment and knowledge sharing. In agreement with this, Chias (2002 cited in Lin & Lee, 2005) also indicated that organisational infrastructure

and information technology could positively or negatively influence knowledge sharing in organisations.

The positive relationship found in the study implied that the availability and accessibility of information technology and technological equipment facilitated knowledge sharing at NICRO. Employees believed that the availability and accessibility of technological equipment enabled them to share information and knowledge without any fuss. These findings were validated by the outcomes of previous studies which concluded that a lack of knowledge sharing infrastructure such as the internet and computers were noticeable hindrances to knowledge sharing (2003 cited in Kim & Lee, 2005). The study thus established that technical infrastructure and information technology allowed workers to find updated information, and share and generate work related material. A negative relationship between these constructs meant that the absence of information technology and technological equipment negatively impacted on knowledge sharing as it made it difficult to obtain, keep and share information within the organisation.

The study also found that information technology had a negative impact on knowledge sharing because employees tended to depend on the use of technology to share knowledge, rather than interacting with their co-workers. This then affected their interpersonal relationships with their colleagues as it minimised the level of communication necessary for maintaining trust and cohesion among them. Ruggles (2003 cited in Haji, 2006) supported this finding, concluding that although technology was perceived as a crucial element of successful knowledge sharing, it was not an independent and exclusive role player in enabling knowledge sharing in an organisation.

5.5.2 Groupware

The outcomes of this study further established that groupware innovations such as email, instant messenger, Skype, video conferencing and the internet played a significant role in knowledge sharing at NICRO. Employees indicated that they often used emails, Skype and other internet-based forms of communication in order to share knowledge with their colleagues. These communication methods were reported to be time and money savers at they often used it to pass knowledge without spending money to attend meetings, trainings and conferences where knowledge was shared formally.

In support to these findings Haji (2006) remarked that the improvement of groupware reflected a change in accentuation towards utilising computers to encourage human cooperation, which was one of the conditions required for knowledge sharing to occur. Basically, this implied motivating individuals to consolidate the utilisation of groupware into their working environments. Groupware were therefore considered as instruments that facilitated knowledge sharing in organisations (Sure, 2003 cited in Evans, 2012). In addition, Al-Alawi, Yasneem & Mohammed (2007) considered electronic resources as enablers of knowledge sharing as they allowed employees to communicate often and share knowledge in both formal and informal settings.

In addition, a number of scholars have highlighted the significance of using information technology in the workplace; that of enhancing innovation, creativity, increasing an employee's knowledge base and facilitating communication within and outside the organisation (Lin & Lee, 2005). Information technology helped staff members to learn new things and exchange information at a faster rate. For instance, workers used computer intervened correspondence such as email, intranet, Skype, and group practices so that they could stay informed and updated with information that related to their work (Lin & Lee, 2005). Thus, as per the research outcomes and confirmation of the current literature, it was concluded that groupware innovations and internet usage played a significant role in enhancing knowledge sharing in the workplace.

5.5.3 Competency using technological equipment and software

This study found that computer usage skills and abilities influenced knowledge sharing at NICRO. The study further indicated that the competency of employees in using technological equipment, programs and software had an encouraging influence on sharing knowledge, as they use their own expertise to share information. In support of this, Kim & Lee (2006) remarked that the degree to which employees used information technology and modern equipment had a positive effect on knowledge-sharing. This was mainly because the degree of perceived ease of using information technology applications influenced the employee's knowledge-sharing capabilities.

The study also ascertained that the absence of information technology skills had a negative impact on knowledge sharing because it prevented unskilled employees from taking advantage and using technology to share knowledge. In agreement with this finding, Dyer (year cited in Haji, 2006)

emphasised that even though technology was essential for enabling sharing of knowledge, computer skills were also necessary to produce the desired results; implying that complicated or non-user friendly devices or technological equipment, software or systems discouraged and prevent employees from attempting to share and transfer information.

In support of this view Branscomb (year cited in Kim & Lee (2006) argued that the presence of technological equipment as well as an information technology system was not sufficient to facilitate knowledge sharing if the employees or users were not knowledgeable or skilled to use the assets. The study therefore established that a lack of information technology skills could have a negative impact on knowledge sharing as 'non privileged' employees were unable to use technology to share knowledge.

5.6   Conclusion

This chapter presented the analysis and discussion of the findings of the study. The study outcomes were discussed in relation to the contemporary literature, and in terms of individual, organisational as well as technological factors influencing knowledge sharing in the organisation studied. The next chapter will consist of the conclusion and recommendations.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS CHAPTER

6.1 Introduction

The previous chapter presented the discussion and interpretation of the findings of this study, and this chapter presents the conclusion and recommendations of the study. These recommendations and conclusion will also be divided according to the individual, organisational and technological factors that evolved in the study. The conclusion is based on the findings of the study, while the recommendations are informed by the main findings of this study.

6.2 Individual factors influencing knowledge sharing

The outcomes of this study indicated that there were numerous factors that influenced knowledge sharing in the organisation under study. Factors such as awareness, personality, self-efficiency and altruism, motivation, as well as job satisfaction evolved as the key personal factors that influenced knowledge sharing among the employees at NICRO. These findings were in line with the conceptual framework of the study as Bakhari & Zawiyah (2012) reported that individual factors influencing knowledge sharing were inclusive of elements such as the employees' attitude, beliefs, perceptions, personality, awareness, trust, job satisfaction and so forth. These factors were reported to have a direct impact on the interpersonal relationships between the individuals, and were seen to be intertwined with other factors that influenced knowledge sharing among the employees in the organisation studied. Although each factor could not be considered as the sole drivers of knowledge sharing behaviour, they never the less played a significant role in the process.

6.3 Organisational factors influencing knowledge sharing

The study ascertained that factors such as organisational structure, organisational culture, rewards system, extrinsic motivation, management style and support for employees, trust, communities of practice, social capital and communication were the main factors influencing knowledge sharing at NICRO. The outcomes suggested that these factors had a negative and sometimes positive relationship with knowledge sharing, hence it was essential for the company to know about these

factors and how they impacted the knowledge sharing behaviour. These findings were well in accordance with the writing of Bakhari & Zawiyah (2012) who asserted that organisational factors impacting knowledge sharing included the organisational culture, leadership style, the office lay out, the organisational structure and leadership style/ management and so forth.

6.4 Technological factors impacting knowledge sharing

The study revealed that factors such as information technology, technological equipment, groupware as well as the employees' skills in using the technological equipment were the main technological factors that influenced knowledge sharing at NICRO. The findings highlighted that technological factors contributed positively to knowledge sharing behaviour in this organisation, however, it did not replace the human factor that assumed a leading role in the process. These findings were in line with those of Haji (2006) who denoted the three foremost technologies that facilitated knowledge sharing as corporate intranets, knowledge repositories and groupware. Another study which lent credence to the finding of this study was that of Lin & Lee (2005), who also concluded that the internet, intranet, social media and computer equipment were technological equipment and means that positively influenced knowledge sharing in an organisation.

6.5 Recommendations

- This study found that employees of the organisation studied have minimal motivation to engage in knowledge sharing due to the unsatisfactory rewards and benefits they receive for doing so. It is therefore recommended that the organisation review its current reward system and try to introduce incentives and rewards that will encourage employees to engage in knowledge sharing behaviour.

- The outcomes of the study suggest that the organisational culture at NICRO does not support or encourage knowledge sharing among employees, as most employees have little or no interest in learning or attaining new information that will improve their knowledge. It is therefore recommended that the organisation create or facilitate an organisational culture that will enable and encourage knowledge sharing among its employees.

- The study also revealed that there was a lack of trustworthy relationships among the employees at NICRO, and this hindered knowledge sharing as the employees lack trust in each other. It is therefore recommended that the employer organise social activities such as teambuilding exercises in order to promote social cohesion and rapport building among the employees.

- There was a lack of trust between the employees and their employer. A recommendation to improve this situation is for the organisation to re-establish a trustworthy relationship with their employees (especially in terms of rewards, job security etc.), by ensuring job security so that employees know that their jobs are secure and that they will not be retrenched suddenly. Establishing a trustworthy relationship between employees and employer will yield a positive outcome and impact positively on knowledge sharing.

- It is also recommended that the organisation work on factors such as the employees' job satisfaction and motivation because the lack of such factors has a negative impact on the process of knowledge sharing. Improving on the reward system and looking after the employees' interests will assist in motivating employees and restoring trust between the employer and their employees. Acknowledging and appreciating the individuals' contributions to achieving the organisational goals could motivate them and help them to find meaning in their jobs. This is mainly recommended because the study revealed that the poor level of job satisfaction was one of the factors that influenced knowledge sharing in this organisation, more especially because these employees seemed less than satisfied with their jobs.

- The study ascertained that the management of the organisation under study was not very involved in knowledge sharing. In order to address this it is recommended that the management take a leading role in this process and give their full support and encouragement to their employees so that they may be motivated to engage in the knowledge sharing process.

- Lack of computer skills and an inability to use upgraded computer programs also emerged as one of the factors that hindered knowledge sharing at NICRO. It is recommended that

the organisation offer continuous workshops and training to equip the staff with computer skills, especially if a new program is introduced in the company. This will encourage the use of modern devices and programs to share knowledge among the employees and beyond.

- It is also recommended that the organisation (employees and management) pay full attention to knowledge management strategies and introduce approaches that will ensure the management of knowledge and avoid knowledge erosion in their work place. Continuous monitoring and reviewing of knowledge management strategies and policies should be undertaken.

6.6 Future Research

- There is a need for research about the practical ways of improving knowledge sharing in the organisation. This is because, although the factors have been studied, organisations often need a practical guide on what they can do to enhance the knowledge sharing behaviour in their organisations.

- There also needs to be a study on the relationship between knowledge sharing and job performance. It is believed that the findings of such a study will help the employer to see how knowledge sharing can contribute to the growth and outstanding performance of the organisation.

- A study should also be conducted on the effects of knowledge erosion, which is a result of a loss of significant knowledge in the organisation. The researcher believes that the findings of such a study will provide insight into how imperative it is to practise knowledge management in every organisation, so they don't suffer the consequences of knowledge erosion by losing their competitive advantage.

6.7 Conclusion

The study revealed that NICRO is a non-governmental organisation that successfully engages in knowledge sharing. Although loopholes and shortcomings were identified as hindrances to sharing knowledge among the employees, significant factors that positively influenced knowledge sharing were also established. The study indicated that individual factors such as personality, awareness, self-efficiency and altruism impacted knowledge sharing in the organisation under study, whereas organisational factors that influenced this behaviour at NICRO were those of trust, the rewards system, motivation, communication, the organisational structure, the organisational culture, and the management style and support. Factors such as information technology, technological equipment, groupware, as well as computer skills were found to be prominent technological factors that impacted the knowledge sharing at NICRO.

Some of these factors were found to have a positive relationship with knowledge sharing while some were concluded to have negative relationship with this behaviour; thus it is recommended that factors that proved to have a positive relationship with knowledge sharing be considered for future planning in strategies and policies aimed at maintaining knowledge in the organisation.

REFERENCES

Abdullah, R., Selamat, M.H., Sahibudin, N.L.and Alias, R.A. (2005). A framework for knowledge management system implementation in collaborative environment for higher learning institution. *Journal of Knowledge Management Practice,* Vol .6 No. (1): 65-115.

Al-Alawi, S., Yasmeen, N. and Mohammed, S. (2007). Organisational culture and knowledge sharing: critical success factors. *Journal of Knowledge Management*, Vol. 11, No. (2): 22-42.

Alawamleh, H. and Kloub, M. (2013). Impact of organisational structure on knowledge management in the Jordanian insurance companies: from the perspective of the supervisory leadership. *International Journal of Business and Social Science,* Vol. 4, No. (11): 49-61.

Avdimiotis, S., Kokkinis, G. and Kamenidou, E., (2012). Sharing knowledge between the peers of a winery network: The case of wine routes in Northern Greece. *China-USA Business Review*, Vol.11, (1) :15-38

Bakhari, M. and Zawiya, M. (2010). The Impact of individual factors on knowledge sharing quality. *Journal of Organisational Knowledge Management*, Vol. 2, No. (3): 65-79.

Bakhari, M. and Zawiyah, M. (2012). Factors affecting knowledge sharing in public organisations in Malaysia. Malaysia: University of Malaysia.

Bakhari, M. and Zawiyah, M. (2013). Knowledge sharing in the public sector in Malaysia: a proposed holistic model. Malaysia: University of Malaysia.

Bandura, A. (2004). Health promotion by social cognitive means. *Health Education & Behaviour,* Vol. 31, No. (2): 143–164.

Berends, H. (2005). Exploring knowledge sharing: moves, problem solving and justification. *Knowledge Management Research & Practice*, Vol. 3, No. (2): 97-105.

Besser, A. and Shackelford, T. (2007). Mediation of the effects of the big five personality dimensions on negative mood and confirmed affective expectations by perceived situational stress: a quasi-field study of vacationers. *Personality and Individual Differences*, Vol. 42, No. (7): 1333-1346.

Bock, G. and Kim, Y. (2005). Behavioural intention formation in knowledge sharing: examining the roles of extrinsic motivators, social-psychological forces, and organisational climate.*MIS quarterly*, Vol. 29, No. (1): 87-111.

Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, Vol. 3, No. (2): 77–101.

Certo, S.C. and Certo, S.T. (2011). Modern management: concepts and skills. (12th ed.). Upper Saddle River NJ: Pearson Prentice Hall.

Chai, S., Das, S. and Rao, R. (2014). Factors affecting bloggers' knowledge sharing: an investigation across gender. *Journal of Management Information Systems*, Vol. 28, No. (7): 134 -178.

Chebbi, M., Bradshaw, R. and Oztel, H. (2015). Leadership and knowledge sharing. *Asian Journal of Business Research.* Special Issue no. (10): 14707- 150001.

Chen, Y. (2008). Relationship between leadership behaviours and knowledge sharing in professional service firms engaged in strategic alliances. Taichung City: Chungchou Institute of Technology.

Chen, C. and Hsieh, C. (2015). Knowledge sharing motivation in the public sector: the role of public service motivation. *International Review of Administrative Sciences*, Vol. 81, No. (4): 812–832.

Chetty, N. (2016). NICRO, Pietermaritzburg office manager.

Chihab, B. (2009). Barriers to knowledge management: a theoretical framework and a review of industrial cases. World Academy of Science, Engineering and Technology. Town or city: University of Malaysia.

Chou, S. and Tsai, Y. (2004). Knowledge creation: individual and organisational perspectives. *Journal of Information Science*, Vol. 30, No. (3): 205–218.

Covey, S. and Merrill, R. (2006). The speed of trust: the one thing that changes everything. Town or city: Free Press.

Crawford, C. (2006). Exploring the relationship between knowledge management and transformational leadership. Knowledge management and leadership. Fort Hays State University.

Creswell, J. (2007). Qualitative enquiry and research design: choosing among five traditions (2nd ed.).Thousand oaks: Sage Publications Ltd.

Creswell J. (2009). Research design: qualitative, quantitative and mixed method approaches. (3rd ed.). Town or city: Sage Publications.

Cross, S. and Levin, D. (2004). The strength of weak ties you can trust: the mediating role of trust in effective knowledge transfer. *Institute for Knowledge-Based Organisations,* Vol. 50, No. (11): 1477 - 1490.

De Clercq, D., Dimov, D. and Thongpapanl, N.T. (2013). Organisational social capital, formalisation, and internal knowledge sharing in entrepreneurial orientation formation. *Entrepreneurship Theory and Practice*, Vol. 37, No. (3): 505-537.

De Jong, J.P. and Den Hartog, D.N., (2007). How leaders influence employees' innovative behaviour. *European Journal of innovation management*, Vol. 10 No.(1) :41-64.

Easterby, P., Smith, M. and Prieto, I.M. (2008). Dynamic capabilities and knowledge management: an integrative role for learning? *British Journal of Management,* Vol. 19, No. (3): 235-249.

Evans, M. (2012). Knowledge sharing: an empirical study of the role of trust and other social-cognitive factors in an organisational setting. A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy. University of Toronto.

Frank, D., Finnegan, R. and Taylor, C. (2004). The race for talent: retaining andengaging workers in the 21st century. *Human Resource Planning*, Vol. 1, No. (1): 12-25.

Gupta, B. (2008). Role of personality in knowledge sharing and knowledge acquisition behaviour. *Journal of the Indian Academy of Applied Psychology*, 34(1): 143-149.

Hancock, B., Ockleford, E. and Windridge, K. (2009). *An introduction to qualitative research*. National Institute for Health Research. Johannesburg: Midlands Publishers.

Haji, M. (2006). Knowledge sharing: improving the central component of knowledge management. School of industrial and manufacturing science. Master's thesis.

Cranfield University.

Hendricks, P. (2004). Assessing the role of culture in knowledge sharing. Nijmegen School of Management. University of Nijmegen. The Netherlands.

Hew, K.F. and Hara, N. (2007). Knowledge sharing in online environments: a qualitative case study. *Journal of the Association for Information Science and Technology*, Vol. 58, No. (14): 2310-2324.

Hoffman, J., Hoelscher, L. and Sherif, K. (2005). Social capital, knowledge management, and sustained superior performance. *Journal of Knowledge Management*, 9(3): 93-100.

Hsu, N., Teresa, L., Yen, T. and Chang, S. (2006). Knowledge sharing behaviour in virtual communities: the relationship between trust, self-efficacy, and outcome expectations. *International Journal of Human-Computer Studies*, Vol. 65, No. (11): 153–169.

Islam, S., Hasan, P. and Sarwar, T. (2011). Organisational culture and knowledge sharing: empirical evidence from service organisations. *African Journal of Business Management,* Vol. 5, No. (14): 5900-5909.

Ismail, M.B. and Yusof, Z.M. (2010). The impact of individual factors on knowledge sharing quality. *Journal of Organizational Knowledge Management*, Vol. 2, No. (13): 72-85.

Keen, P. (2006). Knowledge mobilisation: the challenge for information professionals. Proceedings of the Asia Pacific Conference on Library & Information Education & Practice, Singapore, 3-6 April 2006. Singapore: School of Communication & Information, Nanyang Technological University, 1-19.

Kerry, B., Smith, P. and Feldman, M. (2004). What is altruism? *Trends in Ecology and Evolution*, Vol.19, No. (3): 135–140.

Kerry, M. and Clegg, C. (2007). Sharing knowledge: contextualising socio – technical thinking and practice. *The Learning Organisation,* Vol. 14, No. (5): 423-435.

Khesal, S., Samadi, H., Musriyama, H., Musram, B. and Mahmood, Z. (2013). The impact of trust on knowledge sharing. *Interdisciplinary Journal of Contemporary Research in Business,* Vol. 5, No. (2): 285–306.

Kim, S. and Lee, H. (2006). The impact of organisational context and information technology on employee knowledge-sharing capabilities. *Social Science Journal*, Vol. 66, No. (3): 370-385.

Kruger, C.N. and Johnson, R.D. (2013). Knowledge management according to organisational size: a South African perspective. *SA Journal of Information Management*, Vol. 15, No. (1): 1 - 11.

Larsen, R., and Buss, D. (2005). *Personality psychology: domains of knowledge about human nature.* (2nd ed.). New York: McGraw Hill.

Leonard, D. (2005). *Wellsprings of knowledge: building and sustaining the source of innovation*. Boston: Harvard Business School Press.

Leopold, H., Pittke,F. and Ahrend, N. (2014) Barriers and strategies of process knowledge sharing in public sector organizations. In Multikonferenz Wirtschaftsinformatik.

Lin, H. and Lee, G. (2005). Effects of socio-technical factors on organisational intention to encourage knowledge sharing. *Management Decision*, Vol. 44, No. (1): 74-88.

Lin, S., Hung, T. and Chen, N. (2009). Fostering the determinants of knowledge sharing in professional virtual communities. *Computers in Human Behaviour*, Vol. 25, No. (94): 929–939.

Lunenburg, F. (2011). Expectancy *Theory of Motivation: Motivating by Altering Expectations*. London: Heinemann Publishers.

Mannie, A., Van Niekerk, H. and Adendorff, C. (2013). Significant factors for enabling knowledge sharing between government agencies within South Africa. *SA Journal of Information Management,* Vol. 3, No. (2): 49-58.

Martins, C. and Martins, N. (2011).The role of organisational factors in combating tacit knowledge loss in organisations. *Southern African Business Review,* Vol. 15, No. (1): 49-68.

Mathis, R.L. and Jackson, J.H., (2010). Human Resource Management US: South-Western Learning.

Naicker, K. (2010). Perceptions of human resource information system usage for knowledge management in the context of human resource management. Master of Human Resource Management. University of KwaZulu-Natal. South Africa.

Nonaka, I. and Takuechi, H. (2009). Perspective -tacit knowledge and knowledge conversion: controversy and advancement in organisational knowledge creation theory. *Organisation Science,* Vol. 20, No. (3): 635 - 652.

Noor, A., Hashim, H. and Ali, N. (2012). Factors influencing knowledge sharing in organisations: a literature review. *International Journal of Science and Research*, Vol. 3, No.9:125-137.

Noor, A., Hashim, H. and Ali, N. (2014). Factors influencing knowledge sharing in Malaysia. *International Journal of Science and Research,* Vol. 2, No. (5): 99-124.

Noor, S. and Salim, N. (2012). The influence of theories on factors affecting knowledge sharing and its relationship with innovation and organisational performance. *Knowledge Management* International Conference (KMICe). Vol.2, No. (1): 509-514

Nor, A. and Ismail, M. (2012). Key determinants of research-knowledge sharing in UK higher education institutions. Town/city: University of Portsmouth.

Okyere-Kwakye, E. and Nor, N. (2011). Individual factors and knowledge sharing. *American Journal of Economics and Business Administration,* Vol. 3, No. (1): 66-72.

Oliver, S. and Kandadi, K. (2006). How to develop knowledge culture in organizsations? A multiple case study of large distributed organisations. *Journal of Knowledge Management*, Vol.10, No. (4): 6-24.

Oye, D., Mazleena, S. and Noorminshah, A. (2011). Knowledge sharing in workplace: motivators and demotivators. *International Journal of Managing Information Technology,* Vol. 3, No. (4): 71–84.

Pardo, T. (2006). Knowledge sharing in cross-boundary information systems development. *Journal of Information Technology and Management*, Vol. 7, No. (4): 293-313.

Parijat, S. and Bagga, N. (2014). Victor Vroom's expectancy theory of motivation–an evaluation. *International Research Journal of business and Management,* Vol. 6, No. (5): 59-71.

Peterson, W. (2015).*NICRO annual report*. Cape Town: Juta.

Quintas, P. (2005). The nature and dimensions of knowledge management. *Knowledge Management in Construction*, Vol. 1, No. (1): 10-30.

Ritchie, J., Lewis, J., Nicholls, C.M. and Ormston, R. (2013). Qualitative research practice: A guide for social science students and researchers. Sage.

Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management*, Vol. 9, No. (3): 18-35.

Riggio, R. (2015). *Introduction to industrial and organisational psychology*. Milton Park: Routledge.

Robbins, S.P. (2009). Organisational behaviour, (13th ed.). New York: Pearson Education.

Scott, W.R. and Davis, G.F. (2015). *Organisations and organising: Rational, natural and open systems perspectives*. New York: Routledge.

Sekaran, U. and Bougie, R., (2010). *Research Methods for Business: A Skill building approach*. UK: John Wiley.

Small, C. and Sage, A. (2006). Knowledge management and knowledge sharing: a review. *Information Knowledge Systems Management*, Vol. 5, No. (4): 153-169.

Thomas, E. (2005). Knowledge management in the public and private sector: a synthetic analysis the contemporary literature. Master's Thesis. Pennsylvania State University.

Tobin, P. and Volavsek, P. (2006). Knowledge management measurement in South Africa. *Mousaion Journal*, Vol. 24, No. (1): 96–118.

Tocan, M.C. (2012). Knowledge based strategies for knowledge based organisations. *Journal of Knowledge Management*, *Economics and Information Technology*, Vol. 2, No. (6): 167-177.

Tsoukas, H. (2005). *Do we really understand tacit knowledge? Complex knowledge: studies in organisational epistemology*. New York: Oxford University Press.

Van den Brink, P. (2003). Social, organisational and technological conditions that enable knowledge sharing. PhD thesis, University of Amsterdam, Holland.

Wagner, C., Kawulich, B. and Garner, M. (2012). *Doing social science research: a global context*. Maidenhead: McGraw –Hill education.

Wasko, M. and Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, Vol. 29, No. (1): 35−47.

Wiig, K. (2012). *People-focused knowledge management*. Burlington: Butterworth-Heinemann.

Yiu, M. and Law, R. (2012). Factors influencing knowledge sharing behaviour: a social-psychological view in tourism. *Journal of Service Science*, Vol. 3, No. (2): 12-31.

Yong, C., Chong, W. and Yong, N.,Yew, S. (2011). Do the big five personality factors affect knowledge sharing behaviour? A study of Malaysian universities. *Malaysian Journal of Library & Information Science,* Vol. 16, No. (1): 47-62.

Yusof, M., Ismail, M., Ahmad, K. and Yusof, M. (2012). Knowledge sharing in the public sector in Malaysia: A proposed holistic model. *Information Development,* Vol. 28, No. (1): 43‑54.

APPENDIX A
IN-DEPTH INTERVIEW GUIDE

WELCOMING REMARKS (RESEARCHER)

I will first greet the participant, introduce myself and then invite the participant to do the same.

PURPOSE OF THE INTERVIEW (MODERATOR)

I will inform the respondent that all issues to be discussed are of great importance for understanding the effectiveness of knowledge sharing in the organisation.

I will encourage respondents to feel free to express their views. I will remind them that there are no right or wrong answers, hence their views are very important. I will make it clear that this research is mainly aimed at eliciting information that will contribute towards understanding the factors influencing knowledge sharing in the organisation. I will advise respondents of their entitlement to their own opinions. All respondents will be informed as to the duration of the interview and a request will be extended to record the whole interview session.

INTERVIEW

I will start the interview by posing a general question on the participant's understanding of knowledge sharing in the organisation. I will then briefly explain how literature describes knowledge sharing, especially in the organisational context. Then I will ask the specific questions stipulated below:

Questions to be asked for compiling a biographical profile

1. How old are you?
2. What is your position in the organisation?
3. What is your educational level (qualifications)?
4. How long have you been in this organisation?

Questions focusing on the topic of my research

5. What is your understanding of knowledge sharing in the workplace?
6. What is your perception regarding the necessity of knowledge sharing in the organisation?
7. In your perception, does knowledge sharing take place in your organisation?
8. If yes, to what extent? If no, why do you say so?

9. What are the individual (personal) factors e.g. personality, age, culture, background, educational level, motivation etc. that influence knowledge sharing in your workplace and how?

10. What are the technical factors (e.g. technical infrastructure/ resources, technical skills) that influence knowledge sharing in your workplace and how?

11. What are the organisational factors (management support, organisational culture, management style, structure of communication, organogram, rules, incentives or motivation etc.) that influence knowledge sharing in your organisation and how?

12. In your opinion, how can knowledge sharing be facilitated among your colleagues in your workplace in order to manage organisational knowledge successfully?

CLOSING REMARKS

I will offer an opportunity for any short final comments that the participants may wish to make.

Thank you very much for your invaluable input to the research project, would you like to make any last comments? The information you provided will be vital in my research dissertation contributing to the understanding of the factors affecting knowledge sharing at NICRO.

UNIVERSITY OF KWAZULU-NATAL
School of Management, IT and Governance

Dear Respondent,

Research Project

Researcher: Nosipho Mkhwanazi   .Telephone number: 073 859 4768   Email:nosipho40@yahoo.com

Supervisor: Dr. Given Mutinta. Telephone number: 031 260 8854   Email: mutinta@ukzn.ac.za

Research Office: Humanities & Social Sciences Research Ethics Administration, Govan Mbeki Building, Westville Campus, Tel: + 27 (0)31 260 8350, Email: hssreclms@ukzn.ac.za

I, Nosipho Mkwanazi am an MCOM (Master of Commerce) student in the School of Management, Information Technology and Governance, at the University of KwaZulu-Natal. You are invited to participate in a research project entitled 'Exploring factors affecting knowledge sharing at the National Institute for Crime Prevention and Reintegration of Offenders (NICRO) in Pietermaritzburg. The aim of this study is to explore the individual, organisational and technological factors that influence knowledge sharing at NICRO in Pietermaritzburg.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time, with no negative consequences. There will be no monetary gain from participating in this research project. Confidentiality and anonymity of records will be maintained by the researcher and the School of Management, Information Technology and Governance at UKZN. All collected data will be used solely for research purposes and will be destroyed after five years.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number HSS / 1708/ 016M).

The interview will take about 45-60 minutes/s to complete. Thank you for your time.

Yours sincerely

Nosipho Mkwanazi

(Researcher)

_____   Date : 29/09/2016

This page is to be retained by participant

UNIVERSITY OF KWAZULU-NATAL
School of Management, IT and Governance

Research Project

Researcher: Nosipho Mkhwanazi   .Telephone number: 073 859 4768   Email:nosipho40@yahoo.com

Supervisor: Dr. Given Mutinta. Telephone number: 031 260 8854   Email: mutinta@ukzn.ac.za

Research Office: Humanities & Social Sciences Research Ethics Administration, Govan Mbeki Building, Westville Campus, And Tel: 27 31 2604557, Email: HSSREC@ukzn.ac.za

CONSENT

I_____ (full   names   of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project. I understand that I am at liberty to withdraw from the project at any time, should I so desire.

Additional consent, where applicable.

I hereby provide consent to:

Audio-record my interview / focus group discussion   YES / NO

Video-record my interview / focus group discussion   YES / NO

Use of my photographs for research purposes   YES / NO

_____   _____

Signature of Participant   Date

This page is to be retained by researcher

APPENDIX D

DECLARATION LETTER

This is to declare that Nosipho Mkhwanazi will ensure that the respondent's privacy is protected. I will not use the participant's name in any of the information received from this study or in any of the research reports. Any information received in the study will be recorded with a code number that will be secured. When the study is completed, the key that shows which code number goes with your name will be destroyed. Participants have the right to withdraw from the study at any time without any negative consequences.

I also confirm that the respondents have the right to withdraw from the study at any time without any negative consequence.