

Knowledge sharing in public service: a case study of the KwaZulu-Natal Provincial Human Resource Development Forum

by

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DECLARATION

I Nthabiseng Nteboheng Mosala-Bryant declare that:

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DEDICATION

I dedicate this thesis to my late mother who got her first degree at sixty years old and whose memory drove me to pursue my studies. Special dedications also go to my daughter Pontsho Mosala, who kept saying I am her inspiration and my sister, Lolo Mini, who flattered me with the title, 'my hero'.

ABSTRACT

Knowledge sharing has been identified as the core process of knowledge management. The aim of this study was to explore knowledge sharing practices in the South African public service through the lens of communities of practice. The KwaZulu-Natal (KZN) Provincial Human Resource Development Forum (PHRDF) was used as a case study in order to explore the following objectives: how knowledge sharing occurs, what factors affected knowledge sharing, what the challenges experienced regarding knowledge sharing were and what strategies were used to overcome these challenges. The study also assisted in adding to the literature regarding knowledge sharing in human resource development communities of practice.

Knowledge sharing practices were identified through the lens of motivation theory, Klein's framework of communities of practice theory, the Socialization, Externalization, Combination, and Internalization (SECI) model and social exchange theory. The study used the triangulation approach where both the qualitative and quantitative methods were used, with the quantitative method being the dominant method. Both quantitative and qualitative data were gathered simultaneously during a single phase of data collection. The primary purpose was to gather quantitative data through a structured questionnaire consisting of both closed and open-ended questions. The secondary purpose was to gather qualitative data thorough a semi-structured interview schedule. The population surveyed consisted of 23 respondents from the PHRDF and the interviewees were ten Senior Managers in Human Resource Development (HRD) from ten different Provincial departments. The quantitative and qualitative data analyses were kept separate and the results for the quantitative analysis were established using Statistical Package for the Social Science (SPSS) whilst the results for the qualitative data analysis were established using Non-numeric, Unstructured Data*, Indexing, Searching and Theorizing software known as NUD*IST which was later known as NVIVO.

The findings of the study revealed that the level of knowledge sharing in the PHRDF was high and knowledge sharing was regarded as very important by both the respondents and the interviewees. Knowledge sharing mainly occurred through interactions during the PHRDF meetings such as discussions of pertinent items in the agendas, presentations of new developments in HRD by experts from national departments as well as documents posted on the Department of Public Service and Administration (DPSA) website. It was clear that the Socialization phase of the SECI model took prominence over other phases during knowledge sharing in the PHRDF. The findings also revealed that members of the PHRDF were intrinsically motivated to share knowledge and extrinsic motivators such as incentives and rewards did not influence the willingness to share knowledge. Challenges regarding knowledge included the absence of an institutional repository or knowledge portal that kept knowledge shared during PHRDF meetings and for storing organisational memory. There was low use of information and communication technologies (ICTs) such as social media, emails and online discussion forums in a virtual community for sharing knowledge. Irregular PHRDF meetings further compromised opportunities for members to meet and share best practices and new developments.

Strategies to overcome these challenges as suggested by the study's findings included the development of a knowledge management policy or strategy which would enable knowledge sharing to be formalised as well as developing a knowledge portal. The findings also suggested the exploitation of modern communication technology such as social media, however, it was emphasized that social media needed to be managed and controlled for work-related knowledge sharing purposes. Based on the results and findings of the study, recommendations were made at the end of the study. Recommendations included the development of a knowledge management framework and policy that would accommodate the formalisation of knowledge sharing, the establishment of knowledge management units in the Provincial Departments, the improvement of the use of ICTs other than websites and inclusion of modern knowledge sharing systems, the establishment of knowledge repositories for ensuring access to organizational memory and the development of knowledge sharing strategies such as rewards and incentives during performance assessments.

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LIST OF ACRONYMS AND ABBREVIATIONS

ATR Annual Training Reports

BTech Bachelor of Technology

CAQDAS Computer Assisted Data Analysis Software

CI Centre for Innovation

CIP Compulsory Induction Programme

CoP Community of Practice

CoPs Communities of Practice

DDG Deputy Director-General

DEDT Department of Economic Development and Tourism

DG Director-General

DPSA Department of Public Service and Administration

ETDP SETA Education, Training and Development Practices Sector Education

and Training Authority

Exco Executive Committee

FCS Family Violence, Child Protection and Sexual Offences

GITOC Government Information Technology Officers Council

HIV/AIDS Human Immunodeficiency Virus/ Acquired Immune Deficiency

Syndrome

HRD Human Resource Development

HRDS Human Resource Development Strategy

HRM Human Resource Management

ICT Information and Communication Technology

IT Information Technology

KIM Knowledge and Information Management

KM Knowledge Management

KMF Knowledge Management Framework

KRMDIOF KwaZulu-Natal Records Managers and Deputy Information Officers

Forum

KZN KwaZulu-Natal

KZN HRDS KwaZulu-Natal Human Resource Development Strategy

KZNPA KwaZulu-Natal Provincial Administration

MANCO Management Committee

MIS Management Information Systems

NHRDS National Human Resource Development Strategy

NKMF National Knowledge Management Framework

NKMS National Knowledge Management Strategy

NPM New Public Management

NSG National School of Government

OECD Organization for Economic Cooperation and Development

OTP Office of the Premier

PA Provincial Administration

PA Personal Assistant

PA Performance Agreement

PAIA Promotion of Access to Information Act

PGDP Provincial Growth and Development Plan

PHRDF Provincial Human Resource Development Forum

PHRDS Provincial Human Resource Development Strategy

PKMS Provincial Knowledge Management Strategy

PPC Provincial Planning Commission

PPSTA Provincial Public Service Training Academy

PSC Public Service Commission

PSETA Public Service Sector Education and Training Authority

PSR Public Service Regulations

RSS Rich Site Summary

SA South Africa

SDF Skills Development Facilitator

SECI Socialization, Externalization, Combination and Internalization

SETA Sector Education and Training Authority

SITA State Information Technology Agency

SMS Seta Information System

SPSS Statistical Package for Social Sciences

TPB Theory of Planned Behaviour

WSP Workplace Skills Plan

CHAPTER ONE

INTRODUCING THE STUDY

1.1 Introduction

Knowledge sharing is an integral part of knowledge management as it is through sharing, that knowledge can be expanded throughout the organization. Considering the fact that organizations thrive on what their employees know, it is apparent that knowledge is a crucial resource that needs to be managed the same way finance for example, is managed. This study is concerned with exploring whether knowledge sharing occurs in public service and whether communities of practice play a role in promoting knowledge sharing in public service. This introductory chapter outlines broader issues to be investigated regarding the implications of knowledge sharing in the public service, highlights the background and outline of the research problem, defines key terms and concepts used in the study, and provides principal theories upon which the research project is constructed, it also gives an overview of the research methodology and methods used by the study and the structure of the thesis.

1.2 Broader issues to be investigated

This section provides a brief outline of the broader issues to be investigated pertaining to knowledge sharing in the public service. The broader issues this study falls within include how knowledge sharing among public servants could contribute to the improvement of service delivery and assist in developing strategies and policies for knowledge management.

1.2.1 Service delivery

According to the Public Service Act 1994 as amended by Act 30 of 2007, the public service shall consist of persons who are employed in posts on the establishment of departments and additional to the establishment of the departments (Department of Public Service and Administration (2014). Within the public administration there is a public service for the Republic of South Africa, which must function and be structured in terms of national legislation, and which must loyally execute the lawful policies of the

government of the day (Department of Justice 1996). The Minister of Public Service and Administration is responsible for public service administration. According to the Public Service Act of 1994 as amended, the Minister of Public Service and Administration is responsible for establishing the norms and standards relating to transformation, reform, innovation and any other matter that will improve the effectiveness and efficiency of the public service and its service delivery to the public (Department of Public Service and Administration 2014).

One of the implications of knowledge management is the strategic alignment of organizations to their clients to provide better services to their clients by gaining a better understanding of their clients' needs (Gaffoor and Cloete 2010). Governments are increasingly being required to determine, define, and forecast the needs of their citizens as clients and to develop, modify and adjust services to match these needs (Durrant 2001). Durrant (2001) further suggested that if governments would work within the context of knowledge management, solutions to these needs could be provided. South Africa had experienced a surge of service delivery protest as prompted by the demand for transparency about the use of public funds, detection of anti-competitive behaviours and a growing demand for accountability (Ondari-Okemwa and Smith 2009; Steyn and Kahn 2008).

Among the noticeable human resource problems in the South African government is the high vacancy level in occupations such as engineering, health practitioners as well as practitioners in financial services. Many of Africa's well educated people are permanently leaving the continent at an alarming rate hence initiatives had been introduced to allow African countries to benefit from their citizens in Diaspora (Cortez, Britz and Mullins 2011). The goal of these networks is to maximize the use of knowledge and expertise of expatriates in such a way that contributes to Africa's development (Cortez, Britz and Mullins 2011).

There is a need to manage increasing complexity as changes in strategic direction may result in the loss of knowledge in a specific area. Government often led by political leadership may be required to utilize the 'lost' knowledge but the employees with such

knowledge may no longer be available (Durrant 2001). This could impact negatively on service delivery. The KwaZulu-Natal Provincial Human Resource Development Forum (KZN PHRDF) as a community of practitioners responsible for capacitating public servants with knowledge to improve their skills in order to effectively deliver on government services, would be expected to lead the practice of knowledge sharing. If government could look to its own employees in terms of managing the knowledge it creates and produces, service delivery could be increased significantly.

1.2.2 Policy making and knowledge management

According to Du Toit and Van der Walt (1997), policy making is one of the main functions of public administration. They defined policy making as an umbrella process regarding a series of functions carried out to decide on a plan of action to achieve certain objectives. The ability to make policies that seek to improve service delivery depends on the knowledge public servants possess. As public servants, the KZN PHRDF should be involved in the formulation of the knowledge management strategies and knowledge management policies for the Provincial Administration (PA) of KwaZulu-Natal (KZN). Although it is recommended that to be effective, a knowledge management programme should encourage sharing of knowledge and information, however, its introduction will not necessarily mean that the relevant public servants will be willing to share their knowledge (Ondari-Okemwa and Smith 2009).

There has been a steady inclination towards knowledge management in the South African public sector. This was evident when the Department of Public Service and Administration (DPSA) identified knowledge management as one of the key managerial skills for senior managers (Gaffoor and Cloete 2010). A Learning Networks Guide has been made available on the DPSA website in order to assist the public service in facilitating the sharing of knowledge by establishing learning networks (Learning and Knowledge Management Unit 2003). Another development is the appearance of knowledge management as one of the initiatives of organizations efficiency pillars that need to be implemented in order for the National Human Resource Development Strategy (NHRDS) to function effectively. The inclusion of knowledge management in the NHRDS indicates the presence of an awareness to share knowledge among

employees in order to improve service delivery in the South African public service. According to Mabery, Gibbs-Scharf and Bara (2013) there are no formal knowledge sharing programmes that have been established as a means of fulfilling this responsibility.

When this study was conducted, the KZN Provincial Public Service Training Academy (PPSTA) was in the final stages of consultations with various stakeholders in order for the endorsement of the KZN Provincial Human Resource Development Strategy (PHRDS) to occur. The KZN PHRDS included knowledge management as one of the pillars of organizational efficiency which needed to be implemented as part of the KZN PHRDS. The KZN PHRDF would ultimately lead the implementation of the KZN PHRDS by coordinating and evaluating whether the KZN provincial departments are complying with its initiatives. One of the initiatives is to develop a knowledge management strategy for the KZN Provincial Administration. Therefore this study's objective was to investigate how the KZN PHRDF practices knowledge sharing as a forum that will ultimately report on the knowledge management activities of the KZN provincial departments.

The South African public service faced numerous challenges in the context of service delivery as can be seen in the escalation of service delivery protests. These challenges obligated the public service to seek management strategies that could enhance its workforce's knowledge in an attempt to improve service delivery. Knowledge management is one of the strategies that had been used by the business sector to improve and escalate its business processes (Taylor and Wright 2004). Among other definitions, this definition of knowledge management captures the context of public service as it describes knowledge management as that which involves leveraging knowledge for improving internal processes, for formulation of sound government policies and programmes and for efficient public service delivery for increased productivity (Riege 2005; Jain 2009). Research indicated that the local (South African) knowledge management (KM) market was set for growth as companies focused on their ability to retain expertise in their organizations (Manson and De Kock 2001). While adopting management practices from the private sector we must be aware of the fact that the public sector has some unique features of its own. Generally, policy making and

service delivery have been the two main focuses of the public service (Cong, Li-Hua and Stonehouse 2007).

While KM is a contemporary approach to competitive advantage and organizational efficiency in the corporate world, the public service seems to be lagging behind in leveraging this approach (Yao, Kam and Chan 2007; Taylor and Wright 2004). Lack of proper formal KM programmes and practices can be viewed as one of the weaknesses of government despite the fact that its processes and procedures consequentially develop, provide and produce knowledge and can be classified as knowledge intensive organizations (Willem and Buelens 2007). Jain (2009) argued that government is the highest knowledge consumer and producer with common sources of knowledge such as national strategic plans, government documents, laws, rules and regulations, notifications, archives and directives. Therefore the case for knowledge sharing in the public service is crucial in order for senior managers in the South African public service to realize that for a standard and uniform service delivery across government departments to occur, the knowledge that public servants have to perform their functions needs to be standard and uniform as well.

In an attempt to establish a KM strategy, the Department of Public Service Administration (DPSA) drafted the National Knowledge Management Framework (NKMF) in 2007. The DPSA is the national coordinator of KM in the South African Public Service (Mphahlele 2010). In 2000 the South African cabinet had approved the establishment of the Government Information Technology Officers' Council (GITOC) to coordinate Information Technology (IT) development in the national government (Mphahlele 2010). The GITOC established a Knowledge and Information Management (KIM) workgroup in 2003 as a result of GITOC's acknowledgement of the increasing importance of KM in the public service and the effect it has on its daily duties and operations. Subsequently, the DPSA and GITOC KIM decided to work together on the draft National Knowledge Management Framework (NKMF) and the KM Strategy and should have developed draft documentation that covered the entire public service (Mphahlele, 2010). However, the draft could not be finalized as the leading members in the DPSA knowledge management unit were deployed in other areas such as the

Centre for Innovation. A new attempt to resurrect the Knowledge Management Framework (KMF) was made in 2010 and a process of consultations with provinces of South Africa had begun. However, this effort did not go further than a draft as a change of management distracted the process of endorsing it.

Nevertheless, provinces such as the Free State had begun writing their own Information and KM Strategies and produced a draft (Free State Provincial Government 2007). The Department of Communications initiated KM practices and processes in the early 2000s and it is one of the first departments in the South African public sector to promote KM (Mphahlele 2010). It is these initiatives that indicate that the South African public service's awareness of the role played by KM in improving service delivery is growing. The DPSA recognized the need for government to effectively manage information and knowledge that they create for better use and exploitation.

Some of the observed challenges mentioned in the NKMF included people working in silos in government and the development of policies that reward individuals rather than teams which has led to a poor knowledge sharing culture (Department of Public Service and Administration 2011). Department of Public Service and Administration (2011) further recommended that government should develop policies that shall promote knowledge sharing. The issue of job hopping has an effect in organizations realizing the importance of knowledge sharing because of the gap that is often left by someone who has left the organization (Sandhu, Jain and Ahmad 2011).

1.3 Outline of the research problem

This section provides a brief background of the study and outlines the research problem that the study endeavoured to answer. A research problem is an educational issue, concern, or controversy that the researcher investigates (Creswell 2008:75). According to Creswell (2008:76) there are practical research problems and there are research-based problems. Practical research problems are those found in practical settings and research-based problems are those based on a need for further research because a gap exists, there is a need to extend research in other areas or there is conflicting evidence in literature (Creswell 2008:76). This study is a research-based problem as it

is based on a need to extend research in other areas such as exploring knowledge sharing in the public service.

1.3.1 Background to the problem

The National Human Resource Development Strategy (NHRDS) (NHRDS: 2008) required that knowledge management be implemented as one of the initiatives of organizational support. It provided the bases for developing a National Knowledge Management Strategy (NKMS) as well as Provincial Knowledge Management Strategy (PKMS). The draft KwaZulu-Natal Human Resource Development Strategy (KZNHRDS) of the KwaZulu-Natal Provincial Administration (KZNPA) PHRDS in compliance with the NHRDS included knowledge management as one of the components of organizational efficiency (Public Service Training Academy 2009).

Efforts at developing KM strategies were made by KwaZulu-Natal (KZN) departments such as the Department of Economic Development and Tourism (DEDT) (Department of Economic Development and Tourism, 2011) as well as the KZN Office of the Premier (OTP). However, these efforts did not have a clear implementation plan regarding knowledge sharing. A key question thus is, what knowledge sharing practices were going to be employed in order to ensure that the knowledge created within the public service is systematically shared?

The KZN PHRDF was formed in order to share information and knowledge pertaining to human resource development among human resource development practitioners in KZN provincial departments. The KZN PHRDF is a group of human resource development practitioners who are responsible for the coordination, implementation and evaluation of human resource development strategies and policies within the KZN PA. It is chaired by the General Manager (also known as the Chief Director in the South African national government) of the KZN PPSTA. The membership consists of representatives from the 14 departments of the PA and ranges from the positions of senior management to Senior Trainers. Its secretariat is also based at the KZN PPSTA and meetings are held every quarter for the purpose of information updating, sharing of knowledge and sharing of best practice.

One of the responsibilities of the KZN PHRDF is to facilitate and coordinate the implementation of the KZN HRDS. Since they will ultimately be responsible for monitoring the implementation of the KZN HRDS including the KM component, was the KZN PHRDF optimally used for purpose of knowledge sharing? This research study explored knowledge sharing experiences and practices of the PHRDF members in the KZN PA.

1.3.2 Statement of the problem

According to Mannie, Van Niekerk and Adendorff (2013), South African government departments currently face a serious challenge in terms of addressing service delivery commitments to the public. In addition, there are indications that limited knowledge sharing occur in government agencies (Mannie, Van Niekerk and Adendorff 2013) as well the failure of the use of mechanisms to transfer skills amongst individuals organization wide (Mkhize 2015). A lack of formal knowledge management (KM) programmes or policies often lead to the absence of organized and functional knowledge sharing programmes which could be used to improve service delivery (Dikotla, Mahlatji and Makgahlela 2014; Ondari-Okemwa and Gretchen-Smith 2009).

In order to embark on a successful knowledge sharing programme, an organization must be cognizant of the types of knowledge involved as well as those that are relevant for sharing (Mkhize 2015). The type of knowledge involved often determined the ease and effectiveness in which it can be shared. Jain (2009) argued that a KM strategy is the foremost important document in initiating KM practice. A KM strategy is likely to contribute to the achievement of organizational goals and outcomes (Steyn and Kahn 2008) as knowledge sharing is often the tool to effect KM, however, it is often absent in most public service departments.

Knowledge which needs to be shared is often entrenched in practice and in work cultures of the organizations therefore for knowledge sharing to be effective, communities of practice which bridge the different work cultures and practices of individuals have proved to work (Pardo, Cresswell, Thompson and Zhang 2006).

Collecting formal knowledge about work procedures and policies does not capture the depth of knowledge embedded in practice (Pardo, Cresswell, Thompson and Zhang 2006) and sophisticated tools are unable to capture sufficiently contextualized knowledge hence the inclination towards the establishment of communities of practice which enable individuals to identify others with relevant knowledge (Steyn and Kahn). Osterlund and Carlile (2005) argued that literature on communities of practice was influential when the topic of knowledge sharing in organizations gained momentum in the early 1990s. CoPs have the potential to be useful in capturing retired and older government employees' knowledge, connect silos in different public sector departments and market government' new initiatives (Jain 2009).

According to Ondari-Omkewa and Gretchen-Smith (2009), governments in developed countries have optimized information and communication (ICTs) as knowledge management enablers. Mannie, Van Niekerk and Adendorff (2013) count a lack of ICT infrastructure, no lack of communities of practice and a lack of trust within organizations and even in governments as some of the barriers of knowledge sharing. They conclude that knowledge sharing between government agencies in South Africa is insufficient and ineffective.

1.4 Research aim and objectives

1.4.1 Aim of the study

The aim of this study is to explore if knowledge sharing occurs in the public service by through a case study of the KZN PHRDF.

1.4.2 The objectives of the study

The overall objective of this study was to examine the knowledge sharing practices of the KZN PHRDF to determine whether a CoP could be used as a mechanism of knowledge sharing in the public service. The specific objectives were:

• To establish how the members of the PHRDF practiced knowledge sharing;

- To determine the factors which affected knowledge sharing between PHRDF members;
- To establish what were the challenges experienced by the members of the PHRDF when sharing knowledge
- And to establish what strategies the PHRDF could use to overcome such challenges.

1.5 The research questions

The study was guided by the following questions:

- 1. How did members of the PHRDF practice knowledge sharing?
- 2. What factors affected knowledge sharing between PHRDF members?
- 3. What were the challenges experienced by members of the PHRDF when sharing knowledge?
- 4. What strategies could the PHRDF use to overcome such challenges?

1.6 Justification of the study

Several South African studies have been done on knowledge management and its contribution to service delivery (Kgarimetsa-Phiri 2009; Chaba 2003; Radebe 2002; Fraser 2004; Bhyat, Van der Westhuizen and Blackburn 2005; Soko 2005). Some studies on knowledge management done in South Africa give credence to the use of knowledge applications in organizations which result in organizational efficiency (Gaffoor and Cloete 2010; Steyn and Kahn 2008; Kruger and Snyman 2007; Manson and De Kock 2001). The findings of studies done on knowledge management among farmers in Tanzania illustrate the importance of knowledge sharing as a way of preserving indigenous knowledge (Munyua and Stilwell 2012; Lwoga, Ngulube and Stilwell 2012). This implies that knowledge sharing is a valuable practice in all spheres of work and there is a need to incorporate it whenever knowledge is created. Mashilo and Iyamu (2011) in their research recommended a framework for enhancing organizational performance through knowledge sharing.

These studies motivated this research to broaden the scope of KM by exploring specifically knowledge sharing practices within the public service and more specifically among individuals who perform the same function whilst located in different departments. This research also aimed at establishing the kinds of challenges that were experienced by individuals in a community of practice (CoP) in a public service environment. In addition, the practice of knowledge sharing had not been specifically isolated in the above-mentioned studies hence this study wanted to add to the literature concerning knowledge sharing as a unit of analysis. The study would be a resource should the KZN PA progress with the developing of the KZN KM strategy for the PA.

1.7 Delimitations and Limitations

Limitations help to identify potential weaknesses of the study while delimitations assist to narrow the scope of the study to specific individuals or sites (Creswell 2003: 142). This study was limited to the members of the KZN PHRDF and not to everyone who works in HRD in the KZN PA. The scope of the study was limited to one forum in the KZN PA and the justification is that it would have implications for similar CoPs. The first limitation of the study was the use of two different interview methods for interviewing Senior Managers. Out of the 10 Senior Managers that were interviewed, five were interviewed face-to-face because they could honour the interview appointments whilst the other five were interviewed telephonically due to their busy schedules. The different methods used for the interviews did not present any bias since the same interview schedule guided all the interviews. The second limitation was the turnover of officials in the public service which reduced the amount of time the new officials who were surveyed had attended the KZN PHRDF. The third limitations was that, the PHRDF meetings did not adhere to their schedule resulting in long periods between the scheduled quarterly meetings.

1.8 Definition of terms

The following terms and concepts were used in the study:

1.8.1 Knowledge management

Knowledge management is often defined from different perspectives depending on the discipline or field. Newman and Conrad (1999) agreed that knowledge management is not one single discipline but rather an integration of numerous endeavours and fields of study. According to Sveiby (2002) from a metalevel perspective, there are two tracks of activities involving knowledge management. The first one deals with the management of information and the second one deals with the management of people. This study focused on the management of people track. Therefore the following definition is adopted for the study: Knowledge management is defined by Alavi and Leidner (1999) "as a systematic and organizational specific process for acquiring, organizing and communicating both tacit and explicit knowledge so that employees may utilize it to be more effective and productive in their work".

1.8.2 Knowledge sharing

Knowledge sharing is the transfer of valuable, facts, beliefs, perspectives, concepts learnt through study, observation, or personal experience from knower to knowee (Sandhu, Jain and Ahmad 2011). The sharing of knowledge in organizations or departments is one of the fundamental functions of any knowledge management programme (Ondari-Okemwa and Smith 2009; Klein 2008; White and Korrapati 2007; White and Korrapati 2007).

1.8.3 Explicit knowledge

Explicit knowledge is ""documented, articulated into formal language, formally expressionless, and easily communicable" (Jain 2009). Nonaka (1994) and Nonaka and Takeuchi (1995) all view explicit knowledge as what can be expressed in words or numbers, can be shared, in the form of data, scientific formulae, specifications, manuals, and so forth, and can be readily transmitted between individuals, formally and systematically. Explicit knowledge is the most common knowledge and is often confused with information.

1.8.4 Tacit knowledge

Tacit knowledge is "expressed though action used by employees to perform their work and achieved through Socialization, face-to-face meetings, teleconferencing and electronic discussion forums" (Jain 2009). Tacit knowledge is defined by (Gambarotto and Cammozzo 2010) as "the experiences of employees which need to be shared and explicitly transmitted via communication channels if it is to become part of the organizational intellectual capital". This definition implies that people are an integral source of knowledge and are therefore critical in the knowledge management process.

1.8.5 Communities of Practice

A community of practice (CoP) is described as a group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis (Ntala 2010). Ntala (2010) observes that CoPs have been found to be an effective way of generating, sharing, validating and transferring tacit and explicit knowledge as a way of promoting knowledge management within an organization.

1.9 Principal theories upon which the research project was constructed

The aim of theoretical frameworks is to make research findings meaningful and generalizable (Lwoga 2009:65). This study was an empirical study using primary data from a case being studied. A triangulation of different theories and models was used in this study to increase the reliability of knowledge created in this research. Although models and theory could be regarded as one term, models can be used to present theories (Lwoga 2009:65). To increase theoretical generalization of the results, the use of different methods also known as triangulation for the investigation of a small number of cases is often more informative than the use of one method for the largest possible number of cases (Flick 2009:444). Flick suggested that studying the topic with more than one research perspective in qualitative research comprises triangulation.

Creswell (2003:125) observed that in a quantitative study, theory is used to provide an explanation or prediction about relationships among variables in the study. It is deductively used at the beginning of the study with the objective of testing or verifying a

theory rather than developing it. However, the researcher advances a theory by collecting data to test it, and reflects on confirmation or disconfirmation of the theory by the results (Creswell 2003:125). Creswell (2003:140) further observed that theories in qualitative studies are used as broad explanations as in a quantitative study. They are also used as a theoretical lens or perspective to guide the study and raise questions that the study would like to address. The distinguishing factor in qualitative studies is that theory appears at the end of the study that emerges inductively from data collection and analysis.

However, the use of theories may be directed by the emphasis on either quantitative or qualitative approaches in the mixed methods (Creswell 2009:140). In the mixed methods, theories are found at the beginning sections as orienting lenses that shape the types of questions asked, who participates in the study, how data are collected, and the implications made from the study (Creswell 2009:208). The different theories this research were constructed on were motivation theory and social exchange theory whilst the models used were the SECI model and Klein's framework of communities of practice. These theories and models were discussed in greater detail in Chapter 2.

1.10 Research methodology and methods

This section covers the research design chosen for the study, areas of study, population of study, data collection methods, data analysis and presentation, pre-testing, ethical considerations, and validity, reliability and rigour. A research design provides the plan of action that links the philosophical assumptions, strategies of inquiry, and specific methods (Creswell 2003; 2009). A case study of the KZN PHRDF and the mixed methods design were found appropriate for this research study. According to Creswell (2008: 476) a case study is an in-depth exploration of a bounded system based on extensive data collection. Both qualitative and quantitative data were collected simultaneously during a single phase of data collection. In this study, the entire population of KZN PHRDF members were surveyed using structured questionnaires and semi-structured interviews about factors affecting knowledge sharing in the forum. Combinations of qualitative and quantitative approaches for data analysis were used,

NVivo was used for qualitative data analysis and SPSS 18 was used for quantitative analysis of data.

1.11 Ethical considerations

According to Wisker (2008: 86), research ethics became a major part of scientific research since the second world war when due to unethical research done on human subjects, horrific violations of human rights initiated the insistence on compliance to research ethics. Part of living successfully in a particular society is knowing what the society considers ethical and unethical (Babbie 2013: 32). Code of ethics are formulated to regulate the relations of researchers to the subjects and fields they intend to study (Flick 2009: 36). The study was conducted within the guidelines of the University of KwaZulu-Natal Research Ethics Policy (University of KwaZulu-Natal 2014). The purpose of this study was explained clearly to the respondents before the start of the face-to-face interview and informed consent cover letters (See Appendix 3 and 4) were attached to the self-administered questionnaire. The respondents were also assured that the information they provided would only be used for academic purposes and their identities would remain confidential.

1.12 Validity, reliability and rigour

Yin (1993) described four ways to improve findings of a case study: reliability, construct validity, internal validity and external validity. Validity suggests truthfulness (Neuman 2011: 211). Creswell (2008:172) distinguished between three types of validity namely, content validity, criterion-related validity and construct validity. Content validity is the extent to which the questions on the instrument and the scores from these questions are representative of all the possible questions that a researcher could ask about the content or skills (Creswell 2008:172). Criterion validity determines whether scores from an instrument are a good predictor of some outcome or criterion they are expected to predict (Creswell 2008: 172). Construct validity is established by determining if the scores from an instrument are significant, meaningful, useful and have a purpose (Creswell 2008: 173).

With regards to validity the study was concerned with construct validity which evaluates the data collection method. In an attempt to achieve validity in this study, the

instruments used to collect data had adequate coverage of the research questions guiding the study. Construct validity focuses on the ability to draw parallels between the measures of the research and the concepts and principles underlying these measures. External validity is concerned with representativeness. According to McNielle and Chapman (2005) validity is concerned with whether the object situation under study is typical of others when the research findings are generalizable beyond the case study. However, since this was one CoP it was not possible to make a claim of generalizability of results or to make predictions about other CoPs.

Reliability means dependability, stability or consistency (Neuman 2011:214; Creswell 2008:169; Flick 2009:385). This suggested that if the same study is repeated or recurs under identical or very similar conditions, similar results will be obtained. Creswell (2008:169) suggested that in quantitative research, scores should be nearly the same when researchers administer the instrument multiple times at different times to ensure reliability.

In order to ensure that the instrument was appropriate to produce reliable data in this case, the semi-structured interview guide was pre-tested on three Senior Managers represented on the KwaZulu-Natal Records Managers and Deputy Information Officers Forum (KRMDIOF) and the questionnaire self-administered on all 12 members of KRMDIOF. A pre-test of a questionnaire or interview survey is a procedure in which a researcher makes changes in an instrument based on feedback from a small number of individuals who complete and evaluate the instrument (Creswell 2008: 402). The interview guide was designed to give structure to the interview. Both data gathering instruments were structured to follow the layout of the research questions and the terminology was structured to remain consistent throughout the instruments.

1.13 Structure of dissertation

This section discusses the structure of the study.

Chapter One: Introduction

This chapter provided an overview of information that gives context to the study. Among the subsections of this chapter are: broader issues to be investigated, outline of the

research problem, background to the problem, research objectives, research questions, justification of the study, delimitation, definition of terms and concepts, and principal theories upon which the research project will be constructed. It also outlines the research methodology and methods, ethical considerations and validity, reliability and rigour used to conduct the study.

Chapter Two: Theoretical framework of the study

This chapter discusses Klein, Connell and Meyer's (2005) proposed Framework for Classification of Communities of Practice which consists of four types: stratified-sharing communities; egalitarian-sharing communities; stratified-nurturing communities and egalitarian-nurturing communities. It also discusses how the SECI model which proposes a process by which tacit and explicit knowledge is spiraled between individuals and groups within the organization is relevant for sharing knowledge in the PHRDF. The motivation theory as proposed in the study by Lam and Lambermont-Ford (2010) and Jeon, Young-Gul and Koh (2011) is used to determine motivational factors behind knowledge sharing.

Chapter Three: Literature review

This chapter reviews literature related to the study based on the study's objectives covering the practices of knowledge sharing in public service, the motivational factors for sharing knowledge within communities of practice and the Socialization of knowledge in face-to-face interactions. It aims to show what has already been done, the existing gaps in knowledge and hence the need to fill them through the present study.

Chapter Four: Research methodology

This chapter examines the research methodology and methods used in order to achieve the objectives of the study. The chapter includes: paradigms, approaches, research design, choice of method, area of the study, population of the study, data collection methods, research instruments, data quality control, ethical issues and data processing and analysis.

Chapter Five: Presentation of the results

The chapter provides presentation and interpretation of refined and analyzed data that comes from the responses obtained from the case study. The data is presented in figures, tables, pie and bar charts with frequencies and percentages.

Chapter Six: Analysis of results

This chapter discusses the findings of the study, resulting from both qualitative and quantitative analysis of data. The discussion of the findings are based on the objectives of the study.

Chapter Seven: Summary, conclusion and recommendations

This chapter presents the summary of the findings before providing conclusions and recommendations of the study based on the findings. Future research is recommended and implications for theory and practice on knowledge sharing in public service are provided. Soon after this chapter, references are provided followed by the appendices.

1.13 Summary of the chapter

The introductory chapter of this study provides the background and outlines the research problem which this study is concerned with. It also describes the objectives and key questions that were asked in order to address the research problem.

Justification of the study, delimitations and the definition of key terms has been included in this chapter. A brief discussion of the principal theories on which this research is based is provided including the theoretical framework of communities of practice. The research design comprising of a case study using mixed methods, area of study and the population of this study is presented. Ethical considerations are explained as well as how the validity, reliability and rigour of the findings were maintained. This chapter ends with an outline of the structure of the study. The following chapter will discuss in detail the theoretical framework consisting of Klein's classification of Communities of Practice, the SECI model and motivation theory.

CHAPTER TWO

THEORETICAL FRAMEWORK OF THE STUDY

2.1 Introduction

This chapter provides the theoretical foundation for the study. It discusses the characteristics of a theoretical framework and the role of theory in research. Theoretical frameworks or worldviews of mixed methods research will be discussed as well as to place this study in its context. The theoretical frameworks on which this study is based are motivation theory, the social exchange theory as well as the Classification of Communities of Practice (COPs). Lastly, the SECI model which is adopted in this study to support the above-mentioned theories will be discussed.

2.2 A theoretical framework

Social researchers approach research problems from different theoretical and methodological perspectives by using what are referred to as research paradigms (Blaikie 2007:109). These research paradigms are also called research theories or world views or theoretical frameworks in literature, therefore this study will use these terms interchangeably. Theory has been defined as something which interrelates a set of variables on the basis of the rules of logic (Powell and Connaway 2004:31). It can also be thought of as a unified explanation for discrete observations (Powell and Connaway 2004:32). Goldhor (1972:43) defined theory as a deductively connected set of laws, in the logical form of an explanation and with all statements and generalizations. Blaikie (2007: 109) posited that overarching or underpinning the choice of research problem, the formulation of research questions, and the selection of one or more research strategies is a research paradigm.

Birley and Moreland (1998:30) defined a paradigm as a theoretical model within which the research is being conducted and organizes the researcher's view of reality. They explain further that reality may be perceived as something which is individually constructed (ethnomethodology), as an objective 'out there' phenomenon (positivism),

or as both (realism). When reality is defined within ethnomethodology, the related research will probably involve a great deal of individual discussion with respondents to understand their view of reality. This usually occurs during the interview phase of data collection. If it is an objectivist paradigm the researcher assumes that all respondents will view the same events in more or less the same way. This usually occurs during the survey questionnaire phase of data collection (Birley and Moreland 1998:30).

Mouly (1978:35) and Babbie (2013:69) agreed that a good theory should meet the following criteria:

- A theory or theoretical system should permit deductions that can be tested empirically, meaning that, it should provide the means for its own testing.
- A theory should be compatible with both observation and previously verified theories. It must also be well grounded and should be able to explain the phenomena under study.
- A theory should be stated as simply as possible. It should also explain adequately the existing knowledge but should not be any more complex than necessary.

Anfara and Mertz (2006 xvii) concurred with what constitutes good and useful theory, that:

- It should provide a simple explanation of the observed relations relevant to a phenomenon.
- It should be consistent with both observed relations and an already established body of knowledge.
- It is considered a tentative explanation and should provide means for verification and revision.
- It should stimulate further research in areas that need investigation.

In view of the above discussion it can be deduced that a good theory must be simple, testable, consistent, compatible with other theories, and should allow for further research. It is further observed that no theoretical framework adequately describes or

explains any phenomena (Anfara and Mertz 2006: 194), hence the use of multiple theories and models in this study.

2.2.1 The role of a theoretical framework in research

The fundamental methodological problem that faces all social researchers is what kinds of connections are possible between ideas, social experience and social reality (Blaikie 2007:13). Blaikie (2007:13) further distinguished between ideas, social experience and social reality thus: Ideas refer to the ways of conceptualizing and making sense of experience and reality - such as concepts, theories, knowledge and other interpretations whilst social experience refers to individual conduct, social relationships and cultural practices in everyday life, and to the everyday interpretations, and meanings associated with these. Blaikie (2007:13) citing Ramazanoglu and Holland (2002) adds that social reality refers to the material and socially constructed world within which everyday life occurs, which can have an impact on people's lives in terms of providing opportunities and imposing restriction. Therefore, the various theoretical frameworks present different ways of making connections between ideas, social experience and social reality.

A theoretical framework refers to a general theoretical system with assumptions, concepts and specific social theories (Neuman 2011:74). Lwoga (2009:63) citing Sekaran (2003) stated that a theoretical framework guides research to determine what things it will measure, and what statistical relationships it should look for. It is a logically developed, described and elaborated network of association among the variables deemed relevant to the problem defining a situation and identified through such processes as interviews, observations and literature surveys (Lwoga 2009:63). Experiences and intuition also guide in developing such a framework (Blaikie 2007:13). Henning, van Rensburg and Smit (2004:25) argued that the theoretical framework provides an orientation to the research study, and positions the research in the discipline or subject to reflect the research goals.

The theoretical framework forces the researcher to be accountable to ensure that the methodology, data, and analysis are consistent with theory (Anfara and Mertz 2006: 193). It has the ability to reveal and conceal meaning and understanding hence the

inclusion of delimitations in a study. It also allows researchers to talk across disciplines using known and accepted language of the theory and it is this established language that assists in making meaning of the phenomenon being studied (Anfara and Mertz 2006:194). There are some concerns that researchers raise regarding the application of a theoretical framework. These concerns include: the power of a theoretical framework to be too reductionist, stripping the phenomenon of its complexity and interest; or too determinist, forcing the researcher to fit the data into predetermined categories; or the power of the existing literature on a topic to be ideologically hegemonic, making it difficult to see phenomena in ways different from those that are prevalent in the literature (Anfara and Mertz 2006:194). Hence the argument of applying multiple frameworks to eliminate these concerns.

In order to justify the use of a particular theoretical framework, researchers might want to force their data into what is acceptable in the theory. Therefore researchers are cautioned against dropping data in light of assessing the strengths and weaknesses of any theory. It could be these data that help in the advancement of the theory or in it being refuted (Anfara and Mertz 2006:194). Anfara and Mertz (2006:194) further argued that whereas the 'fit' of the theoretical framework for a study may become evident, it may in fact become necessary to discard the theoretical framework and start the process of searching for a new one. Then the research would be more authentic and valid for its ability to reveal new evidence which contradicts the theory instead of eliminating data that runs contrary to it.

2.2.2 The use of theoretical frameworks in quantitative, qualitative and mixed methods studies

In social science theories are generally drawn from the various disciplines which provide a plethora of lenses for examining phenomena (Anfara and Mertz 2006: xviii). Whether one approaches the research process from a quantitative or qualitative perspective, theory has an important role to play. In a quantitative study, theory is used to provide an explanation or prediction about relationships among variables in the study (Lwoga 2009: 94). Lwoga (2009:94) stated that theory in a quantitative study is deductively used at the beginning of the study with the objective of testing or verifying a theory rather than

developing it. The researcher advances a theory by collecting data to test it, and reflects on confirmation or disconfirmation of the theory by the results (Creswell 2003:125). In quantitative research, researchers often test theories and broad explanations that predict results from relating variables, whilst in qualitative research, theories are not tested, instead the researchers asks the participants in a study to share ideas and build general themes based on those ideas (Creswell 2008:139).

The role of theory in qualitative research is basic, central and foundational, and influences the way the researcher approaches the study and pervades all aspects of the study (Anfara and Mertz 2006:189). Further, it is a lens framing and shaping what the researcher looks at and includes how the researcher thinks about the study and its conduct and in the end how the researcher conducts the study. Theories in qualitative studies are used as broad explanations as in a quantitative study and they are also used as a theoretical lens or perspective to guide the study and raise questions that the study would like to address. Lwoga (2009:65) citing Creswell (2003) stated that theory appears at the end of the study that emerges inductively from data collection and analysis. Thus, the types of frameworks that shape the meaning, and drive society become key role players in the qualitative research.

Mixed methods research is a research design with philosophical assumptions as well as methods of enquiry (Creswell and Clark 2007:5). According to Creswell and Clark (2007:5) as a methodology, the mixed methods research involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. However, as a method it focuses on collecting, analyzing and mixing both quantitative and qualitative data in a single study or series of study (Creswell and Clark 2007:5). Mixed methods use theories either deductively or inductively. However, the use of theories may be directed by the emphasis on either quantitative or qualitative approaches in the mixed methods (Creswell 2003; 2009:140). In the mixed methods, theories are found at the beginning sections as orienting lenses that shape the types of questions asked, who participates in the study, how data are collected, and the implications made from the study (Creswell 2009:208).

This study used a mixed methods approach where the quantitative method was the dominant method. The theoretical frameworks were specifically used to provide a broad explanation and as a theoretical lens or perspective that guided the study. Therefore, the theoretical framework was placed at the beginning of the study. Multiple frameworks and a model were used in this study as suggested above by Anfara and Mertz (2006: 194) to eliminate concerns raised regarding studies guided by theoretical frameworks as opposed to studies that develop theoretical frameworks at the end. A KM model was also used to provide the theoretical lens or perspective that guided the study. The theoretical frameworks used in this study are the motivational perspective as suggested by Lam and Lambermont-Ford (2010), the social exchange theory as suggested by Liang, Liu and Wu (2008) and theoretical framework of Classification of Communities of Practice as suggested by Klein, Connelll and Meyer (2005). The model that is used in this study is the SECI model that was developed by Nonaka in 1991 (Sandhu, Jain and Ahmad 2011).

2.3 Motivational perspective of knowledge sharing

Motivational theories are psychological ways of understanding what inspires human beings to extend their abilities and perform according to expectations. There are various motivational theories developed by theorists such as Abraham Maslow, Douglas Mcgregor, Frederick Herzberg and others. Motivation theory suggests that motivation drives human behaviour (Jeon, Young-Gul and Koh 2011). In order to determine why the PHRDF members share knowledge this study will examine the motivational factors which drive their knowledge sharing behaviours. Although knowledge sharing is a key process in translating individual learning into organizational capability, facilitating it is a difficult task (Jeon, Young-Gul and Koh 2011). According to Lam and Lambermont-Ford (2010) study, a three-category taxonomy of motivation to examine knowledge sharing behaviour in an organization was used, which this study adopted. The three-category taxonomy of motivation consists of the traditional dichotomy of extrinsic and intrinsic motivation and adding hedonic motivation as a way of closing the gap between the two. The gap occurs because extrinsic motivation may support the transfer of explicit knowledge, which is measurable but often fails in the case of tacit knowledge which is

intangible (Lam and Lambermont-Ford 2010). Therefore Lindenberg (2001) divided intrinsic motivation into normative and hedonic types which interact with each other and with extrinsic motivation. This division provided a more complete match between the individual and organizational environments for knowledge sharing.

Normative intrinsic motivation is directed towards the individual's sense of compliance with personal and social norms and the degree to which individuals act or do not act when normatively motivated (Lam and Lambermont-Ford 2010). This type of motivation depends on the importance that they attach to compliance in a given context and also the external reaction to non-compliance (Lam and Lambermont-Ford 2010). Lindenberg (2001) posited that hedonic intrinsic motivation is derived from the engagement in selfdetermined, competence enhancing and enjoyable activity achieved through physical and social wellbeing and improvement in the individual's condition. This influences the willingness of an individual to share knowledge, depending on the importance that the individual appropriates to being involved in such an activity. The significance of hedonic motivation includes its ability to stimulate creativity and innovation as it induces knowledge-seeking behaviour and increases cognitive effort (Lam and Lambermont-Ford 2010). The relationship between intrinsic, extrinsic and hedonic motivation may be complex interaction effects between them. For example, extrinsic rewards may undermine intrinsic motivation for interesting tasks and encourage knowledge hoarding (Lam and Lambermont-Ford 2010). Self-esteem may be lessened when the individual's intrinsic motivation is not acknowledged, implying that their efforts are not appreciated (Lam and Lambermont-Ford 2010). This may occur when incentives are given for specific performances or behaviours, affecting the internally driven behaviours and causing individuals to prefer the reward driven behaviours.

On the other hand, there are beneficial effects of extrinsic motivators on hedonic and normative motivation, which result from the individual's perception that they are supportive and congruent with the underlying normative and hedonic motivational preferences (Lam and Lambermont-Ford 2010). These are extrinsic motivators that provide feedback, recognize and reward as well as confirm or improve competencies leading to increased self-esteem (Lam and Lambermont-Ford 2010). Similar extrinsic

motivators such as career progression, increased involvement that aligns with the individual's normative and hedonic motivators could have a synergistic effect while, high personal commitment (normative) and enjoyment (hedonic) of the task at hand can be unaffected by extrinsic motivation since the activity itself becomes the motivation (Lam and Lambermont-Ford 2010). Extrinsic motivations serve to satisfy indirect or instrumental needs and they can be financial or social rewards, whilst intrinsic motivations are driven by values provided directly within the work itself (Lam and Lambermont-Ford 2010). Amabile (1997) and Huber (2001) argued that normative and hedonic motivation are seen to be essential in knowledge sharing and creative activities and the options for an organization in terms of motivation are limited by its structure and the nature of the tasks performed.

2.4 Social Exchange Theory

In as much as motivation to share knowledge is an organizational as well as a social issue, by understanding the conditions that affect social exchange, a better understanding of how to influence the social process can be developed (Swift 2007). There are certain benefits promised by the act of knowledge sharing for an organization, such as extracting past experiences and know-how and therefore prevent re-inventing the wheel, responding swiftly to problems, or developing new insights and ideas. However, for an individual the act of knowledge sharing is an exchange that requires time and effort and poses the discomfort of losing knowledge that might be that individual's work identity. According to Cyr and Choo (2010), most research examined methods and systems than can facilitate knowledge sharing, however, there is less research on factors that may influence the willingness to share knowledge with others in an organization. Knowledge sharing as social exchange is perceived as an exchange of a valuable resource between two parties which is expected to incur costs borne by the knowledge owner and bestow benefits to the recipient (Cyr and Choo 2010). Social exchange theory is a broad mode of theorizing that has many traditions in fields like anthropology, psychology, economics and sociology. However, Cyr and Choo (2010) identified Blau's (1964) approach which focuses on exchanges between individuals in an organization and will also be adopted in this study. Blau's approach claimed that

social exchange is a rational behaviour, where people enter into social exchange because they perceive the possibility of deriving rewards (Cyr and Choo 2010).

According to the social exchange theory individuals regulate their interactions with other individuals based on self-interest analysis and the costs and benefits of such an interaction (Liang, Liu and Wu 2008). People generally work around minimizing their costs and maximizing their benefits when exchanging resources and the resources need not be tangible as in the case of knowledge. Swift (2007:4) citing Blau (1964) and Gouldner (1960) observed that social exchange is a dyadic process that takes place within a social context where the terms and conditions of the exchange cannot be defined in advance and the probability of reciprocity is uncertain. Individuals may build social relationships with others by sharing knowledge to increase their chances for future returns. The benefits involved in social exchange do not have the exact price in terms of a single quantitative medium of exchange which is why social exchange tends to engender feelings of personal obligation, gratitude and trust. Attributes such as trust have been found to be integral in social interactions. White and Korrapati (2007) found that the personal construct of trust has a direct and immediate effect on knowledge sharing. In addition, they emphasise the importance of trust in knowledge sharing by urging researchers and management practitioners to develop an understanding of the nature of trust.

Social exchange theory has been used in many studies as a base for investigating individual's knowledge sharing behaviour. Previous studies have reported factors related to the social exchange theory are successful in explaining knowledge sharing behaviour among individuals (Liang, Liu and Wu 2008). However, some of the existing research on social exchange theory have been found to have some drawbacks such as diverse constructs used and other studies provided contradictory results (Liang, Liu and Wu 2008). Furthermore, knowledge sharing behaviours according to the social exchange perspective such as trust, revealed inconsistent findings in different studies. However, in the social exchange theory, Cyr and Choo (2010) citing Blau (1964) confirmed that trust is essential for the social exchange process. They claimed that trust creates and maintains exchange relationships, which in turn may lead to the sharing of

good quality knowledge. Swift (2007:12) emphasized the influence of trust of knowledge exchanges this way,

"strong ties between sources and participants facilitate the transfer of complex tacit knowledge as result of the level of trust present in the relationship, and the decreased level of effort required to communicate the knowledge".

The implication of this statement is that knowledge sharing behaviour may be influenced by the type of knowledge to be shared, namely tacit or explicit knowledge. It can be assumed that since tacit knowledge is highly personal and hard to formalize it would require more effort to share, while explicit knowledge which is formally codified is easier to share.

The fundamental dimension in the social exchange theory is individual cognition, which may include perceived benefits and organizational commitment (Liang, Liu and Wu 2008). Liang, Liu and Wu (2008:3) citing Forsythe, Liu, Shannon and Gardner (2006) defined 'perceived benefits' as the individual's subjective perception of gain from their behaviors. Liang, Liu and Wu (2008:3) citing Blau (1964) reported that the social exchange theory presents individuals with the opportunity to engage in social interaction based on the expectation that it will in some way lead to social rewards such as approval, status and respect. This implies that the participation of individuals in exchanging knowledge carries perceived benefits. Social exchange theory defines exchange as "the actions of individuals in dyadic relations where social interaction is a channel for information and resource flows" (Liang, Liu and Wu 2008). Furthermore, the more exchange partners engage in social interactions, the greater the intensity, frequency, and breadth of information exchanged. This is relevant to the PHRDF which conducts monthly meetings as well as impromptu special meetings where necessary. Liang, Liu and Wu (2008) posited that social interaction provides the opportunity to combine and exchange knowledge.

Another dimension that affects knowledge sharing is organizational efforts that support knowledge sharing activities. Organizational support refers to the general perception that an organization cares for the well-being of its employees and values their contribution (Liang, Liu and Wu 2008). The social exchange perspective assumes that

the relationship between employees and their employer is built on the trade of effort and loyalty for benefits such as pay, support and recognition (Liang, Liu and Wu 2008). In a study conducted by Cyr and Choo (2010) it was found that individuals were significantly more likely to share knowledge with their superiors than with a close colleague or a distant colleague. There was no significant difference in propensity between sharing knowledge with a close colleague or a distant colleague. Cyr and Choo (2010) posited that according to the Leader-Member exchange theory, in superior-subordinate relationships, there may be a particular motivation to exchange valued resources, such as knowledge, in order to increase the mutual benefits derived from these exchanges and so improve the quality of the relationship. Therefore, knowledge sharing may be seen as a social exchange of a valuable resource that may be pursued to enhance leader-member relationship in an organization.

The social exchange theory recognizes that knowledge sharing is volitional and cannot be forced or mandated. While organizations may decree that employees share their knowledge, reluctant employees have always found ways to circumvent or undermine the spirit of such directives. Individual perception about costs and benefits, personal preferences about distribution of sharing outcomes, and the structural relationship of knowledge recipients all have effects on knowledge sharing behaviour (Cyr and Choo 2010). A study by Liang, Liu and Wu (2008) found that among the social exchange factors that affect individuals' knowledge sharing behaviour, organizational support did not have a significant effect. They suggested that the possible explanation is that the effect may be diluted by the heterogeneity of different organizational support including formal support, such as training, and informal sanction and help from top management, supervisors and co-workers. In addition, task accomplishment often takes priority over knowledge sharing, hence management support may affect employee attitude but its effect may not be strong enough to change behaviour. The degree of significance of organizational support does not exclude its effect totally, however, the greater significance of other factors confirm the role of social exchange theory as a key theory in interpreting employee behaviour in knowledge sharing (Liang, Liu and Wu 2008). This study investigated whether the factors articulated in the social exchange theory affect how and why the KZN PHRDF members share their knowledge.

2.5 The Socialization, Externalization, Combination, and Internalization Model

One of the most important theories in the field of knowledge management was developed by Nonaka (1994) which he termed the Dynamic Theory of Knowledge Creation (Sandhu, Jain and Ahmad 2011). This theory provided a comprehensive view on how to conceptualize the entire knowledge creation process and it was later known as the SECI model.

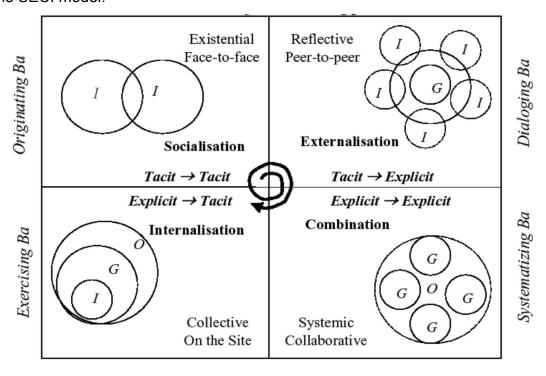


Figure 2.1: SECI MODEL
Source: Nonaka, Reinmoeller and Senoo (2000)

Within the four modes of Socialization, Externalization, Combination and Internalization, knowledge sharing played a vital role for all knowledge conversions to succeed (Sandhu, Jain and Ahmad 2011). The SECI model proposes a process by which tacit and explicit knowledge is spiraled between individuals and groups within the organization as illustrated in Figure 2.1 above. It is the interplay of the four processes aiming to convert tacit knowledge into explicit knowledge and visa versa (Hoe 2006). It is also an interplay between creating and sharing knowledge. In knowledge creation as

presented in the SECI model, people transcend the boundary between self and other, inside and outside, past and present (Nonaka, Toyama and Konno 2000). The SECI model highlights the mutual complementary nature of tacit and explicit knowledge depicted in the four components in the diagram. Lee and Kelkar (2013:229) citing Nonaka (1994) posited that in the model, Socialization is the conversion of tacit to tacit knowledge, and refers to the process of developing new knowledge through shared personal experiences. Tihane (2010) confirms that Socialization happens when individuals are prompted to accumulate knowledge through physical proximity and interaction with colleagues from different organizations in the apprenticeship manner. Individuals usually talk and share information during work processes without pre-defined goals, but they follow their own agendas (Tihane 2010). The main aims of the Socialization phase are participating in social networks across various borders, which could be location, ranks, and so on. In the Socialization process people empathize with their colleagues and customers which diminishes barriers between individuals (Nonaka, Toyama and Konno 2000). In organizations with different cultures various official restrictions and individual preferences of sharing knowledge might hinder this crossborder networking.

Externalization is the conversion of tacit knowledge into explicit codified knowledge. According to Nonaka, Toyama and Konno (2000), in the Externalization process, an individual transcends the inner and outer boundaries of self by committing to the group and becoming with the group. According to Tihane (2010) externalization of tacit into explicit should happen when individuals are prompted to create and articulate concepts through abductive thinking, the use of metaphors for concept creation, the use of models, diagrams or prototypes. For example, individuals could write down their plans and reflect about their activities, but they need to consider the organizational norms and expectations as guidelines in their reflections (Tihane 2010). This would make the documented individual tacit knowledge explicit, searchable for other people and usable as knowledge objects.

Two simultaneous aims are important in the Externalization process, thus, workers need to reflect why, how, and what they do in their professional practice and simultaneously

harmonize that knowledge with organizational visions, norms and expected competences (Tihane 2010). Further, they must also be provided with access to documents from different organizational repositories that convey information about such visions, norms and organizational expectations. In the documentation process some commonly created ontology and mutually meaningful workflow scheme should be used to write down their experience. There is an acknowledgement of the challenge of motivating people planning their professional development in work situations, harmonizing their plans with different organizations' expectations, externalizing their tacit knowledge regularly, and sharing it publicly or semi-publicly with colleagues and top management (Tihane 2010).

Following after Externalization is Combination, which is the conversion of explicit to explicit knowledge and refers to the mingling of explicit knowledge in various sources to enhance the existing knowledge pool. Tihane (2010) suggested that Combination activities of explicit knowledge are primarily group-based and can be supported by organizing collaborative group discussions in the extended organization, presentations and meetings where individuals with different perspectives can ground and negotiate upon externalized concepts and knowledge objects. The aim of the Combination phase is to keep the organizational knowledge, rules and objectives updated with the real work processes and develop new norms and visions for the organization (Tihane 2010). In the Combination phase of extended organizations, simultaneously the individual-organization and organization-organization exchange should take place. During the Combination process, new knowledge generated through Externalization transcends the group in analogue or digital signals (Nonaka, Toyama and Konno 2000).

The exchange processes within the PHRDF take on this model as it is composed of individuals from different departments although the individuals perform similar tasks. According to Tihane (2010), this would increase the cross-boundary translation possibilities and enhance the uptake of knowledge into new situations. In this mode individuals may look for collaborators and form various communities or groups that have shared goals, in other words, exchange best practice. They should discuss externalized knowledge objects, modify them and finalise them as new knowledge objects, which

could in the future guide the organization's shared practice (Tihane 2010). Tihane (2010) lamented the problem of forming cross-units and cross-organization communities, forming novel community practices in which shared identity is formed across organizational borders, however, the PHRDF by virtue of its constituency had overcome this challenge.

Finally, Internalization refers to the conversion of explicit codified knowledge into personal tacit knowledge. According to Lee and Kelkar (2013) this process is iterative, as internalized knowledge could give rise to a new spiral of Socialization, Externalization, Combination and Internalization. In Internalization, individuals access the knowledge realm of the group and the entire organization (Nonaka, Toyama and Konno 2000). Tihane (2010) described the Internalization phase as an individual planning and learning process. He identifies two aspects of the Internalization phase, namely: a) it contains planning and externally reflecting what competencies and goals they want to achieve, and simultaneously harmonizing their plans with organizational visions, norms and expected competencies, and (b) planning the professional development suggest learning from other professionals' experiences and combining it with academic knowledge. In the Internalization phase the resources created in the Externalization phase could be accessed and used for planning personal learning flows (Tihane 2010). However, the challenge in this phase is related to the application of such learning pattern schemas and search ontologies that are acknowledged in both organizations and would enable the organization to find and learn from other professional competence in the least obtrusive way.

The Socialization and Internalization process in particular, exhibit strong characteristics found in informal processes. Essentially, organizational learning involves a recurring set of activities to change one type of knowledge, for example, tacit knowledge to explicit knowledge and visa versa (Hoe 2006). Some processes like Externalization and Combination favour explicit knowledge while others like Socialization and Internalization favour tacit knowledge. Those processes that favour tacit knowledge tend to share characteristics of informal knowledge processes, in other words, they are spontaneous and voluntary (Hoe 2006). The SECI model suggests that certain organizational actions

do not favour tacit knowledge and these are generally the structural knowledge processes of Externalization and Combination (Hoe 2006). Furthermore, many modern organizations which rely extensively on the use of information technology run the risk of relegating tacit knowledge to the background. This is because information technology is limited to the transfer of explicit knowledge (Hoe 2006). On the other hand informal knowledge processes better facilitate tacit knowledge. Hoe (2006) observed that there is much organizational knowledge that is transferred informally through Socialization and the Internalization process, because Internalization is the process in which learning is achieved by doing. For example, when individuals read the explicit knowledge found in policy manuals, they internalize and apply what they have read in their daily work (Hoe 2006).

Incorporated in the SECI model as represented in Figure 2.1, is the Japanese concept of *ba* which relates to the physical, relational and spiritual elements of place or context (Rice and Rice 2005). Since knowledge needs a physical context to be created, *ba* offers such a context (Nonaka, Toyama and Konno 2000). *Ba* is a concept that was originally proposed by the Japanese philosopher, Kitero Nishiola, and was further developed by Shimuzu, and is defined as a shared context in which knowledge is shared, created and utilized (Nonaka, Toyama and Konno 2000). Jones (2007:10) citing Nonaka (1994) proposed the existence of an ongoing 'specific time and place' for knowledge sharing which he termed the *ba*. *Ba* occurs whenever people interact in their environment, the interaction is dynamic in nature, and 'is the context for knowledge creation'. '*Ba* can be understood as a platform where knowledge creation occurs' and it occurs whenever information becomes knowledge during a project; *ba* is also a 'shared space for emerging relationships' and it can be physical, such as an office, or virtual, email, teleconferencing, or even mental, when shared experiences are reflected upon (Jones 2007). *Ba* happens at every stage of knowledge sharing.

The I, G and O symbols in Figure 2.1 represent individuals, group and organization attributes. Each quadrant in the SECI process is associated with a corresponding *ba* representing the social and relational context facilitating knowledge exchange. In knowledge creation, generation and regeneration, *ba* is the key, as *ba* provides the

energy, quality and place to perform the individual conversions and to move along the knowledge spiral (Nonaka, Toyama and Konno 2000). Social, cultural and historical contexts are important for individuals as such contexts provide the basis for one to interpret information to create meanings. *Ba* is a place where information is interpreted to create meanings (Nonaka, Toyama and Konno 2000). In addition, *ba* is not necessarily a physical space, since the Japanese word '*ba*' refers to a specific time and space. It is a concept that unifies space such as office space, virtual space such as e-mail, and mental spaces such as shared ideals (Nonaka, Toyama and Konno 2000).

Socialization of tacit knowledge happens when individuals are prompted to accumulate knowledge through physical proximity and interaction with colleagues from different organizations in the apprenticeship manner (Tihane 2010). Findings in Tihane's (2010) study revealed that tacit knowledge transfer materialized in work environments in which Socialization behaviour was practised. During Tihane's study, the SECI model was applied mainly to investigate organizational learning in private industries. The emphasis of this study was on the Socialization mode of the SECI model where tacit knowledge is shared face-to-face in the context of the originating *ba*. The originating *ba* emphasizes the need to communicate more than the specific and the technical, with a focus on establishing communicating norms and exchanging emotions and developing mental models and experiences (Rice and Rice 2005). However, this study explored the model's application to a group of people performing similar functions in public service.

Khumalo (2012) claimed that the knowledge transfer process is a spiral that grows out of these knowledge conversions cycles and a key to positive change in organizations. He emphasised that tacit knowledge transfer materialized in work environments in which Socialization behaviour was practised. Socialization involved tacit knowledge owners transferring their expertise as they spent time interacting, mentoring and coaching recipients (Khumalo 2012). Internalization which included hands-on training, emerged in Khumalo's (2012) study as an effective knowledge transfer behaviour. He also found that shadowing subject matter experts, participating in mentoring rings and coaching others contributes to knowledge transfer during the Socialization process. Khumalo (2012) suggested that the inclusion of computerized systems for capturing,

storing and disseminating tacit and explicit knowledge to the whole organization is central to knowledge transfer. After all the reason for knowledge sharing is to equip the organization with skills and knowledge to increase its performance and to ensure that minimal knowledge is lost during staff turnovers. According to Jones (2007) in the Socialization phase, *ba* is located in the 'feelings, emotions, experiences and mental models' of personnel.

In the Externalization process, *ba* emerges during moments of face-to-face conversation or discussion. Cyber *ba* can emerge at several points during a process and 'represents the Combination phase' where explicit and tacit transfer may mix (Jones 2007). Whenever any project member actively engages in work, a *ba* is exercised, and a *ba* context is created. Therefore, the correct time to share knowledge, is every time *ba* emerges and creates a context for any knowledge sharing process. The concept of *ba* links up with the socialization exchange theory where feelings and trust influence the willingness to share. It also links with communities of practices where a group of people unified by a common interest utilize space and time to share knowledge amongst themselves. The four different notions of *ba* are defined in relation to each of the four quadrants of the SECI model in Figure 2.1 (Rice and Rice 2005). They are:

- The originating ba: a location where individuals can share feelings, emotions, experiences and perceptual models;
- The dialoguing ba: a space where tacit knowledge is transferred and documented to explicit form. The principal methods used for knowledge transfer are dialogue and metaphor creation;
- The systematizing ba: a virtual space, where information technology facilitates
 the recombination of existing explicit knowledge to form new explicit knowledge;
 and
- The exercising ba: a space where explicit knowledge is converted into tacit knowledge.

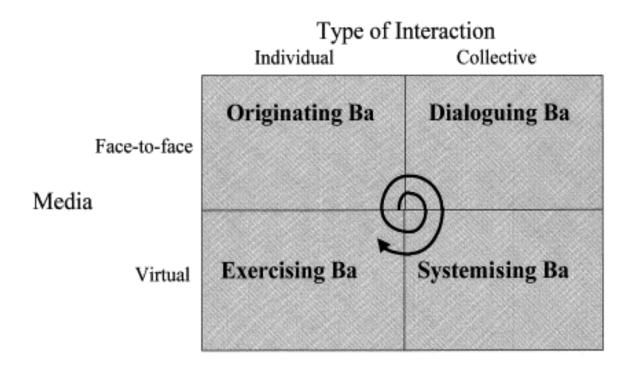


Figure 2.2: Different types of *ba*Source: Nonaka, Toyama and Konno (2000)

The four types of *ba* are defined by two dimensions of interactions, namely, whether the interaction take place individually or collectively and the type of media used in such interactions such as face-to-face contact or virtual media. Each *ba* offers a context for a specific step in the knowledge creation process, through the respective relationships between each single *ba* and conversion modes are not exclusive (Nonaka, Toyama and Konno 2000).

Originating *ba* is defined by individual and face-to-face interactions. It is a place where individuals share experiences, feelings, emotions and mental models (Nonaka, Toyama and Konno 2000). It mainly offers a context for Socialization since an individual face-to-face interaction is the only way to capture the full range of physical senses and psychoemotional reactions, such as ease or discomfort, which are important elements in sharing tacit knowledge (Nonaka, Toyama and Konno 2000). Originating *ba* provides care, love, trust, and commitment which forms the bases for knowledge conversion.

On the other hand, dialoguing *ba* is defined by collective and face-to-face interactions. It is the place where individuals' mental models and skills are shared, converted into common terms, and articulated as concepts (Nonaka, Toyama and Konno 2000). This is where Externalization finds its expression. Individuals' tacit knowledge is shared and articulated through dialogues among participants. Dialoguing *ba* is more consciously constructed than originating *ba* (Nonaka, Toyama and Konno 2000). Therefore, selecting individuals with the right mix of specific knowledge and capabilities is the key to managing knowledge creation in the dialoguing *ba*.

Systemizing *ba* is defined by collective and virtual interactions. Systemizing *ba* mainly offers context for the Combination of existing explicit knowledge, as explicit knowledge can be relatively easily transmitted to a large number of people in written form. Information technology, through such things as online networks, groupware, documentation, and databanks offers a virtual collaborative environment for the creation of systemizing *ba* (Nonaka, Toyama and Konno 2000). Today many organizations use electronic mailing lists and news groups through which participants can exchange necessary information or answer each other's questions to collect and disseminate knowledge and information effectively and efficiently. Exercising *ba* is defined by individual and virtual interactions. It mainly offers a context for Internalization. Here individuals embody knowledge that is communicated through virtual media, such as written manuals or simulation programmes (Nonaka, Toyama and Konn 2000). Furthermore, exercising *ba* synthesizes the transcendence and reflection through action while dialoging *ba* achieves this through thought.

The SECI model has implications for both managerial styles and organizational structures and emphasizes the whole human process of communication as an essential component of organizational knowledge management and learning (Rice and Rice 2005). This study acknowledges that the heavy employment of philosophical elements in the SECI model makes empirical research in the area inherently difficult. This is exacerbated by the fact that explicit and tacit knowledge boundaries are often indistinct, and that this dichotomy is such an important one in the SECI model, makes the statistical testing of SECI derived propositions difficult (Rice and Rice 2005). However,

Rice and Rice (2005:673) cited studies by Kusunoki, Nonaka and Nagata (1998), Chou and Te (2004) and Chou and Tsai (2004) found some support for their propositions that elements of the SECI systems did support positive product development and innovation outcomes at the firm level within Japanese firms. Since Nonaka and Takeuchi's SECI model is an endogenous firm-internal process with knowledge cycling between teams; this research followed such a lead.

2.6 Theoretical framework for classifying communities of practice

The public service in South Africa does not have a common method of implementing and conducting CoPs (Department of Public Service and Administration 2011).

According to Department of Public Service and Administration (2011) CoPs are a platform for knowledge sharing, knowledge exchange, knowledge creation, and sharing of lessons learned on various relevant subjects, service delivery related projects and issues around processes, policies and other work-related functions. The PHRDF is composed of various levels of responsibility from senior manager to practitioner. These levels are director, deputy director, assistant director, skills development facilitator, chief senior trainer, and senior trainer. Knowledge sharing occupies the central activity in the KM literature and communities of practice are largely seen as the vehicle for knowledge sharing. There are different and various characteristics and purposes of CoPs depending on what they want to achieve. Klein, Connelll and Meyer (2005) confirmed that the general consensus is that a CoP is a group of individuals, usually informal and self-organized who communicate and share knowledge with one another motivated by common interests, concerns and enthusiasms related to particular activities.

Jeon, Young-Gul and Koh (2011) added another perspective by differentiating between three categories of CoP thus: informal, supported and structured. They claim that informal CoPs are the traditional CoPs informally bound together by shared expertise; supported CoPs are formally authorized and supported by the organization and structured CoPs are strategically created as well as strategically supported by the organization. According to the categories mentioned by Jeon, Young-Gul and Koh (2011), the PHRDF is a structured CoP because it was established in order to be a communication vehicle between the DPSA Human Resource Development (HRD) and

the HRD components in the government departments of the KZN Provincial Administration. This study used Klein, Connelll and Meyer's (2005) theoretical framework of Classification of Communities of Practice to establish if it conforms to the practices of knowledge sharing within a structured community of practice as a way to answer the question of how knowledge is shared within the KZN PHRDF. Klein, Connelll and Meyer's theoretical framework for classifying communities of practice distinguishes between CoPs that are structured and classified into stratified and egalitarian and within these structures, there are those communities which are knowledge sharing and those which are knowledge nurturing. According to Klein, Connelll and Meyer's (2005) framework for classifying CoPs, the differences between communities is the way in which the different grades of membership are treated. In addition, the nature of knowledge activities upon which the communities focus tend to lead to systematic differences in which knowledge is preserved and evolves within the communities. CoPs are usually composed of individuals with varying degrees of expertise relevant to the interest and activities of the community. It is how these variances are structured within the CoPs and how knowledge sharing practices are conducted that is the focus of this framework. When a community acknowledges the different expertise of its members explicitly and treat different grades within the community differently, that is a stratified community (Klein, Connell and Meyer 2005). On the other hand, a community that tends to minimize the differences in the different grades according them fairly equal treatment, is an egalitarian community (Klein, Connell and Meyer 2005).

Table 2.1: A framework for classification of communities of practice Source: Klein, Connell and Meyer (2005)

Knowledge Activity				
		Sharing	Nurturing	
Structure:	Stratified	 Advanced grades share knowledge with less advanced. Knowledge flows down 	 Knowledge development experiences sequentially arranged. Knowledge development 	
		through community.	controlled by control of experiences.	
		Community knowledge fairly fixed and slow to change.	3. Community knowledge changes slowly but develops pluralistically.	
	Egalitarian	1. All grades share knowledge with each other.	1. Knowledge development experiences not sequentially arranged.	
		2. Knowledge flows up and down through community.3. Community knowledge changes quickly.	 Knowledge development not controlled. Community knowledge changes quickly and develops pluralistically. 	

Whether knowledge is shared vertically or horizontally depends on whether the community is stratified or egalitarian (Klein, Connell, and Meyer 2005). Klein, Connell, and Meyer (2005) argued that knowledge is shared equally within egalitarian communities regardless of different grades or different levels of positions whereas in stratified communities knowledge follows a hierarchy of expert to novice or highly skilled to less skilled.

2.6.1 A framework of classification of communities of practice

The framework proposed by Klein, Connell and Meyer (2005) identified four types of communities of practice (CoPs) namely: stratified-sharing communities, egalitarian-sharing communities, stratified-nurturing communities and egalitarian-nurturing communities.

Stratified-sharing communities make strong distinctions between novice, master, and other intermediate grades in terms of the activities members are permitted to perform, while their predominant knowledge activity is knowledge sharing (Klein, Connell and Meyer 2005). Knowledge flow within this community is hierarchical, from the more advanced grades to the less advanced grades. Promotion to higher grades status is dependent on the successful assimilation of knowledge. This mechanism suggests that the knowledge within stratified-sharing communities is fairly fixed in nature and likely to be relatively slow to change, since progress within the community is related to assimilating the knowledge of the community as possessed by the 'more experienced' and 'mature' members of the community (Klein, Connell and Meyer 2005).

Egalitarian-sharing communities do not make any grade distinction and knowledge tends to flow both up and down the expertise ladder (Klein, Connell and Meyer 2005). In these communities, experts learn from novices as much as novices learn from experts. This implies that the knowledge within these communities is less fixed and there is an openness to the idea of allowing novices to introduce new knowledge. Klein, Connell and Meyer (2005) argued that knowledge within such communities might be expected to evolve considerably faster than within stratified-sharing communities.

Stratified-nurturing communities exhibit the grade stratification of the stratified-sharing communities, but in these communities the emphases lies in nurturing the abilities of members by means of a sequence of experiences leading from novice to master (Klein, Connell and Meyer 2005). Control over the experiences of the members of the community tends to inhibit the evolution of community knowledge. However, since the knowledge of the community develops out of individual rather than sharing, it is expected that control over the knowledge of the community be less rigid than in a stratified-sharing community. Klein, Connell and Meyer (2005) suggested that knowledge held by a particular grade of membership may be pluralistic rather than conforming to a single norm. Different members might know different things or different members might know things differently. This may contribute to a more diverse knowledge pool which the novice members may be exposed to and nurtured into.

Egalitarian-nurturing communities also place emphasis on nurturing knowledge by means of experience, but in contrast to the stratified-nurturing communities, they are likely to throw the novice 'in the deep end' (Klein, Connell and Meyer 2005). Similarly to stratified-nurturing communities, this approach tends to promote pluralistic knowledge within the community, but unlike stratified-nurturing communities, it also promotes fluidity and rapid evolution of knowledge. At its extreme, an egalitarian-nurturing community might be expected to exhibit what might be termed 'knowledge anarchy'. According to Osterland and Carlile (2004) the boundaries of the community are not given by the definition of the term itself but by the community participants' empirical practices. It is within these different classifications of CoP that this study tried to locate the PHRDF, however, it is possible for a community to exhibit a hybrid character of all these communities. The benefit derived from locating the PHRDF within these communities, was utilizing the strengths of the characteristics presented by these communities in order to enhance knowledge sharing behaviours of the members. It is also possible that a community may be classified as stratified or egalitarian but exhibit knowledge sharing practices do not reflect how it is structurally constituted.

Since this study utilized the SECI model to explore knowledge sharing within a community of practice, it was found that the concept of *ba* discussed in the previous section has some similarities with the concept of CoP. Based on the apprenticeship model, the concept of CoPs argues that members of a community learn through participating in the CoP and gradually memorizing jobs (Nonaka, Toyama and Konno 2000). However, there are differences between the concepts of CoP and *ba*. While a CoP is a living place where members learn knowledge that is embedded in the community, *ba* is a living place where new knowledge is created (Nonaka, Toyama and Konno 2000; Jones 2007). There is a boundary in a CoP firmly set by the task, culture and history of the community. Consistency and continuity are important for a CoP as it needs identity (Nonaka, Toyama and Konno 2000).

In contrast the boundary of *ba* is fluid, and can be changed quickly as it is set by participants. Instead of being constrained by history, *ba* has a 'here and now' quality (Nonaka, Toyama and Konno 2000). It is also constantly moving, it is created, functions

and disappears according to need explaining its fluidity. In a CoP, changes mainly take place at micro level (individual level) as new participants learn to be new participants (Nonaka, Toyama and Konno 2000). On the other hand, in *ba*, changes take place both at the micro and macro level as participants change both themselves and Ba itself. While the membership of *ba* is fairly stable and it takes time for a new participant to learn about the community to become a full participant, the membership of *ba* is not fixed, participants come and go (Nonaka, Toyama and Konno 2000). Furthermore, whereas participants of a CoP belong to the community, participants of *ba* relate to *ba*.

Table 2.2: Differences between CoP and *ba* Source: Nonaka, Toyama and Konno (2000)

COP	Ва
A living place where members learn	Need energy to be an active ba where
knowledge that is embedded in the	knowledge is created
community	
Firmly set boundaries by task, culture and	Fluid boundary, can be changed quickly
history. Consistency important	as deemed by participants; has "now and
	here" quality; constantly changes
Changes take place at micro level	Changes take place at both micro and
	macro levels
Membership fairly stable; takes time for	Membership not fixed; participants come
new participants to learn and become full	and go
members	
Members belong to the community	Participants relate to ba

2.7 Summary of the chapter

This chapter discussed the multiple theoretical frameworks and the model adopted in this study. The use of motivational theory, social exchange theory, the Classification of Communities of Practice framework and the SECI model highlighted the various nuances of knowledge sharing amongst individuals, amongst organizations and between individuals and organizations. Motivation theory as discussed above was utilized in this study in order to determine what motivators drove the KZN PHRDF

members to share their knowledge. CoPs social motivators are anticipated to exert a greater impact on attitudes towards behaviour than do personal or economic motivators. Social exchange theory discussed the various factors that enhance knowledge sharing as well as inhibitors of knowledge sharing. Literature confirms that rewards systems, personal gratification, conducive environments, and trust play a significant role in encouraging knowledge sharing.

The SECI model explored the dynamic interaction by which knowledge is transferred in a spiral process, allowing the knowledge value to be enhanced through exchange between individuals and groups within the organization. Tihane (2010) illustrated how this dynamic interaction materialized in work environments in which Socialization behaviour was practiced. This illustration supported the significance of time and space which is emphasized in the *ba* concept. Klein, Connell and Meyer (2005) developed the Classification of Communities of Practice framework to demonstrate how knowledge sharing could be influenced by hierarchical structures as well as whether a CoP utilizes a nurturing or sharing approach. These theories and model are instrumental in providing clarity in how knowledge sharing occurred within the KZN PHRDF.

CHAPTER THREE

LITERATURE REVIEW

3.1 Introduction

This chapter reviews the literature in the context of knowledge sharing in the public service from a global perspective with particular attention to Africa, Southern Africa and South Africa. The literature review is discussed in relation to the objectives of the study which includes the following issues: how knowledge is shared in the public service; practices and factors influencing knowledge sharing; challenges of knowledge sharing and how these challenges could be overcome. Major themes discussed in this chapter include public administration and service delivery from a global perspective, the link between knowledge management and service delivery, the knowledge worker in a knowledge economy, human resource development and human resource development strategy in the South African public service and the role of knowledge sharing in the public sector. Lastly, studies on the different theories that have been used to explore knowledge sharing in this study will be discussed. However, a broad review of the public service and its functions of policy-making and service delivery will be discussed first.

3.2 The purpose of the literature review

Mouton (2001:87) suggested that the first aim of the literature review should be to find out what has been done in the field that is being studied. The process of a literature review involves the review of the existing scholarship or available body of knowledge to see how other scholars have investigated the research problem that the researcher is interested in (Mouton 2001:87). In research, the literature review makes it possible for the researcher to find studies that are related to the current study so that, amongst other benefits the study can be focused appropriately. Pather (2004:72) states that a literature review intends to indicate where the present study fits into the broader debates, thereby justifying the significance of the study. According to Mouton (1996:119) a literature review is similar to a map that guides the researcher along the road that was travelled by other researchers before in a specific terrain. In other words, it provides a historical

background to the research problem and reviews related research studies that have been conducted (Powell and Connaway 2004:255). Moreover, in areas where there has been a concentrated focus on a specific phenomenon, a researcher has an obligation to acquaint him/herself with any publication on major research already conducted in the field; the most widely accepted theoretical positions and the most recent debates.

Babbie (2010:119) suggested that a literature review should adequately respond to these questions:

"What have others said about this topic? What theories address it and what do they say? What previous research exists? Are there consistent findings, or do past studies disagree? Does the body of existing research have flaws that you think you can remedy?"

In addition, the data collection methods intended to be used in the research have an impact on the choice of literature to be reviewed. The literature review will review the broader debates that anchor this research such as the focus on service delivery and policy making in public service, the knowledge economy in South Africa and its effects on knowledge management in public service, empirical research done on knowledge sharing with a special emphasis on the public service, the barriers to knowledge sharing and knowledge sharing within CoPs and various methods that have been used by previous studies to study knowledge sharing in public service.

3.3 Public administration and service delivery

The main areas of concern in public service performance are public administration and service delivery. Public administration relies on policies in order to carry out its operational mandates, therefore policy-making occupies a significant part in the public administration. There is no general accord on the definition of public administration in literature and it seems as if the most common practice is to define it using examples. Literature often refers to the public service as the public sector and therefore these terms will be used interchangeably in this study. This section will discuss the public service from a global perspective and also refers to South Africa in particular in the context of policy-making and service delivery in order to situate the role of knowledge management, a knowledge economy and knowledge sharing in the public service.

In pursuit of fulfilling its mandate of policy-making and service delivery, it is acknowledged that these processes utilize knowledge as an essential resource of government that assumes special importance in every step of the government business (Cong, Li-Hua and Stonehouse 2007). In addition, and most important, effective functioning of government rests on effective sharing and use of knowledge by public sector employees at various levels namely, local, provincial and national. When KM was gaining momentum in the private sector in the last decade of the twentieth century (the 1990s) because of the challenges of losing tacit knowledge as a result of downsizing in the Western economies such as the United States of America (USA) and Canada as well as some Asian countries such as Japan, the public sector was embarking on what is called New Public Management (NPM) (Mphahlele 2010).

NPM offers a set of new ideas and tools for government to run the public sector which entail the idea of employing private law contracts in order to manage public services (Cong, Li-Hua and Stonehouse 2007; Mphahlele 2010). Cong, Li-Hua and Stonehouse (2007:251) citing Lane (2000) described NPM as a general theory about how government can get things done, how it can get services organized and offered to citizens. NPM is not about politics but rather about what happens after parliament has decided on the objectives because it claims that public administration is old-fashioned and can be replaced by NPM (Cong, Li-Hua and Stonehouse 2007). The practice of NPM and its increased acceptance by countries around the globe justifies the acceptance and adoption of KM by the public service, which was initiated in the private sector as valid. Therefore NPM has paved the way for techniques and methods in private management to be transferred to public management, for which KM is no exception (Cong, Li-Hua and Stonehouse 2007; Mphahlele 2010).

3.3.1 Policy-making and service delivery in the South African public service

This section will discuss the broader issues of the public service in South Africa as this research is focused on studying knowledge sharing in the South African public service. Knowledge management was introduced to the developed countries in the nineties when South Africa was going through an inevitable change (Mphahlele 2010). Changes that occurred in 1994 therefore launched South Africa's re-emergence in the global

economy as a new democracy and emerging knowledge economy. Changes in the South African political landscape ushered in a total restructuring of public service; nationally, regionally, and provincially (Mphahlele 2010). These changes included changes in legislation and policies. The changes were necessary in order to redress a system that was designed to promote the exclusion of blacks from the mainstream of society, after all the majority of citizens are black (Naidoo and Kuye 2005). Naidoo and Kuye (2005) further reported that during the first two and a half years of its first five year-year term, the new South African government focused primarily on developing its policies and on streamlining and improving frameworks, structures and systems.

Mufamadi (2003) argued that the post-apartheid democratic government in South Africa since 1994, has had to address the legacy of apartheid and colonialism. In 1994, it was reported that urban areas in South Africa are better provided with higher levels of services because these were areas inhabited by predominantly white citizens (Naidoo and Kuye 2005). In addition, the biggest backlogs were in the rural areas where services were virtually non-existent as these areas were occupied by black people. The reasons for the differences could be attributed to the past where bias of services was mainly towards white communities in South Africa. This system had been designed to promote the exclusion of blacks from the mainstream of South African society after all, the majority of the citizens who live in rural areas are black.

The improvement of service delivery means improving and redressing the imbalances of the past, while maintaining the continuity of services to all levels. Since 1994, government has embarked on initiatives to improve the ability of the public service to deliver services (Naidoo and Kuye 2005). Among the things that government did was to improve the professional capacity of public service (Theletsane 2014). According to Theletsane (2014) new capacities are needed in the South Africa public service to exploit new opportunities and to ensure that all public service functions are carried out to the highest professional standard.

Furthermore, the skills required in the public service, both currently and in the future, in policy-making and analysis, in the management of organizations and in public service

delivery, put greater demands on public servants and call for more professionalism in public management. The South African government outlined 12 crucial objectives with specific outcomes that it wants to achieve in order to create a better life for all and the twelfth outcome of these objectives states that it wants "an efficient and development-oriented public service" (Provincial Public Service Training Academy 2009:9). Lewin (2014) claimed that public service managers and supervisors must understand service delivery policies, procedures and case law to be effective. Moreover, to ensure an 'efficient and effective public service', it is not only senior managers but also supervisors at the lowest level who should have practical knowledge and understanding of the policies and procedures contained in the prescripts.

During the first two and a half years of its first five year term, the new South African government focused primarily on developing its policies and on streamlining and improving frameworks, structures and systems. Various new acts and regulations were formulated and introduced in the South African public service to improve service delivery (Naidoo and Kuye 2005). The transformation of the South African public service initially focused on legislative reform, but has since moved to massive administrative reform (Naidoo and Kuye 2005). There is increased pressure on governments to modernize and transform them into institutions capable of facilitating and driving development in a knowledge economy (Dikotla, Mahlatji and Makgahlela 2014). The South African public service is responding to service delivery challenges by exploring and implanting alternative methods of service delivery.

The trend in both provinces and municipalities is to use public-private partnerships as a way of meeting service delivery objectives. This approach mainly used the expertise, investment and management capacity of the private sector to develop infrastructure as well as improve and extend efficient services to communities (Naidoo and Kuye 2005). Moreover the public service has adopted an approach where the focus is on practical implementation to ensure that communities become involved in matters that affect them. There are various programmes built to enhance co-operative participation by the public service and community. One such programme is called Sukuma Sakhe in KwaZulu-Natal.

Sukuma Sakhe is a programme that coordinates programmes of government to work collectively and systematically (KwaZulu-Natal Office of the Premier 2011). Among other things Sukuma Sakhe members in the community are trained as public servants to assist citizens with matters such as obtaining birth certificates and identity documents, completing social grant applications, teaching the public on health, social and environmental issues as well as starting up social clubs and small businesses. A large part of this programme consists of household profiling which assists in identifying service delivery needs. The programmes which are undertaken by the public service are valuable in assisting communities who are unaware that they are entitled to certain benefits and services.

These unique practices by the South African public service increased accessibility to the public service and promote service delivery needs (Naidoo and Kuye 2005). Although the outcome of these practices is valuable in increasing awareness of the communities to what their rights are, it can also create adverse effects when people demand these services when they do not reach them timeously. This has been evidenced by the escalation of service delivery protests in various under-developed areas in South Africa, however, it also indicates that the public service has gone to great lengths in publicizing its services to people who were ignorant of what was due to them before. The protests were the result of the slow pace of service delivery which affected communities that had been waiting a long time (Dikotla, Mahlatji and Makgahlela 2014).

The Department of Public Service and Administration (DPSA) has noted improvements in a number of national and provincial departments (Naidoo and Kuye 2005). The DPSA is responsible for the formulation of national policy in South Africa. It has also indicated that some public service departments are confronted with challenges that impact on their performance (Naidoo and Kuye 2005). The trend of lack of effective and efficient service delivery in public service in South Africa indicated that there was a lack of accountability, lack of continuity due to political infighting and incomplete projects (Dikotla, Mahlatji and Makgahlela 2014). The Public Service Commission (PSC) maintains that previously disadvantaged areas, especially remote rural communities in

South Africa are still struggling to receive the necessary services for their livelihoods. The PSC is a national government department that is constitutionally mandated to monitor public service delivery in South Africa. It states that there are challenges in the South African public service that impact on service delivery (Naidoo and Kuye 2005). Improving public service delivery is essential for the future economic prosperity and social development of South Africa.

3.4 Knowledge management and service delivery

In order to place knowledge in the context of this study, the researcher will use the progression of data, information, knowledge continuum which is popular in knowledge management (KM) literature. There is an accepted theory that data evolves to information and when information received by an individual is utilized it is transformed into knowledge, however this does not occur in discrete stages of development (Maponya 2003:3). Data consists of facts and figures which relay something specific, but which are not organized in any way and provide no further information regarding patterns, context and so on (Frost 2010).

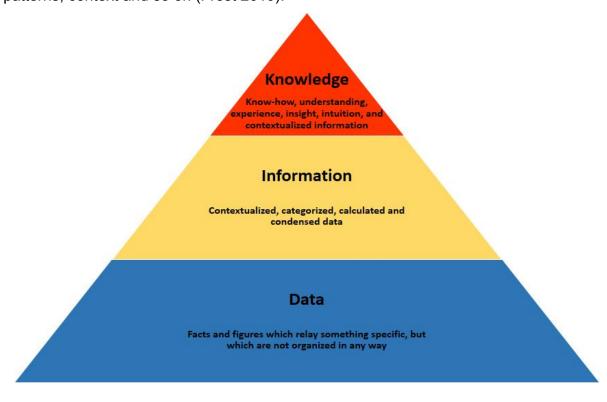


Figure 3.1: Knowledge, information and data

Source: Frost (2010)

Information is data put together to make sense and it is a necessary medium for initiating and formalizing knowledge because knowledge is created and organized by the flow of information anchored on the commitment and belief of its holders (Taylor and Wright 2004). For data to become information, it must be contextualized, categorized, calculated and condensed (Davenport and Prusak 2000). McDermott (1999) and Blumentritt and Johnson (1999) argued that not only is information a necessary antecedent to knowledge creation and use, but it is also the medium by which knowledge is transferred. Knowledge is closely linked to doing and implies know-how and understanding (Frost 2010). The knowledge possessed by each individual is a product of his/her experiences and encompasses the norms by which s/he evaluates new inputs from his/her surroundings (Davenport and Prusak 2000). According to Pardo, Cresswell, Thompson and Zhang (2006) explicit knowledge is those elements of knowledge that are recognized and expressed by formal techniques and can be more readily and directly observed, captured or transferred. It is within the scope of understanding these terms as illustrated in Figure 3.1 that KM and service delivery is discussed.

In South Africa years of apartheid have forced many people to remain in rural settings where they traditionally lived, but without giving any attention to the health and social welfare of people living in these communities (Noeth 2006). The type of housing and its location is often a good predictor of the type of service a community would receive (Nleya 2011). The disregard for these communities led to a deterioration of social and health services. Compared to their urban counterparts, these people have fewer economic and social resources, are poorly educated and more likely to be unemployed, inadequately housed, and exposed to multiple health and social risks (Noeth 2006). For example, informal settlement dwellers like their rural setting counterparts have either no toilets or use communal toilets, and may or may not have access to electricity or clean, piped water (Nleya 2011). Sparse populations as found in rural communities are often limited to specific services and service providers in their immediate area, solely because

of their depleted numbers. In addition, these communities also have limited differentiation and specialization of services.

Results from a situational analysis in a study done by Noeth (2006) of knowledge management and service delivery in rural communities, indicated that limited information and knowledge were the predominant causes of a large number of problems related to ineffective service delivery. It was also revealed in this study that in addition to a lack of information and knowledge in these rural communities, information and knowledge that were available were not disseminated and shared effectively. The limited amount of information and knowledge, and the ineffective management of information and knowledge have a negative impact on the delivery of services. The importance and value of information dissemination is highlighted by trends of dissatisfaction linked to failures in meeting service delivery expectations (Schoeman 2007).

Noeth (2006) claimed that certain knowledge-related problems were identified in rural communities. These problems had a direct impact on service delivery by the public service in South Africa. Problems such as the knowledge regarding the stigma of HIV/AIDS, misconception about the allocation of foster care grants, lack of knowledge by police officers regarding domestic abuse, construction of proper housing and handling of confidential information (Noeth 2006). All these problems can be alleviated through coordinated public service programmes and skilled and knowledgeable staff. There is evidence that problems in the public service that are linked to service delivery are not due to policy issues, they are the result of implementation issues (Maluka, Diale and Moeti 2014). Maluka, Diale and Moeti (2014) recommended that more experts have to be employed to implement mechanisms for service delivery. Dealing with issues in rural communities requires sensitivity around culture and traditions and should staff in the public service be deployed to impart information and knowledge to these communities, knowledge about the communities is paramount.

In rural communities when an individual contracted HIV/AIDS, there was a myth that they were possessed by evil spirits, while others believed that only prostitutes get

infected with HIV (Noeth 2006). Furthermore, the stigma around HIV/Aids prevents people infected from disclosing their HIV/AIDS status resulting in them not receiving appropriate care and medication. In addition, prevention strategies suffer, as it is difficult to transfer knowledge to community members because of the stigma attached to this condition. Perceptions of risks of infection were usually linked to social or cultural constructions and interpretations (Phaswana-Mafuya and Peltzer 2006). If an individual believes that only prostitutes become infected or HIV/AIDS occurs as a result of being possessed by an evil spirit, wearing a condom does not make much sense to the average community member (Noeth 2006). Phaswana-Mafuya and Peltzer (2006) in their study found that there was a myth that sharing a meal with an HIV positive individual as well as being bitten by a mosquito could spread HIV. Although the South African government has an extensive information dissemination campaign an effective knowledge management strategy aimed at providing community members with current and accurate information regarding the onset of HIV/AIDS could reduce the stigma associated with the disease.

The situational analysis from the study by Noeth (2006) found that the allocation of foster-care grants to immediate family members in rural communities have traditionally been used to care for children of family members who have passed away. Receiving financial support for this care is a foreign concept in the rural community. Although these family members are entitled to receive foster-care grants, the lack of knowledge about the various grants deprive these family members of financial assistance that they should rightfully receive. This knowledge gap has a serious effect on the lives of immediate family members caring for orphans (Noeth 2006). Booysen (2004) reported that access to social grants emphasised the likely importance of the child support, disability and foster care grants in mitigating the impact of HIV/AIDS but take-up rates were relatively low. Nkosi (2010) found that in traditional African communities members of a community carry each other's burdens and they are the primary context in which the economic interests and psychological well-being of others are fostered. This results in the care-givers not benefiting from social grants not only because of lack of information and knowledge but also because of legislative restriction since these relations are not legal. Therefore Nkosi (2010) advised that the South African

government should take further steps to ensure that the various child-care structures that exist in indigenous African communities are recognized and provided for in legislation.

This study by Noeth (2006) also revealed that police officers, as well as a number of social workers, indicated that the police do not possess adequate knowledge to deal with sensitive cases. Police officers indicated that they were aware of the problems, however, they felt that they do not possess sufficient knowledge to deal effectively with sensitive situations such as domestic violence, child abuse, and rape (Noeth 2006). This is because their training revolved around violent crimes and potentially dangerous criminals in the majority of cases. A number of social workers in the study also expressed their willingness to provide police officers with the relevant knowledge. In a study by Van Graan (2012) it was reported that the family violence, child protection and sexual offences (FCS) police unit did not have an evenly balanced level of expertise and specialized skills. However, after 2010, the FCS was reintroduced into a centralized unit and there was a noticeable motivation from their members to enhance skills and expertise through sharing information and investigation methods among investigators and supporting one another (Van Graan 2012).

One of the areas concerning service delivery is the area of housing. A lack of proper housing presents a social problem that could have a negative effect on other social issues. Owing to limited financial resources, many individuals in rural communities build their own huts and houses. However, the manner in which these huts and houses are build is not according to proper building guidelines and they are built on loose soil without constructing proper foundations to support them (Noeth 2006). In Noeth's (2006) study representatives of the local government, who are often called Councillors, reported that there were many unemployed individuals in the community who were previously in the construction industry. Failure to release information regarding housing delivery to citizens and interest groups has led communities to corrupt practices and the practice of nepotism (Isaac-Martin 2009). Former construction workers could have passed the knowledge obtained while they were employed to the rest of the community in order to construct better housing structures. This demonstrates the value of

transferring tacit knowledge to other members in the same system similarly to what CoPs do. By contrast, if the tacit knowledge is not shared or transferred, it will eventually be lost resulting in the loss of valuable knowledge to the entire community (Noeth 2006).

One of the aspects that receives a great deal of attention within knowledge management in corporate organizations is the protection of sensitive information. It was found in Noeth's (2006) study that most community members were not satisfied with how personal information was handled in the community especially by hospital personnel. This led them to believe that their privacy was not respected and they were skeptical of disclosing any personal information in case it is made public. Doctors and other health care professionals need to be more attentive to the myriad ways in which confidentiality can be and is compromised (Benatar 2010). The reality is people in rural communities do not view information as valuable to keep and therefore do regard confidential information as private and this is contradictory to the notion of privacy and confidentiality. It is essential that members of the community especially those who obtain personal information of other community members be informed about the value of information and knowledge (Noeth 2006). Without a change in the way information and knowledge is perceived, the dissemination of sensitive information will continue. According to Benatar (2010) health care workers should preserve confidentiality vigorously unless the patient gave consents for the information to be conveyed to others. It is obvious that Noeth's study was investigating knowledge workers in the communities and this aspect will be explored further in the next section.

3.4.1 The knowledge worker in a knowledge economy

The knowledge economy is a term that either refers to an economy of knowledge focused on the production and management of knowledge in the frame of economic constraints, or to a knowledge-based economy (Provincial Planning Commission 2012). In the second meaning which is used often, it refers to the use of knowledge technologies such as knowledge engineering and knowledge management, to produce economic benefits as well as job creation. According to Steyn (2007), the knowledge economy is defined as one characterized by the recognition of knowledge as the major

source of sustainable competitive advantage, the increasing importance of innovation in knowledge creation and the use of the internet and intranet to generate, apply and share knowledge. In the knowledge economy the focus is on intangible assets (du Toit 2014).

The knowledge worker is the member of the organization who uses knowledge to be more productive (Steyn 2007). The focus is on accumulation, processing and analysis of data and information. The task includes the creative transformation of the knowledge commodity, its innovative distribution and creative commercialization. A knowledge worker is often engaged in 'knowledge work' that is challenging and non-routine. The phrase 'knowledge work' connotes the utilization of the brain to carry out some specified tasks. Imafidon (2009:22) citing Horribe (1999) stated that a knowledge worker is the employee who uses his/her head more than his/her hands to add some value to the organization. Such value is created though his/her ideas, his/her analyses, his/her judgment, his/her synthesis, and his/her designs (Imafidon 2009). A knowledge worker is utilized to identify future trends in the knowledge economy and this provides a different reality perception of the role of knowledge managers in the knowledge economy (Du Toit 2014).

The knowledge worker still uses his/her hands but is more likely to put them into a computer than lifting heavy-weight objects. Imafidon (2009:23) citing Sveiby agreed that knowledge workers are those workers who are highly qualified and highly educated professionals. Their work consists largely of converting information to knowledge using their competencies sometimes with the assistance of supplies of information or specialized knowledge (Imafidon 2009). The knowledge worker is also a professional whose work, standards, goals and vision are set by the standards, goals, and vision of the profession. Knowledge workers use knowledge to generate a living through thinking and not necessarily manual labour and simultaneously take responsibility for their own learning and development (du Toit 2014). According to Imafidon (2009), the Organization for Economic Cooperation and Development (OECD) describes a knowledge economy as one in which production, distribution and use of knowledge are the main drivers of growth, wealth creation and employment for all industries.

The implication of the knowledge economy is that there is no alternative way to prosperity than to make knowledge creation of prime importance (Imafidon 2009). Given the realization of the value of people in the knowledge-based economy, the very livelihood of organizations depends on their ability to attract, motivate, retain, and utilize knowledge (Imafidon 2009). Imafidon (2009:27) citing Al-Hawamdeh (2003) claimed that the real value of the organizations lies in its ability to generate enough intellectually capital, through the relevant knowledge that each organizational participant possesses. This leads this review to the next section on human resource development which is the area in which the unit of analysis of this study, the PHRDF, is based. Du Toit (2014) reported that South African enterprises should use more sophisticated information or communication technologies to stay ahead of their competitors. The South African government should invest in improved information and communication infrastructure to encourage more enterprises to use information and communication technology to gain competitive advantage (du Toit 2014).

3.4.2 Human resource development in South Africa

In any country, human resource development (HRD) refers to formal and explicit activities that will enhance the ability of all individuals to reach their full potential (Department of Education 2009). According to Van Dijk (2005) human resource development is an important factor contributing to a country's growth potential. South Africa has the typical profile of a developing country evidenced by an abundance of unskilled people and a shortage of skilled people. The public service has to function within an environment where particular resources are scarce and limited while community needs grow and expand continuously (Van Dijk 2005). Acquiring skills and competencies on a continuous basis will contribute to a life-long process of learning, reflecting a viable society and an economy with positive growth potential.

Since 1996 various changes have characterized the HRD environment. Emanating from the Constitution of South Africa, 1996, renewed focus has been placed on how to improve the competencies of public officials (Van Dijk 2005). The Constitution of South Africa, 1996 Section 195 requires a public administration that is development-

orientated, professional and has sound human resource management practices. Harrison (1993:300) defined human resource development as the planned learning and development of employees as individuals and as groups to the benefit of the organization as well as its employees.

A very specific policy framework was created to facilitate the establishment of a learning public organization. Senge (1990:3) defined the learning organization as one where people continually expand their capacity, where new and comprehensive patterns are fostered, where collective ambitions are set free and people repeatedly are learning how to learn together. Closer examination reveals that within a learning organization, employees become development resources for their colleagues and an environment for knowledge sharing is promoted and protected (Van Dijk 2005). In addition, a learning organization can be described as growing from sharing collective knowledge gained through experience and reflection. In the learning organization, the employee has the responsibility to utilize his or her knowledge to the benefit of the employer (Van Dijk 2005).

Another development in the contemporary HRD environment is based on the assumption that information and knowledge are central to life-long learning (Van Dijk 2005). In today's HRD environment the emphasis is placed on creating knowledge workers. This is evident in the Human Resource Development South Africa (Department of Education 2009:21) document where Commitment Six states:

We will improve the technological and innovation capability and outcomes within the public sector to enhance our competitiveness in the global economy and to meet our human development priorities:

- 6.1 To increase the number of skilled personnel in areas of science, engineering and technology
- 6.2 To improve South Africa's performance in areas of teaching, research, innovation and the commercial application of high-level science, engineering and technology knowledge.

This takes the learning organization one step further towards the creation of a knowledge-intensive organization.

The knowledge-intensive organization is one which is capable of ensuring the appropriate implementation of systems thinking (Van Dijk 2005). Thus learning and development do not take place only when formal knowledge is imported, but much more through knowledge conversion, which includes four types of conversions (Beeby and Booth 2000):

- 1. Socialization which refers to the sharing of implicit knowledge between individuals through formal and informal communication channels.
- Externalization referring to the conversion of implicit knowledge into explicit knowledge through a process of codification to ensure formal conversion and widespread dissemination.
- 3. Combination which refers to the spread of explicit knowledge to all individuals and teams mainly through the use of information systems.
- 4. Internalization depicting the reinforcement of explicit knowledge.

These types of knowledge are what is normally referred to as the SECI model (see figure 2.1) which was discussed in Chapter 2. The knowledge intensive organization is based on the assumption that information, knowledge and learning are central to any organization operating in a technologically advanced environment.

The attention focused on the knowledge-intensive organization stems from the fact that the important factor of production in any public organization is no longer capital but intellectual labour (Van Dijk 2005). Moreover, knowledge is incorporated into an organization's knowledge assets, comprising its core competencies, technology, value-adding activities, processes, systems, procedures and structures. Van Dijk (2005) maintained that the embedded knowledge constitutes the assets through which an organization can sustain its competitive advantage. He further claims that the role of organizational learning is to continuously create new knowledge that would lead to the more effective and efficient handling of organizational assets.

It can then be concluded that public organizations responding to the demands of a lifelong learning environment should ensure an adequate supply of knowledge workers. Van Dijk (2005) proposed that knowledge workers should be continuously identified, developed and evaluated. They should be motivated and rewarded in order to guarantee maximum productivity and quality service delivery since knowledge management facilitates effective and efficient human resource development.

3.4.3 Knowledge management in the public service in South Africa

Knowledge management was introduced around the developed countries in the last decade of the twentieth century (1990s) when South Africa was going through an inevitable change (Mphahlele 2010:10). As was mentioned earlier change was responsible for launching South Africa's re-emergence in the global economy as a new democracy and an emerging knowledge economy. There was also a visible introduction of information and knowledge management like the introduction of the Electronic Communication Act 36 of 2005, and the Promotion of Access to Information Act 2 of 2000 among others (Mphahlele 2010:11). These acts are associated with the use of Information and Communication Technology (ICT) in the South African public sector (Mphahlele 2010:11). The Government Information Technology Office Council (GITOC) and the State Information Technology Agency (SITA) was also established to deal with the use of ICT in the South African Public Sector and is presently addressing issues like e-government and Open Source Software which is still in their infancy (Mphahlele 2010:11).

It should be noted that the emphasis on these developments was mostly on information technology (IT) which is an enabler of KM, not KM itself, as is usually thought. Evidence of KM in both private and public sectors in South Africa can be traced to the late 1990's and early 2000s (Mphahlele 2010:11). Mphahlele (2010:11) said that most public sector agencies are already engaged in knowledge intensive activities, therefore KM is not a zero based activity. The then South African Minister, Mrs Geraldine Fraser-Molekedi for the Department of Public Service and Administration (DPSA) (1994 – 2008)¹ said,

¹ This statement appeared at the back of every issue of the 2004 to 2008 Public Service Delivery Review, a learning journal published by the DPSA for knowledge sharing

"Each of us is a knowledge worker and a learning champion in this knowledge economy. We all have a role to play in turning the public service into a learning public sector for quality service delivery".

This statement confirms that there was a vision for the public service in South Africa to embark on a KM programme.

The DPSA drafted a second discussion document in 2011 on developing a KM framework which superseded the one produced in 2002. According to the DPSA (2011) this document was to be a guiding document that would provide leadership in assisting government departments and KM professionals of South Africa to develop strong capacity in implementing the practice of KM. However, this document still remains in draft form. A little headway regarding KM in the public sector was obtained when a guiding document for developing learning networks was adopted by the DPSA ahead of the KM strategy in 2003 (Learning and Knowledge Management Unit 2003).

The Free State Province followed suit by drafting its own KM strategy whose purpose was to provide guidelines on the creation, implementation and management of knowledge in pursuit of becoming a centre of excellence in KM to improve provincial efficiency and effectiveness (Free State Provincial Government 2007). This document remained a draft as it was affected by the indecisiveness of the DPSA in adopting their own framework as the department that was meant to provide leadership in KM implementation.

Two departments in KwaZulu-Natal (KZN) province which took the initiative to draft their own strategies were the Department of Economic Development and Tourism (DEDT) and the Office of the Premier (OTP), although the OTP was never endorsed. The focus of the draft KM strategy of the DEDT was on driving smart economic interventions (Department of Economic Development and Tourism 2011). It proposed that the scope of a KM strategy must start with data management, followed by information and knowledge management then escalate to innovation management.

The inclination to economic focus in KM by the DEDT is similar to the one observed in the Provincial Growth and Development Plan (PGDP) developed by the KZN Provincial Planning Commission in 2012. The PGDP recognized that in a knowledge-based economy, knowledge is a tool which adopts a two-fold definition of a knowledge economy (Provincial Planning Commission 2012). In the first meaning, the knowledge economy is a term that refers either to an economy of knowledge focused on the production and management of knowledge in the frame of economic constraints or to a knowledge-based economy. In the second meaning, it refers to the use of knowledge technologies such as knowledge engineering and knowledge management to produce economic benefits as well as job creation.

According to Mphahlele (2010) since knowledge management was introduced more than 10 years ago in the South African public sector, the government has been lending support to it through the DPSA as well as GITOC. The different national departments were at different stages of implementation with some doing much better than others, while some had not even started with KM. Despite the effort by government to organize road shows, publish case studies and GITOC's work group, there seemed to be very little knowledge of KM in some departments (Mphahlele 2010). During Mphahlele's study it was found that in departments that have introduced and implemented KM, there was no structured or systematic KM monitoring and evaluation, therefore it became difficult to determine the success or actual failures of it.

3.4.4 The human resource development strategy in South Africa

This study's unit of analysis, the KZN PHRDF forum, is based in the field of human resource development therefore this section will briefly discuss the link between KM and HRD in South Africa. The National Human Resource Development Strategy (NHRDS) was developed in 2001 by the DPSA. A review of progress in respect of indicators and targets of the strategy contained in the 2001 HRD Strategy of South Africa was undertaken and a document called Human Resource Development Strategy of South Africa 2010-2030 resulted from the review. Certain shortcomings were identified in the review therefore the revised strategy sought to overcome the shortcomings. The new

revised strategy consists of eight commitments underpinned by strategic priorities with various objectives aligned to the priorities.

Commitment six states that, "we will improve the technological and innovation capability and outcomes within the public and private sectors to enhance our competitiveness in the global economy and to meet our human development priorities" (Department of Education 2009:21). Under this commitment, the strategic priority 6.2 seeks "to improve South Africa's performance in areas of teaching, research, innovation and the commercial application of high-level science, engineering and technology knowledge" (Department of Public Service and Administration 2009:22). Some of the activities listed under this strategic priority that were identified as related to KM include "establishing the Technological Innovation Agency for the purpose of providing innovation knowledge management services" (Department of Education 2009:42).

The Province of KwaZulu-Natal where the PHRDF is based, is in the process of endorsing the Human Resource Development Strategy (HRDS) for the Province of KwaZulu-Natal (PHRDS). This strategy consists of pillars from which objectives and goals emanate. The link between this study and the PHRDS is found in pillar two whose title is 'Building educational foundations for employment and entrepreneurship'. Under pillar two, goal three looks at 'enhanced workplace learning for employee development' (Public Service Training Academy 2009). The activities listed under goal three would be performed by the Provincial Public Service Training Academy (PPSTA) which coordinates the PHRDF and the most relevant to this study include:

- Establishment of collaborative public service training networks coordinated through PPSTA; and
- Enhanced provincial HRD forums.

It was mentioned in the previous sections that learning is important in knowledge management as a learning organization is constituted by individuals and teams who continuously learn in order to produce innovations that transform the organization to keep up with latest economic and technological developments. It is also important that

PHRDS plans to enhance the PHRDF which is the focus of this study as its coordinating task for capacity development of the Provincial Government employees is very important.

3.5 Knowledge sharing in the public sector

Knowledge management has been widely defined as a set of processes or activities which include knowledge creation, capture, organization, storage, dissemination and application (Salleh, Chong, Ahmad and Ikhsan 2013). Among these processes knowledge sharing has been determined as the cornerstone of KM. Knowledge and information are not clearly distinguished in literature. According to Nonaka (1994) information is defined as a flow of messages and differs from knowledge which is the organized flow of information. However, the terms 'knowledge' and 'information' are most often considered to be interchangeable in literature.

Knowledge sharing is an important management practice in both the private and the public sector since they both rely on deploying non-tangible assets such as know-how and tactical problem-solving in ever short time frames (Park, Saplan-Catchapero and Jaegal 2012). Park, Saplan-Catchapero and Jaegal (2012) further argued that the ability to share knowledge, ideas, perspectives or solutions among collaborators represents possibly the greatest advantage any organization can achieve. White and Korrapati (2007) mentioned various failures of KM projects and attributes such failures to the little understanding of the knowledge sharing process in organizations. They argued that in order to understand knowledge sharing it is useful to differentiate between explicit and tacit knowledge.

In this study knowledge is understood to be "information processed by individuals which includes ideas, facts, expertise, and judgments relevant for individual, team, and organizational performance" (Wang and Noe 2010). Nonaka and Takeuchi (1995) classified organizational knowledge into tacit and explicit knowledge. They described tacit knowledge as 'know-how' since it represents procedural or implicit knowledge that is closely held in human's heads such as experience and expertise and therefore it is difficult to articulate and codify.

On the other hand, explicit knowledge stands for 'facts' from organizational rules, manuals, routines, software and procedures that can be codified and are easy to transfer and share thus explaining its 'know what' nature. Taking from these two types of knowledge, knowledge sharing can be defined as the process by which explicit and tacit knowledge are communicated to individuals (Salleh et al. 2013). Knowledge sharing therefore refers to the provision of sharing task information and know-how to help others and to collaborate with others to solve problems, develop new ideas, implement policies or procedures (Wang and Noe 2012:117).

While knowledge is shared through face-to-face interactions, it can also be shared through such channels as telephones or e-mails (Truran 1998; Dikotla, Mahlatji and Makgahlela 2014). Recently there have been other technological media such as podcasts, intranets, social networks as well as chat technology on mobile cellular phones (Jain 2009). Knowledge is shared informally even in highly structured organizations. Employees often share knowledge unconsciously through informal interactions. This implies that knowledge can be shared without specific intentions to do so (Amayah 2013).

In the knowledge-based economy, knowledge sharing is increasingly viewed as critical to organizational effectiveness. It is argued that knowledge sharing among employees significantly impacts the performance of both public and private organizations (Amayah 2013). In a study of knowledge management in the Kenyan public administration done by Ondari–Okemwa and Smith (2009) it was observed that the Kenyan public administration was still entrenched in traditional bureaucratic procedures where staff are not given due recognition for their professionalism and knowledge, and innovation, knowledge generation and leadership are not rewarded. Seba, Rowley and Delbridge (2012) observed that bureaucratic organizational cultures tend to mean that employees in the public sector often see knowledge management as a management responsibility and not necessarily something for which every employee should take some responsibility.

Although research on knowledge sharing in the public sector is limited, in the past 20 years there have been significant changes in the public sector moving from a traditional bureaucratic approach to a more managerial one, so much so that today's public sector organizations are also known as knowledge-based organizations (Amayah 2013).

Amayah (2013) claimed that today's public sector organizations are known as knowledge-based organizations emphasizing the fact that knowledge has become a critical resource in the public sector as it is to private sector firms. Moreover, public organizations like the private sector, have to contend with greater competition for resources and competition from alternative services. Improving knowledge sharing processes would help ensure employees benefit as much as possible from senior employees' knowledge and experience before the latter retire. By capturing tacit knowledge of an ageing workforce and by availing easy access to all relevant information, partnerships with all stakeholders can be enhanced and by so doing overall performance of the public sector can be improved (Jain 2009).

Barriers to knowledge sharing cannot be ignored as the notion of 'knowledge is power' plays a significant role in employee's unwillingness to part with what they know. In the public sector the structure of the organization has traditionally been compartmentalized leading to people working in silos, knowledge hoarding and people citing lack of time and trust as reasons for not sharing their knowledge (Cong, Li-Hua and Stonehouse 2007; Sandhu, Jain and Ahmad 2011). In a study by Sandhu, Jain and Ahmad (2011) it was found that the most prevalent individual barriers to knowledge sharing were lack of time to share knowledge and lack of interactions between those who can provide and those who need knowledge. The hindrances to sharing knowledge are not only personal, they are organizational and technological as well (Riege 2005). Sandhu, Jain and Ahmad (2011) discovered that organizational knowledge sharing barriers included inadequate IT systems and processes. However, the focus on IT is only on the role it plays as an enabler of knowledge sharing because the main success of knowledge sharing lies in the individuals who share knowledge (Sandhu, Jain and Ahmad 2011).

Liang, Liu and Wu (2008) argued that generally people who possess great amounts of knowledge are unwilling to share it. This argument is based on Davenport and Prusak's

(1998) claim that knowledge sharing is unnatural at work because people think that their knowledge is valuable and important. Furthermore, a survey by Ruggles (1998) revealed that the biggest challenge faced by organizations in terms of KM is changing people's behaviours particularly in terms of knowledge sharing. Thus, is there awareness in the public service especially among senior managers that there are barriers to knowledge sharing which is the crux of an organization's ability to manage its knowledge?

3.5.1 Review of empirical studies about factors affecting knowledge sharing in the public sector

Knowledge management and sharing in the public sector is currently attracting an increasing level of interest (Seba, Rowley and Delbridge 2012). Prior studies of knowledge sharing have placed emphasis on similarities and differences between private and public sector organizations, and factors that affect knowledge sharing. For example, Amayah (2013:456) citing Liebowitz and Chen (2003) found that it is more difficult to share knowledge in public sector organizations because most people associate knowledge with power and their promotion opportunities. Other studies have focused on some factors that affect knowledge sharing in the public sector, for instance, Seba, Rowley and Delbridge (2012) found that organizational structure, leadership, time allocation, and trust could be barriers to knowledge sharing in the Dubai police force.

The study by Seba, Rowley and Delbridge (2012) also demonstrated that the Dubai Police Force had invested considerable effort and resources into establishing programmes and departments to take forward knowledge management initiatives, focusing on capturing implicit knowledge and converting it into explicit knowledge so that it can be disseminated and stored and used again. This strategy is reminiscent of the processes in the SECI model of knowledge creation discussed in Chapter 2. In a study of 50 private sector organizations, Lin (2007) found that motivational factors such as reciprocal benefits, knowledge, self-efficacy and enjoyment in helping others significantly affect employee knowledge sharing attitudes and intentions.

Public sector organizations differ from private sector organizations in a number of ways. Firstly, organizational goals in public organizations are typically more difficult to measure and more conflicting than in private organizations, and they are affected differently by political influences (Pandey and Wright 2006). Secondly, public organizations can be very different from one another, based on ownership of the organization, funding and control (Willem and Beulens 2007). Amayah (2013:456) citing Heffron (1989) observed that other differences include fragmented authority and less incentive for efficiency.

Chiem (2001) claimed that knowledge sharing in the private sector can always be encouraged and rewarded financially whilst in the public sector limited resources could hinder that practice. In addition, government workers are often bogged down with completing paperwork for even the most trivial tasks and this contributes to slow productivity, generates frustration and creates a tendency to perform the most minimal tasks. Therefore, they may perceive knowledge management initiatives as extra work and resist the efforts to build a culture of knowledge sharing (Yao, Kam and Chan 2007).

Nevertheless, there are advantages for the public sector in encouraging a knowledge sharing culture which include less pressures of competitiveness and cost reduction, less concerns about trade secrets and other vital information being leaked to competitors if they implement KM repositories (Seba, Rowley and Delbridge 2012). Another advantage in the public sector is the contribution to social good as an incentive to knowledge sharing because most public servants are not strongly profit motivated but rather, their jobs are devoted to serving the communities, citizens and the general public (Yao, Kam and Chan 2007; Seba, Rowley and Delbridge 2012). In addition, public sector workers may respond positively to an initiative that they perceive as contributing to the organization's overall mission. Yao, Kam and Chan (2007) advised that for knowledge management to be successful, it must be strongly associated with organizational goals and missions, accepted and welcomed by the employees.

Communicating and disseminating knowledge to staff does not necessarily mean that knowledge transfer will occur in the organization (Cong, Li-Hua and Stonehouse 2007). The most crucial factors in effecting knowledge sharing in both public and private sector is the willingness to share. This becomes a barrier to knowledge sharing as employees cannot be compelled to share their knowledge. Knowledge sharing capabilities can be affected by the organizational structure, organizational culture and information technology (Kim and Lee 2006). Other common barriers to knowledge sharing in the public sector where the structure has traditionally been compartmentalized include silo mentality as well as knowledge hoarding (Cong, Li-Hua and Stonehouse 2007). Riege (2005) suggested three dozen barriers to knowledge sharing including individual barriers such as formal power, age and gender difference, potential organizational barriers and potential technological barriers.

Ardichvili (2008) proposed that the following factors affect individuals' willingness to share knowledge: motivational factors such as personal benefits, community-related considerations and normative considerations; barriers categorized into interpersonal, procedural, technological, and cultural; enablers such as supportive corporate culture, trust and tools. Among these processes knowledge sharing has been determined as the cornerstone of KM. This view supports Cong, Li-Hua and Stonehouse's (2007) study which points out that to encourage employees to actively engage in knowledge sharing includes building a formal recognition and reward system not necessarily in monetary terms, to compensate for sharing knowledge with others and using others' knowledge.

One excellent example observed in the study is the World Bank who used that approach very effectively by incorporating learning and knowledge sharing as employees' assessable function (Liebowitz and Chen 2003). Seba, Rowley and Delbridge's (2012) study suggested that knowledge sharing should be adapted to suit specific organizational objectives consisting of three main types namely: dynamic, networking and object-oriented. According to this view, the networking structure is concerned with aiming knowledge sharing at the solution to problems and cooperation between entities, while the object oriented structure will concern itself with external sources of information and knowledge.

Literature illustrates that motivation to share is a necessary prerequisite to knowledge sharing since knowledge resides within individuals and they must be motivated to share it if it is to be shared effectively (Amayah 2013; Lam and Lambermont-Ford 2010; Ardichvili 2003). Amayah (2013) presented three categories of motivating factors on willingness to share knowledge thus: personal benefits, community-related considerations, and normative considerations. This view is supported in the study by Lam and Lambermont-Ford (2010) where the focus was on motivational processes and the relationship between different types of motivators. Their study wanted to bridge the traditional dichotomous view of treating knowledge sharing as either dominated by opportunistic or altruistic behaviour.

It assumed that both kinds of behaviours above are plausible and potentially exist, and the willingness of organizational members to engage in knowledge sharing can be viewed on a continuum, from purely opportunistic behaviour regulated by management authority to an apparently altruistic stance fostered by social norms and group identity (Lam and Lambermont-Ford 2010). This view recognizes that individuals may be motivated to share with others because they expect knowledge to be beneficial to them. Amayah (2013) mentioned that personal benefits identified in literature include status and career advancement, a better professional reputation, emotional benefits and intellectual benefits.

The second category community-related considerations refers to the moral obligation that individuals feel to advance or benefit others in their network (Amayah 2013). According to Ardichvili's (2008) framework, there are three community-related considerations that may influence one's motivation to share knowledge thus: sharing knowledge to establish ties with people one collaborates with, sharing knowledge as a means to build a stronger community and sharing knowledge to strengthen one's position in a community. In this framework, it is argued that motivational mechanisms play a role in actual behaviour and the dynamics of knowledge sharing and creation are complex within different organizational contexts. Amayah (2013) posited that normative considerations, which refer to organizational norms to which employees are expected to

adhere, take into account values and cultural norms that may lead an individual to share his/her knowledge. Individuals who possess common values and share the same vision are likely to share knowledge with one another. Therefore a shared vision has an influence in the quantity of knowledge shared. Some of the organizational knowledge sharing enablers, motivators and barriers are illustrated in Figure 3.2 below.

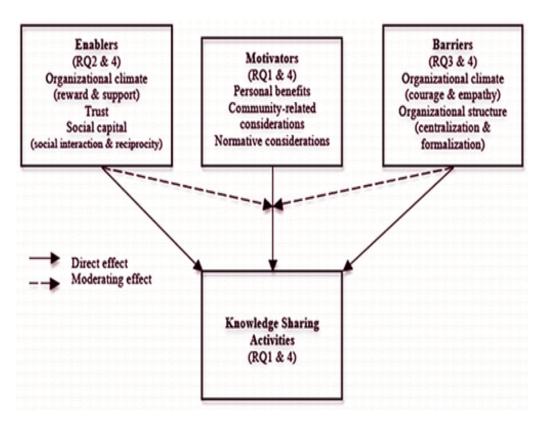


Figure 3.2: Knowledge sharing enablers, motivators and barriers Source: Amayah (2013)

The influence of enablers of knowledge sharing which include organizational culture, social capital and trust have a direct effect on knowledge sharing activities as illustrated in Figure 3.2 (Amayah 2013). Once an individual is motivated to participate in knowledge sharing activities, enablers facilitate the actual exchange of information. Organizational climate determines values, beliefs and work systems that encourage or hinder both learning and knowledge sharing as shown in Figure 3.2 (Amayah 2013). Depending on whether the organizational climate is conducive to knowledge sharing or not, individuals will be for or against participating in the sharing of their knowledge. Other factors that were identified by several studies as being important for successful knowledge sharing are leadership and management as they direct and guide all processes associated with knowledge sharing (Seba, Rowley and Delbridge 2012).

Based on the assertion that leadership and management influence knowledge sharing activities, the following deductions can be made (Seba, Rowley and Delbridge 2012):

- Firstly, leaders contribute to employees' learning from their personal experience.
- Secondly, leaders and managers persuade employees to transfer their knowledge and generate new knowledge.
- Thirdly the decision-making process which follows efficient knowledge sharing is also controlled by leaders.

An open and caring climate is also important to knowledge management as it encourages interaction among individuals which facilitates knowledge sharing. One of the effective ways of encouraging knowledge sharing is to embed it into daily activities.

Cong, Li-Hua and Stonehouse (2007) found that people are increasingly using the new advanced technologies such as the internet and intranet in their daily working activities. Online communities, expert directories and lessons learnt are easily accessed and located by public employees in the organization's intranet when providing services to the public. In this way, employees are sharing knowledge on the job thereby partly solving the barrier of lack of time and relieving employees from perceiving knowledge sharing as an extra burden to their job (Cong, Li-Hua and Stonehouse 2007). Trust has been touted as an enabler for facilitating knowledge as was found in a study by Ardichvili (2008) where participants were more inclined to use the knowledge made available if they trusted it to be a reliable and objective source of information. It was then concluded that trust leads to greater openness between individuals, encourages sharing of knowledge and willingness to collaborate with others.

In a study by Ford and Staples (2010), it was reported that research identified many potential predictors of knowledge sharing such as culture, management support, trust, rewards, attitudes about knowledge and knowledge sharing, language, time and space. Recent research into knowledge sharing in the public sector found that higher levels of trust provide a basis for consensus building, learning and practice changes and lead to more positive perceptions of incentives. However, in a study by Chiu, Hsu and Wang (2006) trust was not found to be a significant predictor of one's willingness to share knowledge and even had no impact on the quantity of knowledge shared.

Chiem (2001) also found that most public sector employees tend to believe that knowledge sharing leads to loss of power, resulting in their unwillingness to share knowledge with co-workers. Moreover, if knowledge shared is not seen as sensitive or otherwise important, trust might not be needed for one to be willing to share it. Instead Cong, Li-Hua and Stonehouse's (2007) study found that knowledge is only shared on a need to know basis. They reported that although there is some informal knowledge sharing in the organizations through face-to-face interaction in corridors and coffee or tea rooms, yet there is no knowledge sharing culture established to support KM other than knowledge sharing on a need to know basis.

Among these processes knowledge sharing has been determined as the cornerstone of KM. This supports the concept of *ba* added to the SECI model discussed in Chapter 2, where spaces for Socialization need to be created in order to facilitate knowledge sharing. Cong, Li-Hua and Stonehouse (2007) also found that there was no official forum or encouragement forum nor recognition and reward for disseminating knowledge to other individuals in their study.

Amayah (2013) found that there are two dimensions of social capital relevant to knowledge sharing which are structural capital and social interaction. This finding suggested that the structural dimension of social capital manifests itself in several ways, including through the norm of reciprocity. According to Chiu, Hsu and Wang (2006), reciprocity refers to the sharing of knowledge that is mutual and that both parties regard as fair. Although it was found that there was a positive relationship between the norm of reciprocity and knowledge sharing, Wasko and Faraj (2005) found a negative relationship between the two.

According to Huang, Davison and Gu (2008) an anticipated reciprocal relationship does not significantly influence one's willingness to share knowledge. In their study, knowledge was shared to make work more effective, not because individuals expected something in return. Instead social interaction was found to influence significantly the extent to which knowledge sharing occurs. This is in line with the social exchange theory discussed in Chapter 2 which supports the idea that social interaction enables

individuals to increase the depth, breadth and efficiency of the knowledge they share with one another. Thus social capital may be considered a contributing factor to one's willingness to share (Amayah 2013).

In as much as organizational structure and organizational climate can influence knowledge sharing positively, they can have a negative impact as well. In organizations where individual competition is emphasised, employees will not be likely to share knowledge with others at work (Amayah 2013). It was found that organizations with a centralized, bureaucratic management style can stifle the creation of new knowledge, whereas a flexible decentralized organizational structure encourages knowledge sharing particularly tacit knowledge (Sharrat and Usoro 2003).

If the increase in personal benefits negatively affects the willingness to share knowledge, then the onus is on departments at public institutions to promote a culture that encourages public service employees to share their knowledge. The bureaucratic nature of many government organizations, where knowledge does not easily flow to other departments or agencies, is not conducive to knowledge management initiatives such as knowledge sharing (Chiem 2001). Identifying factors that influence knowledge sharing could help practitioners create a knowledge sharing culture that is needed to support knowledge sharing and knowledge management within public sector organizations (Amayah 2013).

In Yao, Kam and Chan's (2007) study it was discovered that the Workplace Safety and Insurance Board of Ontario in Toronto, Canada encouraged its staff to think of themselves as experts in their chosen field. In this case, exemplary individuals were profiled regularly in an in-house newsletter distributed to all employees. Since the practice promoted a sense of pride and of being valued, workers were more likely to pass along knowledge if they know they will get positive feedback from colleagues. They were also more willing to use information from others to advance the primary goal of preventing workplace injuries (Yao, Kam and Chan 2007).

In a study of public sector organizations in Puerto Rico, employees identified lack of management commitment, alongside the organizational environment as well as lack of emotional intelligence as significant barriers to knowledge sharing (Seba, Rowley and Delbridge 2012). Another study of public sector employees in Malaysia concluded that whilst the employees from the public sector understood the importance of knowledge sharing, the fact that the overall knowledge sharing strategy was not clearly explained by their departmental managers affected their willingness to share information (Seba, Rowley and Delbridge 2012). In addition, insufficient rewards for knowledge sharing, lack of interaction, lack of time and weak IT also contributed to poor knowledge sharing. A study of public organizations in China also concluded that managerial position and support together with communication between organizational level and advanced information technology systems were important to knowledge sharing (Seba, Rowley and Delbridge 2012).

Some public agencies encouraged knowledge sharing by measuring how much and how often employees contribute to the group's knowledge base and factoring that information into their formal performance evaluations (Yao, Kam and Chan 2007). In addition if promotions and pay raises were tied to these evaluations, the incentives could be very strong for employees. In Yao, Kam and Chan's (2007) study the public administration sector was found to be more dependent than the private sector on people-based approaches such as forums, informal discussion groups and so on, to disseminate knowledge across organizations. This study also discovered that Chinese public sector professionals generally welcomed the ideas of knowledge management and knowledge sharing. They valued knowledge and were eager to acquire more knowledge at their own cost and time (Yao, Kam and Chan 2007).

In addition, they liked sharing knowledge with others but at the same time they were concerned that they would be perceived as boasting about what they know and that would result in them receiving more workload. In this case much of the knowledge sharing was done informally, however, tacit knowledge could still be shared among staff members with good relationships and networks. The barriers to knowledge sharing in this study were individual mindset, the organizational culture and Chinese culture. It was

also found that existing knowledge management tools such as appraisals were not effective and needed to be improved to include a knowledge sharing culture (Yao, Kam and Chan 2007).

In a study by Ford and Staples (2010) knowledge sharing was discovered to be divided into two types, full knowledge sharing and partial knowledge sharing. They described full knowledge sharing as the process whereby the informer gives all the knowledge they feel is relevant to the recipient and there is open communication. Depending on the complexity of the issues, full knowledge sharing can occur over a short or a long period of time. It can occur over a single conversation near the photocopying machine or over an extensive mentoring relationship. Although full knowledge sharing exhibits full disclosure, it is not full disclosure of every single piece of knowledge that the individual has (Ford and Staples 2010).

A full and complete unloading of one's entire contents would likely not be well received by the recipient, feasible by the informer, or a positive knowledge sharing behaviour from an organizational perspective due to information overload and an individual's purported attention deficit (Ford and Staples 2010). Also a full disclosure is not possible because of the presence of implicit knowledge in the informer's head, which is the knowledge that is difficult to convey and can only be discovered in practice. Also, a full knowledge disclosure could be inequitable, such that the payment or benefits given by recipient to informer do not match the informer's costs such as expenditure of time, effort and expertise (Ford and Staples 2010).

On the other hand partial knowledge sharing includes sharing only some relevant knowledge and instructions on the knowledge to be shared either due to confidentiality or risk to the informer or organization (Ford and Staples 2010). Partial knowledge sharing appears to be more situational in nature than full knowledge sharing. Each event of partial knowledge sharing depends on the recipient, the context of the knowledge exchange and the relationship between informer and recipient. The underlying motivation for partial knowledge sharing is likely protection of someone or

something since the disclosure could be disadvantageous to the informer (Ford and Staples 2010).

Ford and Staples (2010) found that the disadvantages to the informer would include negative performance appraisals or sanctions, intellectual property rights violations, access rights violations and power. If an informer partially shares knowledge, organizational efficiencies could be threatened if the recipient needed more than the knowledge shared in order to perform. The person withholding could experience negative evaluations as a bottleneck if he or she is in charge of the work done. On the other hand, if an informer discloses knowledge, then this too could be met with negative performance appraisals or sanctions (Ford and Staples 2010).

3.5.2 Review of empirical studies on knowledge sharing based on motivational and social exchange theories

Motivation is recognized as a key factor in successful knowledge flow in organizations (Swift, Balkin and Mutusik 2010). According to Lam and Lambermont-Ford (2010), motivational mechanisms play a key role in regulating and translating potential into actual behaviour and they underline the complex dynamics of knowledge sharing and creation within organizational contexts. Motivation is a psychological process causing the arousal, direction, intensification and persistent behaviour (Akhavan, Rahini and Mehralian 2013). Deci (1976) quoted by Lam and Lambermont-Ford (2010:52) originally separated motivation into extrinsic and intrinsic motivation. The difference between intrinsic and extrinsic motivation is not obvious (Akhavan, Rahini and Mehralian 2013). Among these processes knowledge sharing has been determined as the cornerstone of KM.

Intrinsic motivation is defined as performing an activity due to its inherent satisfaction rather than some separable consequences, while an intrinsically motivated person likes to act for the fun or challenge entailed rather than by the external prods, pressure or rewards (Akhavan, Rahini and Mehralian 2013). Based on this view, extrinsic motivation allows individuals to satisfy their needs indirectly by obtaining additional resources such

as money, promotion, and other non-financial resources. On the other hand, extrinsic motivation may support the transfer of explicit knowledge, which is measurable, but often fails in the case of tacit knowledge because it is intangible and emergent in nature. Intrinsic motivation gives immediate need satisfaction and it facilitates the generation and transfer of tacit knowledge under conditions in which extrinsic motivation fails (Lam and Lambermont-Ford 2010). Akhavan, Rahini and Mehralian (2013) suggested that where people may be reluctant towards knowledge sharing behaviour, applying motivational factors would be essential. They found that one reason for the failure of knowledge management activities is the lack of motivation in individuals.

The study by Lam and Lambermont-Ford (2010) uses the division of intrinsic motivation into normative and hedonic types as was proposed in Chapter 2 by Jeon, Young-Gul and Koh (2011). Normative intrinsic motivation is directed towards the individual's sense of compliance with personal and social norms, expressed at an organizational level through the organization's expressed values, and for the individual in terms of their identification with social groups to which they affiliate (Lam and Lambermont-Ford 2010). In addition, the degree to which individuals act or do not act when normatively motivated depends on the importance that they attach to compliance in a given context and also the external reaction to non-compliance.

On the other hand hedonic intrinsic motivation is derived from engagement in self-determined, competence enhancing and enjoyable activity achieved through physical and social well-being and improvement in the individual's condition (Lam and Lambermont-Ford 2010). In turn when it comes to knowledge sharing, hedonic intrinsic motivation influences the willingness of an individual to share knowledge, depending on the importance that the individual places on being engaged in such activity in the context of the task and perceived task characteristics. Intrinsic motivation is not the only form of motivation, but it is a persuasive and important one (Akhavan, Rahini and Mehralian 2013). Although in one sense, intrinsic motivation exists within individuals, it also exists in relation with individuals and activities.

According to Lam and Lambermont-Ford (2010), extrinsic rewards may undermine intrinsic motivation for interesting tasks and encourage knowledge hoarding. They reported that self-determination may be reduced if the actual or perceived forms control shifts outside the individual, lessening autonomy and reducing the scope of the individual to act in an altruistic manner. Thus, extrinsic motivators in terms of goal and task constraints may circumscribe the individual's autonomy and lessen intrinsic motivation. Similarly to intrinsic motivation, extrinsic motivation is a construct that pertains whenever an activity is done in order to attain some separable outcomes (Akhavan, Rahini and Mehralian 2013). In addition, extrinsic motivation unlike intrinsic motivation refers to doing an activity simply for the mere pleasure of the act, rather than its instrumental value. Extrinsic motivation originates from factors outside the person.

Table 3.1: Motivational factors affecting knowledge sharing Source: Akhavan, Rahini and Mehralian (2013)

Intrinsic Motivational Factors	Extrinsic Motivational Factors
Friendly and intimate relations	Job promotion
Interpersonal trust	Autonomy of work
Success	Manager's quality
Honesty	Non-financial rewards
Responsibility	Challenge of work
Commitment and loyalty	Financial rewards
Religious beliefs	Management support
Respect	Recognition
Self-management	Reputation
Organizational justice	N/A
Social status	N/A
Compliance with demands	N/A
Learning, growth and improvement of the	N/A
organization	
Usefulness of knowledge sharing	N/A
Enjoyment of helping others	N/A

Intrinsic motivational factors illustrated in Table 3.1 cannot be influenced by tangible resources unlike extrinsic motivational factors which can be easily prompted by external resources. Although motivational factors for knowledge sharing are known, some employees are still reluctant to share their knowledge. The obvious reason might be that shared knowledge becomes a public good. A study by Swift, Balkin and Mutusik (2010) grounded on social exchange theory focused on identifying costs and rewards that shape knowledge sharing behaviour. When an individual provides any part of their knowledge to another, whether it is achieved directly through communication or indirectly through communication or indirectly though mechanisms such as the use of a knowledge archive, they are engaging in knowledge-sharing (Swift, Balkin and Mutusik 2010).

The findings of Swift, Balkin and Mutusik's (2010) study, were that participants in knowledge sharing with performance goal orientation are less willing to expand the effort to exchange tacit knowledge than those with learning goal orientations who are intrinsically motivated to share. This is in line with the assertion above that extrinsic rewards may undermine intrinsic motivation to share knowledge. In addition, those with avoidance motivation are concerned about appearing incompetent making them less willing to share private knowledge due to the uncertainty about the value of the knowledge and how it will be received (Swift, Balkin and Mutusik 2010). It is also reported that only those with certain goal orientations are willing to engage in such knowledge exchanges and this might affect not only the sharing of knowledge but also the acquisition of knowledge.

Lin (2007) in his study that used the exchange ideology as a moderator suggested that the influence of co-worker congruence on knowledge sharing is stronger for individuals with low exchange ideology than for those with high exchange ideology. Moreover, the influence of received task interdependence on knowledge sharing is stronger for individuals with high exchange ideology than for those with low exchange ideology. Also, the influence of participative decision-making on knowledge sharing is stronger for individuals with high exchange ideology than for those with low exchange ideology (Lin 2007). Swift, Balkin and Mutusik's study (2010) presents an explanation of why

individuals choose to share their knowledge with some and not with others. It states that individuals with a performance-prone goal orientation are likely to be more sensitive to the position of others in the organization or social network because they are likely to experience greatest positive outcomes when they demonstrate their competence to those in structurally desirable positions (Swift, Balkin and Mutusik 2010).

In contrast, those with a performance-avoid orientation would be particularly sensitive to the quality of the relationship with a potential recipient because of their fear of appearing incompetent (Swift, Balkin and Mutusik 2010). Those with either learning goal orientation however, are likely to share knowledge with those they have a common language to facilitate achieving their learning objectives. Those with a learning-avoid goal orientation are also likely to limit their knowledge sharing to recipients they also share a close relationship with in order to limit the risk of making mistakes and giving the appearance of incompetence. These differences may help explain why knowledge is not always transferred across strong ties, why sometimes individuals are willing to share their more unique knowledge with people they do not have a social connection with and why organizational members often value knowledge from an outsider more favourable than the same or similar knowledge from other organizational members (Swift, Balkin and Mutusik 2010).

Lam and Lambermont-Ford (2010) found that when non-contribution is not sanctioned and few individuals are perceived to contribute, the motivation to contribute diminishes and the value of contributing to the public good becomes questionable. This is due to the normative motivation to share knowledge being diminished as not sharing is seen as an acceptable practice. Also, the extrinsic motivation to share expressed via the disincentive of sanctions is not present, thus reinforcing the change in normative motivation (Lam and Lambermont-Ford 2010). Reinforcing normative motivators to share knowledge, providing suitable incentives for sharing knowledge, and changing the perceived focus of ownership of knowledge as a public good rather than private good may augment knowledge sharing propensities amongst individuals in an organization (Lam and Lambermont-Ford 2010).

In Akhavan, Rahini and Mehralian's (2013) study, the impact of intrinsic motivational factors was greater than the impact of extrinsic factors. The results of this study showed that unlike public perception that the role of financial motivation and extrinsic rewards for sharing knowledge is important, intrinsic motivational factors play a more effective role in knowledge sharing behaviours. Akhavan, Rahini and Mehralian (2013) concluded that in many cases, without spending much cost and only a little respect to the employees and creating a bit of trust and honesty, the organizations can bring significant results in the knowledge sharing behaviours of employees.

Lam and Lambermont-Ford (2010) found that normative motivation may be influenced by the organization, reinforcing the individual's current motivational stance towards knowledge sharing. In their study of knowledge sharing literature they found that the focus is on the importance of Socialization, common understanding and trust building in stimulating knowledge sharing through promoting congruence between individuals and between individual and organizations. They conclude that hedonic motivation can be enhanced by creating an environment that allows self-determination and self-esteem. The empirical analysis suggested that within professional bureaucracy, the social dilemma for knowledge sharing may be overcome through normative motivation, with the provision of hedonic motivation supported by extrinsic incentives such as training and career progression (Lam and Lambermont-Ford 2010).

3.5.3 Review of empirical studies of knowledge sharing based on the SECI model

The SECI model was discussed in full in Chapter 2 of this research. The SECI model portrays the interaction between tacit and explicit knowledge as an interplay between creating and sharing knowledge occurring in four modes or quadrants. It also affirms that the conversion of tacit knowledge into explicit knowledge and visa versa occurs in a space called *ba*. The processes involved in the SECI model are Socialization, Externalization, Combination and Internalization. Social interaction is the driving force of this model (Marley 2012). The premise that new knowledge can be created by means of conversions between tacit and explicit knowledge brought about the following modes: Socialization (tacit to tacit conversion), Externalization (tacit to explicit conversion),

Combination (explicit to explicit conversion) and Internalization (explicit to tacit conversion) (Marley 2012). Marley (2012) cautioned that the transition between the four SECI modes is never clear-cut and often more than one knowledge spiral is activated at any given time.

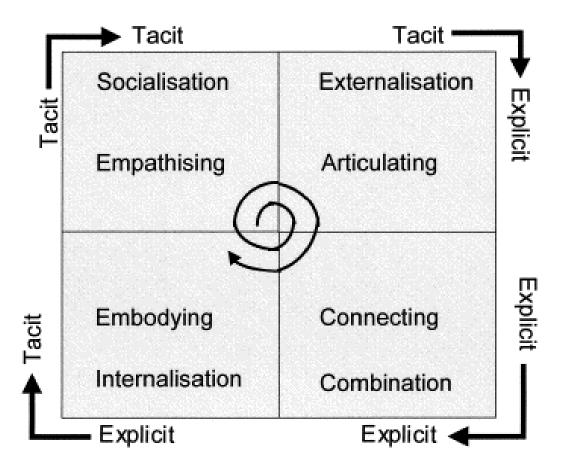


Figure 3.3: The spiral of tacit and explicit knowledge in the SECI model Source: Nonaka, I and Nishiguchi (2001)

The results of the study by Marley showed that the Socialization mode was the phase in the SECI model closes to knowledge sharing. The study suggests that the Socialization phase comprises team building or a field of interaction. The purpose of a field is to create a place and social context in which personal perspectives and knowledge can be articulated and conflicts are resolved and reconceptualized into higher order concepts (Marley 2012). The field of interaction resonates with the concept of *ba*, specifically the

originating *ba*. The concept of *ba* emphasises that knowledge requires a physical context to be created. The key concept in understanding *ba* is interaction (Nonaka, Toyama and Konno 2000). Nonaka, Toyama and Konno (2000) described originating *ba* as an existential place in the sense that it is the world where an individual transcends the boundary between self and others by sympathizing or empathizing with others. Originating *ba* is characterized by face-to-face interactions. An organization must specifically decide how to use teams and create them for specific purposes (Marley 2012). This recommendation ties in with the formation of communities of practice that are created by organizations to foster knowledge sharing.

In a study by Naicker, Govender and Naidoo (2014) which used the knowledge spiral model also known as the SECI model, to ascertain how knowledge is created and transferred, it was found that students utilize the Socialization and the Externalization modes of knowledge conversion comprehensively. This study also found that Internalization played a significant role in the students' knowledge creation and transfer activities. While Combination was utilized to a lesser extent, it still played a role in the students' knowledge creation and transfer activities. The students in this study also had a 'space' or *ba* that allowed them to bring hunches, thoughts, notions and intuition or tacit knowledge into reality (Naicker, Govender and Naidoo 2014). It is interesting to note that trust emerged as a significant factor in this study as the students were found to be aware of each other's capabilities and competencies as well as trusting each other enough to share knowledge.

Information technology (IT) had been criticized for ignoring one of the main components of KM which is 'people'. With the advent of social web initiatives, several studies argued that these new emerging technologies may provide new opportunities to facilitate tacit and experiential knowledge sharing (Panahi, Watson and Partridge 2013). Despite these arguments, there is still a lack of understanding about the potential and pitfalls of the social web for tacit knowledge sharing, in part because of the complexity of the concept of tacit knowledge, and also due to existing contradictory views on IT ability for tacit knowledge sharing (Panahi, Watson and Partridge 2013). There is no evidence in the literature that tacit knowledge can be shared over IT. In a study that sought to

understand perceptions regarding information and communication technology (ICT) use to support knowledge management and to identify suitable ICTs to support such initiatives using the SECI model theoretical perspective, it was found that a single ICT as well as varied Combination of ICTs were frequently used to facilitate the different phases of the SECI model (Lee and Kelkar 2013).

Using the SECI model to explain KM, technologists tend to use Externalization or a Combination of knowledge while management theorists generally focus on KM as a process of Socialization and Internalization (Haggie and Kingston 2003). In addition, management theorists tend to think of technology as merely an enabling factor to Socialization and communication, while technologists see it as the central focus (Haggie and Kingston 2003).

There were 13 ICTs under investigation in Lee and Kelkar's (2013) study, namely: blogs, emails, e-collaborative systems, e-forums, e-learning/online training, information repositories, distant messaging, NetMeeting, telephones, audio conferencing, People Finder, podcasts, video-conferencing and wikis. Specifically the objective was to examine the perceived usefulness of ICT to facilitate Socialization, Externalization, Combination and Internalization by studying the use of both single as well as ICT mixes (Lee and Kelkar 2013). The results showed that ICTs were perceived to be the most useful to support Externalization followed by Internalization, then Combination and finally Socialization. Specifically ICT was perceived to be most useful in providing access to knowledge experts and least useful for maintaining relationships with superiors (Lee and Kelkar 2013). The conclusion of this study was that ICTs were prevalent in the various phases of the SECI model, and they were used for a variety of purposes including maintaining relationships, sharing experiences and self-development, apart from the more traditional uses such as storing and retrieving data (Lee and Kelkar 2013).

Shah, Khan and Amjad's (2013) study highlighted the role of social media in developing effective knowledge management processes including knowledge sharing. It takes into account social media such as Facebook, Twitter, Myspace as well the different types of

blogs, wikis, and podcasts and extends the bounds of SECI model proposed by Nonaka and Takeuchi (1995). The study's findings revealed growth towards the use of social media and learning digital competencies among employees which offers a unique opportunity for knowledge-intensive organizations (Shah, Khan and Amjad 2013). Individuals with digital knowledge and access to internet facilities actively engage in socializing over the internet. This is significant for explicit knowledge sharing as sharing can occur without the limitations of work hours or distance. The study by Panahi, Watson and Partridge (2013) identified the following theoretical, individual, cultural and technical difficulties regarding tacit knowledge sharing:

- Perception where one is unconscious of holding knowledge;
- Language where one is limited in expressing hard to verbalize forms of expertise;
- Time the length of time required to process and internalize new knowledge;
- Value the immeasurableness value of some kind of tacit knowledge; and
- Distance the need for face-to-face interaction.

The study discussed the potentials and pitfalls of each of the following tools in supporting tacit knowledge sharing: blogs and microblogs, wikis, social networking sites, multimedia sharing tools (podcasts/vodcasts), Rich Site Summary (RSS), and social bookmarking (Panahi, Watson and Partridge 2013). Due to globalization and the need for faster and effective communication, social web technology has been viewed by businesses as one of the recent enablers of sharing tacit knowledge. It has been argued that ease of use, informality, openness, multimedia orientation, and the community-based features of the social web platforms may create a great *ba* for social interactions and hence increase the chance of tacit knowledge being shared among knowledge seekers (Panahi, Watson and Partridge 2013). However, despite the theoretical discussions in the literature arguing that tacit knowledge takes place in social web environments, it was noticed that there was a lack of empirical evidence supporting these arguments (Panahi, Watson and Partridge 2013).

Other factors that influence knowledge sharing investigated using the SECI model were found to be gender, age, experience, and management level in a study conducted by Razi, Karim, and Mohamed (2014). They claimed that these factors were found to be moderating factors on the relationship between the intention to be involved in KM processes and its contributing factors like knowledge sharing. However, the findings of the moderation analysis showed that only the gender differences moderate a couple of the above relationships (Razi, Karim and Mohamed 2014). This study suggested that if policy makers in the industry are planning to implement KM processes, they should consider gender differences when making strategic decisions especially regarding IT-related factors and make KM processes relevant to job performance. Furthermore, the managers should also give more consideration to providing more IT facilities if the workforce at executive level comprises more females than males (Razi, Karim and Mohamed 2014). Similarly, the potential improvement of the job performance as a result of involvement in the KM processes should be made explicit to obtain maximum support from the female executives in terms of KM processes.

Khumalo's (2012) study was prompted by the lack of extant literature regarding how the processes of intra-organizational knowledge transfer to employees using technology. Findings from the study revealed that tacit knowledge transfer materialized in work environments in which Socialization behaviour was practised. Socialization comprised tacit knowledge owners transferring their expertise as they spent time interacting, mentoring, and coaching recipients (Khumalo 2012). Internalization which included hands-on training also emerged as an effective tacit knowledge transfer behaviour that was practised.

Employees shadowed subject matter experts, participated in mentoring rings and began coaching others (Khumalo 2012). In addition, central to knowledge transfer were computerized systems for capturing, storing, and disseminating tacit and explicit knowledge to the whole organization's ecosystem. In order for knowledge transfer to succeed, learners needed to offer verbal praise, employee recognition and rewards (Khumalo 2012). It was this study's assertion that in the future, the success of continuous knowledge transfer practice will depend on transformational and situational

leaders who are catalysts for change and promoters of an organizational culture that supports and rewards knowledge sharing behaviour.

Since the Socialization process in the SECI model refers to sharing tacit knowledge which requires some kind of connection between the persons involved, the most dominant concept of knowledge sharing enablers include some kind of connection between the persons involved. Lilleore and Hansen (2011) found that knowledge sharing in research and development primarily takes place through human interactions. The knowledge enablers in their study demonstrated interdependence with synergic influence on knowledge sharing. These links are valuable as it may take very little effort to significantly increase the impact on knowledge sharing practices, for example, common open space to increase personal closeness which then reinforces the frequency of informal meetings and the exchange of tacit knowledge (Lilleore and Hansen 2011).

This study's findings were that physical distance from colleagues was a noteworthy barrier as well as being mirrored as a knowledge sharing enabler depending on the proximity. This finding is in support of the process of Socialization in the SECI model where knowledge sharing takes place usually in face-to-face settings. Furthermore, the findings of this study showed that there is more to the SECI model than tacit-explicit knowledge. They confirm that the SECI model does not account for the actions of individuals such as their strategies, practices and goals (Lilleore and Hansen 2011). Lilleore and Hansen (2011) claimed that with regard to knowledge sharing, the SECI model lacks the views and values of the individuals for engaging in knowledge sharing practices.

3.6 Review of empirical studies on communities of practice

CoPs are beginning to obtain some recognition as effective organizational mechanisms which allow members to voluntarily create and share both implicit and explicit knowledge (Jeon, Young-Gul and Koh 2011). Brown and Duguid (1991) as well as Wenger (1991) quoted by Jeon, Young-Gul and Koh (2011:252) claimed that CoPs are largely formed in a voluntary manner and operate informally without formal controls or

system supports. However, formal and strategic CoPs have also spread in Korea, as many firms depend on CoPs as a source of innovation and problem solving. Previous studies have investigated knowledge sharing within CoPs (Ntala 2010). The concept of CoPs was introduced by Wenger (Lave and Wenger 1991). Knowledge management literature advances CoPs for the creation, sharing and maintenance of knowledge within an organization. According to Klein (2008) the original concept of CoPs of integrating individuals into the life of the community with a common interest has been expanded into a more general role of domain knowledge management. CoPs are primarily an informal group of people who learn about, refine, and accomplish the real work of the organization (McElyea, 2010).

When individuals meet in a forum, relevant information is exchanged verbally, in documents and some sent via technological conduits such as websites, virtual discussion forums, social networks and even cellular technology. These information technology mediums encourage social interaction and exchange of information which later become knowledge when implemented. Maponya (2003) observed that there is no consensus on the nature of knowledge as it is viewed differently depending on whether it is personal, individual and inaccessible or whether it is articulated and captured. Further, knowledge remains elusive concealed by language barriers and the cognitive and perceptual limitations of the human body (Styhre, 2003:25). This study built on the above arguments that when the KZN PHRDF meets, information flows amongst members and is transformed into knowledge when utilized to perform their functions. It is this knowledge that they come together to share, reflecting the continuum from information to knowledge.

Klein (2008) distinguished the different types of knowledge that knowledge management concerns itself with, into explicit and tacit. He describes explicit knowledge as being encodable and expressible making it easy to share whilst tacit is hidden and inexpressible and is under the control of the owner at all times until shared. Ntala (2010) observed that tacit knowledge can be acquired by interacting with others and can only be shared between individuals in the same place or in different locations if a social network exists. The owner of tacit knowledge could decide whether s/he want to make

what s/he knows public or not. Klein (2008) argued that non-explicit knowledge is better understood as implicit knowledge, which is knowledge that can, in varying degrees of effort and ingenuity be made explicit. His point is that tacit knowledge is always hidden and implicit knowledge is that which the owner of the knowledge, whether consciously or unconsciously, shares.

It has been established that knowledge sharing is a difficult task to facilitate with barriers such as willingness to share and integrating knowledge. Lam and Lambermont-Ford's (2010) study identified challenges to knowledge sharing such as fear of giving other members knowledge when they do not contribute in return, reducing opportunity for individual advancement but enhancing the advancement of others, losing internal competition or one's unique value and lack of sanctions for those who do not contribute therefore reducing the motivation to share knowledge that would contribute towards public good. Knowledge sharing generally occurs when individuals are willing to share with others what they know as well as what they do not know hence the creation of a knowledge sharing environment.

The findings of a study on the intentions of knowledge sharing in the public sector recommended that public sector heads should make an effort to create an environment where employees experience subjective value and could easily access shared knowledge (Park, Saplan-Catchapero and Jaegal 2012). A study by Gambarotto and Cammozzo (2010), revealed that employee silence plays a crucial role in the evolution of public services because it stops communication, opportunities to modify routines and knowledge sharing. In their study, Gambarotto and Cammozzo (2010) found that the stressful negative reactions of increased workload that dissuade participation in knowledge sharing, the reputational competition that chokes the proactive effect of knowledge sharing on the organizational climate, and the more demanding competencies derived from CoP involvement that feed individual learning induce a silent behaviour. This study explored what barriers of knowledge sharing exist in the KZN PHRDF and whether there are strategies employed to eliminate these barriers.

Motivation to share is a great catalyst for knowledge sharing since it depends on the individual as to whether they do or do not want to share what they know. A taxanomy of motivation and motivational mechanism were established by Lam and Lambermont-Ford (2010) as consisting of extrinsic, intrinsic, normative intrinsic motivation and hedonic intrinsic motivation. Motivation theory emphasises the two categories: extrinsic and intrinsic motivators (Jeon, Young-Gul, and Koh, 2011). Jeon, Young-Gul and Koh (2011) suggested that extrinsic motivators include money and social rewards whilst intrinsic motivators are concerned with values associated with the work itself. They conducted a study to investigate individual or organizational factors that motivate CoP members' knowledge sharing behaviours. Their study also investigates the manner in which knowledge sharing behaviours differ between formal and informal CoPs. Table 3.2 below illustrates the characteristics of informal CoPs versus the characteristics of formal CoPs.

Table 3.2: Informal CoPs vs Formal CoPs Source: Jeon, Young-Gul and Koh (2011)

Characteristic	ristic Informal Supported		Formal		
			Structured		
Role	Sharing knowledge	Building capability	Providing a cross-		
	among practitioners	for a given business	functional platform		
	for community's own	or competency area	for organizational		
	sake		problem solving		
Membership	Self-joining or peer-	Self-joining,	Invited by sponsors		
	invited	member-invited, or	or members with		
		manager's	some selection		
		recommendations	criterion		
Level of sponsorship	Very low, sometimes	Moderate:	High: formally		
	no formal sponsorship	sponsored by one or	sponsored by		
		more	executives (or		
		seniors/managers	CEO)		
Evolution	Naturally developed	Intentionally	Organizationally		
	and working based	developed mainly	developed and well		
	predominantly on	by sponsor(s) and	aligned with		
	voluntariness	CoP members	business objectives;		
			mostly depending		
			on endorsement of		
			members		
Motivation	Purely voluntary	Voluntary and	Mostly mandatory		
		mandatory mixed			
Rewards	Mostly depending on	Internal and	Mainly depending		
	internal reward (e.g.	external mixed	on external rewards		
	enjoyability or mutual		(e.g. incentives		
- 10	trust)		from executives)		
Life cycle	Relatively	Moderate	Sometimes short		

Characteristics such as role, membership, level of sponsorship, evolution, motivation, rewards and life cycle respond differently to knowledge sharing behaviors depending on whether the CoP is informal, supported or formal and structured as seen in Table 3.2. This study also used motivational theory to explain knowledge sharing behaviour in CoPs. Jeon, Young-Gul and Koh's (2011) study premises knowledge sharing behaviour in CoPs as an individual's social psychological process in which one's attitude affects intention, and intention subsequently influences the individual's behaviour. To this end, extrinsic motivation is satisfied by social rewards that one derives from the acquisition of an opportunity. According to Blau's (1964) social exchange theory, the social rewards can also be understood in terms of the participants' personal benefits involved in social exchange.

In the context of CoP, social rewards such as reputational or image enhancements are considered more appropriate, since CoP members create or join their communities as the result of shared enthusiasm for a common cause, rather than as the consequence of anticipating specific economic rewards from the organization (Jeon, Young-Gul and Koh's 2011). On the other hand, intrinsic motivation is spurred by values provided directly within the work itself (Frey and Osterhof 2002). Altruism is an excellent example of intrinsic motivation existing in people as social beings, as people are motivated by the enjoyment of charity itself. Within CoPs, the social motivations are anticipated to exert greater impact on attitudes towards behaviour than do personal or economic motivations (Jeon, Young-Gul and Koh's 2011).

Knowledge sharing is a key process in translating individual learning into organizational capability (Lam and Lambermont-Ford 2010). As in the case with knowledge management, knowledge sharing as a process on its own has not yet received much attention in the context of public service in the South African research literature (Taylor and Wright 2004). Taylor and Wright (2004) reported that without developing organizational capabilities for knowledge sharing which is a necessary precondition for effective knowledge management, launching a knowledge sharing initiative is subject to failure. It can be deduced therefore that one of the organizational capabilities for knowledge management is a platform for sharing knowledge. This study explored what strategies were used in the KZN PHRDF to overcome challenges regarding knowledge sharing.

Literature on CoPs appears to focus on either the theoretical or functional aspects with little direct reference to the experience of the participants (Shoop 2009). Shoop (2009) observed that a significant portion of the literature related to CoPs has been highly abstract and theoretical or very focused on tools, techniques and processes for creating or facilitating CoPs. He laments the lack of exploration of the more subjective aspects of the CoPs such as the adoption of innovation, transfer of tangible skills and knowledge and the use of IT (Shoop 2009). There are arguments that have emphasized that knowledge is always located in social communities, in local practices, in culture, in

idiosyncratic organizational routines and standard operating procedures (Styhre 2003:148). In Jeon, Young-Gul and Koh's (2011) study it was recommended that in a CoP, it is critically important to understand that members' social psychological motivations have a positive influence on knowledge sharing therefore the satisfaction of social psychological motivation is essential for the successful functioning of a CoP. Intrinsic motivations such as enjoyment of helping and need for affiliation are more critical for knowledge sharing in spontaneous settings such as CoPs as Jeon, Young-Gul and Koh's (2011) found out.

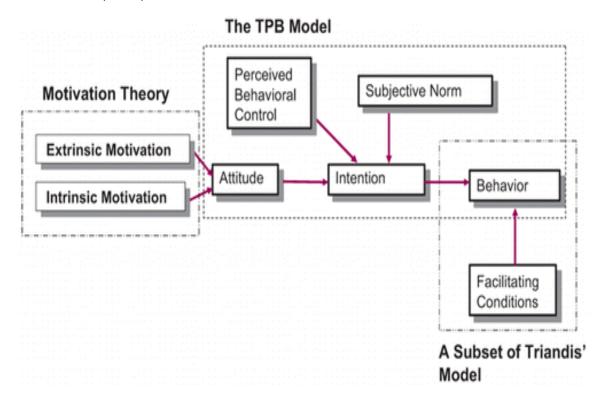


Figure 3.4: The impact of intrinsic versus extrinsic motivators: A subset of Triandis model

Source: Jeon, Young-Gul and Koh (2011)

Figure 3.4 illustrates the theory of planned behaviour (TPB) model of which the main factor is the individual's intention to perform a given behaviour (Park, Saplan-Catchapero and Jaegal 2012). Jeon, Young-Gul and Koh's (2011) study recommended a programme to recognize the knowledge contributions of CoP members to strengthen the image motivation of CoP members. In addition, when a climate of balanced

contribution with no notable discrepancy in contribution levels amongst members can be cultivated, reciprocity will positively affect members' attitudes towards knowledge sharing. Enjoying helping behaviours may have a positive effect on CoP members' attitude towards knowledge sharing. Such enjoyment can be enhanced by a variety of programmes designed to enhance job satisfaction and organizational commitment (Jeon, Young-Gul and Koh's 2011).

The need for affiliation can be satisfied by means of a variety of membership training programmes. By providing an 'originating *ba*' where CoP members can socialize, dine play sports and have relaxed conversations together, the affiliation motivation can be satisfied (Nonaka and Konno 1998). As the strengths of relationships between individual motivating factors and CoP members' attitudes towards knowledge sharing differed depending upon the types of CoP whether formal or informal, organizations must place an increased focus on extrinsic motivators for formal CoPs and intrinsic motivators for informal CoPs (Jeon, Young-Gul and Koh's 2011).

CoPs are varied since they are composed of individuals who differ in terms of the degree of knowledge they possess (Klein, Connell and Meyer 2005). This was the case in the KZN PHRDF since members have different levels of responsibility ranging from senior managers to practitioners. Klein, Connell and Meyer (2005) proposed a classification of CoP which consists of four types: stratified-sharing communities, egalitarian-sharing communities, stratified-nurturing communities and egalitarian-nurturing communities (See Table 2.1). As noted earlier, stratified-sharing communities make strong distinctions among various levels of rank and the knowledge sharing tends to flow from the expert to the novice (Klein, Connell and Meyer 2005). This arrangement may affect the freedom of lesser ranked individuals to share their knowledge regardless of how crucial it is. Egalitarian-sharing communities ignore ranks among its members and knowledge sharing occurs freely either way between expert and novice and this promotes learning by experts from novices (Klein, Connell and Meyer 2005).

Stratified-nurturing communities exhibit the grade stratification of the stratified-sharing communities, however, nurturing the abilities of members by means of a sequence of

experiences leading from novice to master (Klein, Connell and Meyer 2005). Such communities tend to allow novices to share knowledge based on their level with the intention of capacity development. Egalitarian-nurturing communities also nurture knowledge by means of experience but there is no gradual assimilation of experience here, instead the novice is 'thrown in at the deep end' (Klein, Connell and Meyer 2005). Even though this community might promote rapid evolution of knowledge, Klein, Connell and Meyer (2005) cautioned that it might result in what could be referred to as 'knowledge anarchy'. This study explored what type of community the PHRDF is and whether this affects how knowledge is shared within the group.

Zboralski's (2009) study proposed that three levels of analysis can be considered for examining antecedents of CoP interaction namely: member level which concerns specific characteristics of community members; community level which concerns specifics of the community and organizational level which concerns the characteristics of the organization which hosts the CoP. In addition, three factors, one on each level are considered as important antecedents of community interaction:

- Members' motivation;
- · Community leader; and
- Management support.

According to Zboralski (2009) when motivated mainly by intrinsic objectives individuals will only interact with other members of a CoP as long as they profit from it and experience reciprocal rewards. The findings of his study revealed that individuals are mainly motivated by benefits regarding their work tasks and their network in the formal organization. They participate in order to progress with certain projects, to improve their career prospects, to make their work easier and to improve their contact with colleagues (Zboralski 2009). In addition, members influence the frequency of interaction in CoPs. The results of the study did not indicated a significant relationship between members' motivation and interaction quality because trust, cohesion and a positive communication climate exist independently of individual motivation to participation (Zboralski 2009). The community leader plays a central role in the interaction quality in CoPs. This is because his/her ability to motivate people to interact with each other, as well as his/her

competencies regarding the topic of the CoP, have strong impact on interaction quality (Zboralski 2009). The community leader can be regarded as a facilitator, an enabler of trust, cohesion and a positive communication climate within the CoP. Interaction quality was positively influenced by management support although to a lesser extent. The frequency of interactions between community members is mostly dependent on an active management support. Zboralski's (2009) research showed that CoPs profit from an active support in terms of providing required resources such as time for members to participate, technical infrastructure and establishing the necessary prerequisites in the organization. Therefore the awareness of the importance of knowledge sharing is encouraged.

3.7 Summary of the chapter

This chapter provided an overview of the state of policy making and service delivery in the South African public service and revealed the burden of apartheid on previously disadvantaged or rural communities. Literature revealed that KM has made inroads in the public service as one of the management approaches utilized today towards improving service delivery. The South African public service is shown to have embarked on various strategic directions towards redressing the ills of apartheid and fast tracking service delivery which incorporates KM, in particular in human resource development. This chapter illustrated how the theories of social exchange, motivation, SECI model and CoPs can be used to encourage and promote knowledge sharing in organizations. Based on the studies discussed above, leadership, time allocation, trust, rewards, organizational structure, organizational culture, organizational climate, communication, leadership and management, willingness to share, language, gender, space and IT knowledge sharing tools are factors that affect knowledge sharing both positively and negatively. Literature searched did not extensively cover knowledge sharing in the South African public service. Nevertheless, it is this gap that the current study will explore.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

This chapter describes the research methodology that was used to explore knowledge sharing in the PHRDF. In a social research project it is necessary to describe the research techniques and methods used as is done in this chapter. Research techniques can be defined as the specific and concrete means that the researcher uses to execute specific tasks (Mouton 1996:36). These tasks are related to specific stages in the research process and they include sampling, measurement, data collection and data analysis. Research methods on the other hand, refer to the means required to execute a certain stage in the research process (Mouton 1996:36). The difference between techniques and methods is one of degree and scope where methods include classes of techniques, skills and instruments (Mouton 1996:36). This chapter will therefore outline the research design, study population, data collection procedure and instruments, data analysis, validity, reliability, research ethics and the evaluation of the research methods.

4.2 Research methodologies

According to Lwoga (2009) research method and methodology are two different concepts. Birley and Moreland (1998:30) argued that methodology is a decision making process that is predicated upon sets of background assumptions or paradigms. These methodological paradigms such as quantitative, qualitative and participatory action paradigms, are not merely collections of research methods and techniques, but also include certain assumptions and values regarding their use under specific circumstances (Mouton 1996:36). Methodology involves the strategy, the plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes (Crotty 1998:3). Methodologies include a wide range of approaches from experimental research and survey research, to ethnography, phenomenology, grounded theory, and heuristic inquiry to action

research, discourse analysis, and feministic standpoint research whilst the research methods include observation, case study, statistical analysis, document analysis and so on (Anfara and Mertz 2006:xxi).

According to Birley and Moreland (1998:31) some authors distinguish between qualitative and quantitative methodologies. Some prefer mixed or combined methodologies where both quantitative and qualitative methodologies are used in the same research. Methods on the other hand include classes of techniques, skills and instruments (Mouton 1996:36). They are techniques or procedures used to gather and analyse data related to some research question or hypothesis that are implemented after the research methodology has been chosen (Crotty 1998:3). They include methods of definition, sampling methods, measurement methods, data-collection methods and data-analysis methods. This research uses case study methodology. Case studies are both an approach to reporting research and also methodology that concentrates upon singular or small numbers of individual instances (Birley and Moreland 1998:36).

4.3 Research design

Research design involves a set of decisions regarding what topic is to be studied among what population with what research methods and for what purpose (Babbie 2010:117). Research designs are the specific procedures involved in the last three steps of the research process which are data collection, data analysis and report writing (Creswell 2008:59). According to Mouton (1996:107) a research design is defined as a set of guidelines and instructions to be followed in addressing the research problem. Its main function is to enable the researcher to anticipate what the appropriate research decisions should be so as to maximize the validity of the eventual results (Mouton 1996:107). Research designs differ depending on which research methodology is used. For instance, quantitative research methodology uses different research design from qualitative methodology, whilst combined or mixed methodology uses a different research design from both a quantitative and qualitative methodology.

When a researcher embarks on a research, Powell and Connaway (2004:53) advised that he/she must decide whether the proposed research will be primarily applied or basic and quantitative or qualitative in nature as this informs the research design. Basic research is usually theoretical in nature and features theory construction, hypothesis testing and producing new, general usable knowledge whilst applied research tends to be more pragmatic and emphasizes providing information (Powell and Connaway 2004: 53). This information is usually immediately usable in solving a problem which may or may not have application beyond the immediate study. Powell and Connaway (2004:54) suggested that basic and applied research can be considered as two parts of a continuum which consists of more overlap than typically realized. They further argued that basic research is judged by its clarity of purpose and interpretation, by its ability to support or refute a particular hypothesis, by the incisiveness of the new hypothesis it generates, by the generalizability of the results, and by its technical accuracy and by the degree to which the results can be utilized to develop a product. On the other hand, applied research can validate theories and lead to the revision of theories (Powell and Connaway 2004:54). According to Hoskins (2010) the goal of basic research is to generate new knowledge and not necessarily to resolve a problem like applied research seeks to do. Thus this present study is basic research seeking to generate new knowledge regarding knowledge sharing practices in a CoP in the South African public service.

In addition to deciding whether a research project will be basic or applied, one must decide whether the research will be quantitative or qualitative. Powell and Connaway (2010: 59) reported that the bulk of basic research in library science has taken the form of quantitative research which tends to adhere relatively closely to the scientific method of inquiry, while qualitative methods have been employed to a greater degree in more recent years. In the knowledge management literature consulted in this study, both qualitative and quantitative approaches were used (Jones 2007; Amayah 2013; Khumalo 2012; Jeon, Young-Gul and Koh 2011). According to Lwoga (2009) the use of only qualitative or quantitative approach falls short of major approaches used in the social and human sciences. This study used the mixed methods research design where both qualitative and quantitative data collection methods were used.

4.4 The choice of research method

According to Mouton (1996:38) research methods are task specific and the task is defined by the research goal. The choice of research method depends upon the methodology to be used and the research questions of the study (Wisker 2008:186). The principal purposes of social research include exploration, description, and explanation (Babbie 2010:121). Exploration is the attempt to develop an initial, basic understanding of some phenomenon, description is the precise measurement and reporting of the characteristics of some population or phenomenon under study, while explanation is the discovery and reporting of relationships among different aspects of the phenomenon under study (Babbie 2010:121). Each research method has its strengths and weaknesses, and certain concepts are more appropriately studied through some methods than through others (Babbie 2010:115).

This research is an exploratory study seeking to develop an understanding of how knowledge sharing occurs among public servants performing similar functions. The purpose of the study also informs the choice of method to be used during data collection. Most studies use either the qualitative or the quantitative approach, but the use of both methods in one study has become popular (Powell and Connaway 2004:3). Creswell (2008:46) suggested that in order to understand the differences and similarities between these methods it is necessary to define the qualitative and quantitative research. According to Powell and Connaway (2004:3) quantitative research methods involve a problem-solving approach that is highly structured in nature and that relies on the quantification of concepts for purposes of measurement and evaluation. On the other hand, qualitative research methods focus on observing events from the perspective of those involved and attempt to understand why individuals behave as they do.

Mouton (1996:38) observed a long standing debate about whether a researcher can or should combine quantitative and qualitative research methods and techniques. The debate concerned the compatibility between worldviews and methods. Worldviews are broad philosophical assumptions researchers use when they conduct studies (Creswell 2008:554). Mouton (1996:38) argued that the use of multiple methods and techniques is

actually one of the best ways to improve the quality of research. The procedure of collecting, analyzing, and mixing both quantitative and qualitative research and methods in a single study to understand a research problem is called mixed method design or triangulation design (Creswell 2008: 552). The rationale for the use of both quantitative and qualitative methods in combination is that it provides a better understanding of the research problem and questions than either method by itself (Creswell 2008:552).

Mouton (1996: 40) argued that most researchers accepted that quantitative and qualitative tools are compatible and that the choice for their inclusion in studies is determined by the phenomenon under study. According to Mouton (1996:156), Denzin (1978) coined the term triangulation to refer to the use of multiple methods of data collection. Advocates of triangulation state that one data collection method supplies strengths to offset the weaknesses of the other form (Creswell 2008:557; Mouton 1996:156). The Combination of qualitative and quantitative data provides a more complete picture by noting trends and generalizations as well as in-depth knowledge of participants' perspectives (Creswell and Clark 2007:33).

Quantitative research is often associated with positivistic research methodology because it assumes that if one asks the right questions in the right way, use the right methods, carry out the right kind of experiments and processes, one will discover facts or truths (Wisker 2008:65). Positivistic research is based on a belief that the world is describable and provable, measurable and deductive because the research would use the quantitative methods to collect data which would be reliable for future use (Wisker 2008:65). Quantitative research tends to address research problems requiring a description of trends or an explanation of the relationship among variables (Creswell 2008:51). Furthermore, in quantitative research, describing a trend means that the research problem can be answered best by a study in which the researcher seeks to establish the overall tendency of responses from individuals and to note how this tendency varies among people. Powell and Connaway (2004:59) advised that quantitative research is appropriate where quantifiable measures of variables of interest are possible, where hypotheses can be formulated and tested, and inferences drawn from samples to populations. Some quantitative research problems require that it be

explained how one variable affects another (Creswell 2008:51).

In contrast, qualitative research is best suited for research problems in which you do not know the variables and need to explore (Creswell 2008:53). This occurs in the case where literature yields little information about the phenomenon of study, and a need rises to explore more from the participants. The research approach that is often applied by those who believe that the difference between the social world and the natural worlds are so fundamental that the same methods and techniques cannot be used in the human sciences is called anti-positivist research approach and is often associated with qualitative research (Mouton 1996:47). Such research is characterized by being inductive, making theory and contributing to meaning rather than testing theory and meaning and is also known as anti-positivist research or postpositivist approach (Wisker 2008:66).

The postpositivist approach is based on the belief that questions asked do not yield absolute final answers , that all data collected will need to be interpreted in context and that our understanding of the meanings we determine from the findings produced by our research could be differently interpreted in different places and times by different people (Wisker 2008:66). Interpretivists fall under the anti-positivist approach. Interpretivism's premises is that: human beings are subjects and have consciousness or mind and are affected by knowledge of the social world which exists in relation to human beings Wisker 2008:69); hence the interpretivism approach is used in qualitative research where subjects can be interviewed as method of data collection. Powell and Connaway (2004:59) posited that qualitative methods are appropriate when the phenomena to be studied are complex, social in nature and do not lend themselves to quantification. It is a means to understand why participants act the way they do. A central phenomenon is the key concept, idea or process studied in qualitative research (Creswell 2008: 53).

Qualitative research tends to apply a more holistic and natural approach to the resolution of a problem than does quantitative research (Powell and Connaway 2004: 59). Qualitative researchers have used a variety of methods and techniques including the ones traditionally used in quantitative research such as observation and interviews.

A review of qualitative and quantitative research starts with the knowledge that they both address the same elements in the process of research. Creswell and Clark (2007:28) and Powell and Connaway (2004:187) argued that no single study perfectly fits all the elements of either qualitative or quantitative study. The two approaches tend to differ in the basic intent of the research, thus, in qualitative research, the intent is to learn the participant's view about a particular phenomenon whilst in a quantitative approach, the intent is to see how data provided by participants fits an existing theory (Creswell and Clark 2007: 28).

In qualitative research, the literature review is used to provide evidence for the purpose of the study and the underlying problem addressed by the inquiry whilst in a quantitative study, the literature review establishes the importance of the purpose and the research problem in a study (Creswell and Clark 2007:29). In addition, the literature may be used to identify a theory to test or the specific questions that remain unanswered in the literature which must be asked of the participants. Quantitative literature reviews are often longer and more detailed than qualitative literature reviews because of the multiple roles they assume (Creswell and Clark 2007:30). In qualitative research, the questions are open-ended thus allowing the participants to provide the information from their perspective whilst in quantitative research, the intent and literature point towards focused, closed-ended questions that relate variables to each other (Creswell and Clark 2007:30).

Collection of data involves addressing the questions or hypothesis. In qualitative research, the data tends to be words from participants in the form of transcripts from interview or field notes from observations (Creswell and Clark 2007:30). When a researcher wants to develop a deep understanding of the phenomenon, he/she may use a few individuals as more individuals participating in the study will result in obtaining less depth from each participant (Creswell and Clark 2007:30). In addition, the depth can be established further by actually visiting the research site to learn about the context of participants' thinking. In contrast, quantitative research tends to report only numbers or scores obtained from instruments, checklists or information available in accessible documents (Creswell and Clark 2007:30).

The purpose of this study is to test theories broadly to see how they apply to many people at many sites and this is done by sending and collecting instruments from a large number of individuals who usually, represent a larger population (Creswell and Clark 2007: 30). In doing this both quantitative and qualitative methods were used. In qualitative research, the text or word data are analyzed using increasing levels of abstraction whilst in quantitative research, the scores lead to numeric analysis through statistical procedure (Creswell and Clark 2007:30). The overall intent of data analysis is to reject or accept the hypothesis. Most qualitative researchers would not deny the value of quantitative analysis even in so called qualitative studies (Mouton 1996:166). However, they will certainly object to the wholesale use of such techniques to the exclusion of other methods of analysis.

When a quantitative design such as an experiment or correlational study can be enhanced by qualitative data or, when a qualitative design such as grounded theory or case study can be enhanced by quantitative data, a mixed methods design is the preferred design (Creswell and Clark 2007:33). Creswell (2008:557) explained that the purpose of a triangulation mixed method design is to simultaneously collect both quantitative and qualitative data, merge the data and use the results to understand the research problem. The following principles underlie the process of using the triangulation design:

- The mixed methods researcher often gives equal priority to both quantitative and qualitative data;
- The mixed methods researcher collects both quantitative and qualitative data concurrently or simultaneously during the study; and
- The mixed methods researcher compares the results from quantitative and qualitative analyses to determine if the two databases yield similar or dissimilar results (Creswell 2008:558).

Creswell and Clark (2007:34) noted that a problem exists when the quantitative results are inadequate to provide explanations and the problem can be best understood by using the qualitative data to enrich and explain quantitative results in the words of the

participants. They also noted that a problem exists when qualitative research can provide an adequate exploration, but such exploration is not enough and therefore quantitative research is needed to further understand the problem. The mixed methods design is best suited to address these problems (Creswell and Clark 2007:34).

This study used the mixed method design in order to explore knowledge sharing practices of Human Resource Development (HRD) practitioners working in the Provincial Government of KwaZulu-Natal. It was the preferred method of collecting qualitative data from heads of human resource development by means of interviews and quantitative data from the HRD practitioners by means of questionnaires. This was the preferred method since addressing the research problem required "both quantitative and qualitative approaches, required adding a secondary form of data to the design and also required explaining quantitative results with qualitative data" (Creswell and Clark 2007:35).

4.4.1 Case studies

Case studies are often used in qualitative research. They are both an approach to reporting research and also a methodology that concentrates upon singular or small numbers of individual instances (Birley and Moreland 1998: 36). A case study is an investigation of a contemporary social phenomenon within its real life context, using multiple data sources (Anfara and Mertz 2006:40). A case study focuses attention on a single instance of some social phenomenon without any significant intervention from the investigators (Babbie 2010:309; Powell and Connaway 2004:60; Birley and Moreland 1998:36). It seems to be appropriate when investigating phenomena when a large variety of factors and relationships are included, where no basic laws exist to determine which factors and relationships are important and when factors and relationships can be directly observed (Powell and Connaway 2004: 61). Babbie (2010:309) reported that the chief purpose of case studies may be descriptive, as when an anthropologists describes the culture of a preliterate tribe. However, Powell and Connaway (2004:61) recommended the case study method for investigating organizational structure and functions or organizational performance. Powell and Connaway (2004: 61) and Creswell (2008: 476) also recommended the case study method for exploratory studies. When

Creswell (2008: 476) was investigating the differences between case studies and ethnography, he found that when case study writers research a group, they may be more interested in describing the activities of the group instead of identifying shared patterns of behaviour exhibited by the group.

According to Creswell (2008:476) there are various types of cases which researchers study such as:

- The case may be a single individual, several individuals separately or in a group, a programme, events or activities.
- The case may represent a process consisting of series of steps that form a sequence of activities.
- A case may be selected for study because it is unusual and has merit in and of itself.
 When the case is of interest it is called an intrinsic case whilst an instrumental case
 is the one where the focus may be a specific issue with a case used to illustrate the
 issue. Collective case studies are when multiple cases described and compared to
 provide insight into an issue.
- When the development of an in-depth understanding of a case is needed, collecting multiple forms of data such as pictures, e-mails, and advertisements may be necessary.
- The researcher may also locate a case within a larger context such as geographical, political, social or economic settings.

A number of data collection techniques such as questionnaires, interviews, observation and analysis of documents are usually employed in a case study (Powell and Connaway 2004:61). This study used the case study method to illuminate the particular issue of knowledge sharing in the public service by using the PHRDF case.

4.4.2 The literature search and review

A literature review is a written summary of articles books and other documents that describes the past and current state of knowledge about a topic, organizes the literature into topics, and documents a need for a proposed study (Creswell 2008:116). It cites and briefly reviews the related research studies that have been conducted (Powell and

Connaway 2004:255). A literature review consists of arguments made by other researchers as well as raising the researcher's own point of view regarding the body of study already done. In other cases, the research done in other fields is all that exists of any real importance that will give guidance about the issue being researched (Powell and Conaway 2004:255). A literature review normally lays the groundwork for the study to be done and indicates why the study may have value in the bigger context (Babbie 2010: 523). It assists in suggesting the best approach to seeking a solution to the problem (Powell and Connaway 2004:255). Creswell (2008:113) established two types of literature reviews, thus: thematic review of literature and study-by-study review of the literature. When the researcher identifies a theme and briefly cites literature to document this theme, this is called the thematic review. On the other hand, when each literature study reviewed provides a detailed summary of each study grouped under a broad theme, this is called a study-by-study review of literature. This study used both the thematic and the study-by-study literature reviews.

Creswell (2008: 116) reported that literature reviews are different in quantitative and qualitative research. In quantitative research, the literature review establishes the importance of the purpose and the research problem in a study (Creswell and Clark 2007:29). Creswell and Clark (2007:29) further posited that, it could be used to identify a theory to test specific questions that remains unanswered in the literature and that must be asked of the participants. Creswell (2008:116) also confirmed that in quantitative research, researchers provide a detailed review of the literature to justify the major purpose and research questions of the study. In a qualitative study, the researcher reviews the literature and uses it to provide evidence for the purpose of the study and the underlying problem addressed by the inquiry (Creswell and Clark 2007:29). Creswell (2008:116) argued that in qualitative research, the investigators use a limited amount of literature in the beginning of the study to allow participants' rather than perspectives from the literature. According to Creswell (2008:116) the literature is again cited at the end of the studies in both quantitative and qualitative studies but for different purposes. In quantitative research, literature cited at the end is used to compare results with prior predictions made at the beginning of the research, whilst in qualitative research, it is used at the end to compare and contrast findings in the study

with past literature (Creswell 2008:116). In this study both purposes were employed as this study used the mixed methods approach to establish knowledge sharing in the public service using the PHRDF case study. The literature study was discussed thoroughly in Chapter 3 and findings and results of the enquiry were compared and contrasted with the literature review in Chapter 3.

4.4.3 Survey methodology

Survey research is defined as the research strategy where one collects data from all or part of a population to assess the relative incidence, distribution, and interrelations of naturally occurring variables (Powell and Connaway 2004:59). Survey research designs are procedures in quantitative research in which researchers administer a survey or questionnaire to a sample or to the entire population of people to describe the attitudes, opinions, behaviours or characteristics of the population (Creswell 2008:647). They are particularly useful to obtain an overview of a particular situation and are often used by policy makers and by those who wish to inform policymakers. Surveys can be used for descriptive, explanatory and exploratory purposes (Babbie 2010:254). It is also a frequently used mode of observation in the social sciences (Babbie 2010:54). Powell and Connaway (2004:84) observed that survey research was generally considered to be more appropriate for studying personal factors and for exploratory analysis of relationships. This is an exploratory study which explored knowledge sharing among members of the PHRDF. One of the objectives of this study is to make its results available to inform the knowledge management strategy of the KwaZulu-Natal Provincial Administration hence the use of the survey methodology. Survey research is recognized as the best method available to the social researcher who is interested in collecting original data for describing a population too large to observe directly (Babbie 2010:254).

Powell and Connaway (2004:85) affirmed that an exploratory survey which is often conducted in qualitative research can increase the researcher's familiarity with the phenomenon in question, it can help to clarify concepts, it can be used to establish priorities for future research, it can identify new problems and can be used to gather information with practical applications. Exploratory surveys include literature surveys,

experience surveys and analysis of insight-stimulating examples (Powell and Connaway 2004:85). For this reason the use of the exploratory survey for this study was found to be most appropriate. Other types of surveys include cross-sectional study, trend study, cohort study, panel study, approximation of a longitudinal study, parallel samples study, contextual study, sociometric study and critical incident study. According to Creswell (2008:389) there are still two basic types of research surveys, namely, cross-sectional and longitudinal despite the many applications of surveys available currently. In a cross-sectional survey design, the researcher collects data at one point in time. Its advantage is that it measures current attitudes or practices (Creswell 2008:389). In addition, it provides information in a short amount of time, such as the time required for administering the survey and collecting information.

Cross-sectional surveys serve different purposes. Some examine current attitudes, beliefs, opinions, or practices (Creswell 2008:389). Another cross-sectional survey design compares two or more groups in terms of beliefs, opinions or practices (Creswell 2008:390). One can measure community needs as they relate to programmes, courses, projects or involvement in community planning (Creswell 2008: 390). In addition, some cross-sectional designs evaluate a programme such as a survey that provides useful information to decision makers. Lastly a national survey is a cross-sectional survey design which is a large scale assessment of groups of individuals such as teachers, or students (Creswell 2008:391). On the other hand, longitudinal survey designs collect data over time and this process involves the survey procedure of collecting data about trends with the same population, changes in a cohort group or subpopulation, or changes in a panel group of the same individuals over time (Creswell 2008:391). Trend studies in some surveys are used to study changes within same general population over a period of time. Trend studies are longitudinal survey designs that involve identifying a population and examining changes within that population over time (Creswell 2008: 392). This study employed the cross-sectional survey in order to examine knowledge sharing practices amongst the PHRDF members at the same point in time.

Survey designs are different from experimental research in that they do not involve a treatment given to participants by the researcher, instead they describe trends in the

data rather than offer rigorous explanations (Creswell 2008:388). In addition, survey research does not enable the researcher to manipulate the independent variables, provides less control of the research environment and therefore is not considered capable of definitely establishing cause and effect (Powell and Connaway 2004:84). Survey research involves the collecting of quantitative, numbered data using questionnaires or interviews and statistically analyze the data to describe trends about responses to questions and the testing of research questions or hypothesis (Creswell 2008:388; Babbie 2010:255). However, the survey design has its disadvantages. Hoskins (2010) observed that one of its disadvantages is its rigidity in that once the initial research design is developed; it must remain the same throughout the study. Another disadvantage observed by Babbie (2010:260) is the occurrence of bias where some questions seem to be prompting particular responses than others as well as the susceptibility of collected data to bias. In this research, these shortcomings were overcome by pre-testing the data collection tool on a forum of Records Managers and Deputy Information Officers. In addition to this, a literature survey including similar studies was employed to gather information regarding knowledge sharing and interviews were held with Heads of Human Resource Development who managed members of the PHRDF.

4.4.4 Collecting information about the population

This is a case study which explores knowledge sharing in the public service. Powell and Connaway (2004:61) reported that a case study is often useful as a exploratory technique hence its use in this study. A researcher might use homogeneous sampling of individuals who have membership in a subgroup with distinctive characteristics (Creswell and Clark 2007:112). A qualitative researcher usually identifies a small number of people who will provide in-depth information about the issue being investigated and the number relates to the type of qualitative approach being used (Creswell and Clark 2007:112). Therefore in this research the case study was suitable.

4.5 Population

A population is a group of individuals who have the same characteristics and if a researcher can identify and study this group, it is called a target population (Creswell

2008:152). Powell and Connaway (2004:93) defined a population as the total of all cases that conform to a pre-specified criterion or set of criteria. The population can include individuals such as adults, children, teachers or in the case of this research, human resource development practitioners. Selection of the population must be done carefully with regard to the selection criteria, desired size, and the parameters of the survey population (Powell and Connaway 2004:93). The population of this study was composed of representatives of HRD personnel of the Provincial Administration in the PHRDF. It consisted of senior managers, deputy managers, assistant managers, skills development facilitators, a chief training officer, and senior training officers who worked in the area of human resource development from the 14 departments of the KZN Provincial Administration. Normally, a population consists of elements of study which are usually called units of analysis. An element or unit of analysis is that unit about which information is collected and that provides the basis of analysis. The unit of analysis in this study was the individual representatives in the PHRDF. Powell and Connaway (2004:93) cautioned against too large or too expensive to manage populations as this could negatively affect the execution of the research. In addition, members of the population must be readily accessible to the researcher otherwise it would not be possible to collect the required data. In order to mitigate against these negative factors, the researcher had access to the members of the PHRDF through the PHRDF meetings and through the secretariat and chairperson of the forum using email.

4.5.1 Size of population

The list of members of the PHRDF was obtained from the secretariat of the PHRDF. Normally, the HRD consists of the different positions and levels in all departments as depicted in Table 4.1. It was a senior manager of HRD's prerogative to nominate anyone on these levels to represent their respective department at the PHRDF. However, as the group solidified, departments began to nominate specific representatives from their HRD sections to attend the meetings.

Table 4.1: Ideal representation of HRD members on the KZN PHRDF

Department	Senior Manager	Deputy Manager	Assistant Manager	Chief Trainer	Trainer	SDF
	Wanager	Manager	Mariager	Trainer		
Arts and Culture	1	1	1	1	1	1
Agriculture, Environmental Affairs	1	1	1	1	1	1
and Rural Development						
Cooperative Governance and	1	1	1	1	1	1
Traditional Affairs						
Economic Development and	1	1	1	1	1	1
Tourism						
Education	1	1	1	1	1	1
Treasury	1	1	1	1	1	1
Health	1	1	1	1	1	1
Human Settlements	1	1	1	1	1	1
Office of the Premier and Public	1	1	1	1	1	1
Service Training Academy						
Public Works	1	1	1	1	1	1
Sport and Recreation	1	1	1	1	1	1
Community Safety and Liaison	1	1	1	1	1	1
Social Development	1	1	1	1	1	1
Transport	1	1	1	1	1	1

From the time the proposal for this research was developed in 2013 to the period of the survey in 2015, some members had changed jobs and new members were incorporated into the forum. As a result, some of the respondents were new to the forum. This development meant the Researcher had lost some of the PHRDF members who had moved to other departments or other jobs. In addition, HRD sections in the departments were nominating a certain number of representatives to attend the meetings. This

meant that the number of people that could be surveyed was 48 including 14 Senior Managers who were interviewed as depicted in Table 4.2 below.

Table 4.2: The nominated members who attended PHRDF meetings

Department	Senior	Deputy	Assistant	Chief	Trainer	SDF/
	Manager	Manager	Manager	Trainer		Practitioner
Arts and Culture	1				1	1
Agriculture, Environmental Affairs and	1	1				
Rural Development						
Cooperative Governance and Traditional	1		1			
Affairs						
Economic Development and Tourism	1	1				
Education	1				1	1
Finance/ Treasury	1	1	1			1
Health	1	1	2			
Human Settlements	1					1
Office of the Premier and Public Service	1	5	2			2
Training Academy						
Public Works	1	1	1			1
Sport and Recreation	1	1	1			
Community Safety and Liaison	1	1				
Social Development	1					
Transport	1	1	1			
TOTAL	14	13	9		2	6
GRAND TOTAL			48	3		

The nominated attendees to the PHRDF meeting became the whole population to be surveyed. According to Powell and Connaway (2004:93) a count or survey of all elements of a population, and the determination of the distribution of their characteristics is called a census. A census study as reported by Creswell (2008: 394)

permits conclusions to be drawn about the entire population. Therefore random sampling, hypothesis testing and the use of inferential statistics are not necessary. For a census study, survey researchers simply report on the descriptive statistics about the entire population (Creswell 2008:394). In light of the relatively small size of the population, there was no need for sampling as the population was relatively manageable for administering questionnaires as well as conducting interviews with Heads of HRD.

4.6 Data collection procedure and instruments

The current study used multiple levels of evidence-gathering methods to form a triangulated study design. In order to observe the object from several different angles or viewpoints social researchers employ a simple process of triangulation (Neuman 2011). Creswell (2008: 266) describes triangulation as the process of corroborating evidence from different individuals, types of data, or methods of data collection in descriptions and themes in qualitative research so as to develop a report that is both accurate and credible. The study adopted both qualitative and quantitative approaches and used both forms of data collection concurrently. A concurrent form of data collection exists for the triangulation design where the two forms of data are independent of each other (Creswell and Clark 2007:116). The process of knowledge sharing takes place when individuals mutually exchange their knowledge and jointly create new knowledge (Park, Saplan-Catchapero and Jaegal 2012). The concept of knowledge sharing is hard to operationalize and to measure quantitatively in larger samples (Willem and Buelens 2007). Willem and Beuelens (2007) observed that qualitative data could explain more in-depth what is occurring in the knowledge sharing process.

According to Creswell (2008:12) it is important to respect the site in which research takes place by gaining permissions before entering a site, by disturbing the site as little as possible during the study and by viewing oneself as a guest at the place of study. Creswell and Clark (2007:113) affirmed that this permission can be gained at three levels: from individuals who are in charge of the sites, from people providing the data or their representatives and from campus-based institutions review boards. Creswell (2008:218) listed the steps included in seeking permission to enter the site by seeking

permission from the board, developing a description of the project, designing an informed consent form and having the project reviewed. For this study, the Researcher wrote a submission to the Director-General of the KZN Provincial Administration who was stationed at the KZN Office of the Premier to seek permission to conduct this research. The approval process went from the Chairperson of the KZN PHRDF to the Deputy Director-General for whom HRD is one of her jurisdictions and finally to the Director-General.

These levels of permission are required whether the research is qualitative or quantitative. Because the qualitative data collection involves spending time at sites, and the sites may be places not typically visited by the public, researchers need to find a gatekeeper (Creswell and Clark 2007:113). A gatekeeper is described as an individual in the organization supportive of the proposed research who will open up the organization and has 'insider' status at the site the researcher plans to study (Creswell and Clark 2007:113; Creswell 2008:219). Ethical issues such as providing reciprocity to participants for their willingness to provide data, handling sensitive information and disclosing the purposes of the research apply to both qualitative and quantitative research and a covering letter assuring participants of such should be provided to them beforehand (Creswell and Clark 2007:116).

The familiarity of the Researcher with the participants of the study and with the Chairperson of the PHRDF assisted in gaining access to the research site. In addition, submission approving the study to be conducted obtained from the Researcher's employer (See Appendix 1), the Director-General in the Office of the Premier, who is the head of the KwaZulu-Natal Provincial Administration (KZNPA), was used to gain permission to collect data from the members of the PHRDF who came from the different departments of the KZNPA. The Deputy-Director General (DDG) made a comment which implied that the completed research emanating from the study would be the exclusive property of the Office of the Premier. After it was clarified to the DDG that research done at UKZN belongs to the University, a follow-up gatekeeper's permission was granted to the Researcher (See Appendix 2). An informed consent (See Appendix 3) was also used to explain to the respondents about the nature of the study to be

conducted and to ask for their voluntary agreement to participate in the study (Lwoga 2009).

4.6.1 The questionnaire

A self-administered questionnaire was designed consisting of closed questions with follow-up open-ended questions in some cases, in order to determine knowledge sharing experiences of PHRDF members. The design of the questionnaire was done based on the literature review as well as the theories that were used in the study (Powell and Connaway 2004:124). In addition, the questionnaire was organized around the questions the study wanted to answer. The questionnaire was pre-tested on the KwaZulu-Natal Records Managers and Deputy Information Officers Forum (KRMDIOF). It must be pointed out that at the time of data collection, KwaZulu-Natal was in a transition from one Premier to another, implying that the various Members of the Executive Council would be employing new strategies of expediting service delivery, which affected the frequency of meetings held by the PHRDF.

4.6.1.1 Electronic questionnaires

The term 'electronic questionnaires' is generally used to cover both online questionnaires and questionnaires within an e-mail message, it does not cover questions produced in a word-processing package and then sent to participants in an attachment because, this is still a 'paper-based' questionnaire using a different mechanism for distribution (Pickard 2013:222). According to Babbie (2010:283) the use of the internet and World Wide Web (WWW) has made online surveys increasingly popular. He claimed that researchers conduct meaningful surveys through online surveys via e-mail or via websites. The online survey involves the participant downloading a questionnaire either received by e-mail or located on an internet site, completing the questionnaire and sending it back to the researcher (Creswell 2008:396; Babbie 2010:283). Creswell (2008:396) and Powell and Connaway (2004:146) cautioned that although electronic surveys provide an easy, quick form of data collection, their use could be limited if not all participants have access to computers or are not comfortable using websites or the internet.

Powell and Connaway (2004:145) argued that the early survey text instruments were text-based and allowed for no interactivity as if they were paper questionnaires delivered electronically. The change came in the mid-1990s where the World Wide Web (WWW) became more available and more popular making multimedia and interactive surveys possible. According to Powell and Connaway (2004:145) Schonlau, Fricker and Elliot (2002) conducted a literature survey which indicated that surveys using a mail response and those using both e-mail and Web response mode tend to have a higher response rates than those using just an e-mail or web-response mode. The belief that e-mail questionnaires are less expensive than mail questionnaires has been found to pertain only to postage and printing (Powell and Connaway 2004:146). However, Babbie (2010:85) argued that paper, printing and postage alone can constitute a large expense. Powell and Connaway's (2004:146) suggestion that respondents must be assured of maintaining their confidentiality and anonymity by stripping e-mail addresses and encrypting data which is then saved to a private storage in order to retain respondents' privacy.

4.6.1.2 Paper-based questionnaires

The most common form of questionnaire is the paper-based, printed instrument (Pickard 2013:222). It has been found that of all the survey methods the postal survey provides the greatest possibility of anonymity (Welman, Kruger and Mitchell 2005:153). Anonymity is a very important factor in public service, therefore the researcher chose an instrument which has a greater degree of providing such. The most typical form of distribution is by post, handing them to individuals at group events or leaving them at prominent positions where people are encouraged to complete and return them to the distribution point (Pickard 2013:222). The researcher delivered printed questionnaires to the respondents because of their close proximity and to preserve anonymity and confidentiality. However, some respondents requested their questionnaires to be sent by e-mail in order to facilitate a quicker return rate. After these questionnaires were returned by the respondents via e-mail they were printed and deleted from the computer in order to maintain the respondents' privacy and anonymity.

4.6.1.3 Categories of information

The questionnaire consisted of questions divided into four categories based on the questions to be answered by the study, namely:

- How is knowledge shared in the PHRDF;
- Factors affecting knowledge sharing;
- · Challenges with knowledge sharing; and
- Strategies to overcome the challenges of knowledge sharing.

According to Powell and Connaway (2004:128) the questionnaire is likely to consist of a variety of questions addressing a number of components of a broader topic. Seven questions were allocated to the category of enquiring how knowledge is shared amongst the PHRDF members. The category on factors affecting knowledge sharing consisted of ten questions. Eight questions dealt with the category of challenges experienced with knowledge in the PHRDF. The category dealing with strategies for overcoming challenges regarding knowledge sharing in the PHRDF had eight questions. The open-ended follow-up questions were also meant to establish more information around these categories of information.

4.6.1.4 Forms of questions

The form of the question determines the method of response (Powell and Connaway 2004: 128). Researchers agree that there are two basic forms of questions namely, closed and open-ended questions (Babbie 2010:256; Creswell 2008: 398; Powell 2004:128). Powell and Connaway (2004:128) also referred to open-ended questions as unstructured questions and closed-ended questions as fixed or structured questions. Babbie (2010:256) observed that the term questionnaire suggests a collection of questions, however, a questionnaire can reveal as many statements as there are questions in it. He further resolved that using both questions and statements in a questionnaire creates more flexibility in the design of items and can make the questionnaire more interesting as well. This study used both closed-ended and openended questions. Both forms of questions were used in order to provide the easiest response from the participants while still producing adequate, definite and uniform answers (Powell and Connaway 2004:128).

4.6.1.4.1 Close-ended questions

Quantitative data was collected using a self-administered questionnaire consisting of close-ended and open-ended questions which were used for the rest of the participants to explore the existence of stratified and egalitarian structures within the group. The advantage of this type of questionnaire is that predetermined close-ended responses can collect useful information to support theories and concepts in literature while, the open-ended responses will assist in exploring reasons to the close-ended responses and identify comments people might have that are beyond the responses to the close-ended questions (Creswell 2008:228). The disadvantage is the many responses to the open-ended questions that would be received of unequal length to analyze. The self-administered questionnaires were distributed by e-mail because this type of survey is easy, cheap and fast to conduct (Struwig and Stead 2001:103). The guiding questions for this study and the instruments utilized to collected data on each question are shown in Table 4.3.

Table 4.3: Mapping research questions to the instruments

Research Questions	Instruments
1. How do the members of the PHRDF practice knowledge	Interview schedule
sharing?	Questionnaire
2. What factors affect knowledge sharing between PHRDF	Interview schedule
members?	Questionnaire
3. What were the challenges experienced by PHRDF members	Interview schedule
when sharing knowledge?	Questionnaire
	Literature review
4. What strategies can be used by the PHRDF to overcome	Interview schedule
such challenges?	Questionnaire
	Literature review

4.6.2 Pre-testing the questionnaire

To ensure the instruments used were valid for data collection, the instruments were pretested. A pre-test of a questionnaire or interview survey is a procedure in which a researcher makes changes in an instrument based on feedback from a small number of individuals who complete and evaluate the instrument (Creswell 2008:402). Creswell confirmed that it helps determine that the individuals in the sample are capable of completing the survey and that they can understand the question. A forum of information officers and records managers known as KwaZulu-Natal Records Managers and Deputy Information Officers forum (KRMDIOF) was used for pre-testing the self-administered questionnaire.

This forum of about 12 members is a CoP consisting of senior managers and deputy managers in the field of Promotion of Information act (PAIA) and records management. They hold meetings once a month to discuss matters related to their functions. The same questionnaire which was sent to the KZN PHRDF members was pre-tested on five of the senior managers who regularly attend these meetings. The questionnaire was sent to them by e-mail on 4 February 2015 and they all completed the questionnaire and returned it by the 15 of February 2015. Minor grammatical and editorial changes were made which included the addition of an open-ended question following some of the questions.

4.6.3 Administering the questionnaire

After the changes were made to the questionnaire according to the results from the pretest, the Researcher used the attendance list obtained from the Secretariat of the PHRDF to contact the attendees telephonically. This was to alert them about the questionnaires that were to be delivered as well as the intention to send them by e-mail (for their own keeping and reference) with the cover letter (See Appendix 3) which contained permission from the gatekeeper, the Director-General's approval to conduct the research, and the informed consent form. The informed consent form is given to participants to complete as evidence that they understand what they are agreeing to, accept what is being asked of them and are comfortable with the purpose of the research and the intended use of the data they are providing (Pickard 2013:89). This

made it easier for the Researcher to deliver the questionnaires as the respondents already had the information regarding what the research entailed.

The questionnaires were delivered personally to the respondents as the Researcher had established where the respondents' locations were (See Appendix 6 for questionnaire). Although the Researcher was familiar with most of the respondents since she worked at the Office of the Premier which was overseeing the PHRDF, delivering the questionnaires personally assisted in building an element of trust between the Researcher and the respondents and emphasized the seriousness of the project.

The Researcher started to distribute the questionnaires from 10 March 2015 requesting the respondents to return the questionnaire within two weeks after receipt depending on when it was delivered. Some respondents received their questionnaires later than others because their departments were located in Durban. The questionnaires were returned via the normal registry procedures among the Departments and some were collected by the Researcher. In cases where the respondents indicated they had misplaced the questionnaires, most of them requested an e-mail version of the questionnaire. One department who had two members attending the PHRDF did not participate because the Researcher could not get hold of them and they did not respond to the e-mail requests nor to the telephone calls. Out of 28 questionnaires that were distributed, 21 responses were received yielding a good response rate of 75%.

4.7 Interviews

Interviews are used frequently in library and information research (Pickard 2013:195). The basic steps in developing a standardized or structured interview are not that different from those for developing most other kinds of survey studies (Powell and Connaway 2004:147). The purpose of the interview is to access what was in, and on, the respondent's mind (Pickard 2013:196). Pickard (2013:196) further argued that the predominant reason for using the interview method should be the nature of data that is sought and the type of questions that needs to be asked to access the data. She further states that interviews are often used when one is seeking qualitative, descriptive, indepth data that is specific to the individual and when the nature of the data is too

complicated to be asked and answered easily.

Interviews are not particularly conducive to the reproduction of complicated and exact data, however, they are conducted to discover what people think, feel and remember about situations (Pickard 2013:1996). Powell and Connaway (2004: 147) advised that the researcher should set up the interview well in advance where possible and appropriate, and should be punctual for the interview. Depending on the nature of the interviews, analysis could begin as soon as the first interview is complete (Pickard 2013:197). The possible presence of bias that may be introduced by the interviewer is always a disadvantage to the interview process. However, this can be avoided by ensuring that the interviewer does not overreact to responses of the interviewee, dressing inconspicuously and appropriately for their environment, holding the interview in a private setting and keeping the interview as informal as possible (Powell and Connaway 2004: 149). Another disadvantage is the cost of travel and long distance telephone costs, especially cellular telephone costs. Notwithstanding these disadvantages, the interview has been found to produce a better response rate. This is attributed to the fact that the personal contact of the interview helps to encourage, or put more pressure on persons to respond fully (Powell and Connaway 2004:150).

4.7.1 Types of interviews

The type of interview that is chosen depends on the nature of the research topic and the sort of data that needs to be collected to respond to the research question (Pickard 2013:198). Pickard (2013:198) advises that more practical considerations such as the researchers' experience, time available to do the research, the number of respondents that should be reached, and the analysis needing to be done are important. In research, three types of interviews are used: structured, semi-structured and unstructured (Welman, Kruger and Mitchell 2005:165). There are other types of interviews.

4.7.1.1 Structured interviews

In a structured interview, the interviewer puts a collection of questions from a previously compiled questionnaire, known as the interview schedule to a respondent face-to-face and records the interviewee's response (Welman, Kruger and Mitchell 2005: 165). Pickard (2013:199) concurs that structured interviewing refers to a situation in which the

interviewer asks each respondent a series of pre-established questions with a limited set of response categories. The interviewer sticks to the interview schedule questions and has no room to deviate from it. Pickard (2013:199) stated that it is often referred to as a 'researcher administered questionnaire'.

There are two forms of structured interviews namely, standardized, open-ended interviews and closed fixed-response interviews (Pickard 2013:199). In a standardized, open-ended interview, all interviewees are asked the same open ended-questions but allowed to respond in any way they feel is appropriate and with any information they choose to share (Pickard 2013:199). Whilst, in closed fixed-response interviewees are asked the same questions and choose from a predetermined set of alternative answers (Pickard 2013:199). Sometimes the Combination of the two methods is applied.

The advantage of this type of interview is the benefit of visual and oral clues that the interviewer can pick up by listening and watching the respondent compared to just an administered questionnaire. There is also the increased control the researcher has over response rates since they obtain complete data and can measure as he/she goes how much data is being gathered (Pickard 2013 199). While there is social interaction between the researcher and the respondent such as explanations that must be provided, the questions should be read in the same tone of voice so that bias is not indicated (Welman, Kruger and Mitchell 2005:165).

4.7.1.2 Unstructured interviews

Unstructured interviews are informal and are used to explore a general area of interest in depth (Welman, Kruger and Mitchell 2005:166). There is no pre-determined list of questions prepared in this type of interview although the researcher needs to be clear with regards to what he/she wants to explore. The purpose of the unstructured interview is to gain a holistic understanding of the thoughts and feelings of the interviewee and is concerned with open-ended questions that allow the interviewer to tell their own story in their own words (Pickard 2013:199).

informal conversation and the general interview guide. In the informal conversational interview it is important that the conversation is allowed to flow from the immediate context however, the interviewer must listen very carefully and respond to the interviewee. This type of interview needs one to be very familiar with the topic and very comfortable with the interview situation as people can be very passionate about certain areas of the topic. Therefore, the ability to steer the conversation into a purposeful conversation is crucial (Pickard 2013:200). It has been labeled as an informant interview since it is the interviewee's perceptions that guide the conduct of the interview (Welman, Kruger and Mitchell 2005:166).

Alternatively, the general interview guide, also referred to as the guided interview, employs the approach of a prepared basic checklist to make sure that all relevant areas or topics are covered (Pickard 2013: 200). In this type of interview the interviewer directs the interview and the interviewee responds to the questions of the researcher (Welman, Kruger and Mitchell 2005:166). This approach is found to be useful for eliciting information about specific topics. Unstructured interviews are usually employed in qualitative or explorative research to identify important variables in a particular area, to formulate penetrating questions about them and to generate hypothesis for further investigation (Welman, Kruger and Mitchell 2005:166).

4.7.1.3 Semi-structured interviews

Interviews that are neither unstructured nor structured but have a varying degree of structuredness are usually called semi-structured interviews. In semi-structured interviews, the researcher has a list of themes and questions to be covered, although these may vary from one interview to the next (Welman, Kruger and Mitchell 2005:166). Instead of an interview schedule, interview guides are used in semi-structured interviews (Welman, Kruger and Mitchell:166). According to Welman, Kruger and Mitchell (2013:166) an interview guide involves a list of topics and aspects of these topics that have bearing on the given theme and that the interviewer should raise during the course of the interview. In a semi-structured interview some questions may be used in particular interviews, given the specific organizational context that is encountered in relation to the topic. In addition, the order of the questions may also be varied

depending on the way in which the interview develops. On the other hand, additional questions may be required to explore the research question and objectives given the nature of events within the particular organization (Welman, Kruger and Mitchell 2005: 166). This means the interviewer is free to explore, probe and ask a question not previously specified when it of interest to him/her (Pickard 2013:200).

In qualitative research, open-ended questions are asked so that the participants can best voice their experiences unconstrained by the perspective of the researcher or past research findings and their answers are recorded, transcribed and entered into a computer file for analysis (Creswell 2008:225). In this study, qualitative data was collected by using a semi-structured interview schedule (See Appendix 5) posed to the Heads of HRD. The heads were either senior managers or general managers in charge of HRD only or both HRD and Human Resource Management (HRM). Thus the senior managers within the PHRDF forum were interviewed with open-ended questions to investigate how they share knowledge, what influences them to share knowledge, what challenges they experience in sharing knowledge and how the participation in the forum assist them in performing their functions. The semi-structured open-ended questions were conducted on a one-to-one interview approach either in a face-to-face or telephonic interview.

4.7.2 Pre-testing the interview schedule

An interview schedule was sent to three Senior Managers of the KRMDIOF for pretesting. Individual face-to-face sessions were arranged and conducted with them. Responses such as the questions regarding the inclusion of gender and religion were made, however the Researcher explained that the literature review raised such issues and they needed to be tested. The interview session established that the Researcher would have to allow the respondents sufficient time to explain themselves as the boundaries between the concepts of 'information' and 'knowledge' from the respondents' point of view were blurred. It was also recommended that the senior manager would like to see the schedule before they can commit because of their busy schedule and the need to familiarize themselves with the topic. All these issues were taken into consideration when amending the interview schedule.

4.7.3 Administering the interview

After the questionnaire responses were received, the process of making appointments with senior managers began. The interview process was used to clarify questions that were in the questionnaire that was distributed to the staff who eventually reported to the senior managers. The interview process started during the month of April 2015 and it was a very challenging process as senior managers in public services have very busy schedules and attend many strategic meetings. The appointment process was highly dependent on the Personal Assistant (PA) to the senior manager because they manage the diary of the senior managers. At the start of each interview the Researcher would read out the section of the cover letter (See Appendix 4) which assured the interviewee of the anonymity and confidentiality of the research. This was to ensure that the interviewees were not only assured of complete anonymity but that they would feel completely free to express their true feelings and opinions without fear of disapproval or condemnation by the interviewer (Welman, Kruger and Mitchell 2005:199).

Out of 14 senior managers, only five appointments were secured and interviews were conducted. After speaking to the Supervisor, the Researcher decided to attempt doing telephonic interviews in order to minimize the time it took for the Researcher to go to the senior managers' offices and was also easier to secure an interview when they have a gap in their schedule. This approach was more successful as an additional five senior managers were secured and interviewed during the months of June and July 2015. The researcher was unable to secure the four remaining senior managers. This meant that the response rate for the interview process was 71.4% which is above the recommended 70%. The Heads of HRD were a Combination of senior managers and general managers which is a higher rank than the senior managers. Both these groups' responsibilities were either human resource development only or the combination of human resource development and human resource management which is a common occurrence in the public service in South Africa. After each question the Researcher repeated the answer so that the interviewee could refute or approve of it. This ensured an accurate response account of the responses

The collection of both the quantitative data by means of questionnaires and qualitative

data by means of an interview in this study can be referred to as a convergent design. Convergent design occurs when the researcher collects and analyses both quantitative and qualitative data during the same phase of the research process and then merges the two sets of results into an overall impression (Creswell and Clark 2011:77). This design is used when the researcher wants to triangulate the methods by directly comparing and contrasting quantitative statistical results with qualitative findings for corroboration and validation purposes (Creswell and Clark 2011:77).

4.8 Data quality control

A component of all good research is to utilize procedures to ensure the validity of the data, results and their interpretation (Creswell and Clark 2011:210). In order to collect high quality data for this particular study, a number of issues were taken into consideration; these included pre-testing of the research instruments and a Combination of data collection methods was applied. After obtaining an informal evaluation of the questionnaire, it should be pre-tested fully (Powell and Connaway 2004:139). The use of the triangulation research approach in this research adds to the increase in the validity of this study. In quantitative research, the researcher is concerned about issues of validity at two levels: the quality of the scores from the instruments used and the quality of the conclusions that can be drawn from the results of the quantitative analysis (Creswell and Clark 2011:210). Quantitative validity means the scores received from the participants are meaningful indicators of the construct being measured (Creswell and Clark 2011:210). Quantitative researchers are also concerned with issues of reliability. Quantitative reliability means that scores received from participants are consistent and stable over time (Creswell and Clark 2011:211).

In qualitative research, there is more focus on validity than reliability to determine whether the account provided by the researcher and the participant is accurate, can be trusted and is credible (Creswell and Clark 2011:211). Checking for qualitative validity means assessing whether the information obtained through the qualitative data collection is accurate (Creswell and Clark 2011:211). Reliability has limited meaning in qualitative research, but is popular in qualitative research where there is interest in comparing coding among several coders (Creswell and Clark 2011:212). Strategies to

determine qualitative validity include the following:

"Data is triangulated from several sources or from several individuals. The inquirer builds evidence for a code or theme from several sources or from several individuals" (Creswell and Clark 2011:211).

4.9 Ethical considerations

Anyone involved in social science research needs to be aware of the general agreements shared by researchers about what is proper and improper in the conduct of scientific enquiry (Babbie 2013:32). Ethics committees are established and ethics code are developed as a standard requirement to regulate and oversee the conduct of research in a harmless manner to the subjects of the enquiry. In order to ensure ethical standards, the committees examine the research design and methods before they can be applied (Flick 2009:39). Reviews of ethical issues often focus on the following aspects: the intrusion into people's lives, revelation of personal information, harm to subjects, anonymity and confidentiality and issues of deception (Babbie 2013: 32). Universities have codes of practice and ethics committees who oversee ethics approval (Wisker 2008:88). The ethics guidelines generally insists on the following requirements in order to adhere to ethical considerations of the research subjects:

- "A letter explaining the research aims and processes, and the final use of the results.
- A consent form for participants to sign that indicates that they give consent for the data to be gathered and that they understand how it will be used.
- An assurance given to the participants that data is kept confidential and will not be released after research for any other purpose or use without approval from the participants" (Wisker 2008:89).

The above requirements were adhered to in this study as shown in appendices three and four. This study received approval from the University of KwaZulu-Natal ethics committee and it used the ethics code of this university (University of KwaZulu-Natal 2014).

4.10 Data analysis and presentation

There is no single accepted approach to analyzing qualitative data although several guidelines exist for this process (Creswell 2008:56; Flick 2009). Various authors allude to the use of various strategies for analyzing data (Creswell 2008:56; Flick 2009; Neuman 2011:245). A Combination of qualitative and quantitative approaches for data analysis was used. The qualitative data collected through the face-to-face or telephonic semi-structured interview was analyzed through thematic content analysis. According to Creswell (2008:245) initial preparation for data to be analyzed requires organizing the large amount of information, transferring it from spoken or written words to a typed file and making decisions about whether to analyze the data by hand or by computer. The content of in-depth interviews was broken down into the smallest meaningful units of information that was systematically coded to produce numerical descriptions and statistically analyzed with computer assisted data analysis software (CAQDAS) such as Statistical Package for Social Sciences (SPSS) (Sillitoe, Dixon and Barr 2005:223). This helped the researcher in ascertaining values and attitudes of respondents. The CAQDAS facilitated the storage and manipulation of large amounts of quantitative data (Sillitoe, Dixon and Barr 2005:223).

NVivo and SPSS 18 are two CAQDAS that were used for data analysis. In qualitative data analysis, coding is used to describe the relation of materials to categories used in the analysis. Coding is a process of developing concepts used for labeling, sorting and comparing excerpts of data and later for allocating further excerpts to the developing coding system (Flick 2014:373). The researcher collected and transcribed data from all interviews and ensured the validity of collected data by using the NVivo software that is mainly used for qualitative research (Lwoga 2009:156). According to Flick (2014: 468) the NVivo software was originally developed as a Mac programme with the acronym NUD*IST. NUD*IST stands for non-numeric, unstructured data*, indexing, searching and theorizing software which later evolved to NVivo. NVivo includes a full command for automating coding and searching (Flick 2014:469). In this study, coding was done by creating nodes in NVivo. Nodes consisted of themes established from the literature review and interview schedule. Coding was done by applying nodes to segments of text of interview answers (Bryman and Bell 2011:600). Themes were established by

retrieving occurrences of a particular node by searching through the coded data in order to make logical interpretation of data.

SPSS for Windows is the most widely used computer software for the analysis of quantitative data for social scientists (Bryman and Bell 2011:360). SPSS enables one to input raw data, to modify and reorganize them once they have been input, and to conduct a wide range of simple, statistical and multivariate analyses (Blaxter, Hughes and Tight 2010:222). These range from listing frequencies of different responses and calculating means, through cross-tabulation, correlation and regression analyses, analyses of variance and covariance, to cluster and factor analysis (Blaxter, Hughes and Tight 2010:222). Quantitative data was analyzed using SPSS 18 software using descriptive statistics such as frequencies and percentages. Thus, cross tabulation was used to determine the association among variables. The results are presented in graphs, tables and charts with frequencies and percentages.

4.11 Validity of research design

As already mentioned in Chapter 1, Powell and Connaway (2004:44) suggested three types of validity as it relates to the design of research namely, internal validity, construct validity and external validity. They confirmed that internal validity is satisfied if causal relationships are identified and rules out rival explanations. In other words, internal validity is the extent to which the investigator can conclude that there is a cause and effect relationship among variables and it is of highest concern in experimental studies (Creswell and Clark 2011:211). Construct validity is met if the variables being investigated can be identified and labeled properly. The construct validity of a measuring instrument refers to the degree to which it measures the intended construct rather than irrelevant constructs or measurement error (Welman, Kruger and Mitchell 2005:142). Research has external validity or generalizability when its conclusions are true or hold up beyond the confines of a particular study (Powell and Connaway 2004:44).

In this study construct validity was met by identifying the variables to be measured by using the literature review to assess what has already been done in investigating

knowledge sharing and what variables have been used in past research. The questionnaire was drawn up and pre-tested on KRIMDIOF members to ascertain whether it is understandable and to eliminate ambiguity. Pre-testing involves the use of a small number of participants to examine the appropriateness of the questions and their comprehension (Sekaran 2003:249). The interview schedule was pre-tested on three Senior Managers of KRIMDIOF in order to assess how well this instrument would measure what it intended to measure. Lwoga (2009:162) observed that attaining absolute validity and reliability in any study is an impossible goal for any research model. To ensure that external validity is met, correct inferences must be drawn to other persons, settings, past and future situations by using procedures such as selecting a representative sample (Creswell and Clark 2011:211). In this study, external validity was ensured by using the whole population of the PHRDF members so that the chances of the findings being true of knowledge sharing practices within the KZN PHRDF as a CoP in public service could be increased.

4.12 Reliability in measurement

As already mentioned in Chapter 1, if a research finding can be repeated it is reliable (Welman, Kruger and Mitchell, 2005:145). A measurement is generally considered to be reliable when the error component is reasonably small and does not fluctuate greatly from one observation to another (Powell and Connaway 2004:47). In other words, when a data collection instrument is free from measurement error, it is considered reliable. One of the most commonly used methods of assessing reliability is known as a test-retest correlation (Powell and Connaway 2004:46). When the researcher applies this method he/she gathers scores twice for the same group of subjects (Powell and Connaway 2004:46). Test-retest reliability refers to the degree to which measurement or test occasion is immune to the particular measurement or test occasion on which it is administered (Welman, Kruger and Mitchell 2005:146). The smaller the error of measurement, the more likely the correlation will be high (Powell and Connaway 2004:47).

This study used the triangulation of methods to ensure both validity and reliability of the findings. According to Lwoga (2009:164) triangulation can allow researchers to be more

confident of their results. Within-method triangulation consists of using one method such as a questionnaire and employing different techniques within that method to examine data such as closed and open-ended questions to ensure validity and reliability of results (Lwoga 2009:164). In this study, coding of data was applied in the open-ended questions results by assigning labels determined from the exact words of the participants and then grouping the codes into themes as advised by Creswell and Clark (2011:208). In this study, the questionnaire coding was achieved by using SPSS and the interview schedule coding was done using NVivo.

Denzin (2006), observed that between-methods triangulation employs dissimilar research strategies such as the questionnaire and interview, to measure the same empirical unit in order to ensure reliability and validity. This study employed both the within-method and between-method techniques. The pre-testing of the instruments on the KRIMDIOF members was used to ensure reliability. The questionnaire used on respondents consisted of both closed and open-ended questions and the interview schedule consisted of closed and open-ended questions. After grammatical and editorial errors were corrected in the pre-tested instruments, the same questionnaire was used to collect data from all the respondents and the same structured interview schedule was used to collect information from all the interviewees in order to obtain consistent results and ensure reliability of the results.

4.13 Summary of the chapter

In this chapter the research methodology employed was discussed. This study used the case study methodology. The research design was also discussed. This study used both the qualitative and quantitative research designs. Data-gathering methods which consisted of a self-administered questionnaire and a semi-structured interview schedule were also discussed in this chapter. Types of questions and types of interviews were discussed and this study chose closed questions and open-ended questions for further clarity for some questions, and open-ended questions were used for the interview. The chapter also discussed the data analysis techniques which involved using SPSS for analysis of quantitative data and NVivo for analyzing qualitative data. Finally, data quality control and the various methods of assessing validity and reliability were

discussed.

CHAPTER FIVE PRESENTATION OF THE RESULTS

5.1 Introduction

The aim of this chapter is to report the results of the survey conducted by means of a self-administered questionnaire delivered physically to the members of the PHRDF as well as by face-to-face interviewing of HRD Senior Managers in the various departments where the PHRDF members were located. Telephonic interviews were conducted for those who were not available for face-to-face interviews. The results are presented and organized according to the following objectives as set out in Section one of Chapter one:

- To establish how the members of the PHRDF practised knowledge sharing.
- To determine the factors which affected knowledge sharing between PHRDF members.
- To establish what were the challenges experienced by the members of the PHRDF when sharing knowledge.
- To establish what strategies the PHRDF used to overcome such challenges.

5.2 Response rate

Out of 38 members of the PHRDF, seven members did not respond when they were contacted telephonically or by e-mail therefore the questionnaire was not sent to them. A self-administered questionnaire was then sent to 31 respondents and hand delivered to the respondents who responded to the telephonic request to have the questionnaire delivered to them. Out of 31 questionnaires that were delivered to the respondents, 23 (N=23) were returned which yielded a response rate of 74.2%. This was a relatively high response rate taking into consideration that the respondents were contacted telephonically to ensure that they are aware of the questionnaire that was going to be delivered to them. They were also made aware that the questionnaires would be physically collected at a certain date and telephonic reminders were made before the due date arrived. The effort to physically collect the questionnaires contributed to the good response rate. Out of the 14 departments represented at the PHRDF, 10 out of 14

Senior Managers made themselves available for interviews and this yielded a 71.4% response rate. In terms of the interview process, six Senior Managers were interviewed face-to-face whilst four were interviewed telephonically because of their busy schedules. This is a good response rate considering the fact that Senior Managers in government are always occupied in meetings and most of them could only be interviewed in between meetings.

5.3 Results of the questionnaire

Results of the questionnaire are presented as per the sections of the questionnaire.

5.3.1 Section A: Characteristics of the respondents: questionnaire

The whole population of the PHRDF members which consisted of 38 members from the 14 KZN Provincial Departments who attended the first meeting of the year on the 24th of February 2015 were contacted. The contact details were obtained from the attendance list of the PHRDF.

5.3.1.1 Departmental representation

In response to Question 1, out of the 14 departments Figure 5.1 shows that one (4.3%) response each was received from the Departments of Cooperative Governance and Traditional Affairs, Economic Development and Tourism, Human Settlements, Sports and Recreation, Agriculture and Environmental Affairs and Education. Arts and Culture, Public Works and Transport departments had two (8.7%) responses each. The Departments of Health and Treasury had three (13%) responses each. The highest number of responses was from the Office of the Premier with five (21.7%) responses but this is because of the high representation sent to the meetings from that department. The Department of Social Development could not be reached and the Department of Community Safety did not respond. However, a 100% response rate according to the number of questionnaires sent to each department was received from the Departments of Cooperative Governance and Traditional Affairs, Economic Development and Tourism, Arts and Culture, Treasury, Public Works, Transport, Health, Agriculture and Environmental Affairs and Human Settlements.

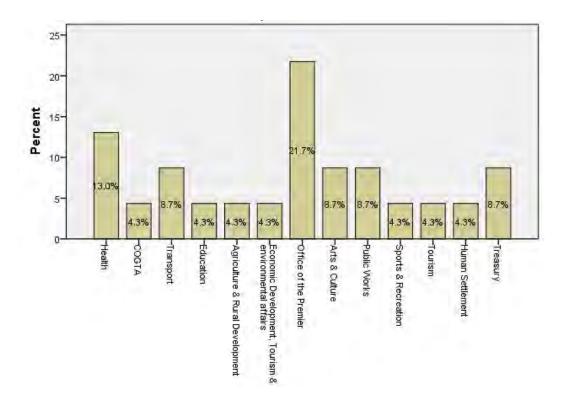


Figure 5.1: Percentage of respondents by Department (N=23)

5.3.1.2 Job title of respondents

The PHRDF is composed of members whose titles are based on the DPSA-allocated titles in HRD. These titles are used differently from department to department depending on the job requirements in each department. They are used to indicate the responsibilities of the incumbents. Question 2 results presented in Table 5.1 showed that the respondents were composed of six (26.1%) members whose titles were HRD; four (21.7%) members whose titles were Skills Development Officer or Skills Development Facilitator (SDF) or Skills Development Specialist; five (17.4%) members whose job titles were Practitioner; three (13%) members whose titles were Deputy Manager and each of the remaining members had different titles which were Trainer, Training Adviser (4.3%), and Manager (4.3%). One (4.3%) respondent misinterpreted the question requiring 'Job Title' to mean status title and responded that her title was 'Mrs'. This response was ignored.

Table 5.1: Job titles of respondents (N=23)

Job Title	Frequency	Percent
HRD	6	26.1
Skills Development Officer/Facilitator/Specialist	5	21.7
Practitioner	4	17.4
Deputy Manager	3	13.0
Mrs	1	4.3
Trainer	1	4.3
Training Advisor	1	4.3
HR Policy, Systems and HRD	1	4.3
SDF	1	4.3
Manager	1	4.3
Total	23	100.0

Source: Field Data

5.3.1.3 Rank or level of respondents

DPSA ranks levels 12 and 11 as middle management, whilst levels 10 and 9 are ranked as junior management. Levels 8 and 7 are often ranked at both practitioner and supervisory levels. Question 3 responses as shown in Table 5.2 indicate that there was diverse membership according to rank or level of the respondents with the highest being level 12 and the lowest being level 7. Level 12 had the highest number of respondents at six (26.1%) and matched level 10 which also had six (26.1%) respondents. One (4.3%) respondent was at level 11. Levels 8 and 9 had four (17.4%) respondents each. There were two (8.7%) respondents at level 7.

Table 5.2: Rank of respondents (N=23)

Rank	Frequency	Percent
Level 7	2	8.7
Level 8	4	17.4
Level 9	4	17.4
Level 10	6	26.1
Level 11	1	4.3
Level 12	6	26.1
Total	23	100.0

Source: Field Data

5.3.1.4 Position of respondents

The allocation of position is determined by the DPSA conditions of service, however, departmental HR could allocate positions according to the need of the department, for

example, an HRD Coordinator could also be given the position of Assistant Manager or Deputy Manager. The responses to Question 4 as shown in Table 5.3 indicate that the respondents included one ETD Practitioner (4.3%), one HRD Coordinator (4.3%), one Practitioner (4.3%), one Skills Development Facilitator (4.3%), one Senior Personnel (4.3%), one Administrator (4.3%), two (8.7%) Training and Skills Development Managers, seven (30.4%) Deputy Managers, and eight (34.4%) Assistant Managers,

Table 5.3: Position of respondents (N=23)

Position	Frequency	Percent
Assistant Manager	8	34.8
Deputy Manager	7	30.4
Training and Skills Development Manager	2	8.7
Skills Development Facilitator	1	4.3
Senior Personnel	1	4.3
Practitioner	1	4.3
HRD Coordinator	1	4.3
ETD Practitioner	1	4.3
Administrator	1	4.3
Total	23	100.0

Source: Field Data

5.3.1.5 Gender of respondents

Question 5 results indicate that there were nine males (39.1%) and 14 females (60.9%) who participated in the study.

5.3.1.6 Religion of respondents

Question 6 was asked to determine whether a belief system had an effect in sharing your knowledge with others and the results are presented in Table 5.4. Out of 23 respondents, 18 (78%) were Christians, one (4.3%) was Muslim, two (8.7%) were Traditional², one (4.3%) was Hindi and one (4.3%) was Tamil.

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² Traditional African religions

Table 5.4: Religion of respondents (N=23)

Religion	Frequency	Percent
Christian	18	78.3
Traditional ¹	2	8.7
Tamil	1	4.3
Muslim	1	4.3
Hindi	1	4.3
Total	23	100.0

Source: Field Data

5.3.1.7 Age of respondents

Question 7 was asked to determine whether age had an influence on the attitude towards knowledge sharing. Figure 5.2 shows that out of 21 respondents who answered this question, the highest number of respondents, six (28.6%), were at the range 41 to 45 years. It was followed by five (23.8%) respondents in the range 36 to 40 years. This was followed by four (19%) respondents in the range 51 years and above. Three (14.3%) respondents were at the 46 to 50 years range. Two (9.5%) respondents were at the 31 to 35 years range and one (4.3%) respondent was at the 26 to 30 years range. Two (8.7%) respondents did not respond to this question.

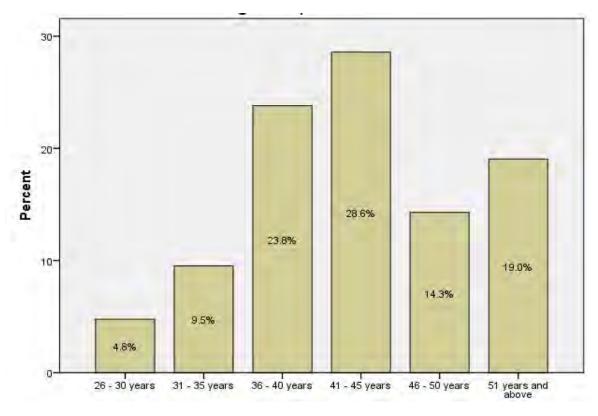


Figure 5.2: Age of respondents (N=23)

5.3.1.8 Level of education of respondents

This information was collected in response to Question 8 to establish the level of education of respondents and whether it had an effect on knowledge sharing (See Table 5.5). Out of 23 respondents, nineteen (82.6%) responded to this question. Eighteen (78.3%) had post-secondary education and one (4.3%) had secondary education. Four (17.3%) respondents did not answer this question. One of the respondents who did not answer this question answered the question below regarding qualifications.

Table 5.5: Level of education (N=23)

	\ /	
Education	Frequency	Percent
Secondary Education	1	4.3
Post-Secondary	18	78.3
Total	19	82.6
No Response	4	17.3
Total	23	100.0

Source: Field Data

5.3.1.9 Highest level of education

This question was a follow-up to the question above, asking to specify the type of post-secondary qualifications to determine the highest qualification which the respondents possessed and whether certain levels of educations influence the degree of knowledge sharing. Out of 20 (87%) respondents who answered this question, four (17.4%) had a National Diploma, four (17.4%) had a B-Tech degree, seven (30.4%) had a Bachelor's degree, two (8.7%) had a Post-Graduate Diploma, and three (13%) had an Honours degree. There was no response from three respondents (13%). It was observed that four respondents did not answer the question above regarding whether they had secondary or post-secondary qualification, however, in the following question regarding the highest level of qualification, three respondents did not answer the question. There was no way of determining why the fourth respondent who did not answer the previous question decided to respond to the question about the highest level of education. The response given was National Diploma.

Table 5.6: Highest level of education (N=23)

Table Collings		
Qualification	Frequency	Percent
National Diploma	4	17.4
BTech Degree	4	17.4
Bachelor Degree	7	30.4
Post Graduate Diploma	2	8.7
Honours Degree	3	13.0
Total	20	87.0
No Response	3	13.0
Total	23	100.0

Source: Field Data

5.3.2 Section B: How knowledge is shared in the PHRDF

This section deals with the objectives of the study pertaining to knowledge sharing practices in the PHRDF. The first objective was to determine how knowledge was shared in the PHRDF. The section below deals with this objective.

5.3.2.1 Level of knowledge sharing in the PHRDF

Question 9, a multiple response question, was asked to determine how the respondent would rate the level of knowledge sharing in the PHRDF according to a scale of categories ranging from very high to very low including 'other' to exhaust all possible responses. Figure 5.3 shows that one (4.3%) respondent rated the level of knowledge sharing as "very high", 12 (52.2%) respondents rated it as "high" and 10 (43.5%) rated it as "moderate". When requested to explain their answer, some of those who responded that the level of knowledge sharing was "high" or "very high" explained their response as follows:

- "Since 14 Provincial departments attend and report at this Forum, the knowledge shared is extremely valuable and important for reporting purposes";
- "it is high because National and SETA's policies and new developments are shared in these meetings";
- "Subject matter experts conduct presentations based on relevant matters and updates";
- "A lot of valuable information is being shared";
- The forum meeting is flooded with a lot of items in the agenda. Items are dealt with thoroughly"; and
- "HRD information is shared amongst members and allows them to use/ implement in all spheres of government".

Some of the comments made by those who mentioned "moderate" as their response are as follows:

- "As indicated my experience indicates moderate as HRD is very vast. Too many programmes to be discussed in a single forum/meeting";
- "The focus is not always on sharing of information on processes and practices";
- "The forum doesn't sit consistently hence the response above";

- "Most of the information lacks clarity because it is derived from National level";
- "For a new member of the PHRDF the knowledge sharing might seem very high, but as you grow in the field of Skills Development the knowledge sharing becomes moderate to high. I have been in the field for about eight years now, and most sharing happening in the PHRDF is really a continuous exercise for me. Only when there are new issues from DPSA and other Stakeholders that need that platform.";
- "The meetings focus more on updates and progress knowledge sharing involved technical issues as well";
- "Some members of PHRDF delegate representation to lower level officials"; and
- "The invitations are not sent to employees on the coalface of service delivery.
 This then attribute to none sharing and implementation of knowledge".

The respondents who mentioned that knowledge sharing is at a moderate level in the PHRDF seem to share the opinion that sharing which occur at the meetings was more related to information than to knowledge and the amount of knowledge sharing was affected negatively by irregular meetings.

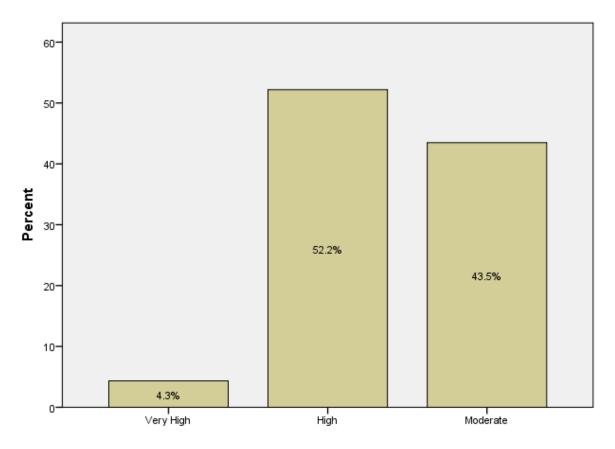


Figure 5.3: The level of knowledge sharing in the PHRDF (N=23)

5.3.2.2 Importance of knowledge sharing

In question 10, the respondents were asked to rate the importance of knowledge sharing from 'very high' to 'very low' including the catch-all phrase of 'do not know'. Figure 5.4 indicates that 15 (65.2%) respondents rated the importance of knowledge sharing as "very high" whilst eight (34.8%) respondents rated it as "high". When asked to support their responses, some of the respondents made the following remarks:

- "Best practices and ideas should be shed [sic] with others to improve efficiency";
- "All professionals within the HRD field need to keep abreast to HRD matters";
- "it's important to ensure that as departments we implement training in line with legislated frameworks";
- "Learning will only take place through the sharing of processes and practices";
- "Important for consistent performance. Information sharing motivates and gives bigger picture";

- "Not everyone gets the opportunity to be at the place where knowledge originates hence it should be shared"; and
- "As mentioned the knowledge shared at the forum is high as it gives members
 the perspective of the province as a whole and what is happening in each
 department".

The remarks made by the respondents in support of the importance of knowledge sharing indicate their perception of the role of knowledge sharing in creating a learning organization, competent individuals, healthy competition among the departments, improved service-delivery and a problem solving environment.

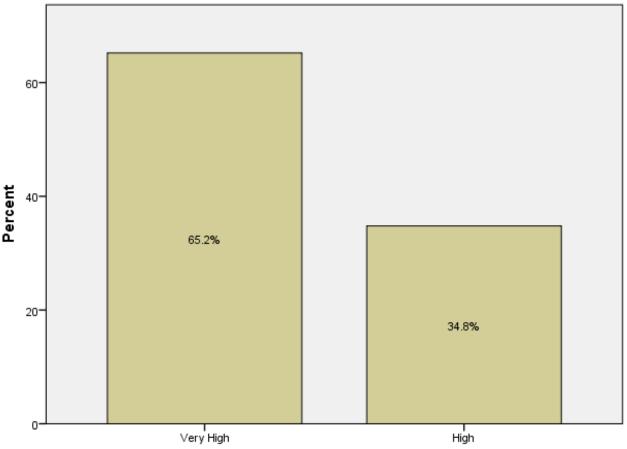


Figure 5.4: The importance of knowledge sharing in the PHRDF (N=23)

5.3.2.3 PHRDF meeting the need when there is a lack of specific know-how

The respondents were asked in Question 11 whether they experienced situations when they lacked specific know-how in the course of doing their jobs and a follow-up openended question was asked to determine whether attending the PHRDF meeting provided the required knowledge or not. Of the 23 respondents, 19 (82.6%) responded in the affirmative and four (17.4%), responded in the negative to whether they experienced instances where they needed specific know-how in performing their duties. Those who received assistance through attending the PHRDF mentioned specific areas where they received assistance such as the implementation of Learnerships and Internships, HRD planning, training implementation, and networking. Others perceived it as the learning network for KZN where they connected to other professionals in their sphere of work and know from whom to get specific knowledge. Those who were not completely convinced that the PHRDF is of assistance when they lacked specific knowledge made the following comments:

- "To some extent but sometimes the responses are very fake and do not give the how part";
- "Yes but due to changes in the system (for example, MIS³) one still feels inadequate to perform the duties capturing info successfully";
- "No. there is no attempt to innovate and improve processes and practices"; and
- "No, there is no attempt to innovate and improve processes and practices".

The above-mentioned remarks although in the minority, point to the perceived absence of the opportunity or environment created in the PHRDF to share the actual tacit knowledge as experienced by the respondents.

5.3.2.4 Technical knowledge or skills required in HRD

Respondents were asked to mention the type of skills required in HRD in Question 12 in order to determine whether they acknowledge that specific knowledge is required to perform HRD-related functions. A number of skills were mentioned by the respondents and were tabulated in Table 5.7 and repetitions were omitted. The skills required in HRD as mentioned by the respondents mainly deal with knowledge of HRD policies,

³ MIS refers to the Management and Information System

HRD legislation framework, skills development framework including training, development and implementation of Workplace Skills Plan (WSPs), impact assessments, project management, planning, presentation, data-capturing, computer, and planning skills.

Table 5.7: Technical knowledge or skills required in HRD (N=23)

TECHNICAL KNOWLEDGE OR SKILLS REQUIRED IN HRD

Development of workplace skills plan and capturing on the PSETA MIS⁴

Skills development legislation, HRD, Information of the country, Higher education policies, qualification framework

Develop policies and monitor implementation

Knowledge of all relevant legislative prescripts, e.g. Skills Development Act/ Skills Development Levies Act

Critical thinking, knowledge of prescripts and government development goals

Computer research, networking, skills to benchmark is very important

Translating the strategic focus of KZN government departments into a learning and development strategy

In depth knowledge on all legislative prescripts and the HRD and the National Development Plan

One has to know about the HRD trends nationally and internationally, training, impact assessments, social learning

Planning skills are crucial facilitation, organizing, mentoring, coaching, networking, and understanding of demand and supply

Knowledge of your area of specialisation e.g. curriculum development, facilitation, etc.; plus strategies and policies of broader HRD

Knowledge of the HRD landscape, the legislative framework and presentation skills

Developing a workplace skills plan, skills development programmes and initiatives, knowledge of relevant legislation

In depth knowledge at all HRD related experts i.e. internships, Acts and the practical implementation of programmes and monitoring and evaluation

HR planning and implementation, research, project management

Development of workplace skills plan (WSP) and capturing on the PSETA MIS³

Source: Field Data

⁴ PSETA MIS is the Public Service Sector Education and Training Authority's Management and Information System utilized for online filing of Workplace Skills Plans and Annual Training Reports

5.3.2.5 The regularity of obtaining required expertise from the PHRDF

In question 13 respondents were asked to specify the regularity with which they obtain the required expertise from attending the PHRD meetings to determine if a CoP is a good mechanism for knowledge sharing. Of the 23 respondents, five (21.7%) respondents always obtained the required expertise from the PHRDF, 14 (60.9%) respondents sometimes obtained their knowledge from the PHRDF and two (2%) respondents never obtained the required expertise from the PHRDF. Two respondents (8.7%) did not respond to the question. The reasons given by the respondents, who always access, find or acquire the knowledge or skills they mentioned in the previous questions were as follows:

- "PHRDF is the nerve centre for the research and updates on HRD";
- "I prepare myself for any meeting to ensure that I provide guidance where possible";
- "During the interaction you learn and develop your knowledge";
- "questions are always welcome and engagements on individual basis also assist";
- "Internet, e-mails, input into Seta Information System (SMS) for development of WSP, Telephone, Conduct Workshops on HRD trainings, Use PowerPoint to document presentations etc."; and
- "As most of the time I engage in PSETA⁵/ DPSA for know-how and skills required".

The above comments indicate that most of these respondents also do their own research and go outside of the PHRDF after they have established the relevant networks at the PHRDF meetings, in order to enhance their knowledge on HRD matters.

The respondents who indicated that they "sometimes" find the required know-how and skills they mentioned in the previous questions made the following comments regarding their responses:

⁵ The Public Service Education and Training Authority (PSETA) is one of the institutions established to facilitate the improvement of skills, and to advance the competence of employees in the South African Public Service.

- "PHRDF plays more of a monitoring role rather than skills transfer and knowledge sharing";
- "No knowledge portal on learning and development exist";
- "Usually we require courses/ workshops in order to be capacitated and this depends on the availability of funds";
- "Training on the development of the WSP/ATR does come but very late when we are way ahead with the processes as new developments should be introduced early";
- "Regular meetings or forums increase access to the necessary know-how";
- "I would say there is a little bit of this and that and not a full scale. I would suggest for the Association of Training and develop competency model".

The above comments indicate that if knowledge sharing occurs at the PHRDF meeting it is mainly explicit knowledge and the respondents require workshops to support what they receive from the PHRDF. The collection of data on WSP and Annual Training Reports (ATR) is one of the key responsibility areas of HRD. There is thus a theme running through the responses regarding irregular meetings of the PHRDF which affects the timing of when the required skills are relevant.

5.3.2.6 Where knowledge pertaining to HRD developments is found

Question 14 was asked to establish if IT-related sources in addition to print sources were utilized by the respondents as some of the knowledge sharing tools and multiple responses were provided (See Figure 5.5). The internet (16.1%), physical HRD policy documents (14.3%), PHRDF (14.3%), courses and conferences (10.7%) and workshops (10.7%) were the most frequently used sources for explicit knowledge in HRD. Informal contacts with colleagues (8.9%), e-mail (6.3%), intranet (6.3%) and telephone (4.5%) were used less compared to the above-mentioned sources. It was interesting to note that social networks (0.9%) and contacts made at the PHRDF (3.6%) were the least considered sources by the respondents when seeking to update their knowledge on HRD issues.

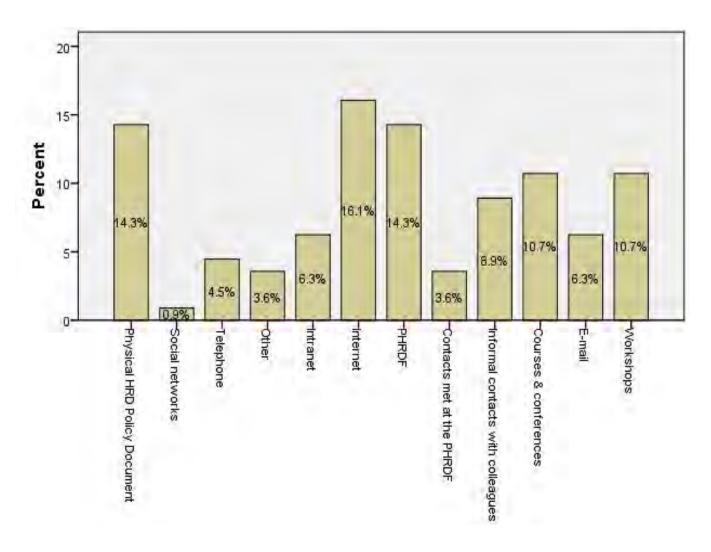


Figure 5.5: Sources used to update knowledge about HRD developments (N=23)

5.3.2.7 Access to knowledge shared at PHRDF meetings

Question 15 was asked to establish whether there was a database or institutional repository that the respondents could access knowledge shared at the PHRDF meeting after the meetings. Twenty (64.5%) respondents wrote their own notes at the PHRDF meeting, eight (25.8%) respondents contacted other members to obtain knowledge from them, two (6.5%) respondents used the DPSA website and one (3.2%) respondent used the HRD portal in her department. Other responses given were that copies of minutes of what was discussed and corresponding with others by e-mail were a mode used to access knowledge on what was discussed at PHRDF meetings.

5.3.3 Section C: Factors affecting knowledge sharing

This section deals with the second objective which seeks to explore factors affecting knowledge sharing in the PHRDF.

5.3.3.1 Diverse membership involving senior and junior managers

Question 16 was asked to determine whether the diverse membership of the PHRDF which included senior and junior managers hindered or encouraged knowledge sharing. Twenty (87%) respondents agreed that diverse membership in the PHRDF encouraged knowledge sharing whilst three (13%) respondents disagreed. Comments which supported the view that diverse membership of senior and junior managers encourages knowledge sharing from experts to novices included the following:

- "It is important to incorporate these two groups in one forum because mostly senior managers don't share knowledge from their meetings. They always don't have time";
- "Junior managers get to interact with senior managers and learn more";
- "Although PHRDF addresses strategic issues but the involvement of foot-soldiers assists them to have default operational issues addressed";
- "People with vast HRD knowledge are able to share a lot of their knowledge and experiences";
- "It promotes growth/empowerment within the career since each level sharpens and learns from each other especially the more experienced"; and
- "It is a powerful source of empowerment".

These results are in line with Table 5.2 which shows that the respondents are composed of different ranks or levels and Table 5.3 which shows the various positions held by the respondents. The majority of responses did not regard the diversity as a disadvantage, rather it provided an opportunity that is rare in normal working circumstances as Senior Managers were busy people. The respondents who did not support the idea that the diversity of membership contributes to knowledge sharing from expert to novice because they feel that the PHRDF's focus is not on knowledge sharing as the agenda does not accommodate best practice and knowledge empowerment on problem areas and the membership operated at different levels.

5.3.3.2 Experience and knowledge as motivating factors in knowledge sharing

Question 17 was asked to determine whether the respondents agree that their experience and knowledge are the motivating factors for them to share their knowledge. Twenty-two (95.7%) respondents indicated that experience and knowledge are factors in encouraging knowledge sharing whilst one (4.3%) respondent disagreed that knowledge sharing is influenced by one's experience and knowledge. When asked to support their responses, some of the respondents who agreed that experience and knowledge encourages knowledge sharing commented as follows:

- "Having knowledge and experience encourages one to be able to stand in front of others and discuss ideas and share knowledge";
- "...am able to transfer knowledge for what I have expertise on";
- "That was the reason for the constitution of the PHRDF, for knowledge sharing as well as assistance to each department"; and
- "I always explain how the department approaches implementation of certain programmes, e.g. Compulsory Induction Programme (CIP).

The reasons provided by the respondent who did not agree that experience and knowledge influenced him to share knowledge included that he did not see the PHRDF's focus being knowledge sharing. He also stated that the meetings occur very sparingly and the times that they occur, there is no opportunity to share one's experiences and knowledge which is not ideal.

5.3.3.3 Knowledge sharing and increased reputation

In Question 18, the respondents were asked if they agreed that sharing knowledge increases their reputation among their colleagues in the PHRDF to establish whether increasing one's reputation is an intrinsic motivator for sharing knowledge. Twenty (86.9%) respondents replied in the affirmative and two (8.7%) respondents disagreed that knowledge sharing increased their reputation among PHRDF members. One (4.3%) respondent did not answer this question. These were some of their explanations for their answers:

- "Knowledgeable officials are respected in the PHRDF meetings";
- "It shows your credibility, colleagues look up to you for assistance";

- "This manifests by the number of people who asks or seeks information from me";
- "Yes people assign high esteem to people who are always free to share information"; and
- "Information is a powerful source, therefore empowering others is highly recommendable hence then reputation will be enhanced. People feel much better having learnt new things which makes them better people".

These comments indicate that there is an intrinsic motivator for most respondents for sharing their knowledge. On the other hand, the two who did not agree that sharing knowledge enhance their reputation commented as follows:

- "Partly though my intention is not about limelight and I think that way it adds no value when applying for high position"; and
- "My reputation is not enhanced since no culture on knowledge management exists".

The above comments lament the non-existence of a formalized knowledge management programme that would support the recognition of expertise for upward mobility than the notion that they disagree with recognition of expertise as a motivator for knowledge sharing.

5.3.3.4 Knowledge sharing culture

Question 19 was asked to establish the presence of a knowledge sharing culture in the PHRDF. Nineteen (82.6%) respondents indicated that there is a culture of knowledge sharing in the PHRDF whilst four (17.4%) respondents disagreed. Some of the comments that supported the presence of a culture of knowledge sharing in the PHRDF were as follows:

- "It is the only opportunity that HRD practitioners and managers sit together and share ideas from different departments";
- "All departments are given the opportunity to give reports/ plans/ challenges, experiences, etc.";
- "Members are consulted for inputs on new developments especially development of provincial HRD Strategy and other policies";

- "People in the PHRDF will always assist one another where there is a need";
- "There is a lot of information sharing and people are upfront";
- "All departments alleviate their achievements and challenges to the PHRDF as board of support and advices for provincial HRD; and
- Other stakeholders (senior and junior from DPSA) are invited to the forum, hence promoting a culture of sharing".

The respondents indicated that the PHRDF is a platform for exchanging ideas and best practice and it provides learning for those who are novices in the field. Those who did not agree that there is a knowledge sharing culture in the PHRDF pointed out that sharing was minimal and knowledge sharing was not the focus of the forum.

5.3.3.5 Incentive for knowledge sharing

Respondents were asked in question 20 whether an incentive for sharing knowledge would increase their participation in knowledge sharing in order to determine whether an incentive for knowledge sharing was the extrinsic motivator for sharing knowledge in the PHRDF. The respondents were divided in half with 11 (47.8%) indicating that an incentive would increase their participation in knowledge sharing whilst, 11 (47.8%) disagreed. One (4.3%) respondent did not answer this question. Some of the respondents who felt that an incentive was a motivator for knowledge sharing made the following comments:

- "I would like to be rewarded";
- "The incentives are a propeller";
- "Human beings are naturally more motivated by awards";
- "At least they can advertise by publicizing the best implemented on each HRD interventions"; and
- "This is a motivational factor however; it does not stop me from sharing my knowledge".

These comments reveal that at the time when the questionnaire was filled there was no programme in place to reward knowledge sharing, however, half of the respondents who answered this question felt that a reward for sharing knowledge would be a

motivator. Some of the other half of the respondents who felt an incentive did not affect their motivation for sharing knowledge commented as follows:

- "I would not participate in knowledge sharing for any incentive. The fulfilment I get when I have shared information / knowledge with someone which changes their situation for the better then that's the only incentive I prefer";
- "Empowerment should not be incentive driven in my view";
- "Knowledge sharing requires no incentive because it is the only way that proves you have grasp the matter...";
- "Knowledge sharing should be from the within"; "I am not motivated by financial incentive to share knowledge"; and
- "Knowledge sharing requires no incentive because it is the only way that proves
 you have grasped the matter, because colleagues will ask questions that lead to
 better way of saying and or understanding the knowledge you are sharing. It
 further paves way for innovation".

The above sentiments reveal that knowledge sharing has an intrinsic value which these respondents derive from sharing knowledge without being persuaded by an incentive.

5.3.3.6 Recognition of expertise as extrinsic motivator knowledge sharing

Question 21 was asked to establish whether the recognition of one's expertise as an extrinsic motivator would motivate knowledge sharing in the PHRDF. Thirteen (59.1%) respondents are motivated to share their knowledge if when sharing their knowledge they would be recognized as experts in their field whilst nine (40.9%) respondents disagreed. This result indicates that that recognition of expertise would be a motivator of knowledge for most respondents. Some of the comments from the respondents who agreed with recognition of expertise for encouraging knowledge sharing were as follows:

- "Recognition of one's efforts definitely motivates";
- "It encourages the heart and good practices";
- "In a way, yes we like some form of recognition/ acknowledgement for our efforts":

- "I would share knowledge though recognition is appreciated but to do it any way even without one"; and
- "It has to be stressed that a culture of knowledge management will be the driver of such a practice".

The following comments are in support of sharing knowledge even without the recognition of expertise although some of them were provided by those who indicated that the recognition of expertise would be a motivator for knowledge sharing:

- "My motivation is to see someone else grow because of my contribution to him/her through sharing my knowledge";
- "It is always good to participate in knowledge sharing exercises as you also learn a lot from other colleagues";
- "It does not matter; I always provide knowledge when requested";
- "It's not about gaining recognition"; and
- "In the process of knowledge sharing there is an opportunity to learn which
 motivates a lot since in the Forum other experts in the field are members. Being
 a member motivates on its own".

The above comments reveal that intrinsic motivation plays a role in the respondents who stated that sharing of knowledge is not influenced by having their reputation enhanced.

5.3.3.7 Sharing knowledge as social exchange

Question 22 was asked to determine whether knowledge sharing is done as a social exchange to derive reciprocal benefits. Table 5.8 shows that 13 (56.5%) respondents who indicated that they would share knowledge if others would share their knowledge when they need it, whilst six (26.1) respondents indicated that they would not share knowledge just for reciprocal reasons. Four (17.4%) respondents did not answer this question. The reason given by some of the respondents who would share knowledge for reciprocal purposes were as follows:

- "I share so others will also give their opinions on a particular matter";
- "As I would also like to learn from others";

- "If you do not share knowledge freely other people tend to hold back when it is your turn to ask for assistance";
- "This is an expectation if I share knowledge with my colleagues"; and
- "Information is for sharing irrespective and you only get feedback that it is knowledge relevant once you share it".

The comments above inform the reasons for sharing knowledge by the respondents as beneficial in nature, in that the respondents have an expectation of getting assistance or support should they need it. Some of those who did not share knowledge for reciprocal reasons made the following comments:

- "I share knowledge because I feel it is the right thing to do even if it is not reciprocated. It feels good to know that you have empowered one person";
- "I share knowledge because I love progress, I want to see results and I love assisting someone develop and grow";
- "You cannot function in a vacuum"; and
- "It is my view that the purpose of the sharing of knowledge is to innovate and improve processes and practices".

The above comments convey a message of knowledge sharing for the well-being of others and contributing to innovation and empowering one another in the PHRDF.

Table 5.8: Knowledge sharing as a social exchange for reciprocal reasons (N=23)

Reciprocal sharing	Frequency	Percent
Yes	13	56.5
No	6	26.1
Total	19	82.6
No Response	4	17.4
Total	23	100.0

Source: Field Data

5.3.3.8 Trust as a factor in knowledge sharing

Question 23 was asked to determine whether trust influences knowledge sharing in a CoP. Twenty-two (95.7%) respondents indicated that they trust the PHRDF members enough to share their knowledge with them whilst one (4.3%) member indicated that he/she does not trust the PHRDF members enough to share the knowledge with them. Some of the respondents who affirm trust as a factor for knowledge sharing supported their views with the following comments:

- "We are in the same field and working towards a common goal";
- "I have confidence in the PHRDF members";
- "We interact with PHRDF members on a regular basis and therefore we have learnt to trust each other";
- "Lessons learnt from the Forum assists in the daily operations and you know you
 are doing it right at first because we are all striving towards one goal as a
 Province. So I will not be misled by anyone";
- "Most members are in HRD for years and have vast experience in this field. They
 are able to assist me if I don't understand";
- "PHRDF members have been colleagues for years, we have grown together in the field of HRD"; and
- "They are also carrying same functions in their departments sharing knowledge will increase chances for performance improvement."

The above reasons for trusting one another highlight the impact of knowledge sharing in a CoP where there is a common goal, learning experienced and similarity of functions performed. The above comments also confirm that in a CoP, chances of trust being built for knowledge sharing purposes are greater than when employees are required to share their knowledge across different functions.

5.3.3.9 Sharing of knowledge outside the PHRDF

Question 24 was asked to establish whether sharing knowledge occurs beyond the PHRDF meeting in order to explore if the environment or space where knowledge sharing occurs influences knowledge sharing. Twenty-two (95.7%) respondents indicated that they share knowledge with other members outside of the PHRDF meeting

and one (4.3%) member indicated that he/she does not share his/her knowledge outside of the PHRDF.

When asked to explain further the reason for sharing their knowledge with others outside of the PHRDF, some of the comments were as follows:

- "Sharing knowledge is not limited to a particular group, colleagues at work also need knowledge";
- "Some of the stakeholders to HRD deserve update on the latest developments in HRD e.g. managers, district practitioners, organized labour and employees";
- "The Departmental HRD Directorate cannot sit at the Forum. So it is very important that we cascade the information to our colleagues outside the forum";
- "I would phone someone in another department to find out as to how they deal with a certain issue, even phoning DPSA";
- "I share knowledge with colleagues across the spectrum (i.e. from other departments, sections, etc.)"; and
- "My colleagues outside of PHRDF also need to understand the importance of developing human resources in organisation".

The above comments reveal that the respondents were not confined to sharing knowledge only with their colleagues within the PHRDF. This was because some were obligated to pass on the knowledge to their colleagues who were not members of the PHRDF but performed HRD functions. Some were compelled by reporting obligations to relevant stakeholders and others shared knowledge out of their good will. The comments regarding reasons for not sharing knowledge outside the PHRDF included the lack of opportunity to share knowledge and the inability to share knowledge with colleagues on a daily basis.

5.3.3.10 Documentation of knowledge at the PHRDF meeting

Question 25 was asked to establish how tacit knowledge obtained at the PHRDF is translated into explicit knowledge and recorded in the form of notes or processes and procedures. Twenty (87%) respondents agreed that they recorded knowledge shared at the PHRDF meetings for later use and reference, whilst two (8.7%) respondents did not

record knowledge shared at the PHRDF meetings. One (4.3%) respondent did not answer this question. The results support the results in Question 15 where 65.4% of respondents confirmed that they write their own notes as a way of accessing knowledge shared in the PHRDF meetings.

5.3.4 Section D: Challenges with knowledge sharing

This section deals with the third objective of establishing whether there are challenges with knowledge sharing in the PHRDF.

5.3.4.1 Presence of the Supervisor in the PHRDF hinders knowledge sharing

Question 26 was asked to determine whether the presence of members in higher levels of authority hinders knowledge sharing endeavours for members who are in lower levels of authority. Three (13%) respondents indicated that they find it difficult to share their knowledge in the presence of their supervisors whereas 20 (87%) respondents were not hindered to share knowledge in the presence of their supervisors. Reasons given by those who had difficulty sharing in the presence of their supervisors were as follows:

- "I feel that my supervisor might be measuring my level of knowledge";
- "I tend to be more careful of what I share in order not to embarrass my manager and expose too much internal information"; and
- "The supervisor always feels threatened and subsequently not even allows me to attend meetings, workshops, forums etc.".

The comments above reveal the willingness to share was hindered by respondents protecting themselves from being judged negatively, fear of exposing internal weaknesses and lack of internal organizational support. On the other hand those who were willing to share in the presence of their supervisors cite organizational support and confidence in their own knowledge as motivators for them to share. Below are some of their comments:

- "My supervisor is very supportive so I get more encouragement to share knowledge.";
- "I am always willing to share knowledge and I will also like to learn from others";

- "If I am confident in a certain area, and have sufficient information I am able to import knowledge in the presence of my manager";
- "I don't have a problem with his presence as he encourages us to do"; and
- "I don't find it at all difficult because on my technical expertise in my job I actually find that I have more to share than my supervisor".

5.3.4.2 Inclusion of Senior Managers facilitates knowledge sharing

Question 27 was asked to determine the process of knowledge sharing in the PHRDF. Seventeen (73.9%) respondents confirmed that the inclusion of Senior Managers in the PHRDF facilitated the process of knowledge sharing from expert to novice whilst six (26.1%) respondents disagreed. The reasons given by some of the respondents who agreed that the inclusion of Senior Managers facilitate the process of sharing knowledge from expert to novice were as follows:

- "Senior managers will give the broader picture";
- "Their experience helps those coming through the ranks to learn though it does not mean they are always right";
- "Questions maybe asked by novices and an experienced Senior Manager may respond in a more knowledgeable manner";
- "Senior Managers are supposed to be strategic thinkers therefore they guide us through the meetings and on issues where clarity is required. Actually we should learn from them";
- "Novices can learn more if they interact with senior managers";
- "This enhances the quality of knowledge being shared"; and
- "It's good if they share the how part of certain information and the outcome on certain issues".

These comments above affirm the recognition given to Senior Managers for their expert knowledge as they sit in higher strategic committees which deal with policy-making and at the PHRDF they break down the implementation process of those policies to those that deal with operational issues. Some of the reasons given by those who do not support that knowledge sharing process flow from experts to novices were as follows:

- "There is a misperception in Public Service that only senior leaders are the carriers of knowledge";
- "The experts are the ground workers, not senior managers that have a lot of experience"; and
- "...in some instances they learn from junior managers".

The above comments indicate that knowledge sharing is a two-way process between experts and novices, one learns from the other and visa versa.

5.3.4.3 Barriers to sharing knowledge

Question 28 was a multiple response question which was asked to establish the reasons that the respondents might have for their unwillingness to share knowledge. Table 5.9 shows that six (26.1%) respondents indicated that they were unwilling to share when they feel they are forced to share, one (4.3%) respondent indicated that he/she was unwilling to share when they he/she was insecure, one (4.3%) respondent indicated that she/he was unwilling to share when there is competition to share, and nine (39%) respondents had other reasons. Six respondents (26.1%) did not answer this question. The 'other' reasons that were given were the following:

- "Lack of an organisation culture supporting knowledge management";
- "Lack of support from my manager";
- "If it is not sharing but reporting only";
- "Occupational level";
- "The fear of exposing oneself";
- "People using knowledge and passing it off as their own ideas;
- "The sense of knowing that I am used for some other benefits other than knowledge sharing" and
- "when opportunity to share is always not given".

Table 5.9: Factors that hinder knowledge sharing (N=23)

Factors that hinder knowledge sharing	Frequency	Percent
The feeling that I am forced to share	6	26.1
Insecurity	1	4.3
Competition to share	1	4.3
Lack of an organisation culture supporting knowledge management	2	8.7
Lack of support from my manager	1	4.3
If it is not sharing but reporting only	1	4.3
Occupational Level	1	4.3
The fear of exposing oneself	1	4.3
People using knowledge and passing it off as their own ideas	1	4.3
The sense of knowing that I am used for some other benefits other than knowledge sharing	1	4.3
When opportunity to share is always not given	1	4.3
Total	17	73.9
No Response	6	26.1
Total	23	100.0

Source: Field Data

5.3.4.4 Availability of a knowledge repository for knowledge sharing

Question 29 was asked to establish if there was a knowledge repository to store knowledge, it would be used. Twenty-two (95.7%) respondents supported the availability of a knowledge repository for encouraging knowledge sharing whilst one (4.3%) respondent would not use the knowledge repository. Comments from some of the respondents who supported the existence of a knowledge repository were as follows:

- "Sometimes it is always easy to refer to documents";
- "They will be easily accessible if stored in central place";
- "Will assist in knowledge sharing and learning";
- "Most of the time factor limits everyone of us, but if there is database forum in one's spare time I can post discussions, suggestions or ideas for sharing";
- "It would make it simpler as I would be able to gain knowledge and share experience/ knowledge";

- "PHRDF members are a great source of consultation when one needs clarification in relation to training issues";
- "To update the database with new development and trends and also acquire updated information"; and
- "I will assist especially for shy people who are not confident enough to air their views in public".

The above comments not only recognized the value of a knowledge portal, but also revealed that a portal transcends time and at the same time creates a space where everyone can share and update new developments including those who are not comfortable with expressing themselves in public.

5.3.4.5 Participation in an online virtual community

Question 30 was asked to determine whether the PHRDF members participate in online virtual communities to share knowledge. Five (21.7%) respondents participated in online virtual communities whilst 18 (78.3) respondents do not participate in online virtual communities. At the time of the study the PHRDF did not have an online discussion forum.

5.3.4.6 Factors that hinder knowledge sharing in the PHRDF as a community of practice

Question 31 was asked to establish whether the respondents' unwillingness to share as asked in Question 28 above was related to the structural issues of the PHRDF. These were some of the responses given for hindrances to knowledge sharing in the PHRDF:

Table 5.10: Barriers to knowledge sharing

Barriers to knowledge sharing

Some of us have egos

It does not sit frequently. Delegation of various people/ participant by departments makes the structure formation to be imbalanced

Sometimes the meeting is dominated by some people makes comments and juniors keep quiet but they also know a lot as implementers

Organisational culture is not supporting knowledge management

The meeting are poorly attended

Time is not made to departments

It's not easy to say since I indicated before that I am new on the field but I think it could be non-arrangement of quarterly meetings

Availability of resources. Lack of proper structure that encourages this to happen

Lack of regular group interactions between members

In instances when members lack knowledge on a particular subject

Not a standing item on the agenda. Meeting is more about updated and progress reporting

Official are focused on their own work and departments

Politics and its interference to administration issues e.g. political appointments. Appointment of Senior Managers in Work Groups

There is not much interaction with other members - time constraints

An online system will definitely help. HRD units are always overworked and understaffed, members are participating in too many projects

Source: Field Data

The above comments indicate structural, compositional and organizational issues that hindered knowledge sharing in the PHRDF. For example, the focus on knowledge sharing rather than report presentation was emphasised, representation was not consistent, and platforms for further interactions such as online discussion forums were not encouraged.

5.3.4.7 Trust as an issue when sharing knowledge

Question 32 was asked to establish whether trust is considered when sharing expertise with others. Nine (45%) respondents considered trust as an issue when sharing knowledge whilst 11 (55%) respondents did not consider trust as an issue when sharing

knowledge. When asked to explain, some of the respondents who felt trust influenced their willingness to share made the following comments:

- "You cannot share knowledge to someone you can't trust especially confidential information";
- "You always need to verify the information shared because it holds financial implications and influence decision making for HRD";
- "People need to trust you to know they can gain vital knowledge from you";
- "One will absorb more information where there is more trust";
- "A trustworthy individual will always have incredible information. It is therefore imperative that one is trustworthy"; and
- "More is shared if trust is certain".

The above comments support that it was easier to share knowledge when parties trust that they are receiving credible explicit knowledge from one another. Those that felt trust was not an issue in sharing knowledge mentioned that since it is professional information not personal information that was shared. In addition, they mentioned that any information shared can be verified in documents therefore anyone can find it if they are willing to look for it.

5.3.4.8 PHRDF a useful platform for sharing knowledge

Question 33 was asked to determine whether the respondents found it useful to attend the PHRDF for knowledge sharing purposes. Twenty (87%) respondents found the PHRDF a useful platform for sharing knowledge whilst three (13%) respondents did not. Some of the respondents who support the PHRDF as a knowledge sharing platform had this to say:

- "I have mentioned that this is an excellent platform for knowledge sharing";
- "What I like is that dialogue is supported on training issues and inputs from departments are valued";
- "Challenges are identified across all departments and solutions are made";
- "It ensures uniform application of knowledge";
- "All provincial HRD meet, ideal platform, besides each person has some expertise that can be shared";

- "Members get to network with colleagues from different spheres"; and
- "It can be a good learning platform".

These comments reveal the value members of the PHRDF have for it as a platform for knowledge sharing in specific areas of HRD, for learning best practices and for networking. The main issue with those who did not agree that the PHRDF was a useful platform for knowledge sharing was the infrequent times which the meetings were held. They felt that the quarterly meetings were inadequate and usually do not occur which leaves a number of developments unattended and members not kept up-to-date. They also felt that there should be strict stability in terms of the members of the Forum instead of representatives changing frequently.

5.3.5 Section E: Strategies to overcome challenges of knowledge sharing

The information in this section deals with strategies to overcome knowledge sharing challenges.

5.3.5.1 Inclusion of knowledge sharing in performance assessment

Question 34 was asked to determine whether knowledge sharing should be an activity which is rewarded in the performance assessment for rewarding those that share their knowledge with others. Fourteen (60.9%) respondents agreed that knowledge sharing should be rewarded during performance assessments while seven (30.4%) respondents disagreed. Some of the reasons given for supporting the inclusion of knowledge sharing as part of performance assessment were the following:

- "Inclusion in the PA will enforce implementation of knowledge sharing. It will further support the innovative part as encouraged in the PSR (Public Service Regulations) and non-incentive appraisals as per the performance management system";
- "If knowledge is shared which benefits the department, there should be a reward for this":
- "It would be a useful tool but there is no guarantee it will work or yield good results":

- "A broader organisational development approach is required which will involve the mainstreaming of knowledge management into the performance management process"; and
- "It will encourage people to learn and also share what has been learned".

The reasons given by some of the respondents who were against the inclusion of knowledge sharing into the performance management systems were as follows:

- "This is not necessary. Knowledge sharing does not need incentives";
- "Including knowledge sharing would increase unnecessary competition";
- "That would encourage people to be involved in unscrupulous methods of knowledge sharing"; and
- "I don't think so because knowledge sharing is an on-going day to day practice (consciously and unconsciously). I am not sure if we need to measure that, but it will kill the beauty of knowledge sharing if included in the Performance Management System".

The above comments reveal that the respondents fear the abuse of the activity of knowledge sharing if included in performance assessments and they also lament that it will take away the spontaneity of sharing.

5.3.5.2 Knowledge sharing policy

Question 35 was asked to establish whether the development of a knowledge sharing policy would encourage knowledge sharing. Seventeen (73.9) respondents favour the development of a knowledge sharing policy to encourage knowledge sharing whilst five (21.7%) respondents do not favour it. One (4.3%) respondent did not answer this question. Some of the comments in favour of the development of a knowledge management policy were as follows:

- "Formalising knowledge management will help making all more aware although informally done, therefore promote knowledge sharing";
- "It will give direction as to how knowledge should be shared and what are the benefits for all. It will promote sharing of best practices";
- "The policy will give guidelines in terms of necessary limitations on what should/ not be shared";

- "Linked to this policy should be a business process and standard operating procedure"; and
- "To safeguard the accuracy of information shared and create a conducive platform for sharing".

These comments revealed that the respondents were anticipating a policy that would provide knowledge sharing under the umbrella of knowledge management. On the other hand, some of the respondents who were against having a policy for knowledge sharing mentioned the following concerns:

- "It will make people as if they are forced if there is a policy but departments should encourage knowledge sharing",
- "This aspect of knowledge sharing should come from within a person, people should not be forced to be able to share knowledge"; and
- "It will complicate things. Policies have a tendency of limiting some activities and it might be a shot in the foot".

5.3.5.3 Attitude towards development of a database for knowledge sharing

Question 36 was asked to determine how the respondents felt about the development of a knowledge repository for knowledge sharing purposes. Table 5.11 reveals that 15 (65%) respondents strongly recommended a knowledge repository for knowledge sharing, five (21.7) respondents recommended it, and three (13%) respondents were not sure.

Table 1.11: Institutional repository for knowledge sharing (N=23)

Attitude towards development	Responses	
of Institutional Repository	Frequency	Percent
I strongly recommend it	15	65.2
l recommend it	5	21.7
l am not sure	3	13.0
Total	23	100.0

Source: Field Data

5.3.5.4 Reasons for or against an institutional repository

Question 37, was a follow-up to Question 36 as to the reasons why the respondents were for or against the development of an institutional repository. Since most respondents 'strongly recommended' it or 'recommended' it the reasons given were mainly supportive of the repository:

- "It will assist to manage knowledge within HRD and be able to refer to old and new ways of doing things for improved service delivery. Knowledge management is one key factor in ensuring empowered workforce and for future use";
- "It will be easier to identify who to consult for knowledge sharing on certain issues"; "It will serve as a critical point of reference";
- "It is a beneficial resource for officials to have access throughout their careers";
 "There will be structured platform that encourages knowledge management"; "It will be a reference case for others in future";
- "The channel of communication will improve as information will be a click away";
- "We need to have a service of reference and value the knowledge people have obtained in the sector"; and
- "Global research supports the use of technology for the sharing of knowledge".

The major factor in supporting the knowledge repository as revealed by these comments was ease and convenience of access to knowledge; a resource for reference and facilitation of knowledge sharing. The concerns expressed by those who were not sure about the developments were whether it will improve the attitude towards knowledge sharing or not.

5.3.5.5 The role of IT in facilitating knowledge sharing

Question 38 was asked to find out if the respondents favoured IT as a means to facilitate knowledge sharing. Table 5:12 is a reflection of the responses from the respondents. Twenty-one (91.3%) respondents agreed that IT facilitates knowledge sharing whereas one respondent (4.3%) disagreed and one (4.3%) respondent did not answer the question. When asked to explain their answer, the respondents who agreed that IT would enhance the facilitation of knowledge sharing for HRD practitioners provided the following remarks:

- "Easier access to knowledge sharing with other colleagues will eliminate use of other resources, i.e. telephones and meetings, etc.";
- "IT plays a vital role in data management. They have and can create files and systems, tools to be used to store the information and its accessibility";
- "For the database, for storage of standard operating procedures, for online sharing platforms";
- "Since e-learning is another form and the understanding thereof will make a difference";
- "It makes things easier and we live in a technology filled era, and the people are on social networks";
- "As with IT expertise the facilitation of knowledge sharing would be of an advanced nature"; and
- "Database with all contact information will be useful for networking between members".

The above comments reveal that the respondents approved the use of IT as an enabler of knowledge sharing.

Table 5.12: The role of IT in facilitating knowledge sharing (N=23)

Role of IT in facilitation knowledge sharing	Frequency	Percent
Yes	21	91.3
No	1	4.3
Total	22	95.7
No Response	1	4.3
Total	23	100.0

Source: Field Data

5.3.5.6 The role of the PHRDF for HRD practitioners

Question 39 was asked to establish whether the PHRDF is the correct platform for HRD practitioners who want to learn the know-how in their field. Twenty-one (91.3%) respondents responded in the affirmative that the PHRDF is the correct platform for HRD practitioners whereas two (8.7%) respondents responded negatively to this question. To support their answer, the respondents who approved that the PHRDF is the correct platform for HRD practitioners for knowledge sharing made the following comments:

- "PHRDF is very relevant as HRD legislation is also discussed. PSETA/SETA's, NSG [National School of Government] sometimes or mostly is also present to discuss all training related issues and allows for further discussions and questioning";
- "This platform provides views, opinions, updates, and reviews in terms of HRD";
- "It is the only structure in the province where HRD practitioners convene";
- "HRD is a complicated area and with various fields of specialization. Therefore PHRDF is the correct platform for sharing information to ensure skills development is approached almost in a similar way considering uniqueness of each Department";
- "Yes, on condition that the correct people attend who can report on activities in their respective departments";
- "All transversal HRD issues are covered with the attendance of HRD practitioners from departments. There can always be an end slot for knowledge sharing wherein the correct levels can be invited based on subject matter"; and
- "Various issues are discussed on HRD matters. HRD practitioners are kept abreast on current HRD patterns, trends and activities. Possible interventions are proposed for challenges experienced in HRD".

Comments emanating from those who did not feel the PHRDF was the correct platform for HRD practitioners consisted of the following:

 "PHRDF was intended for strategic issues. A learning network would be more appropriate for practitioners to share their experiences even an HRD practitioner's forum could work"; "However the angle from which the forum is currently facilitated is too transactional and required to be reengineered to adopt an organisational development approach".

Some of the comments from both groups reveal a concern that either there has been a departure from what the PHRDF's mandate was in terms of knowledge sharing or the members are not up-to-date with who is supposed to belong to the Forum.

5.3.4.7 The role of sharing knowledge among peers of the same rank or levels

Question 40 was asked to determine if sharing knowledge amongst peers of the same rank was favourable to the respondents or whether it was a barrier. Figure 5.5 is a reflection of the responses to this question. Eight (34.8%) respondents confirmed that sharing knowledge with those of the same rank was favourable, three (13.3%) respondents stated that sharing knowledge with those of the same rank was not favourable and 12 (52.2%) respondents stated that rank did not make any difference when sharing knowledge.

When asked to further explain their answers, those who favoured sharing knowledge among their peers stated the following:

- "You want to pitch the matter/ area of sharing to the right audience";
- "It always comfortable because you all have similar interest and challenges and you discuss how you overcome them";
- "Although sharing knowledge amongst equals would have been more valuable and less stressful, there is a need to impress or fear anybody";
- "I've certainly identify easily with people in similar ranks"; and
- "It's always comfortable because you all have similar interest and challenges and you discuss how you overcome them".

The above comments reveal a disjuncture with an earlier question asking whether they would be comfortable with sharing in the presence of their supervisor where only three (13%) said they would not be comfortable. The majority who stated that rank and level were not a factor when sharing knowledge supported their views with these comments:

- "I believe that no one knows everything. Therefore working as a team is as good as building your own credentials, e.g. trust within peers and learning from the group of equals";
- "Rank is not the issue but knowledge sharing is in question hence we can learn from any level/ rank within the public service";
- "We all, at all levels should have the same understanding of HRD matters and in fact the PHRDF should comprise of members of all levels from HRD";
- "I don't think rank matters, as long as you are carrying out the mandates of your department, you should be comfortable to share knowledge with colleagues"; and
- "I am more of empowering so I prefer to share with those who might not be at the same level of understanding so as to bring them up to my level of understanding".

The minority who answered "no" to the above question attributed their choice of answer to their disagreement that "rank should not influence knowledge sharing" as "sharing makes one grow".

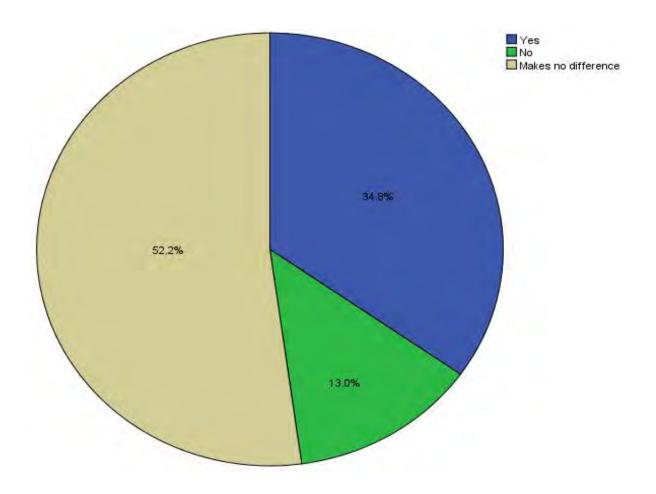


Figure 5.6: Sharing knowledge along the same rank or level (N=23)

5.3.5.8 Motivating values for sharing knowledge

Question 41, a multiple response question was asked to determine the factors that drive them to share knowledge. Figure 5.7 is a reflection of the responses to this question. Ten (43.5%) respondents indicated that they were motivated to share knowledge when they are capacitated, four (17.4%) respondents indicated that they were motivated to share knowledge when they want to help others, seven (30.4%) respondents indicated that they were always motivated to share knowledge, and two (8.7%) respondents indicated that they are motivated to share knowledge when they are both capacitated and want to help others.

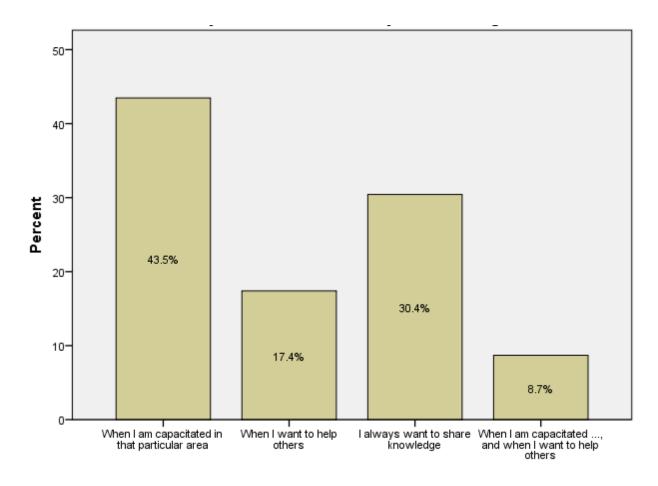


Figure 5.7: Motivation to share knowledge (N=23)

5.4. Interview results

This section deals with the interview results emanating from interviews held with Senior Managers who participated in this study. The responses are presented in the same order as the questions in the interview schedule but are grouped under the thematic outcomes from the NVIVO programme that was used for the qualitative data analysis.

5.4.1 Section A - Environment for knowledge sharing

In order to establish the extent to which the environment allowed for knowledge sharing the Senior Managers were asked to rate their departments' level of knowledge sharing and two (20%) of the respondents rated it as very high and seven (70%) rated it as high whilst one rated it as moderate. They all cited their rating on the basis that meetings were the most prevalent method they used for knowledge sharing. The meetings they held were mostly categorized by rank where the Senior Managers held management

meetings referred to as MANCOs (Management Committees) and the Deputy Managers would in turn cascade this knowledge to their subordinates. The intranet was also mentioned as a means used by three (30%) of the Senior Managers for knowledge sharing, whilst one (10%) mentioned a shared drive where important documents were posted. The one (10%) Senior Manager whose rating was 'moderate' cited the absence of a knowledge management strategy as the reason for the rating. One (10%) Senior Manager regarded the use of e-mails as a facilitator for knowledge sharing. Learning networks, structures such as various committees catering for executive management, extended management committees down to the level of Assistant Manager, as well as a staff committee were mentioned by three (30%) Senior Managers as vehicles for knowledge sharing.

In terms of the importance of knowledge sharing, the Senior Managers were asked how they rated it and what the reasons for the rating were. Seven (70%) of the Senior Managers rated it as 'very high' whilst three (30%) of them rated it as 'high'. Succession planning was mentioned by two (20%) Senior Managers as the reason for their rating whilst various reasons including preserving of institutional memory, achieving goals of the department, preventing silos, and enhancing performance were also cited. Information sharing was seen as the reason for the importance of knowledge sharing by one (10%) of the Senior Managers whilst similar sentiments such as keeping up-to-date with developments in the HRD field, minimising risks of litigation, potential of influencing decision-making contributing to the importance of knowledge sharing were expressed by several Senior Managers. Most importantly, two (20%) Senior Managers mentioned that the ultimate output of knowledge sharing is service delivery and that made the importance of knowledge sharing even higher.

When asked how the Senior Managers shared their knowledge with their staff, six (60%) of them mentioned regular meetings with their staff, three (30%) mentioned circulars and workshops and two (20%) mentioned training and three (30%) mentioned workshops and these answers overlapped among the Senior Managers. When asked whether there is a repository where departmental knowledge can be accessed from and who was its target, two (20%) of the Senior Managers mentioned that the intranet

functions as the repository since all circulars and policies are uploaded on it. One (10%) Senior Manager mentioned that a shared hard drive is used but the access is not available to everyone. Half (50%) of the Senior Managers mentioned that their website houses the knowledge shared within the department including circulars, guides, vacancies, and so on, and it is available to everyone who accessed it. However, three (30%) Managers stressed that they are aware of what a repository entailed, however, the website and the intranet sufficed as a means of sharing knowledge in the absence of a legitimate repository. One (10%) Senior Manager confirmed the presence of a knowledge portal in her department.

In terms of creating an environment for knowledge sharing in their departments, three (30%) Senior Managers sent their staff to relevant courses, whilst one (10%) Senior Manager conducted workshops to educate staff about policies. One (10%) Senior Manager ensured that immediate staff members that report to him are copied-in on correspondence especially with outside service providers so that in the event that one of them is not at work, others would still carry on with the service. Five (50%) of the Senior Managers used meetings such as MANCO, departmental meetings, information seminars, report-backs from training, staff meetings and Exco meetings to create an environment of knowledge sharing. One (10%) Senior Manager mentioned the existence of a HRD and a HRM forum where staff from level 8 upwards participated in knowledge sharing. Informal session where staff members could ask questions, information sessions, and network sessions were some of the ways that three (30%) Senior Managers created an environment of knowledge sharing. Reading articles and clippings and obtaining monitoring and evaluation reports were methods used by four (40%) Senior Managers in order to create an environment of knowledge sharing. According to one (10%) Senior Manager, the availability of standard operating procedures created an environment of knowledge sharing whilst one (10%) Senior Manager thought that walkabouts to staff members' workstations and engaging face-toface with staff members created an environment of knowledge sharing. Another Senior Manager stated that the availability of a knowledge portal created an environment of knowledge sharing.

5.4.2 Section B - Communities of practice

Senior Managers were asked if the PHRDF made a difference in sharing knowledge related to HRD issues, to establish whether CoPs provided a useful platform for sharing knowledge and whether seniority played a role within a CoP in knowledge sharing. Of the 10 Senior Managers who were interviewed, eight (80%) of them answered that the PHRDF made a difference citing the following reasons:

- Sharing of best practice occurred;
- Sharing of experiences and resolving of problems occurred;
- Experts from National Departments visited to share new developments and implementation of policies;
- Experts from the School of Government visited to facilitate transfer of knowledge;
- Members showed themselves more knowledgeable when they attended the meetings;
- It provided an opportunity for networking and discussing issues and challenges in an informal setting during tea times and lunch times;
- It provides a platform for engaging about knowledge that members have gained from the meetings; and
- It provides a platform to monitor whether the HRD community in the Province is on the same page as well as acting as a compass that pointed direction for the HRD community in the KZN Province

One (10%) of the managers stated that the PHRDF had glaring deficiencies which included the following:

- Selective information where Senior Managers will be alerted of certain developments from HRD departments outside of the KZN Province;
- Irregular meetings which included two years of not sitting as a forum;
- Meetings only called when there is an external guest who sought to speak on HRD issues: and
- Not using even e-mail to inform Senior Managers about crucial meetings and such as the launch of a Provincial learning network

One (10%) Senior Manager was still new at the time the interview was held and could not give an opinion on this question.

Senior Managers were asked if rank influences whom they share their knowledge with and eight (80%) replied in the negative, although they explained that there are contexts when they would consider rank when sharing their knowledge. One (10%) of the Senior Managers commented as follows:

"My perspective is that knowledge is knowledge and that knowledge is
worthwhile for everybody and I believe that we should not allow rank to influence
how we share knowledge. Knowledge should be shared appropriately with
everybody so that we develop together".

The above responses overlapped with seven (70%) responses which stated that "it depends on the context" which came as a result of the follow-up question requesting an explanation for the negative responses. One (10%) Senior Manager explained the issue of the context this way:

 "I just believe that the process has to be managed effectively, because there is some knowledge that you may want to share that is relevant to sort of senior management. When you share it perhaps with more junior staff you'll have to contextualize why you are sharing the knowledge."

Two (20%) Senior Managers whose responses also included "yes" to the question of whether rank influenced who they share their knowledge with, cited issues of information overload if the information is not rank-specific; issues of specific function which need a specific level of seniority and issues of maturity to handle certain matters. One (10%) Senior Manager commented as follows:

"Something that would require constant supervision and follow-ups we communicate with Deputy Managers but anything that is general we can communicate with everyone in staff but something that requires reporting lines we stick that to Deputy Managers and but perhaps I do copy Assistant Managers".

All of the Senior Managers encourage CoPs or similar platforms for sharing knowledge. One (10%) Senior Manager gave an example of how a group of panellists for a job interview can be regarded as a CoP because for the duration of the selection process, the members will have met several times and had a frame of reference and guidelines detailing how the group would conduct itself during that period. Another Senior Manager

mentioned that they are reviving such structures in her department. One (10%) of the Senior Managers stated that there are learning networks in her department which are conducted as CoPs. One (10%) Senior Manager went as far as describing how knowledge is shared in the CoP in his department:

"We did that at some of the MANCOs when we ask people to talk on a specific topic regarding their issues and also at a Chief Directorate MANCO each Directorate presents information as to what we are doing and what I do, I purposefully just at the meeting choose one of my team to talk about the subject that pertains to their function."

The interviewees were asked how they access knowledge regarding a human resource development matter if one of the HRD practitioners was on leave. This question was asked to determine whether there was a repository or database in place containing operating procedures or processes and procedures that could be accessed should one of the employees leave. Two (20%) Senior Managers responded that the DPSA website and normal internet assisted to find what they needed whilst one (10%) added that the availability of a knowledge portal in her department was helpful in that regard. One (10%) Senior Manager mentioned the availability of other HRD departments in the Provincial governments referring to them as 'sister departments' who can be consulted for assistance. The fact that knowledge resides in people's heads was recognized by seven (70%) Senior Managers who pointed out that:

- Their employees were multiskilled and supervisors were 'all-rounders' regarding HRD knowledge therefore anyone of them could assist;
- Leave is staggered so that there is someone who would always be available to answer:
- Meetings and knowledge sessions were held in order for everyone to be up-todate with knowledge;
- There was a procedure where one did a handover to someone else and others in the section are copied on matters pending; and

 Most of the staff members in the section were provided with 3G cards for access to the internet incase an urgent situation required them to e-mail information whilst they were on leave.

The records management system was mentioned by four (40%) Senior Managers as a source of explicit knowledge that they have access to as the filing system was organized in such a way that information was easily accessible. One (10%) Senior Manager reported that the availability of a shared drive where circulars and policies reside assisted with access to required information.

5.4.3 Section C - Challenges related with knowledge sharing

To support the results of the section on the questionnaire on factors that affect knowledge sharing and challenges related to knowledge sharing, the Senior Managers were asked how they motivate their staff to share knowledge. They reported the following as their motivation for sharing knowledge:

- Developing trust and eliminate suspicions when knowledge is not shared;
- Developing people;
- Driving change management from hoarding knowledge to sharing knowledge;
- Enhancing strategic direction of the Department by capacitating all staff with knowledge;
- Encouraging innovation;
- Accountability and responsibility for managing people;
- Preserving institutional memory;
- Preventing silos;
- Sharing knowledge as a model to be followed;
- Succession planning; and
- To keep staff up-to-date.

When asked how the Senior Managers encourage staff to share their knowledge with one another, one (10%) Senior Manager mentioned the creation of informal spaces such as Sports days and two (20%) Senior Managers mentioned departmental social

events as a space created for informal knowledge sharing. Another Senior Manager stated that they create teams who did work-related activities together and were in turn required to report back on the activity done in order to encourage vibrant interactions. One (10%) Senior Manager lets the staff members know the implications of not sharing knowledge should one staff member leave or get sick and staff members were therefore encouraged to share and learn from one another. Another Senior Manager used information sessions and training and presented to staff members that their purpose is to ensure that should one staff member not be available, others would be able to assist. Sharing of offices and open space workstation were mentioned by two (20%) Senior Managers as methods used to encourage knowledge sharing. Networking sessions and presenting in front of their peers allows for knowledge sharing according to two (20%) Senior Managers. Three (30%) Senior Managers allow meetings between the same ranks such as Deputy Managers as well as inter-rank meetings such as between Deputy Managers and Assistant Managers. They also allow staff meetings of all HRD staff and receive feedback on the discussions.

Interviewees were asked how they felt about the use of social media as tools for encouraging their staff to share knowledge, in order to establish to what extent social media was used in the PHRDF. Three (30%) of the Senior Managers admitted that they have not encouraged the use of social media for personal reasons such as:

- "being uncomfortable with how these platforms can be used for wrong reasons";
- "being technological challenged and the inability to control the openness of these platforms"; and
- "not being a fan of social media".

However, one (10%) of them mentioned that there was a space for social media if relevancy of what is posted and avoidance of information overload was taken into account. On the other hand, seven (70%) of the Senior Managers believed that social media is the modern way of immediate communication and realized that most government websites contain options for using Facebook and Twitter. They also mentioned that most of their employees communicate by WhatsApp although they were

not certain if the communication was work-related as they posted only social matters. One (10%) of the Senior Managers advised that there must be moderators put in place to control what is posted so that it could be a medium that is used for knowledge sharing. According to four (40%) of the Senior Managers, social media should be embraced as an essential means of communicating in the 21st century and one of them stated that it is out-staging all other outdated means of communicating.

A statement was posed to the interviewees regarding whether it was true or false that staff members who share knowledge are entrusted with higher responsibilities as a way of motivating them and others. This question was asked to determine whether promotions for those who shared knowledge could be used as an incentive for knowledge sharing. The Senior Managers were divided on this question; five (50%) of them agreed that they are entrusted with higher responsibilities whilst the other five (50%) did not support this statement. Those who supported this statement reported that those who share their knowledge appeared to be knowledgeable, were consulted often for assistance, were bold enough to want to share and in turn impressed, and they revealed that they were passionate about their field. One of those who did not agree reported that one could not be sure if it was the same person who shared knowledge electronically as they could be using someone else and once they are nominated into a committee, they would not be able to deliver. Others cited that most of the time it was junior staff that did all the work and the one who shared the knowledge would in turn take all the credit for the sharing.

5.4.4 Section D - Strategy for knowledge sharing

To support the results of the section on strategies to overcome challenges of knowledge sharing, the Senior Managers were asked what policy or strategy was in place for sharing knowledge in their departments. Four (40%) of the interviewees mentioned that they do not have a policy or strategy that dealt specifically with knowledge sharing, however, three (30%) of them mentioned that they have the Communication Strategy that is used to post to the website as well as templates to use for reporting purposes and business plans development, whilst one (10%) mentioned a Quality Management System they used that contained each section's processes and procedures. Four (40%)

of the interviewees reported that they have nothing that dealt with knowledge sharing as one of them understood it is a knowledge management issue that was due to be discussed in the forthcoming meetings. One (10%) of them also mentioned that it was something that would be taken up as soon as the restructuring in her department was over and knowledge management was in place. Only one (10%) Senior Manager mentioned the existence of a knowledge management policy in her department.

5.5 Summary of findings

This chapter dealt with the analysis and presentation of results from the data obtained from the questionnaire and interview schedule. Some of the important findings were:

5.5.1 How is knowledge shared in the PHRDF?

- Knowledge sharing was rated highly, however the blurring of knowledge with information was a problem experienced throughout the data collection.
- The importance of knowledge sharing was also rated high as it was regarded as necessary for learning best practices, learning processes and procedures, creating a learning organization, developing competent individuals, improve service delivery and establish a problem-solving environment.
- Most Senior Managers regarded meetings targeted at different levels as the main method of sharing their knowledge with staff members.
- Senior Managers also created teams around similar functions to work on projects and then report back to other staff members as a method of knowledge sharing.
- Some respondents acknowledged that the PHRDF was more inclined to provide
 a holistic perspective on developments in the HRD as well as updating members
 on new developments in the field than to sharing technical knowledge.
- PHRDF provided a space for problem-solving, however, the irregularity of meetings was a barrier to knowledge sharing.
- There were specific skills required for performing duties in HRD which the PHRDF assisted in honing, as members shared information on operational strategies. An opportunity for this was missed when the PHRDF did not sit.
- Respondents need information on HRD matters.

- Respondents felt that workshops, training sessions, and courses assisted them to learn technical skills than relying on the PHRDF.
- Senior Managers created an environment of knowledge sharing by sending staff to courses and training.
- Telephonic or e-mail contacts between members assisted in accessing tacit knowledge.
- There was a culture of knowledge sharing in the PHRDF as the meetings were seen as the only opportunity for all Departmental representatives of different ranks and positions to be consulted on HRD issues.
- Some Senior Managers created internal HRD forums and learning networks in their Departments to facilitate knowledge sharing.
- One department had a knowledge management policy which explained why this particular Department had an established knowledge portal and knowledge sharing sessions.
- Senior Managers ensured handovers of functions when staff members responsible for those functions were on leave.

5.5.2 Factors affecting knowledge sharing

Factors affecting knowledge sharing included:

5.5.2.1 ICTs

- The internet (which translated to websites) was used as a database for policies, guidelines and circulars which members could access should they need information on HRD matters.
- The respondents often regarded policies and circulars uploaded on websites as knowledge. However, some respondents clarified that what was shared in the PHRDF was mostly information, not technical knowledge.
- Means of sharing knowledge using IT was greatly supported by respondents and is mitigated against challenges of time and distance which often beleaguered PHRDF meetings.

- Senior Managers reported that e-mails were tools that they utilized to enable knowledge sharing
- Social media were not regarded as a means of knowledge sharing yet, however, they were used to communicate appointments and events.

5.5.2.2 Institutional repositories

- Senior Managers regarded the internet, intranet and Departmental websites as an institutional repository where they obtained knowledge pertaining to HRD matters.
- Written notes of what was gained from the discussions and exchanges at the PHRDF meetings were utilized as a means to capture explicit knowledge.
- Respondents stated that they would utilize a knowledge portal or institutional repository should that facility be developed.

5.5.2.3 Motivation to share

- Employees are motivated to share knowledge when they are capacitated.
- Experience and knowledge members possessed contributed to the confidence of sharing knowledge.
- There was intrinsic motivation of increased reputation in sharing knowledge among peers.
- Incentives for sharing knowledge were welcomed by the respondents and rejected equally by some.
- Respondents felt that recognition of expertise would contribute to the motivation to share knowledge with others.
- Knowledge shared was done for reciprocal purposes because respondents reported that they shared knowledge when they felt that they would obtain knowledge from others when they needed it.
- Trust was regarded as a major factor in sharing knowledge with others because PHRDF members trusted each other as they were peers working in the same field.

 Senior Managers perceived a knowledgeable workforce, succession planning, and institutional memory development as some of the motivators for sharing knowledge with their staff.

5.5.2.4 Communities of practice

- PHRDF was supported as the correct platform for sharing knowledge on HRD.
- Sharing knowledge with peers of the same rank was not as favourable as having diversity in ranks, levels and positions.
- Diverse membership was highly favoured by respondents as it assisted knowledge sharing about both strategic and operational HRD issues among different ranks and positions.
- When knowledge sharing occurred in the PHRDF, novices got opportunities to learn from experts as experts from National Government would share on policy developments and implementation plans.

5.5.3 Challenges with knowledge sharing in the PHRDF

- Respondents who were of a junior status were not hindered by the presence of members of a senior status in sharing knowledge instead they were encouraged and received support from them.
- There was unwillingness to share knowledge when members felt forced to share, were insecure about sharing their knowledge, when they did not receive support from the organization, when they felt used, when others took credit for the knowledge they shared and when the PHRDF platform is used for reporting instead of sharing.
- The use of online communication such as discussion forums or virtual communities had not yet been established in the PHRDF.
- Barriers to knowledge sharing were largely related to structural, compositional and organisational issues of the Forum.
- Many members blamed the non-sitting of scheduled meetings, the dominance of discussions by certain senior members, the frequent changing of representation

and meetings becoming reporting platforms more than knowledge sharing platforms as challenges which prevented knowledge sharing.

5.5.4 Strategies for overcoming challenges

- Managers encouraged staff members to read articles and sent newspaper clippings on HRD issues. One Manager reported the availability of a library to support access to information that would later be shared with other staff members.
- Four Senior Managers reported on their departments' efforts to revive structures concerned with knowledge management.
- A majority of respondents agreed that knowledge sharing should be one of the areas assessed in a performance management system
- The formulation of a knowledge sharing policy was supported as a means of formalising knowledge sharing.

5.6 Summary of chapter

The results and findings of this chapter collected from respondents who completed questionnaires and interviewees from the different departments were presented according to the research objectives. What emerged from the results was the blurring of the concept of 'information' and 'knowledge'. However, knowledge sharing was perceived in a serious light by the respondents and its importance was rated highly. In addition, the PHRDF was perceived as the correct platform for sharing HRD knowledge amongst the various departments. Knowledge was shared mainly in the form of presentations, discussions and exchanges amongst the members. External guests and experts from the National Department like the DPSA, as well as government entities such as the PSETA and National School of Government often visited to update the HRD Officials of new developments as well as implementation plans. The internet, government websites, departmental websites and the few knowledge portals were some of the tools the respondents and the interviewees used to access information for knowledge sharing purposes.

Most respondents were not motivated by incentives such as rewards and recognition of expertise. However, they are encouraged to share their knowledge so that their peers would share in return. There was a knowledge sharing culture within and outside of the PHRDF. Respondents acknowledge that sharing knowledge at the PHRDF meetings increased their reputation. Trust was seen as a factor in knowledge sharing, however, in the PHRDF, trust was not a barrier as respondents viewed themselves as working under the same section of HRD, and therefore they needed to share knowledge with one another. The unavailability of an institutional repository compelled the respondents to write their own notes regarding knowledge shared at the PHRDF. Respondents did not feel intimidated by the diverse nature of the PHRDF where both junior and senior employees by rank and position gathered. This was not a barrier for them to share their knowledge. Social media and discussion forums in a virtual community had not been utilized as a form of knowledge sharing by the respondents. Senior Managers were cautious about the use of social media advising that if they were utilized they should be monitored and controlled so that they are used only for work-related knowledge sharing. There was no knowledge management strategy or policy in most departments which would cater for a knowledge sharing policy except for one department. The data collection in this chapter will form the basis of the interpretation of results and findings in the next chapter.

CHAPTER SIX

DISCUSSION OF FINDINGS

6.1 Introduction

The main purpose of Chapter 6 is to interpret the research results presented in Chapter 5 and discuss the findings thereof. The relevant literature and the extent to which the research results presented a common view and what made them distinctive from previous KM research of a similar nature are also presented. The research results were interpreted in accordance with the motivation theory and the social exchange theory as well as the Classification of Communities of Practice (COPs) model and the SECI model (See Chapter 2). This study sought to explore whether knowledge sharing occurs in public service and whether communities of practice play a role in promoting knowledge sharing in public service by studying the PHRDF as a case. The research questions which guided the study were as follows:

- How did members of the PHRDF practice knowledge sharing?
- What factors affected knowledge sharing between PHRDF members?
- What were the challenges experienced by members of the PHRDF when sharing knowledge?
- What strategies could the PHRDF use to overcome such challenges?

The order of this chapter follows that of the research questions of the study. Each question is discussed with reference to the results of the questionnaire sections (respondents) and the interview schedule (Senior Managers) in the light of the literature review and the research framework. The findings of the questionnaire and the interview schedule that are presented in this chapter only relate to the PHRDF members and Senior Managers in HRD who responded to the questionnaire and interview schedule respectively. In light of the high response rate of the questionnaire which targeted the whole population of PHRDF members who attended the first meeting of 2015 and the interview schedule which targeted the whole population of Senior Managers in HRD represented in the PHRDF, it is possible to make generalizations about the whole population.

6.2 How is knowledge shared in the PHRDF?

The first question focuses on the practices of knowledge sharing within the PHRDF as well as the presence of the environment for sharing knowledge. It is important to distinguish the PHRDF members as knowledge workers as described by Imafidon (2009) who states that, knowledge workers are those workers who are highly qualified and highly educated professionals. Based on this description it can be concluded that the respondents were knowledge workers because out of 20 (87%) respondents who answered this question, seven (30.4%) had a Bachelor's degree, two (8.7%) had a Post-Graduate Diploma, four (17.4%) had a National Diploma, four (17.4%) had a B-Tech degree and three (13%) had an Honours degree as shown in Table 5.6. There was no response from three (13%) respondents. This finding revealed that the majority of the respondents who answered this question had a post-matric qualification.

The current study's findings revealed the perception of a significant level of knowledge sharing within the PHRDF as reported by 12 (52.2%) of respondents to the survey questionnaire who rated it as 'high' and 10 (43.5%) who rated it as 'moderate' as seen in Figure 5.3. The study's findings also revealed that the importance of knowledge sharing was rated 'very high' by 15 (65.2%) and 'high' by eight (34.8%) of the respondents as shown in Figure 5.4. A previous study by Dikotla, Mahlatji and Makgahlela (2014) supports this finding since CoPs have proved to be the most significant means of fostering KM in the twenty-first century because its members spent considerable time helping each other solve problems. The significance of this finding lies in the reasons provided by the respondents for the high level of knowledge sharing in the PHRDF which can be seen as a CoP, which pointed to the content of what was shared and the benefits derived from knowledge sharing. Policies, new developments, implementations plans were counted among the content of what was shared at the PHRDF whilst learning best practices, improved performance, learning directly from experts, improved service delivery and keeping up-to-date were some of the benefits derived from knowledge sharing.

Although literature confirms that knowledge is held by individuals in groups such as CoPs as well as embedded in routines and procedures, it also cautioned that simply identifying the formal knowledge about work procedures and policies will not capture the necessary depth and nuance of knowledge embedded in practice (Pardo, Cresswell, Thompson and Zhang 2006). This view is echoed in the results when respondents complained that sharing in the PHRDF meetings consisted mostly of sharing information rather than technical knowledge. Senior Managers who were interviewed in the current study rated the level of knowledge sharing in their departments as both 'very high' (20%) and 'high' (70%), and they utilized meetings as their main avenue for knowledge sharing. There were different types of meetings held, some were between middle management and Senior Managers and others were meetings amongst staff members themselves depending on the objective of the meeting. This finding is consistent with Dikotla, Mahlatji and Makgahlela's (2014) assertion that formal knowledge sharing takes place through official channels such as meetings. This finding is also supported by the SECI model of Socialization where tacit knowledge owners transferred their expertise as they spend time interacting with, mentoring and coaching recipients (Khumalo 2012).

This study's findings revealed that the environment for knowledge sharing in the departments where the respondents were based was found to be conducive because of the structures that are set up for knowledge sharing. These findings are in line with Lwoga's (2010:371) study who found that identification of the organization's knowledge environment is important to help those who work with knowledge to locate the knowledge they need for effective KM practices. The structures that enabled knowledge sharing in the departments were mainly different meetings held by Senior Managers with their staff members depending on the context and the content that needed to be shared. Marley (2012) supported the creation of such structures in his observation that organizations specifically decide how to use teams and create them for specific purposes. For example, the Senior Managers who were interviewed reported that if the context was of a strategic and highly political nature the meetings were held among Executive Management and Senior Managers, whereas if the content was operational knowledge they would share their knowledge with Deputy Managers.

The Deputy Managers would in turn cascade the knowledge to junior staff members via either meetings, information sessions or learning networks, depending on which method

is used in that particular department. This is reminiscent of the originating *ba* in the SECI model which is characterized by face-to-face interaction in the Socialization phase where participants find a space to express their physical senses and psychological reactions in the process of conveying tacit knowledge between the participants (Nonaka, Toyama and Konno 2000). On the other hand, dialoguing *ba* is defined by collective and face-to-face interactions found in the Externalization phase. It is a place where it finds its expression because the individuals' mental models and skills are shared, converted into common terms, and articulated as concepts (Nonaka, Toyama and Konno 2000).

The environment for knowledge sharing was also strengthened by the fact that the importance of knowledge sharing was rated highly by all Senior Managers. While recognizing the benefits of knowledge sharing such as the preservation of institutional memory, prevention of silos, influencing decision making and enhancing performance. Senior Managers also recognised the improvement of service delivery which was the major government mandate through knowledge sharing. Evidence in literature supported that low levels of information sharing and knowledge sharing were the prime contributor to poor service delivery in the public sector (Dikotla, Mahlatji and Makgahlela 2014). Fortunately, findings show a high level of knowledge sharing in the PHRDF which therefore implied improved service delivery.

Since knowledge sharing is embedded in the interactional transformation of tacit to explicit knowledge according to the SECI model, the findings reveal that sharing of tacit knowledge occurs to a lesser extent than the sharing of explicit knowledge. According to the SECI model, certain organizational actions do not favour tacit knowledge and these are generally the structural knowledge processes of Externalization and Combination (Hoe 2006). The findings revealed that 19 (82.6%) of the respondents obtained the skills they required by attending PHRDF meetings. The type of skills or expertise required to perform in the HRD field are presented in Table 5.7. The skills mentioned required the sharing of both tacit as well as explicit knowledge therefore the application of the SECI model in its entirety was crucial for knowledge sharing to occur in the PHRDF. The interaction during the PHRDF meeting served to fulfil the Socialization and

the Internalization phase through physical proximity during tea times and lunch times, as well as the Combination and Externalization phase through presentations and discussions. Dikotla, Mahlatji and Makgahlela (2014) confirmed that informal sharing takes place inside or outside the office during breaks and time outs.

Knowledge sharing that occurs during the Socialization and Internalization phase in the PHRDF is in keeping with Cong, Li-Hua and Stonehouse's (2007) study who reported that informal knowledge sharing occurs in organizations through face-to-face interaction in corridors and coffee or tea rooms. This view is in keeping with the study of Lilleore and Hansen (2011) where common open spaces should be created to increase personal closeness which then reinforces the frequency of informal meetings and the exchange of tacit knowledge. Face-to-face interactions that occurred informally at the PHRDF are in line with the originating *ba* of the Socialization phase where the emphasis is on the need to communicate more than the specific and the technical, with a focus on establishing communicating norms and exchanging emotions and developing mental models and experiences (Rice and Rice 2005). Of the Senior Managers who were interviewed one commented regarding the originating *ba* that even "gossip was good" if it furthered exchange of experiences and expertise. Another one of the Senior Managers mentioned that the creation of open workspaces facilitated knowledge sharing in his department which was in line with the dialoguing *ba* concept.

The findings revealed that five (21.7%) of the respondents always obtained the above mentioned knowledge and skills when they attend the PHRDF whilst 14 (60.9%) only found it 'sometimes'. Some of the reasons provided by those who 'always' found the knowledge and skills involved:

- self-preparations for meetings so as to provide guidance where needed;
- seizing the opportunity to learn and develop their own knowledge;
- conducting their own research through the internet, e-mail correspondence, research into Seta Information System (SMS) for development of Work Place Skills Plans, and so forth; and
- engaging in PSETA/ DPSA for know-how and skills required.

The above finding is in line with the SECI model where the Internalization phase consists of planning and externally reflecting what competencies and goals one wants to achieve, and simultaneously harmonizing one's plans with organizational visions, norms and expected competencies, and planning one's professional development which results in learning from other professionals' experiences and combining it with academic knowledge (Tihane 2010).

The reasons mentioned by those who 'sometimes' found the knowledge they wanted, indicated that they did not only want explicit knowledge, they also realized that there is tacit knowledge that was not shared at the PHRDF meetings. They also indicated that the irregularity of PHRDF meetings which would assist them with knowledge in order to meet the deadlines for submissions of WSPs⁶ and ATRs⁷ disadvantaged them. This finding is in line with the study by Yao, Kam and Chan (2007) who revealed that the public administration sector was more dependent on people-based approaches such as forums and informal discussion groups to disseminate knowledge than the private sector. The irregularity of meetings was also mentioned by one of the Senior Managers who complained of the selective manner in which important events such as learning networks held in the Province were not duly announced until the event is known by hearsay.

There is evidence in literature that knowledge sharing occurs in two ways, namely, formal and informal. Formal sharing occurs through official channels such as meetings, discussions, e-mails, web-postings and memos, whilst informal sharing occurs inside or outside of the office, for example, during tea or lunch breaks (Dikotla, Mahlatji and Makgahlela 2014). The study findings revealed as shown in Figure 5.5 that the internet (16.1%), physical HRD Policy documents (14.3%), PHRDF (14.3%), courses and conferences (10.7%) and workshops (10.7%) were the most frequently used sources for explicit knowledge by the respondents. Most of these sources were used to share explicit knowledge in keeping with Salleh et al. (2013) who explained that explicit knowledge consists of organizational rules, manuals, routines, software and procedures

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⁶ Workplace Skills Plans

⁷ Annual Training Reports

that can be codified and easy to transfer. Informal contacts with colleagues (8.9%), e-mail (6.3%), intranet (6.3%) and telephone (4.5%) were used less compared to the above-mentioned sources. This finding is not consistent with the Senior Managers opinions where two (20%) Senior Managers mentioned the high usage of the intranet and five (50%) mentioned their departmental website as sources of knowledge in their departments. Nevertheless, the use of e-mails is in line with Truran's (1998) study who found that knowledge can also be shared through channels such as telephones or e-mails. Since explicit knowledge is formal, it is usual stored in readily accessible media or artefacts such as formal policies, procedures, standards and databases (Pardo, Cresswell, Thompson and Zhang 2006) as was reported in the current study's findings.

This study's findings also revealed that social networks (0.9%) and contacts made at the PHRDF (3.6%) were the least considered sources by the respondents when seeking to update their knowledge on HRD issues. These methods would be more relevant for sharing tacit knowledge as tacit knowledge is embedded in social context (Pardo, Cresswell, Thompson and Zhang 2006). However, the study by Panahi, Watson and Partridge (2013) revealed that there is still a lack of understanding about the potential and pitfalls of the social web for tacit knowledge sharing partly because, the concept of tacit knowledge is complex and there are contradictory views on IT ability for sharing tacit knowledge. Therefore, it would be much more difficult to transfer tacit knowledge using these methods if they are least used. Three (30%) of the Senior Managers interviewed admitted that they have not encouraged the use of social media referring to their discomfort regarding how "these platforms can be used for wrong reasons" and also advocating for stricter controls should they be used for knowledge sharing.

On the other hand seven (70%) of the Senior Managers interviewed acknowledged that social media were being used to convey information in real time, this was the modern way of communicating and they had noticed icons for Facebook and Twitter in government websites. This finding is consistent with Shah, Khan and Amjad (2013) whose study highlighted the role of social media in developing effective knowledge management processes including knowledge sharing. Their study revealed a growth towards the use of social media for knowledge intensive organizations. Four (40%) of

the Senior Managers interviewed were aware of the application WhatsApp which was used for group communications amongst staff members, although they realized that content of the communication was social in nature. This is in keeping with Lee and Kelka's (2013) study who found that single ICT as well as varied Combination of ICTs were frequently used to facilitate the different phases of the SECI model which in the case of the PHRDF, it facilitated the Socialization phase.

The study's findings revealed that there was no institutional repository to keep best practices and knowledge specifically shared at the PHRDF meetings, however one Senior Manager interviewed mentioned the existence of a knowledge portal in her department. Twenty (64.5%) respondents wrote their own notes at the PHRDF meeting, eight (25.8%) respondents contacted other members to obtain knowledge from them, two (6.5%) respondents used the DPSA website and one (3.2%) respondent used the HRD portal in her department. On the other hand six (60%) Senior Managers indicated that the DPSA website or their intranet functioned as a knowledge repository for HRD matters. Although knowledge sharing was rated highly both in the PHRDF and in the departments, the lack of a knowledge portal accessible to all respondents which would allow voluntary inputs from all PHRDF members was a hindrance to continuous knowledge sharing among the respondents. According to Pardo, Cresswell, Thompson and Zhang (2006), the process of sharing must bridge the different work cultures and practices of the participants from various agencies and organizational units. This assertion is highlighted because members of the PHRDF came from different departments and regular inputs into a repository would enable them to be up-to-date with new developments.

6.3 What factors affected knowledge sharing between PHRDF members?

In terms of whether the diverse membership in the PHRDF which involves senior managers, junior managers, skills development facilitators, HRD practitioners and various ranks affected knowledge sharing, the findings revealed that the majority of 20 (87%) respondents supported that the diversity encouraged knowledge sharing. The major reasons for the support were that learning from senior managers occurred and the opportunity for junior managers to share the same platform with senior managers for

the purpose of empowerment was maximally utilized. The PHRDF exhibit the typical characteristics of a CoP which is usually composed of individuals with varying degrees of expertise relevant to the interest and activities of the community as observed by Klein, Connell and Meyer (2005) in their Framework for classifying CoPs. The finding from this study showed that the diversity of juniors and seniors members encouraged learning from the senior ones and creates an opportunity for knowledge sharing across all levels. This finding also supports that the PHRDF is a stratified community as it is composed and acknowledged the different ranks and therefore it exhibits an egalitarian community in terms of knowledge that flows both up and down through the community according to the respondents (See Table 2.1).

The diversity in terms of sharing of knowledge across levels is supported in the concept of *ba* in the SECI model where knowledge needs a physical context to be created (Nonaka, Toyama and Konno 2000). *Ba* is not necessarily a physical place; it can be any place where information is interpreted to create meaning such as an office space, virtual space or mental space (Nonaka, Toyama and Konno 2000). When the exchange of information and knowledge occurs between senior and junior managers, *ba* would be the energy and space provided by the PHRDF for the transformation of tacit to explicit knowledge through the various phases of Socialization, Externalization, Combination and Externalization (See Figure 2.1).

The interviews revealed that not all information and knowledge is shared by the Senior Managers with their subordinates. However, seven (70%) of Senior Managers reported that rank influences whether they shared information with their subordinates because of the issues of confidential knowledge which is privy to senior managers only, matters of sensitive political nature and prevention of information overload. This finding is consistent with the study by Ford and Staples (2010) who discovered that knowledge sharing was divided into two types, namely, full and partial knowledge sharing. Their study revealed that full knowledge sharing consists of the informer supplying all the knowledge they feel is relevant to the recipient although it cannot be a full discloser because of implicit knowledge that would still be left in the informer's head as well as the avoidance of information overload (Ford and Staples 2010). On the other hand their

study discovered that partial knowledge sharing occurred when only relevant information and knowledge is conveyed to the receiver to promote confidentiality or mitigate against risks to the informer or organizations (Ford and Staples 2010).

In terms of whether sharing knowledge is influenced by the extent of one's knowledge and experience, the finding revealed that 22 (95.7%) respondents agreed that their experience and knowledge encouraged them to share knowledge rather than hoard it. This finding is in line with Lam and Lambermont-Ford's (2010) study which concluded that hedonic motivation can be enhanced by creating an environment that allows self-determination and self-esteem. This finding also supported a stratified-nurturing CoP type according to the theoretical framework for classifying communities of practice where the abilities of members are nurtured by means of experiences leading from novice to master (Klein, Connell and Meyer 2005). Among the reasons provided by the respondents was the confidence they possess to share knowledge on what they have expertise on and the fulfilment of teaching others what they know due to their experience and knowledge. This is in keeping with Naicker, Govender and Naidoo's (2014) finding that Internalization in the SECI model, played a significant role in the participants' knowledge and transfer activities where expertise is shared and participants applied the knowledge in their work settings.

In terms of whether an increased reputation is an incentive for knowledge sharing, the findings of the study showed that 20 (90.9%) respondents agreed that sharing knowledge increases their reputation amongst their colleagues. According to Amayah (2013) personal benefits such as status and career advancement, a better professional reputation, emotional benefits and intellectual benefits have a direct link to motivation to share knowledge. In support of this view the findings consisted of the reasons mentioned in Section 5.3.3.3 which included gaining respect, increasing credibility, and attributing authority as motivation for knowledge sharing. This finding is consistent with Liang, Liu and Wu (2008:3) citing Blau (1964) who reported that the social exchange theory presents individuals with the opportunity to engage in social interaction based on the expectation that it will in some way lead to social rewards such as approval, status and respect. The study's findings revealed that Senior Managers were motivated to

share their knowledge by leadership and management related issues such as succession planning, prevention of silos, people development, innovation, developing trust, preserving institutional memory, and so forth. According to Seba, Rowley and Delbridge (2012) leaders contribute to employees' learning from their personal experiences. In addition, leaders and managers influence their employees to share and transfer knowledge by leading by example. As a result, the decision making process which follows efficient knowledge sharing is controlled by leaders hence the reasons provided by the Interviewees as motivation for sharing knowledge.

With regard to whether there was a culture of knowledge sharing in the PHRDF, 82.6% agreed that there was a culture of knowledge sharing in the PHRDF. Based on the assertion that information is a necessary antecedent to knowledge creation and use, it is also the medium by which knowledge is transferred (Frost 2010). Information sharing at the PHRDF consisted of sharing best practices and challenges by the various members from the different departments as well as presentations done on new developments by invited experts from National Departments such as the DPSA, SETAs and the NSG. It is important to ascertain the presence of a culture of knowledge in the PHRDF as limited information and knowledge were the predominant causes of many of the service delivery problems (Noeth 2006). The delivery of basic services may relate to improving the economic infrastructure, improving efficiency and effectiveness and establishing a business-friendly environment by reducing the cost of setting up and doing business (Ondari-Okemwa and Smith 2009). Since a low level of knowledge and information sharing was identified as prime contributors of poor government service delivery (Ondari-Okemwa and Smith 2009), it is interesting that the findings reveal a high degree of knowledge sharing in the PHRDF (See Figure 5.3), hence the presence of a knowledge sharing culture.

In terms of whether incentives for knowledge sharing would result in increased participation in knowledge sharing, the respondents to the questionnaire were divided. Eleven (47.8%) agreed and eleven (47.8%) disagreed. It was noted that when the study was conducted, there was no programme in place to reward knowledge sharing, therefore it was done on a voluntary basis. Those who agreed reasoned that incentives

are a catalyst and human beings are motivated by rewards. These findings are in line with Cong, Li-Hua and Stonehouse's (2007) study who found that formal recognition and a rewards system to compensate for sharing knowledge with others encouraged employees to actively engage in knowledge sharing. According to Lam and Lambermont-Ford (2010), within a professional bureaucracy such as in government, the social dilemma for knowledge sharing could be overcome through normative motivation, with provision of hedonic motivation supported by extrinsic incentives such as training and career progression. Fortunately, a few of the respondents (10.7%) mentioned training, attending courses and conferences among some of the ways they obtained knowledge. Of the Senior Managers who were interviewed two mentioned sending staff members for training and three mentioned sending staff for workshops as incentives for sharing knowledge as they return and share with others what they had learnt.

Motivational theory affirms that motivational mechanisms play a key role in regulating and translating potential into actual behaviour and underline the complex dynamics of knowledge sharing and creation within an organizational context (Lam and Lambermont-Ford 2010). Extrinsic motivation allows individuals to satisfy their needs by directly obtaining additional resources such as money, promotion and other non-financial resources (Akhavan, Rahini and Mehralian 2013). Based on this view, the respondents could satisfy their needs and be rewarded through incentives for sharing their knowledge. The interviews with Senior Managers revealed that events such as sport day and social events created an environment which motivates staff members to share knowledge. According to Park, Saplan-Catchapero and Jaegal (2012) public sector heads should make an effort to create an environment where employees experience subjective value and could easily access shared knowledge. Therefore, the holding of these events are in line with Park, Saplan-Catchapero and Jaegal's advice and support Amayah's (2013) finding that employees often share knowledge unconsciously through informal interactions.

In terms of those who did not agree that incentives would encourage them to participate more in knowledge sharing revealed reasons associated with intrinsic motivation since they experience fulfilment and building others' capacity through knowledge sharing.

Lam and Lambermont-Ford (2010) using the motivational theories divided intrinsic motivation into normative and hedonic types as discussed in Chapter 2. The normative type is directed towards the individual's sense of compliance with personal and social norms expressed at an organizational level and identification with social groups to which they affiliate to; and the hedonic is derived from engagement in self-determined, competence-enhancing and enjoyable activity achieved through physical and social well-being and improvement in the individual condition (Lam and Lambermont-Ford 2010). One of the Senior Managers mentioned that to encourage her staff members to share knowledge, she pointed out the disadvantages of hoarding information from one another resulting in their own work not being done when they were absent. This finding is in keeping with Lam and Lambermont-Ford (2010) who reported that changing perceived focus of ownership of knowledge as a public good rather than private good may augment knowledge propensity amongst individuals in an organization.

The following reasons were provided by the respondents who did not support offering incentives for knowledge sharing:

- "I would not participate in knowledge sharing for any incentive. The fulfilment I get when I have shared information/knowledge with someone which changes their situation for the better then that's the only incentive I prefer";
- "Empowerment should not be incentive driven in my view";
- "Knowledge sharing should be from the within"; "I am not motivated by financial incentive to share knowledge"; and
- "Knowledge sharing requires no incentive because it is the only way that proves
 you have grasped the matter, because colleagues will ask questions that lead to
 better way of saying and or understanding the knowledge you are sharing. It
 further paves way for innovation".

The reasons provided above are consistent with Lindenberg's (2001) study who reported that hedonistic intrinsic motivation which depends on the importance the individual places on being engaged in such an activity rather than based on compliance factors influences the willingness to share.

The study's findings showed that 13 (59.1%) of the respondents would be motivated by recognition of their expertise to share knowledge. According to Akhavan, Rahini and Mehralian (2013) the recognition of expertise is counted among extrinsic motivators which are motivators that originate outside the individual (See Table 3.3). Based on their study, Lam and Lambermont-Ford (2010) cautioned that extrinsic rewards may undermine intrinsic motivation for interesting tasks and encourage knowledge hoarding. This implies that extrinsic motivators in terms of goals and task constraints may restrain the individual's autonomy and decrease intrinsic motivation.

More interesting were the reasons provided by nine (40.9%) of the respondents who declared that recognition of expertise would not motivate them any more than they were already motivated to share knowledge. Their reasons as listed in Section 5.3.3.6 included being motivated to share to witness their colleagues' growth because of the shared knowledge and learning as they participate in knowledge sharing. The reasons provided clearly demonstrated intrinsically based motivation to share knowledge. Intrinsic motivators are identified by their concern with values associated with the work itself (Frey and Osterhof 2002). In their study of knowledge sharing within CoPs, Jeon, Young-Gul and Koh (2011) found that altruism as demonstrated by the comments above of the respondents, was an example of intrinsic motivation existing in people as social beings because people are motivated by the enjoyment of charity itself. One of the Senior Managers interviewed mentioned that knowledge sharing was part of his job as he was supposed to develop his staff members and that was what he was paid to do. This finding is in line with Lam and Lambermont-Ford's (2010) motivation theory which posited that the degree to which individuals act or do not act when normatively motivated depends on the importance they attach to compliance in a given context and also to the external reaction to non-compliance.

In terms of whether the respondents shared knowledge in order for their colleagues to share knowledge with them when they needed it, Table 5.12 shows that 13 (56.5%) of respondents did. Social exchange theory basically advocates that individuals may build social relationships with others by sharing knowledge to increase their chances for future returns. Individuals will only interact with other members of a CoP as long as they

profited from it and experienced reciprocal rewards when motivated by mainly intrinsic objectives (Zboralski 2009). The comments made by the respondents who stated that they share knowledge for reciprocal reasons are listed in Section 5.3.3.7. The reasons can be summed up as knowledge sharing for social good occurred and the recognition that one cannot function in isolation. The respondents' comments supported Zboralski's (2009) study that individuals in a CoP participate in order to progress with their projects, improve career prospects, make their work easier, and improve contacts with their colleagues. When motivated mainly by intrinsic objectives individuals will only interact with other members of the CoP as long as they profit from it and experience reciprocal rewards (Zboralski 2009).

The study's findings established that trust was present in the PHRDF and was not a barrier to knowledge sharing. The current study's findings revealed that 22 (95.7%) of the respondents trusted their colleagues enough to share knowledge with them. Ardichvili (2008) found that participants in his study were more inclined to use knowledge made available if they trusted it to be a reliable and objective source of information. One respondent supported this finding as follows: "We interact with PHRDF members on a regular basis and therefore we have learnt to trust each other". The following comments made by the respondents confirmed the presence of trust in the PHRDF:

- "Lessons learnt from the Forum assists in the daily operations and you know you
 are doing it right at first because we are all striving towards one goal as a
 Province. So I will not be misled by anyone"; and
- "We are in the same field and working towards a common goal".

These comments are in line with Amayah's (2013) view that individuals who possess common values and share the same vision are likely to share knowledge with one another.

Trust leads to greater openness between individuals, encourages sharing of knowledge and willingness to collaborate with others. The study's findings support this view based on the following comments by the respondents:

- "Most members are in HRD for years and have vast experience in this field. They
 are able to assist me if I don't understand";
- "PHRDF members have been colleagues for years, we have grown together in the field of HRD"; and
- "They are also carrying same functions in their departments sharing knowledge will increase chances for performance improvement".

In support of the above comments, a study by Ford and Staples (2010) found that trust was among the potential predictors of knowledge sharing. In a study by Naicker, Govender and Naidoo (2014), participants were found to be aware of each other's capabilities and competencies as well as trusting each other. The above comments support Yao, Kam and Chan (2007) in their study where they found that tacit knowledge could be shared among staff members with good relationships and networks. Swift (2007:12) confirmed that the influence of trust in knowledge exchanges resulted in strong ties which facilitated the transfer of complex tacit knowledge between sources and participants as a result of the level of trust present in the relationship and less effort required to communicate the knowledge.

In terms of sharing knowledge outside the PHRDF to determine whether respondents utilized spaces other than the PHRDF for knowledge sharing, 22 (95.7%) of the respondents shared knowledge outside of the PHRDF. Nonaka, Toyama and Konno (2000) described originating *ba* of the SECI model as an existential place in the sense that it is the world where an individual transcend the boundary between self and others by sympathizing or empathizing with others. The following comment supports this view: "The Departmental HRD Directorate cannot sit at the Forum. So it is very important that we cascade the information to our colleagues outside the forum". Ntala (2010) suggested that tacit knowledge can be acquired by interacting with others and can only be shared between individuals in the same or different place if a social network exists. This suggestion is supported by the following comment from one of the respondents: "I would phone someone in another department to find out as to how they deal with a certain issue, even phoning DPSA". This finding is in line with Lee and Kelkar (2013) who found in their study that ICTs, in this case the telephone were found to be most

useful in providing access to knowledge experts and least useful in maintaining relationships with superiors.

Originating *ba* provides care, love, trust, and commitment which forms the bases for knowledge conversion (Nonaka, Toyama and Konno 2000). This assertion is evidenced by the following comments from the respondents:

- "I share knowledge with colleagues across the spectrum (i.e. from other departments, sections, etc.)"; and
- "My colleagues outside of PHRDF also need to understand the importance of developing human resources in organisation".

The above finding supports the view that the four types of *ba* are defined by two dimensions of interactions, namely, whether the interaction takes place individually or collectively and the type of media used in such interactions such as face-to-face contact or virtual media (Nonaka, Toyama and Konno 2000). In the case of the previous comment, the interactions occurred face-to-face, telephonically or by e-mail. Lin's (2007) study revealed that task interdependence could influence knowledge sharing for individuals with high exchange ideology which is evident in the comments made by the respondents who share their knowledge outside of the PHRDF.

The study's findings established that 20 (87%) of the respondents documented the knowledge that they have internalized at the PHRDF for their own use and reference. In the SECI model this process is defined as the Externalization phase of knowledge creation where tacit knowledge is converted into explicit codified knowledge.

Externalization of tacit into explicit happens when individuals are prompted to create and articulate concepts through abductive thinking, the use of metaphors for concept creation, the use of models, diagrams or prototypes (Tihane 2010). This process involves individuals writing down their plans and reflecting about their activities, but they need to consider the organizational norms and expectations as guidelines in their reflections (Tihane 2010). It is this documented knowledge which the respondents exchange with their colleagues within and outside the PHRDF as was mentioned earlier. However, the absence of an institutional repository for storing and accessing the

recorded explicit knowledge by the respondents was a concern mentioned by three (30%) Senior Managers who confirmed that the intranet they were currently using to upload policies and manuals was not necessarily a repository in terms of knowledge management principles. Three (30%) of the Senior Managers interviewed admitted that the absence of a proper institutional repository was detrimental to their knowledge sharing efforts although the intranet was used for purposes of uploading other useful HRD documents. Regarding the absence of an institutional repository for HRD, Khumalo (2012) advised that central to knowledge transfer was the existence of computerized systems for capturing, storing, and disseminating tacit and explicit knowledge to the whole organization's ecosystem.

6.4 Challenges with knowledge sharing

The study's findings revealed that 20 (87%) of the respondents did not find the presence of their supervisor at the PHRDF a challenge for them in terms of knowledge sharing. In a study based on the social exchange ideology conducted by Lin (2007), it was found that the influence of co-worker congruence on knowledge sharing is stronger for individuals with low exchange ideology than for those with high exchange ideology. This study investigated why some individuals chose to share knowledge with some and not with others. The study found that individuals with a performance-prone goal orientation are likely to be more sensitive to another's position in the organization or social network (Swift, Balkin and Mutusik 2010). These individuals were likely to experience greater positive outcomes when they demonstrated their competence to those in structurally desirable positions (Swift, Balkin and Mutusik 2010). One of the respondents commented as follows: "my supervisor is very supportive so I get more encouragement to share knowledge".

On the other hand, individuals with a performance-avoid orientation would be particularly sensitive to the quality of the relationship with a potential recipient because of their fear of appearing incompetent (Swift, Balkin and Mutusik 2010). This behaviour was conveyed by one of the three (13%) recipients who found it difficult to share knowledge in the presence of his supervisor as follows: "I feel my supervisor might be measuring my level of knowledge". This finding is in keeping with Swift, Balkin and

Mutusik (2010) who revealed that individuals with avoidance motivation were concerned with appearing incompetent making them less willing to share what they deemed private knowledge. It can then be concluded that the majority of the respondents in the PHRDF were performance-prone goal oriented as the presence of their supervisors when they were sharing knowledge presented an opportunity to demonstrate their competence to them.

In terms of the flow of knowledge within the PHRDF, 17 (73.9%) of respondents agreed that knowledge sharing flowed from experts to novices. This finding is in keeping with Klein, Connell and Meyer's (2005) framework of classification of communities of practice in Chapter 2 which consists of four types: stratified-sharing communities, egalitarian-sharing communities, stratified-nurturing communities and egalitarian-nurturing communities. This model proposes that stratified-sharing communities make strong distinctions among various levels of rank and the knowledge sharing tends to follow from the expert to the novice. The findings of this study therefore positioned the PHRDF as a stratified-sharing community where knowledge flowed from experts to novices. In support of the findings one respondent commented as follows: "Questions maybe asked by novices and an experienced Senior Manager may respond in a more knowledgeable manner". This finding is in contradiction with the earlier finding where the respondents mentioned that information flowed both ways in the PHRDF hence they supported diversity of composition of both junior and senior members.

According to Klein, Connell and Meyer (2005) this arrangement of the flow of knowledge from expert to novice may affect the freedom of lesser ranked individuals to share their knowledge even if it is useful knowledge to others in the community. However, the previous findings with the majority of respondents claiming their freedom with sharing knowledge in the presence of their supervisors contradicts the above statement, although there were three (13%) respondents who had different views. The views of the respondents who disagreed that the knowledge flowed from expert to novice in the PHRDF were about the identity of the expert and the novice, and not about the flow of knowledge. They viewed the experts as those on the operational level dealing with ground work rather than those on the strategic level.

In terms of what discouraged them to share their knowledge, six (26.1%) of the respondents claimed that the feeling that they are forced to share discouraged them from knowledge sharing. This is consistent with the social exchange theory which recognizes that knowledge sharing is volitional and cannot be forced or mandated (Cyr and Choo 2010). One respondent mentioned 'insecurity' and another 'competition to share' as reasons why they were discouraged to share knowledge. Most of the responses came from the 'other' section of the question which came from 39.1% of the respondents. This section consisted of the following responses:

- "Lack of an organisation culture supporting knowledge management";
- "Lack of support from my manager";
- "If it is not sharing but reporting only";
- "Occupational level";
- "The fear of exposing oneself";
- "People using knowledge and passing it off as their own ideas";
- "The sense of knowing that I am used for some other benefits other than knowledge sharing" and
- "when opportunity to share is always not given".

The above comments support Seba, Rowley and Delbridge's (2012) study that organizational structure, leadership, time allocation and trust were some of the factors affecting knowledge sharing in the public sector. It is interesting to note that rewards and incentives were not mentioned by the respondents as a barrier to knowledge when studies by various authors such as Yao, Kam and Chan (2007), Seba, Rowley and Delbridge (2012), Khumalo (2012), Lam and Lambermont-Ford (2010), Cong, Li-Hua and Stonehouse (2007) and Chiem (2001) found incentives to be motivators of knowledge sharing.

In terms of establishing whether the respondents would use a repository for knowledge sharing purpose were it is available, 22 (95.7%) of the respondents confirmed that they would use it. The most significant comments regarding the availability of a database that would enable knowledge sharing were as follows:

- "Most of the time factor limits everyone of us, but if there is database forum in one's spare time I can post discussions, suggestions or ideas for sharing"; and
- "I will assist especially for shy people who are not confident enough to air their views in public".

The comments above are consistent with the study of Lilleore and Hansen (2011) who found that physical distance from colleagues was a noteworthy barrier as well as being mirrored as a knowledge sharing enabler depending on the proximity. This finding is significant for explicit knowledge sharing since the use of a knowledge repository transcends time and distance limitations which were mentioned earlier regarding the irregular meetings of the PHRDF. According to Cong, Li-Hua and Stonehouse (2007) utilizing online communities, expert directories and lessons learnt enables employees to share knowledge on the job thereby partly solving the barrier of lack of time. In addition, the above comments are in keeping with the findings that individuals with digital knowledge and access to internet facilities actively engage in socializing over the internet (Shah, Khan and Amjad 2013). In line with this finding is the absence of pressure of competitiveness and concerns about trade secrets being leaked to competitors if KM repositories are implemented in government as reported by Seba, Rowley and Delbridge (2012). It was interesting to note that the respondents did not perceive the intranet or the departmental website as a repository unlike the five (50%) Senior Managers who did.

In terms of whether the respondents participated in an online virtual community for knowledge sharing purposes only five (21.7%) respondents participated. Lee and Kelkar's (2013) study established that a single ICT as well as varied Combinations of ICTs were frequently used to facilitate the different phases of knowledge creation identified in the SECI model. The low participation in online virtual community by the respondents could be attributed to unavailability of an active online virtual community for PHRDF members or it could be attributed to use of other online means such as the use of the internet (16.1%), intranet (6.3%) and e-mail (6.3%) as shown in Figure 5.5. This finding is in line with the finding of Dikotla, Mahlatji and Makgahlela (2014) who mentioned that intranets are a powerful tool for communication and collaboration for

presenting data and information. Further they are a means for creating and sharing knowledge in one easily accessible place.

In terms of whether there were factors that prevented knowledge sharing among PHRDF members, Table 5.10 reveals that there were structural, organizational and compositional issues that were presented as barriers to knowledge sharing. Structural issues that were identified in the responses included:

- "Availability of resources. Lack of proper structure that encourages this to happen";
- "It does not sit frequently. Delegation of various people/ participant by departments makes the structure formation to be imbalanced";
- "Not a standing item on the agenda. Meeting is more about updated and progress reporting";
- "It's not easy to say since I indicated before that I am new on the field but I think
 it could be non-arrangement of quarterly meetings"; and
- "There is not much interaction with other members, time constraints".

According to Dikotla, Mahlatji and Makgahlela (2014) CoPs are one of the most significant means of fostering KM in the twenty-first century. They reported that members of a CoP spend time helping each other solve problems, however, in light of the above comments by the respondents there were time constraints and meetings were not frequent as they were not kept to their scheduled dates. This finding also supports the study by Seba, Rowley and Delbridge (2012) which revealed that lack of time and lack of interaction were found to contribute to poor knowledge sharing.

Organizational issues that were reported by the respondents included the following:

- "Organisational culture is not supporting knowledge management";
- "Time is not made to departments"; and
- "Officials are focused on their own work and departments".

This finding supports the study by Gaffoor and Cloete (2010) which revealed that in order for KM to contribute to organizational efficiency there is a need for various processes and departments to work together for functional silos to be eliminated. The

effectiveness of knowledge sharing is therefore affected when an organization does not have a supportive organizational culture (Gaffoor and Cloete 2010).

Compositional issues reported by respondents include the following:

- "Sometimes the meeting is dominated by some people makes comments and juniors keep quiet but they also know a lot as implementers";
- "An online system will definitely help. HRD units are always overworked and understaffed, members are participating in too many projects";
- "It does not sit frequently. Delegation of various people/ participant by departments makes the structure formation to be imbalanced";
- "Politics and its interference to administration issues e.g. political appointments";
 and
- "Appointment of Senior Managers in Work Groups".

This finding is in keeping with the finding of Dikotla, Mahlatji and Makgahlela (2014) which reported that political affiliation plays a role as a barrier to KM in that people do not want to share with those that are affiliated to a different party. The comment about junior members of the PHRDF keeping quiet because of the domination of the discussions by the senior members is in line with Gambarotto and Cammozzo's (2010) findings that revealed that employee silence plays a crucial role in the evolution of public services because it stops communication, opportunities to modify routines and knowledge sharing. Another barrier reported in the above comments regarding HRD staff being overworked with many projects, is in keeping with Gambarotto and Cammozzo (2010) who reported that the stressful negative reactions of increased workload dissuade participation in knowledge sharing.

The study's findings revealed that 11 (55%) of the respondents revealed that trust was not an issue sharing their expertise at the PHRDF whilst nine (45%) of the respondents considered it as an issue. This is in keeping with Pardo, Cresswell, Thompson and Zhang (2006) who reported that the level of interpersonal trust and to a certain extent, similar mental sets which can be expected from the PHRDF, provided a solid foundation for knowledge sharing. However, the significant number of respondents who reported

that trust was an issue prompted a following up to the responses. The explanation provided for the response that trust was an issue for sharing knowledge specifically at the PHRDF were as follows:

- "You cannot share knowledge to someone you can't trust especially confidential information"; and
- "You always need to verify the information shared because it holds financial implications and influence decision making for HRD".

The above finding is in line with Pardo, Cresswell, Thompson and Zhang (2006) who reported that the higher the level of trust and the lower the level of mistrust in the relationship, the more knowledge sharing will provide a basis for consensus building, learning and practice changes. Therefore, this finding reveals the high levels of trust in the PHRDF.

In terms of whether the PHRDF was a useful platform for sharing knowledge, 20 (87%) of the respondents agreed. These findings are consistent with Pardo, Cresswell, Thompson and Zhang (2006) who reported that the initiation of knowledge sharing is motivated by the need to gain access to valuable resources or know-how. Their finding supports the above comments as they reported that positive sharing experiences can help government professionals build and reinforce professional networks and CoPs, which the PHRDF is doing. This finding also supports motivational theory as reported by Zboralski (2009) that when motivated mainly by intrinsic objectives individuals will only interact with other members of a CoP as long as they profit from it and experience reciprocal rewards. The PHRDF was also found to be a useful platform for sharing knowledge by 80% of the Senior Managers interviewed. One of them mentioned that the levels of knowledge their staff possessed after attending the meetings seemed higher and another commented that it was a platform for sharing best practice. This is line with the concept of CoPs as argued by Nonaka, Toyama and Konno (2000) that members of a community learn through participating in the CoP and gradually memorizing jobs.

6.4 Strategies to overcome challenges of knowledge sharing

The study's findings established that the 14 (60.9%) respondents agreed that knowledge sharing should be included as part of the performance management system to reward and encourage it. This finding is consistent with the finding of Pardo, Cresswell, Thompson and Zhang (2006) who reported that the higher the level of incentives for participation, the more likely that knowledge sharing will be initiated and developed. One respondent commented as follows: "a broader organizational development approach is required which will involve the mainstreaming of knowledge management into the performance management process". According to Amayah (2013) knowledge sharing among employees significantly impacts the performance of both public and private organizations and this assertion supports the view of the above respondent in regard to an approach to include knowledge sharing in performance assessments. The seven (30.4%) respondents who were against knowledge sharing being part of the performance management system feared abuse of the system as well as the deprivation of its spontaneity. Two of the respondents made the following comment in this regard:

- "That would encourage people to be involved in unscrupulous methods of knowledge sharing"; and
- "I don't think so because knowledge sharing is an ongoing day-to-day practice (consciously and unconsciously). I am not sure if we need to measure that, but it will kill the beauty of knowledge sharing if included in the performance management system".

The above comments support the views from Amayah (2013) who argued that knowledge is often shared without specific intentions to do so. According to Seba, Rowley and Delbridge (2012) knowledge sharing could be encouraged by embedding it into daily activities in support of the view that it should not be measured.

In terms of whether a policy should be developed to encourage knowledge sharing 73.9% of the respondents supported it. Some of the comments which supported the development of a knowledge sharing policy were as follows:

- "Formalising knowledge management will help making all more aware although informally done, therefore promote knowledge sharing";
- "It will give direction as to how knowledge should be shared and what are the benefits for all. It will promote sharing of best practices"; and
- "The policy will give guidelines in terms of necessary limitations on what should/ not be shared".

This finding is in line with Gaffoor and Cloete's (2010) findings which reveal that there should be a KM division responsible for devising a KM governance policy aligned with and mutually supportive of the KM strategy.

Nine (90%) of the Senior Managers who were interviewed confirmed the absence of a knowledge sharing policy except one (10%) whose department had a knowledge management policy. Three (30%) of them mentioned that they have the Communication Strategy that is used to post documents to the website as well as templates used for reporting purposes and business plan development, whilst one (10%) mentioned a Quality Management System that was used for keeping each departmental section's processes and procedures. Four (40%) of the Senior Managers interviewed mentioned that knowledge management and its related processes such as knowledge sharing were part of the agenda in their departments' developments. This finding is in keeping with Amayah's (2013) study who reported that improving knowledge sharing processes would help ensure employees benefit as much as possible from senior employees' knowledge and experience before they retire.

The findings of the study regarding attitudes towards the development of a database for knowledge management in order to facilitate knowledge sharing revealed 15 (65%) of the respondents strongly recommended a knowledge repository for knowledge sharing, five (21.7%) recommended it, and three (13%) were not sure. All (100%) Senior Managers that were interviewed regarding how they find knowledge when one of their staff members was on leave, mentioned sources such as multi-skilled staff who substitute staff on leave, and the intranet where policies and procedures are kept and handover procedures to those who would be left behind. It was interesting to note that

these contingency plans still involved people and knowledge in their heads and there was no guarantee that the remaining staff would always be available. This finding is in keeping with Gaffoor and Cloete (2010) in their study which recommended that building an organizational memory involves pooling and streamlining the entire organization's reports such as lessons learned and best practices to follow. Four (40%) Senior Managers reported that records keeping through the filing systems enabled them to locate knowledge recorded as their records management systems were efficient. However, one of them complained that the records management system was still manual and therefore vulnerable to damage and loss.

In terms of whether the respondents supported the view that IT would enhance the facilitation of knowledge sharing, 21 (91.3%) responded in the affirmative. According to Razi, Karim and Mohamed (2014) policy makers should consider gender differences when making strategic decisions especially regarding IT related factors and making relevancy of KM processes relevant with job performances. This should be done by giving more consideration to provide more IT facilities if the workforce at executive level comprises more females than males (Razi, Karim and Mohamed 2014). However, this study's findings found that nine (100% within males) male respondents and twelve (92.3% within females) female respondents agreed, with two (7.7% within females) females not responding to whether IT would enhance the facilitation of knowledge sharing. This is in keeping with the suggestion that females should be given more consideration concerning the provision of IT facilities.

Senior managers who were interviewed confirmed the use of the intranet and the departmental websites for keeping important documents. According to Ondari-Okemwa and Smith (2009), governments in the developed countries have optimized ICTs as knowledge management enablers. According to Panahi, Watson and Partridge (2013) several studies argued that the new emerging technologies such as social web initiatives may provide new opportunities to facilitate tacit and experiential knowledge sharing. One of the respondents supported the above assertion as follows: "It makes things easier and we live in a technology-filled era, and the people are on social networks".

The findings of a study by Lee and Kelkar (2013) which examined the perceived usefulness of ICT to facilitate the phases of the SECI model showed that ICTs were perceived to be the most useful to support Externalization followed by Internalization, then Combination and finally Socialization. The low usefulness of ICTs in support of Socialization could be attributed to Panahi, Watson and Partridge's (2013) findings that there was no evidence that tacit knowledge can be shared over IT in the literature. However, ICT tools such as repositories which store documents could facilitate sharing of explicit knowledge from a single point of access as suggested by Gaffoor and Cloete (2010). Knowledge maps can provide an overview of expertise that resides in government departments and the identification of the people who possess such expertise as reported by Ondari-Okemwa and Smith (2009).

The study's findings revealed that the PHRDF was the correct platform for sharing knowledge for HRD practitioners as reported by 21 (91.3%) of respondents. This finding is in keeping with Dikotla, Mahlatji and Makgahlela's (2014) study which reported that members of a CoP typically spend time helping each other solve problems. One of the respondents' comments supported this finding as follows: "HRD is a complicated area and with various fields of specialisation. Therefore, PHRDF is the correct platform for sharing information to ensure skills development is approached almost in a similar way considering uniqueness of each Department". Zboralski's (2009) research showed that CoPs profit from active support in terms of providing required resources such as time for members to participate, technical infrastructure and establishing the necessary prerequisites in the organization. One of the respondents supported the above finding as follows: "It is the only structure in the province where HRD practitioners convene".

The finding of the study revealed that 12 (52.2%) of the respondents did not consider different ranks in the PHRDF a barrier to knowledge sharing. Some of the respondents who reported that different ranks in the PHRDF are not a barrier to knowledge sharing commented as follows:

 "I believe that no one knows everything. Therefore working as a team is as good as building your own credentials, e.g. trust within peers and learning from the group of equals";

- "Rank is not the issue but knowledge sharing is in question hence we can learn from any level/ rank within the public service"; and
- "We all, at all levels should have the same understanding of HRD matters and in fact the PHRDF should comprise of members of all levels from HRD".

According to the classification model of CoPs as proposed by Klein, Connell and Meyer (2005), egalitarian-sharing communities ignore ranks among their members and knowledge sharing occurs freely either way between expert and novice and this promotes learning by experts from novices. This finding is supported in the current study where rank did not make any difference as a factor in knowledge sharing to the 12 (52.2%) who represented the majority of respondents. The current study noted that 8 (34.8%) of the respondents reported that they would prefer sharing knowledge among members of the same rank for the following reasons:

- "Although sharing knowledge amongst equals would have been more valuable and less stressful, there is a need to impress or fear anybody";
- "I've certainly identify easily with people in similar ranks"; and
- "It's always comfortable because you all have similar interest and challenges and you discuss how you overcome them".

Egalitarian-nurturing communities also nurture knowledge by means of experience but there is no gradual assimilation of experience here, instead the novice is 'thrown in at the deep end' as reported in Klein, Connell and Meyer's (2005) findings. The above comments from the respondents who preferred to share knowledge among similar ranks reveal some characteristics of an Egalitarian-nurturing community in PHRDF although to a lesser extent than those of an Egalitarian-sharing community.

In terms of when respondents were motivated to share knowledge 10 (43.5%) of the respondents indicated that they were motivated to share knowledge when they are capacitated, four (17.4%) of the respondents indicated that they were motivated to share knowledge when they want to help others, seven (30.4%) indicated that they were always motivated to share knowledge and two (8.7%) indicated that they are motivated to share knowledge when they are both capacitated and want to help others. According to a study of motivational factors for knowledge sharing by Lam and Lambermont-Ford

(2010) normative intrinsic motivation is directed towards the individual's sense of compliance with personal and social norms, expressed at an organizational level through the organization's expressed values, and for the individual in terms of their identification with social groups to which they affiliate. The above finding reveals that PHRDF members are normative-intrinsically motivated as their motivation to share does not come from factors outside of the individual. Lam and Lambermont-Ford (2010) suggested that an environment of self-determination and self-esteem can be created to enhance hedonic motivation and this view is supported by the respondents who reported that being capacitated motivated them to share knowledge.

6.5 Summary of chapter

This chapter examined and analysed data relating to the application of the motivation theory, social exchange theory, SECI model and Klein, Connell and Meyer's classification of communities of practice model in exploring knowledge sharing in the PHRDF. An attempt was made to show how the findings of the present study support or differ from the above mentioned theories and models as well as previous research conducted on knowledge sharing in the public sector. This chapter discussed the findings of all specific research questions indicated in Section 1.4 of Chapter 1.

Based on the findings of Chapter 6, members of the PHRDF practised knowledge sharing by attending scheduled meetings where best practice, challenges and solutions were discussed. Since membership was diverse in terms of ranks and levels, most of the knowledge and information shared flowed from expert to novice; senior managers, experienced members and experts from national Departments being experts. Most members recorded what was shared by taking down notes and shared later in their own departments through structures that are created for such knowledge sharing. Documents such as minutes of meetings, policies and procedure manuals are posted on the departmental websites, the intranet, and in rare cases on a knowledge portal or shared drive.

The findings revealed that factors that affected knowledge sharing included presence of trust and the diversity of membership was found to be an advantage of the PHRDF

because most members trusted one another and they appreciated obtaining knowledge from Senior Managers who often brought the strategic view to HRD matters. There was also a culture of sharing in the PHRDF which was evident in the high esteem that knowledge sharing and its importance were afforded. Incentives for sharing knowledge were not seen as influencing the sharing of knowledge and recognition of expertise was commended as one of the ways to improve knowledge sharing.

Challenges with knowledge sharing included the irregular meetings that deprived PHRDF members of learning about new developments and technical know-how regarding HRD procedures such as the collection of WSPs and ATRs. The feeling that the individual members were forced to share was found to be a challenge to knowledge sharing. Other important barriers included the inconsistency in who attended the PHRDF as departments sent substitutes often, there was more reporting than knowledge sharing, there was limited use of IT related methods of knowledge sharing and the absence of a knowledge portal.

Strategies for overcoming challenges of knowledge sharing included the development of a policy for knowledge management which would include knowledge sharing. A knowledge portal or an institutional repository was recommended to store organizational memory. The PHRDF was supported as a platform for knowledge sharing and the diversity of membership which consisted of both junior and senior staff was recommended. It was found that when members are capacitated with knowledge they were more motivated to share knowledge in the PHRDF.

CHAPTER SEVEN

SUMMARY OF STUDY FINDINGS, CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

On the basis of the data presented and interpreted in the two previous chapters, this chapter presents a summary of the findings, significance and contribution of the study, conclusions and recommendations of the study. The purpose of the study was to examine knowledge sharing practices in the KZN PHRDF and to determine whether CoPs could be used to promote knowledge sharing in the public service. The findings could be used to inform the development and implementation of a knowledge management strategy in the KZN PA. The summary of the findings of the study is presented based on the research questions in Chapter 1, Section 1.4, and the conclusions are derived from the data presented in Chapter 5. The order of the discussion in this chapter follows that of the order of the research questions in this study.

7.2 Characteristics of respondents

The findings of the study did not reveal much about the characteristics of the respondents in terms of knowledge sharing. The findings did not significantly show that sharing knowledge was influenced by age, job title, job position, gender, religion and education as some of the literature implied. Literature suggested that knowledge sharing could be affected by the above-mentioned characteristics; however, it was not based on studies done within a CoP. The findings of this study revealed that CoP members exhibit knowledge sharing dynamics which transcend biographical differences which are different from those of a wide spectrum of members who perform different functions in an organization.

Most of the members of the PHRDF were highly educated professionals with postgraduate qualifications which made them fall under the category of knowledge workers. The PHRDF was composed of more respondents in junior positions than those in middle and in senior management. This finding did not influence the results of knowledge sharing practices within the PHRDF in any significant way. The summary on the finding of the effects of diverse membership in the PHRDF discussed in the next section will validate the previous comment. Although nearly two-thirds of the respondents were female, the findings did not indicate significant differences in knowledge sharing patterns based on gender, although the results revealed a slight inclination (less than 8%) by males towards favouring the use of IT for knowledge sharing.

7.3 Summary of research findings based on research questions

The following conclusions are drawn from the findings of the study that relates to knowledge sharing in public service and the practice of knowledge sharing in the KZN PHRDF based on the questions presented in Chapter 1, Section 1.4.

7.3.1 Knowledge sharing practices in the PHRDF

A summary of the findings of this study regarding the level and the importance of knowledge sharing in the PHRDF, what type of knowledge is shared, how knowledge sharing occurs and is motivated in the PHRDF, challenges and strategies to overcome these challenges will be provided in this section.

7.3.2 Level of knowledge sharing in the PHRDF

The findings showed that the respondents felt that there was a high level of knowledge sharing during PHRDF meetings. The meetings involved members sharing best practice, challenges, solutions and making input towards the making of new policies. More importantly, experts from the DPSA, PSETA, and the National School of Government visited from time to time to update members on new developments and policies in HRD or for consultation with members regarding new policies and processes. The findings also revealed that the agenda was exhaustive of issues to be discussed however, sometimes a session of the meeting overflowed with too many reports denying members the opportunity to discuss operational issues. This resulted in members perceiving it as an information sharing session rather than a knowledge

sharing session. Nevertheless, the PHRDF displayed a culture of knowledge sharing and the level of knowledge was high.

7.3.3 Importance of knowledge sharing in the PHRDF

The findings showed that members of the PHRDF regarded knowledge sharing as a very important activity because of the relevancy of the content shared and the amount of learning that took place when members shared their knowledge. The contents that were shared included updates on policies and regulations and their implementation plans, implementation of WSPs, and writing of ATRs. It appeared that members of the PHRDF did not concede knowledge from one another as they possessed one vision of ensuring that KZN HRD was successful in achieving its goals, therefore they worked as a collective. It can thus be concluded that the importance of knowledge sharing in the PHRDF in order to achieve the same goals was very high.

7.3.4 Types of knowledge shared in the PHRDF

The findings revealed that some respondents often obtained the skills and technical know-how they required at the PHRDF. This implies that there were significant amounts of tacit knowledge shared at the PHRDF that enabled them to improve their performance in their jobs. The findings showed that some of the Senior Managers found that their staff displayed an increased level of knowledge when they attended the PHRDF meetings. In addition, presentations made by the experts who visited the PHRDF represented the transfer of both tacit knowledge from the presenter as well as explicit knowledge from the approved policies, regulations and implementation plans. Further to this, knowledge shared at the PHRDF was brought back by its recipients as both tacit and explicit knowledge to their respective departments to be shared with their colleagues. It can therefore be concluded that both tacit and explicit knowledge was shared at the PHRDF meetings.

7.3.5 Method of sharing knowledge in the PHRDF

The PHRDF is led by the Office of the Premier in the KZN PPSTA unit. It is through this unit that the DPSA conveyed new developments in HRD so that they could be passed on to HRD professionals in the KZN Province during PHRDF meetings. This study's

findings revealed that during PHRDF meetings information about new developments, compliance issues, targets and deadlines regarding HRD reports to the DPSA was shared by the chairperson of the PHRDF who was located at the PPSTA. This information would then be converted to know-how during discussions regarding its implementation and members would take down notes for later reference and also obtain minutes of meetings by e-mail. Relevant documents were posted on the DPSA website and on some departmental websites, shared drive and knowledge portal in some departments. Sharing of knowledge at the PHRDF was largely dependent on holding the scheduled meetings as postponement of meetings affected the availability of knowledge needed for performance of functions.

7.3.6 Access to knowledge shared at the PHRDF

The study's findings revealed that knowledge shared at the PHRDF was kept as tacit knowledge by the members who had attended the meetings and as explicit knowledge by most members who took down their own notes. Some of the knowledge was documented as explicit knowledge in the form of minutes taken and later sent to the members by e-mail. The findings revealed that the only access available was to knowledge shared regarding governmental policies, processes, regulations, manuals and templates, which was posted on the DPSA website and tacit knowledge by members obtained could not be accessed by others. There was no knowledge portal or database or institutional repository where tacit knowledge, best practice, and solutions shared could be accessed and no further inputs could be made outside the PHRDF. Therefore, access to explicit knowledge shared at the PHRDF was limited to information and explicit knowledge found in documents posted online.

7.4 Factors affecting knowledge sharing

This section deals with the summary of the findings regarding factors affecting knowledge sharing for the PHRDF members.

7.4.1 Diversity of membership in the PHRDF

This study's findings reveal the PHRDF consisted of different categories of HRD professionals in terms of position, rank or level, and job title which is often associated

with the level of importance depending how low or how high in the hierarchy the individual is. According to the findings, the PHRDF members appreciated this diversity as it was one of the rare occasions where the different categories could mix freely and discuss issues relevant to one's functions, in this case, HRD. The findings revealed that the diversity encouraged knowledge sharing across levels and promoted learning from senior to junior members although a few members believed that learning occurred both ways, from seniors to juniors and visa versa. It can therefore be concluded that diversity in the PHRDF encouraged not only knowledge sharing, but learning as well.

7.4.2 Motivation for knowledge sharing

The findings revealed that most PHRDF members had experience and knowledge of their field and were therefore motivated to participate in knowledge sharing because of the confidence enhanced by having experience and knowledge. They also attributed their willingness to share knowledge and experience to the fulfilment they derived from sharing the knowledge they had gained throughout the period they had been in the HRD field.

The findings also revealed that sharing knowledge enhanced reputation and that motivated PHRDF members to share their knowledge even more. This showed that they benefited from sharing knowledge although the motivation to share their knowledge was intrinsically motivated and not motivated by any rewards or incentives. On the other hand, the senior managers were motivated to share their knowledge based on their obligation as managers and leaders to capacitate their staff members. They were concerned about succession planning, prevention of silos, preservation of institutional memory, encouraging innovation and people development and that motivated them to share their knowledge.

In terms of the presence of a knowledge sharing culture as a motivator for knowledge sharing, the findings revealed that the majority of PHRDF members agreed that a knowledge sharing culture in the PHRDF was significant. The knowledge sharing culture in the PHRDF was preluded by the high degree of information sharing which laid a foundation for building a knowledge sharing culture. Findings revealed that there was

a high level of knowledge sharing in the PHRDF hence the members confirming the presence of a knowledge sharing culture.

The study's findings revealed that there were no incentives for PHRDF members to share their knowledge and knowledge sharing occurred voluntarily. Half of the members considered the idea of introducing incentives for sharing knowledge positively and half were against the idea. Those who favoured incentives regarded them as motivators for knowledge sharing, whilst those who were against the idea raised the point of fearing abuse of the knowledge sharing practice. From a management point of view, Senior Managers regarded sending their staff members to courses, workshops and training as an incentive for knowledge sharing as they were required to share lessons learnt from attending these events. Some Senior Managers considered allowing staff members to attend events such as sports days and social functions as creating opportunities and being incentives for meeting colleagues and sharing knowledge whilst networking at these events.

In terms of recognition of expertise as a motivator for knowledge sharing, the majority of PHRDF agreed that they would be motivated even more to share knowledge if their expertise was recognised. This revealed that most of the respondents required extrinsic motivators to encourage them to share knowledge. Those who were not concerned about whether they were recognised or not for sharing knowledge showed that they were motivated to share their knowledge for the sake of goodwill and growth of their colleagues. This finding revealed that there was an element of altruism among the members of the PHRDF regarding their motivation to share knowledge.

In addition to the above finding, the majority of PHRDF shared knowledge with one another because they expected their colleagues to share knowledge with them should they need it. This motivation to share knowledge is based on reciprocal rewards which are intrinsically motivated. The members recognised that as a CoP they would not be able to work in isolation and should they hoard their knowledge, their colleagues would do the same. The issue of trust was regarded as a significant factor for PHRDF members' willingness to share their knowledge. Their trust for others' capabilities and

competencies, experience and knowledge and the strong relationships formed by their PHRDF members resulted in their willingness to share their knowledge with others at the PHRDF.

Not only were PHRDF members participating in knowledge sharing at the PHRDF meetings, the study's findings revealed that they shared their knowledge outside of the forum meetings as well. This indicated that although the PHRDF provides a platform for sharing knowledge, the knowledge gained is transferred to others proving that there is a social network that exists outside of the forum. According to the findings, this social network consisted of colleagues in HRD who are not in the PHRDF, supervisors who require feedback from the meetings as well as other colleagues who required HRD knowledge for service delivery purposes. In addition, there were various meetings held at the department level where the PHRDF members share knowledge gained from the PHRDF with their colleagues. The findings suggested that Senior Managers arranged these meetings for knowledge sharing purposes.

The use of ICT as revealed by the findings was the focus in the case where knowledge needed to be transferred to others outside the PHRDF. Although the intranet, telephones and e-mails were used to contact members and other relevant stakeholders such as the DPSA, a knowledge portal or institutional repository or an active online community would provide real time consultations for PHRDF members as suggested by the findings. The PHRDF members relied on documenting what has been shared at the PHRDF for later use and reference. From a management point of view, the Senior Managers felt that the internet and departmental websites sufficed in the absence of a knowledge management portal. However, the findings showed that what was available was inadequate when meetings were postponed and contact with the PHRDF and the DPSA was limited to meet immediate knowledge and information needs. Therefore it can be concluded that there is a need for the introduction of modern technology to facilitate knowledge sharing and access beyond physical locations and venues.

7.5 Challenges with knowledge sharing

This section will discuss challenges to knowledge sharing in the form of factors that could create barriers and hindrances to the sharing of knowledge within the PHRDF.

7.5.1 Sharing knowledge in the presence of the Supervisor

In terms of the setup of the PHRDF that included various level of HRDF professionals, the findings revealed that the PHRDF members did not have difficulty in sharing knowledge in the presence of their supervisors. This finding is very interesting as it was mentioned earlier that there is significant importance that is placed in the hierarchy of positions of individuals in public service because of its bureaucratic nature which could result in junior members refraining from expressing their views in the presence of their supervisors for fear of judgment as was revealed in the findings. However, the findings revealed that in the PHRDF, members did not find it difficult to share their knowledge in front of their Supervisors. This finding could be attributed to the presence of a knowledge sharing culture in the PHRDF as well as the presence of CoP-like meetings, information sessions and learning networks in some departments as suggested by the Senior Managers.

7.5.2 Knowledge sharing occurs from expert to novice

The findings revealed that the inclusion of senior managers in the PHRDF facilitated knowledge sharing from expert to novice. According to the findings this encourages learning from experts by novice and this renders the PHRDF a stratified-sharing community. The feeling that one is forced to share was regarded as the barrier to sharing knowledge by some of the PHRDF members. The bulk of barriers mentioned included organizational culture, management support, information sharing, fear of being judged, lack of opportunity to share, occupational level, and lack of recognition.

7.5.3 The effect of developing an institutional repository or knowledge portal

According to this study's findings, the majority of respondents would make use of an institutional repository or knowledge portal for sharing knowledge if it was available. They indicated that limitations of time and distance would be reduced if there was an online portal available to share knowledge. However, the findings revealed that very few

members had participated in an online virtual community. This finding illustrates how the PHRDF as a CoP did not optimally utilize the ICTs available to promote knowledge sharing, bearing in mind that its members belong to different departments and they are often beleaguered by postponements of scheduled meetings which an online community's presence would be used to mitigate against these challenges. Although Senior Managers regarded ICTs as enablers of knowledge sharing, their perspective centred on the use of websites, shared drives, e-mails and to a lesser extent, knowledge portals as prevalent means of ICT usage for knowledge sharing.

7.5.4 PHRDF as a platform useful for knowledge sharing

In terms of whether the PHRDF was regarded as a useful platform for sharing knowledge, the findings reveal that the members agreed that it was useful for sharing HRD matters. This was evident from the comments regarding repeated postponements with one Senior Manager estimating that it did not sit for close to two years. The findings revealed that although it was a useful platform for knowledge sharing, missing its scheduled times, creates a gap of knowledge among HRD professionals. It can be deduced from these findings that PHRDF members regard the PHRDF as a conduit for both information from the DPSA and a knowledge sharing space for HRD professionals.

7.6 Strategies to overcome challenges to knowledge sharing

This section will deal with strategies to overcome challenges to knowledge sharing as revealed by the findings.

7.6.1 Knowledge sharing inclusion in performance assessments

The findings revealed that most PHRDF members supported the idea of including knowledge sharing in performance assessments as an incentive for knowledge sharing and as a way of rewarding those who share their knowledge with their colleagues. Those who did not support the idea reasoned that the spontaneity of knowledge sharing would be compromised by the lure of rewards and incentives. However, in light of the previous discussions, most members shared their knowledge for altruistic reasons and some even mentioned that they would share their knowledge regardless of whether there were rewards or not. However, without a proper knowledge management strategy

or a knowledge sharing policy it would be difficult to include knowledge sharing in performance. Therefore, this finding supports the development of a knowledge management strategy or policy that would provide guidelines for monitoring and evaluating knowledge sharing.

7.6.2 The development of a knowledge sharing policy

According to the findings, the majority of PHRDF members supported the idea of developing a knowledge sharing policy. The majority of Senior Managers acknowledged that the lack of a knowledge management policy resulted in the absence of formalized knowledge sharing procedures. The findings revealed that some departments were in the process of reviving some of the knowledge management processes such as establishing learning networks and knowledge portals. From these findings, it can be concluded that there was a need for knowledge sharing to be formalized.

7.6.3 Attitudes towards establishing an institutional repository or knowledge portal

In terms of assessing attitudes towards the establishment of a knowledge portal that could facilitate knowledge sharing in the PHRDF, the members recommended the idea of establishing an institutional repository or knowledge portal. The findings revealed that Senior Managers relied on the remaining staff when one of the staff members was on leave by ensuring that all staff members are multi-skilled. They ensured that staff members would handover outstanding work to the remaining staff so that they would know what to do. Other Senior Managers relied on the records management system to locate files containing information that they needed in the absence of the relevant staff member and others searched for the required information from documents posted on departmental websites or the intranet. However, if there was an institutional repository or an online discussion forum where processes and procedures were stored, the tacit knowledge that the staff member going on leave has, would have been captured on the institutional repository.

7.6.4 IT as an enhancer in facilitating knowledge sharing

The findings revealed that IT was regarded as a means to enhance the facilitation of knowledge by the PHRDF members. All males agreed that IT facilitates knowledge sharing as did most (92.3%) of the females. Similarly, in terms of the support for use of social media for sharing knowledge, all males supported it, whiles 40% of the females showed reservation in supporting social media as a knowledge sharing medium concerned that it is often used inappropriately. There appears to be acknowledgement of the prevalent use of IT and social media for sharing knowledge as seen in other industries, however there is a lack of resolve shown in the findings regarding stepping in that direction. The lack of resolve could be attributed to ignorance pertaining to the availability of other IT methods other than intranets and websites and concern for lack of control in the use of social media.

7.6.5 PHRDF as the relevant platform for knowledge sharing

In terms of whether the PHRDF had support as the relevant platform for knowledge sharing, the PHRDF members maintain that the forum is the correct platform for sharing HRD knowledge proving that CoPs facilitate and encourage knowledge sharing. Senior Managers regarded the PHRDF as a platform which equipped their staff members with new knowledge and skills. When the members are equipped they easily shared their knowledge with others. This resulted in them being entrusted with higher responsibilities as they appeared more knowledgeable. It can therefore be concluded that CoPs are successful mediums for knowledge sharing purposes because they capacitate and enhance employees' competence according to the findings.

7.6.6 Changing the composition of the PHRDF according to members of the same rank

The findings revealed that only a few members of the PHRDF would be comfortable with sharing knowledge only among the same rank or level. The majority favoured the current composition with a diversity of membership in terms of ranks, levels and positions as it encouraged sharing and learning about strategic issues and operational issues simultaneously. This finding placed the PHRDF not only as a sharing platform, but also as a learning platform which is usually one of the attributes of CoPs.

7.6.7 Motivation to share knowledge

In terms of developing a strategy to motivate PHRDF members to share knowledge, the findings revealed that the members were motivated to share: when they are capacitated with knowledge; they always want to share their knowledge; and when they want to help others, in that order. Since the members of the PHRDF derive their motivation from altruistic motives, it is reassuring that the findings revealed that Senior Managers send their staff members to attend courses, workshops, training and conferences to ensure that they are knowledgeable and also as an incentive. Another Senior Manager mentioned the existence of learning networks and a knowledge portal in her department to encourage knowledge sharing.

7.7 Recommendations

It has been established from the study's findings that a Combination of information and knowledge sharing takes place in the PHRDF through presentations, discussions, electronic documents posted on intranets and websites and physical documents. Meetings arranged by Senior Managers in departments facilitate further information and knowledge sharing and contacts outside the PHRDF are accessed by e-mail or telephone for knowledge sharing purposes. Literature has already established that GITOC's KIM workgroup had developed a KIM draft strategy in 2004 (Mphahlele 2010) however, it was biased towards ICT. The recommendations made in the following section relates to policy and practice of knowledge sharing in the KZN public service and its CoPs since this study sought to explore sharing in the PHRDF and also hoped to inform the development and implementation of a knowledge management strategy for the KZN PA.

7.7.1 Develop a knowledge management strategy and policy

It is usually difficult to implement any business process without an approved guiding document like a strategy or a policy as most processes in public service are driven by compliance obligations. For knowledge management to succeed, knowledge sharing processes and procedures must be clearly specified in order for them to be properly implemented. Data revealed that there are no proper structures to facilitate knowledge sharing (see comment in Table 5.10) and comments in section 5.3.5.2 call for

formalizing knowledge management as a means of promoting knowledge sharing. In addition 73% of respondents favoured the developed a knowledge sharing policy. It is recommended that both the KZN PA knowledge management strategy and policy be developed which will incorporate knowledge sharing so that they can inform knowledge sharing in CoPs such as the PHRDF. The development of knowledge management strategy and policies could change the organizational culture into one that supports knowledge management as the comment on Table 5.10 revealed that knowledge management was not supported.

7.7.2 Establish knowledge management units

Three (30%) Senior Managers acknowledged the need for knowledge management to be a formal functional unit which would accommodate knowledge sharing practices in the public service. In section 5.5.4 data revealed that four (40%) Senior Managers were in the process of reviving knowledge management functions in their units. KM units should be established in all the KZN PA departments to promote understanding of knowledge and reap the benefits of a knowledgeable public service. Leadership in terms of developing a KM strategy and policy is required, and without KM units in departments, there is bound to be a lack of standardization in terms of what KM entails. The KM unit would be led by a Chief Knowledge Officer who will champion the implementation of KM in his/her department. The existence of a KM unit will also assist members of the PHRDF in understanding fundamental principles of KM such as the differences between information and knowledge as well as the mechanisms available for knowledge sharing.

7.7.3 Use ICTs to strengthen knowledge sharing

There is a variety of ICTs that are currently used for online communication such as podcasts, web seminars and social networks. To mitigate against the challenges of missing dates for meetings and distance, the PHRDF chairperson could arrange for online meetings using the above mentioned facilities to enable members of the PHRDF to interact and share knowledge without leaving their workstations if necessary. Data revealed in Section C that 70% of the Senior Managers believed that social media is the modern way of communication which could be used to facilitate knowledge sharing

provided proper control mechanisms were put in place. In Section 5.3.5.5, data also revealed that 91.3% of responds agreed that IT facilitates knowledge sharing and some commented that easy access to one another through social media as well as the implementation of e-learning are possible through IT.

7.7.4 Establishment of a knowledge portal or repository

This study recommends the establishment of a knowledge portal or repository that will support the activities of knowledge sharing in the PHRDF. This facility should consists of meeting discussions, knowledge maps, best practice, database of training providers and all skills development projects carried out in HRD in the KZN PA including policies, processes and procedures and implementation plans. In Section 5.3.5.3 data revealed that 86.1% of the respondents recommended the establishment of database for knowledge sharing purposes and they saw it as a reference facility as well as a platform for knowledge management as mentioned in the comments in Section 5.3.5.4. The knowledge management unit should facilitate the development and implementation of an institutional repository.

7.7.5 Develop strategies to encourage knowledge sharing

Although the findings revealed that there was a knowledge sharing culture in the PHRDF and the level of sharing knowledge was high, it is recommended that knowledge sharing be included in performance assessments in order to encourage those who might be reluctant to share their knowledge and also for the reason that KM is already one of the competencies required from Senior Managers in public service. These strategies that would allow knowledge sharing to occur as part of the normal functions of employees include assessing knowledge management as a key responsibility area of Senior Managers as well as formalizing CoPs as data has shown that 80% of Senior Managers felt that the PHRDF made a difference in the depth of knowledge of their staff members.

7.7.6 Nature and conduct of meetings

Data revealed that meetings do not sit frequently, they are poorly attended and there is time for interaction amongst members is inadequate according to comments in Table 5.10. According to the interviews held with Senior Managers, the meetings were already scheduled on the calendar, however, issues other than PHRDF interfere with the schedule and other service delivery priorities resulting meetings being canceled. Therefore it is recommended that a deputy chairperson should be elected from another department other than the Office of the Premier to circumvent the absence of the current chairperson who by virtue of being in a political office would be regularly engaged with broader Provincial HRD matters. It is also recommended that an experienced member of the PHRDF who is not a Senior Manager be given responsibility of chairing PHRDF members when the above-mentioned Senior Managers are not available in order to encourage middle and junior managers in the PHRDF to share knowledge since the comments in Table 5:10 allude to junior members keeping silent when others presumably senior, dominate discussions at the meetings.

7.8 Significance and contribution of the study

This section deals with the significance of this study and the contributions it makes to theory.

7.8.1 Significance of the study

This study explored theoretical evidence of knowledge sharing in public service and provided empirical evidence of knowledge sharing in a CoP as a case study in order to utilize the findings to inform the KZN Provincial Knowledge Management Strategy. The study's findings were therefore of significance as they provided empirical evidence of knowledge sharing practices in the context of South African public service and how CoPs could be successful in ensuring knowledge sharing in public service. Previous studies in knowledge sharing provided very little empirical evidence of knowledge sharing practices under investigation; most of the focus is on knowledge sharing as a process within knowledge management. Few studies have investigated knowledge sharing behaviours in public service (Manele 2005; Maponya 2005; Mogotsi, Boon, and Fletcher 2011) and even these studies have not assessed knowledge sharing within CoPs. This study is significant because it positively supplemented other studies on knowledge management and the role of knowledge sharing and CoPs in fostering

knowledge management by isolating the exploration of knowledge sharing practices within a CoP.

7.8.2 Contributions to theory

This study was the most comprehensive to date in the South African literature establishing social exchange processes such as issues of diversity of positions in a CoP, trust, sense of belonging, reciprocity and values and norms that influence willingness to share knowledge in a CoP in public service. Beside the study that looked at applying social capital theory in information and knowledge research (Fani 2015), little effort has been extended to research the role of social exchanges in facilitating knowledge sharing in the South African public service. The findings of this study have contributed to theory by providing empirical evidence that members of a CoP forged a strong relationship amongst themselves which transcends the boundaries created by diverse positions and ranks, establishes trust, promotes willingness to share their knowledge due to altruistic values, provides a sense of belonging to a network and creates a reciprocal system that eliminates the silo mentality.

In addition, the findings of this study added to the body of knowledge regarding knowledge creation based on the SECI model. The findings provided evidence of the SECI model application by demonstrating how knowledge was shared face-to-face amongst the PHRDF members during presentations and discussions in the meetings (tacit to tacit). Members then recorded their own notes and coded it according to their understanding to facilitate ease of recalling the knowledge shared at the meeting (tacit to explicit). This was then followed by the process of combining the knowledge recorded with other sources such as policies and implementation plans mentioned at the meeting and follow-ups outside of the PHRDF (explicit to explicit) using telephones or e-mails. This process was supported at the departmental meetings and through information sessions and learning networks. Finally, how the individual members learned from the group interactions that occurred at the PHRDF as well as at the departmental meetings and accumulated their own knowledge (explicit to tacit). Evidence from the findings showed that the PHRDF and the departmental meetings provided the *ba* for all the processes of SECI to take place during knowledge sharing.

The findings made additional contributions to the theoretical framework for classifying CoPs. Theory differentiate between informal, supported and structures CoPs (Jeon, Young-Gul and Koh 2011). However, the findings revealed that the PHRDF exhibited characteristics of both a supported and a structured CoP in that it was formally authorized and supported by DPSA and strategically created and strategically supported by the KZN PA. This new evidence from the findings added a fourth dimension of a supported and structured CoP, to the three previously mentioned dimensions. In addition, the framework for classifying CoPs, recognizes stratified communities which make distinctions between grades and egalitarian communities which do not make distinctions between grades; and how knowledge sharing practices are conducted within these communities, whether knowledge is shared from novice to expert or from expert to novice. The study's findings added a new dimension to the theory in that, the PHRDF was a stratified community where the different grades were recognized, however knowledge sharing flowed from expert to novice when external guests from the National departments visited, but flowed either way during discussions within the meetings without any distinction between grades. Therefore, the study added to the theory that it is possible for a stratified community to exhibit characteristics of both stratified-sharing and egalitarian-sharing communities.

Further, the study contributed to the body of knowledge regarding the motivation to share and the barriers to knowledge sharing. Theory highlighted the importance played by willingness to share that could be hindered by various factors. Personal benefits, community-related considerations and normative considerations which consist of status and career advancement, a better professional reputation, emotional benefits and intellectual benefits all contribute to the motivation to share knowledge (Amayah 2013; Lam and Lambermont-Ford 2010; Ardichvili 2008). The study's findings supported with previous evidence to demonstrate that members of the PHRDF were influenced by community-related considerations such as building and helping others to grow, establish ties and future reciprocal benefits, and increasing one's reputation. Among the three dozen barriers of knowledge identified by Riege (2005), only potential technological barriers and potential organizational barriers were found to hinder knowledge sharing in this study. Rewards and incentives were minimally desirable to the PHRDF members as

motivation to share knowledge because the members shared knowledge for the good of the other as well as for achieving the goals of KZN HRD. Therefore, new evidence showed that it is possible for rewards and incentives to be unimportant for knowledge sharing in a CoP because of the relationships that exist within the group which result in wanting to see others succeed.

7.8.3 Implication for policy and practice

The findings of this study have potential to influence policy. At the time of this study there was no existing policy for knowledge sharing in the KZN PA beside the communication strategy consisting of how to disseminate government information and various reporting templates should be used. The findings revealed the need for guidance and direction regarding knowledge management in the KZN PA which would consequently include the development of a knowledge sharing policy. Therefore, the findings of this study would provide policy makers, decision makers, and departmental knowledge management units with empirical evidence, relevant data, baseline data and insightful guidelines to support the development of a KM strategy for the KZN Province and contribute to the formulation of a National KM framework.

The study contributes to practice by comprehensively answering the question of how knowledge sharing occur in the public service and specifically whether a CoP facilitates knowledge sharing. Firstly, the study has provided evidence that there was a blurring of understanding between information and knowledge in terms of the practice of sharing knowledge for both Senior Managers and other members of the Forum. This study provided information that distinguishes between information, explicit knowledge and tacit knowledge which facilitated how effective staff members perform their functions. Secondly, the study has shed more light regarding the major role played by CoPs in sharing knowledge and hopes that decision makers would leverage the existing forums in the South African public service not just for reporting and information sharing, but also for knowledge sharing purposes. Thirdly, since rewards and incentives for knowledge sharing seemed to be insignificant in a CoP according to this study's findings, whilst recognition of expertise and increased reputation seemed to be

important, decision makers could introduce ways of ensuring that those who share are recognized through processes such as performance assessments.

Fourthly, this study has revealed that the absence of a knowledge repository for the PHRDF is a disadvantage which is even more exposed when the meetings were not held as there was a gap in terms of the knowledge required on how to implement certain HRD processes. Fifth, the study's findings provided evidence regarding the lack of knowledge pertaining to the use of online virtual communities and social media for sharing knowledge in real time which is unfortunate, because these modern technologies provide real-time information and knowledge sharing mechanisms. Finally, it is evident that there is little research done on the practice of knowledge sharing in the South African public service and within CoPs in particular, and it is hoped that the empirical evidence from this study would inform the practice of knowledge in the public service in general.

7.9 Future research

This study explored knowledge sharing practices in the KZN PHRDF, which is a CoP of HRD professionals and brought to light areas of knowledge sharing in a CoP public service that required further investigation.

- This study explored knowledge sharing within the PHRDF. Other similar studies need to be done in other forums in KZN or Nationally to determine whether the findings will be consistent or different.
- Further studies need to be done on knowledge sharing in public service as most studies already done deal with investigating knowledge management.
- This study revealed the skills that are required for an individual to perform HRD work and it was confirmed that knowledge sharing at the PHRDF enhances those skills. It was also revealed that staff members are sent to courses, workshops, training and conferences for knowledge sharing purposes. There is a need for further study comparing the role played by a CoP in knowledge sharing and the role played by attending courses, workshops, training and conferences.

- The demographic data did not indicate any significant differences regarding knowledge sharing in the PHRDF showing a disregard for biographical distinctions in a CoP. Further research is necessary to establish the effects of knowledge sharing in the promotion of women to executive positions in the public service.
- The prevalence of use of the intranet and departmental websites for accessing sources of HRD knowledge was prominent in this study; however, an institutional repository or knowledge portals, virtual online community participation, and use of social media were the least used means for knowledge sharing. There is a need to investigate the role these media play in knowledge sharing and why they were the least in this study when most departments had established IT infrastructures and also used social media such as Facebook and Twitter to communicate with the public.
- A study on how the appointment of Senior Managers occurs by political deployment affect trust in knowledge sharing should be carried out.

7.10 Summary of the chapter

The final chapter presented the summary of the findings, significance and contributions, conclusions and recommendations of the study which explored the knowledge sharing practices in the South African public service using the PHRDF as a case study. Contributions to theory and implications for policy and practice are discussed. Recommendations are made and future research directions are suggested. Triangulation of theories which included the Motivation Theory, social exchange theory, SECI model and Klein's Framework of Communities of Practice were applied as a lens through which this study was conducted and the case study method guided how the research was done. Both the qualitative and quantitative methodologies were used to collect data. The literature review provided the broader perspective of knowledge management in the public service in South Africa and internationally. South African Public Policy making, service delivery, and HRD issues in the South African public service were also discussed.

The purpose of the research to explore knowledge sharing practices in the South African public service using the PHRDF as a case study was accomplished. The study's findings revealed that knowledge sharing occurred in the PHRDF and it was considered a very important activity. The study's findings revealed that members of a PHRDF did not necessarily require incentives to share knowledge however, they were motivated by the fulfilment of sharing their knowledge for others' development and for ensuring that all KZN HRD professionals were successful in the achievement of their departmental goals. The PHRDF provided a knowledge sharing culture where knowledge flows were both from experts to novices as well as from novices to experts. Meetings were found to be the main method for sharing knowledge with other members in HRD and intranets and websites were mainly used to store explicit knowledge in the form of HRD documents. The irregularity of meetings of the PHRDF was found to be a huge barrier to knowledge sharing. Participation in modern information and knowledge technologies such as knowledge portals, social media and online virtual communities was very limited and contributed to the lack of group knowledge sharing outside the PHRDF meetings.

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APPENDICES

Appendix 1: Submission from the KZN Director-General approving the study to be conducted



DIRECTORATE:

Private Bag X9037, PIETERMARITZBURG, 3200 8th Floor, Natalia Building, 330 Langalibalolo Street, Plotermantzburg, 3200 Tel: 033 395 2072 Fax: 033 395 2190 Administration & Auxiliary Services

SUBMISSION

TO:

MR NVE NGIDI

DIRECTOR-GENERAL

SUBJECT:

REQUEST FOR APPROVAL TO CONDUCT RESEARCH AT THE PROVINCIAL PUBLIC SERVICE TRAINING ACADEMY'S PROVINCIAL HUMAN RESOURCE

DEVELOPMENT FORUM

PURPOSE

The purpose of this submission is to obtain the approval for the Deputy Manager: Records Management Services, Mrs Nthabiseng Mosala-Bryant to conduct a PhD research at the Provincial Public Service Training Academy utilizing the members of the Provincial Human Resource Development Forum (PHRDF).

2. BACKGROUND AND DISCUSSION

- 2.1 Mrs Mosala-Bryant is a registered PhD student at the University of KwaZulu-Natal in Pietermaritzburg. The topic of her research is: Knowledge sharing in the public service: The case of the KwaZulu-Natal PHRDF.
- 2.2 This research seeks to enquire about the practice of knowledge sharing in the public service and whether communities of practice such as the PHRDF would be the best suited approach of sharing knowledge in order to enhance and improve service delivery.
- 2.3 It is envisaged that the findings of this study would contribute to the body of work on knowledge management in the public service as well as inform how knowledge sharing could be done in similar communities of practice to retain knowledge produced in public service. In addition, the findings could also be used to inform the knowledge management strategy of the KZN Provincial Administration.
- 2.4 This research will require the use of government publications such as the National Human Resource Development Strategy (NHRDS), the draft KZN HRD Strategy for the Provincial Administration as well as other available documents pertaining to human resource development.
- 2.5 The research will consist of surveying PHRDF members using self-administered questionnaires, interviewing senior managers in human resource development in the 14 departments represented in the PHRDF and non-participant observation at the PHRDF meetings. The participants will be informed of the confidentiality clause of the research which renders them anonymous and the privilege to withdraw participation at any time during the research.

Working Together For A Secure and Prosperous Future

REQUEST FOR APPROVAL TO CONDUCT RESEARCH AT THE PROVINCIAL PUBLIC SERVICE TRAINING ACADEMY'S PROVINCIAL HUMAN RESOURCE SUBJECT: DEVELOPMENT FORUM

This research will add to Mrs Mosala-Bryant's personal development as it contributes towards 2.6 her Personal Development Plan (PDP) and career path. She also coordinated the team which produced the draft Knowledge Management Strategy for the KZN Provincial Administration.

FINANCIAL IMPLICATIONS 3.

There will be no financial implications for the Office of the Premier.

RECOMMENDATION 4.

It is recommended that approval be granted to Mrs Mosala-Bryant to conduct the PhD research at the Provincial Public Service Training Academy with KZN PHRDF members.

Mayout MRS N.N. MOSALA-BRYANT DEPUTY MANAGER: RECORDS MANAGEMENT SERVICES
DATE: 27 01 2014

SUPPORTED INOT SUPPORTED

MR F.M.A. SAFLA GENERAL MANAGER

KZN PROVINCIAL PUBLIC SERVICE TRAINING ACADEMY

DATE: 13/2/2014.

SUPPORTED INOT SUPPORTED with a provise that OTP has exclussive rights to the published findings and used MS P.D. KHUMALO by the according. SENIOR GENERAL MANAGER

INSTITUTIONAL DEVELOPMENT & SUPPORT DATE: 14/02/2014

APPROVED/ NOT APPROVED

2005.04 MR N.V.E. NGIDI DIRECTOR - GENERAL

DATE:

Working Together For A Secure and Prosperous Future

Appendix 2: Gate-keeper's permission letter clarifying comment regarding ownership of research



vate Bag X9037, PIETERMARITZBURG, 3200 Floor, Natalia Building, 330 Langalibalele Street, Pietermaritzburg, 3200 l: 033 395 2868 Fax: 033 345 1797

BRANCH:

Institutional Development and Support Ms P.D. Khumalo

HUMAN AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE UNIVERSITY OF KWAZULU-NATAL

SUBJECT: GATEKEEPER'S PERMISSION

- This letter seeks to clarify the comment made by Ms Khumalo, the Senior General Manager in the submission to the Director-General Mr N.V.E. Ngidi written by the researcher, Nthabiseng Mosala-Bryant requesting approval to conduct research at the Provincial Public Service Training Academy (PPSTA) in the KZN Office of the Premier.
- The comment, 'with a proviso that OTP has exclusive rights to the published findings and used by the Academy' was made due to the following concerns:
 - how would the time spent with the respondents during the collection of data be recovered by government
 - the lack of control by government over the published data if the university has copyright to the research findings
 - the lack of opportunity by government to clarify some of the findings in the research
- After a bilateral meeting was held with the researcher it was established that the IP2 form stating that UKZN is the sole owner of the intellectual property is signed by every research student at registration.
- It was then agreed at this meeting that the researcher will be granted access to do research at the PPSTA without the above-mentioned proviso.
- 5. It is hoped that the university and government will review the issue of data collection from government respondents without government owning part of the final product, at a relevant platform.
- I hereby support that the research be done by Nthabiseng Mosala-Bryant as requested in the attached submission.

Regards

MS P.D. KHUMALO

SENIOR GENERAL MANAGER

INSTITUTIONAL DEVELOPMET AND SUPPORT DATE: 10/03/20/4

Noted/Comments: The

concerns

Working Together For a Secure and Prosperous Future.

Appendix 3: Covering letter for the PHRDF members' questionnaire



15 February 2014

Dear Respondent

<u>Informed Consent Letter</u>

Researcher: Nthabiseng Mosala-Bryant

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Supervisor: Dr Ruth Hoskins

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HSSREC Research Office: Ms P Ximba Institution: University of KwaZulu- Natal Telephone number: +27 (0) 31 260 3587 Email address: ximbap@ukzn.ac.za

I, Nthabiseng Mosala-Bryant doctoral student of the University of KwaZulu-Natal, kindly invite you to participate in the research project entitled "Knowledge sharing in the public service: the case of a KZNProvincial Human Resource Development Forum"

This research project is undertaken as part of the requirements of the PhD, which is undertaken through the University of KwaZulu-Natal, Information Studies Programme.

The aim of this study is to explore knowledge sharing practices and experiences in the KZN Provincial Human Resource Development Forum.

Participation in this research project is voluntary. You may refuse to participate or withdraw from the research project at any stage and for any reason without any form of disadvantage. There will be no monetary gain from participating in this research project. Confidentiality and anonymity of records identifying you as a participant will be maintained by the Information Studies Programme, at the University of KwaZulu-Natal.

If you have any questions or concerns about participating in this study, please feel free to contact myself or my supervisor at the numbers or addresses indicated above.

Thank you for participating	in this research project.
Nthabiseng Mosala-Bryant	15 February 2014
Signature	 Date

Declaration of Consent

	tand the contents of this document and the nature of the pating in the research project.
I understand that I am at liberty to withdr	raw from the project at any time, should I so desire.
SIGNATURE OF PARTICIPANT	DATE.

Appendix 4: Covering letter for Senior Managers interview



Dear Respondent

Invitation to participate in a survey

I, Nthabiseng Mosala-Bryant doctoral student of the University of KwaZulu-Natal, kindly invite you to participate in the research project entitled "Knowledge sharing in the public service: the case of a KZN Provincial Human Resource Development Forum". This research project is undertaken as part of the requirements of the PhD, which is undertaken through the University of KwaZulu-Natal, Information Studies Programme.

The aim of this study is to explore knowledge sharing practices and experiences in the KZN Provincial Human Resource Development Forum. The study will assist in understanding the implications of knowledge sharing in enhancing employee performance. The findings may also contribute towards developing the knowledge management strategy of the KwaZulu-Natal Provincial Administration.

Participation in this research project is completely voluntary. You may refuse to participate or withdraw from the research project at any stage and for any reason without any form of disadvantage. There will be no monetary gain from participating in this research project.

Confidentiality and anonymity of records identifying you as a participant will be maintained throughout the study by the Information Studies Programme, at the University of KwaZulu-Natal. Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission.

I appreciate the time and effort it would take to participate in this study. The interview will take approximately 30 minutes.

Thank you. Yours sincerely Nthabiseng Mosala-Bryant

Researcher: Nthabiseng Mosala-Bryant

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Please complete this form

Title of study: "Knowledge sharing in the public service: the case of a KZN Provincial Human Resource Development Forum"
Ihereby confirm that I understand the contents of this
document and nature of the research project, and I consent to participate in the research project as outlined in the document about the study.
I, I consent/do not consent to have this interview recorded
I acknowledge that I have been informed of the purpose of this survey. I am aware that participation in the study is voluntary and I understand that I am at liberty to withdraw from the project at any time, should I so desire.
Participant
Signature
Date:
Email:
Researcher
Signature
Date:

Survey Questionnaire for PHRDF members

My name is Nthabiseng Mosala-Bryant, Student Number: 207526614, a PhD in Information Studies candidate at the University of KwaZulu-Natal, Pietermaritzburg campus, South Africa. I am conducting this study as part of the requirements for the Doctoral degree. The title of this study is: "Knowledge sharing in the public service: the case of a KZN Provincial Human Resource Development Forum". The purpose of this study is to explore knowledge sharing practices and experiences in the KZN Provincial Human Resource Development Forum. The study will assist in understanding the implications of knowledge sharing in enhancing employee performance. The findings may also contribute towards developing the knowledge management strategy of the KwaZulu-Natal Provincial Administration. I will be extremely grateful if you could assist me in this endeavor by answering the following questions. The time for completing this questionnaire will be approximately 30 minutes. Your answers will be kept anonymous with confidentiality.

Instructions for completing questionnaire

- a. Unless otherwise instructed, please place a tick or a cross in the space provided
- b. When you are required to answer in your words, please use the space provided

Part A: Personal Data
1. Department:
2. Title of your job e.g. Trainer:
3. Level:
4. Position e.g. Assistant Manager:
5. Sex: ()Female () Male
6. Religion: () Christian, () Muslim, () Traditional, () other (please mention)
7. Age
8. Highest level of education: () None, () Primary education, () Secondary education,
() Post-secondary
(please specify)

Part B: Knowledge sharing practices

To fill this questionnaire you will be required to choose your answer from the given options. You have been asked to tick the options that apply to you and to elaborate where necessary.

B1: How is knowledge shared in the PHRDF

9. How would you rate level of knowledge sharing in	the PHRDF?
() Very high () High () Moderate, () Low, () Very low () Do not know
Please explain for your answer	

10. How would you rate the importance of sharing knowledge? () Very high () High () Moderate() Low()Very low () Do not know Please explain your answer	
11. Have there been instances in the course of doing your work related to HRD where you felt you lack particular know how?() Yes (No)If Yes, did attending the PHRDF meeting or one of the PHRDF members assist you?	
12. What kind of technical knowledge/skill/ know-how is required in HRD?	
13. How often do you have access, find or acquire the kind of know-how and skills you have described on 12 above from the PHRDF? () Always () Sometimes () Rarely () Never Please explain your answer	
14. Where do you get the required know-how and skills to be up-to-date with developments in the HRD field? You can tick more than one relevant answer () Physical HRD Policy Documents () Intranet () Internet () PHRDF () Contacts met at the PHRDF () Informal contacts with colleagues () Courses and conferences () e-mail () workshops () social networks () cellphone text messages () other? (Please specify) 15. How do you access the knowledge shared at the PHRDF meeting? () from the website () HRD portal () write my own notes () contact other members	
 B2: Factors affecting knowledge sharing 16. The diverse membership involving senior and junior management in the PHRDF encourages knowledge sharing () Yes () No Please explain 	
17. My experience and knowledge encourages me to share knowledge with other members of the PHRDF () Yes () No Please explain	
18. Sharing knowledge enhances my reputation amongst my colleagues in the PHRDF () Yes () No Please explain	

19. There is a culture of knowledge sharing in the PHRDF() Yes () NoPlease explain
 20. If there was an incentive for knowledge sharing I would participate more in knowledge sharing () Yes () No Please explain
21. I would be motivated to share knowledge if there was recognition for my expertise () Yes () No Please explain
22. I share knowledge in order for my colleagues to share their knowledge with me when I need it. (Yes) () No Please explain
23. I trust the PHRDF members enough to share my knowledge with them () Yes () No Please explain
24. I share knowledge with my colleagues outside of the PHRDF () Yes () No Please explain
25. I document what has been shared at the PHRDF for later use and reference () Yes () No
B3: Challenges with Knowledge Sharing 26. I find it difficult to share knowledge in the presence of my supervisor () Yes() No Please explain
27. The inclusion of senior managers in the PHRDF facilitates knowledge sharing from experts to novices () Yes() No Explain for your answer

28. What would discourage you from sharing knowledge? () Loss of power () the feeling that I am forced to share () Insecurity () competition to share () Other? Please explain
29. If there was a database available for PHRDF members to share their knowledge, would you use it to share your knowledge?
() Yes () No Please explain
30. Have you participated in an online virtual community for knowledge sharing purposes? () Yes () No
31. What factors do you think prevent knowledge sharing among PHRDF members?
32. Do you think trust is an issue when sharing knowledge among PHRDF members?
33. Do you think the PHRDF has been a useful platform for sharing knowledge?() Yes () No Please explain
 B4: Strategies to overcome challenges of knowledge sharing 34. Do you think knowledge sharing should be included in the performance assessment system for reward purposes? Yes No Please explain
35. Do you think there should be a policy to encourage knowledge sharing?() Yes () NoPlease explain
 36. What is your attitude towards the development of a database for knowledge management to facilitate knowledge sharing? () I strongly recommend it () I recommend it () I am not sure () I do not recommend it 37. Please provide your reason for your answer to 36 above.
38. Do you think IT would enhance the facilitation of knowledge sharing? () Yes () No Please explain
39. Do you think the PHRDF is the correct platform for sharing knowledge for HRD practitioners?

() Yes () No Please explain	
40. Would sharing knowledge amongst your rank be more comfortable? () Yes () No Please explain	
41. When are you motivated to share your knowledge? () when I am capacitated in that particular area () when I am pointed out to share () when I want to help others () I always want to share Please explain	

Thank you very much for your time

Appendix 6: Senior Managers' interview schedule

My name is Nthabiseng Mosala-Bryant, Student Number: 207526614, a PhD in Information Studies candidate at the University of KwaZulu-Natal, Pietermaritzburg campus, South Africa. I am conducting this study as part of the requirements for the Doctoral degree. The title of this study is: "Knowledge sharing in the public service: the case of a KZN Provincial Human Resource Development Forum". The purpose of this study is to explore knowledge sharing practices and experiences in the KZN Provincial Human Resource Development Forum.

The study will assist in understanding the implications of knowledge sharing in enhancing employee performance. The findings may also contribute towards developing the knowledge management strategy of the KwaZulu-Natal Provincial Administration.

I will be extremely grateful if you would allow me to interview you as part of my research. The interview should approximately 30 minutes. Your answers will be kept anonymous with confidentiality.

If no	, how does your staff access knowledge on human resource development matters?
de ()	Does the PHRDF make a difference in sharing knowledge related to human resource evelopment issues? Yes, () No se explain your answer
15. Does rank influence who you share your knowledge with? () Yes () No () Please explain your answer.	
16.	What factors motivate you to share your knowledge with your staff?
	How do you create an environment of knowledge sharing in your department?
18. H HRD 19. A	How do you access knowledge regarding a human resource development matter if one of the practitioner responsible for it is on leave? Are there any procedures used for capturing knowledge from employees who resign or leave mploy of the rtment?
20. A and c () Yo	Are there occasions when you would not be willing to share your knowledge with your staff colleagues? es () No se explain your answer How would you improve the sharing of knowledge in your department?
22. H	How do you motivate your staff to share their knowledge with one another?
	How do you feel about use of social media for sharing knowledge e.g. facebook, twitter, sapp, etc.
	Do you encourage communities of practice such as the PHRDF for sharing knowledge or ar platforms?

25. In your experience, staff who share their knowledge either in meetings or electronically are usually entrusted with higher responsibilities: True or False, Elaborate.
26. What policy or strategy is in place for sharing knowledge in your department? Please explain.

Thank you very much for your time.