# INVESTIGATING THE KNOWLEDGE SHARING CULTURE AMONG ACADEMICIANS IN HIGHER LEARNING INSTITUTIONS IN ZAMBIA

BY

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(B.A. LIS)

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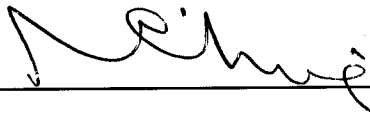
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# DECLARATION

I hereby declare that this dissertation is the result of my independent investigation, except where I have indicated my indebtedness to other sources.

It has not already been accepted in substance for any other degree, and it is not being submitted concurrently for any other degree.

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# APPROVAL

This dissertation of KAOMA LAMBA DAKA is approved in fulfilling the partial requirements for the award of the degree of Master of Library and Information Studies by the University of Zambia.

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# ABSTRACT

The research examined the existence of a knowledge sharing culture among academicians in higher learning institutions (HLIs) in Zambia. It specifically sought to investigate knowledge sharing and identify factors that either aid or hinder knowledge sharing activities among academicians. The exercise was carried out through a survey of 15 randomly selected colleges and universities in the country.

The data was collected via self-administered questionnaires and interviews. The first involved the administering of 135 questionnaires, while the second involved conducting interviews with 15 key informants from management level in the sampled HLIs as a means of verifying data collected through the questionnaires.

After carefully analysing the data, the study found that a knowledge sharing culture exists among academicians in HLIs in Zambia. It was found that academicians engaged in frequent knowledge exchanges amongst themselves and preferred doing so in meetings and via person-to-person interactions. Institutional policies and knowledge sharing initiatives were identified as the major factors influencing knowledge sharing, while lack of motivation and inadequate infrastructure support as the major hindrances to knowledge sharing.

The results brought to the fore information on the state of knowledge sharing in higher education in Zambia and draws attention to factors that influence knowledge sharing activities. The study recommended that (i) further research be carried to identify academicians' knowledge seeking behaviour and (ii) the formulation of relevant policies to address the need for motivators and improved infrastructure support. These would enable HLIs leverage their knowledge in today's competitive world.

To my husband, Steven M. Daka

and

daughter, Chikondi E. Daka.

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# CHAPTER ONE

## INTRODUCTION

This chapter introduces the investigation of the existence of a knowledge sharing culture among academicians in higher learning institutions in Zambia. The presentation begins by giving a structure of the dissertation, before giving an introduction of knowledge management and knowledge sharing in education, highlighting historical background and their role in providing competitive advantage of one institution over others.

Thereafter, the chapter gives background information on the country's education system before presenting the problem under investigation, the rationale, purpose, objectives of the study and research questions through which the objectives are addressed. This is followed by the theoretical framework for the study. The chapter then ends by defining the scope of the study outlining some of the limitations and providing a summary of the issues dealt with in the chapter.

## 1.0    Structure of the Dissertation

This dissertation comprises six chapters. The first chapter introduces the study by providing background information on the investigation, stating the specific problem under investigation and giving rationale for the study. The chapter also outlines the purpose and objectives of the study, the specific research questions addressed as well as the theoretical framework for the study.

The second chapter reviews some of the available literature that is considered to be of direct relevance to the present study in order to place the investigation within the context of similar surveys thereby enriching it as well as providing a justification for it.

The third chapter describes in detail the methodology used to collect data in order to provide answers to the questions raised in Chapter one of the study. The chapter builds on the introduction and presents details relating to the type of research design employed in the study, the study area, sample size, the data collection instruments and procedures, as well as data analysis process.

The fourth chapter presents the findings from the data collection on knowledge sharing culture among academicians in higher learning institutions. The presentation is arranged according to the research objectives and questions as set out in chapter one.

The fifth chapter presents a discussion of the findings regarding the existence of a knowledge sharing culture among academicians. The sixth chapter draws conclusions based on the findings and makes recommendations with regard to policy formulation and areas requiring further research.

## 1.1    Background

In recent years, there has been a marked transformation in the business world from the traditional manufacturing industries, where labour and capital were hailed as key factors, towards an economy that is driven by knowledge, (Davenport et al. 1998). Organizations are now faced with the task of managing knowledge effectively and efficiently to remain competitive (Alavi & Leidner, 2001; Staples et.al., 2001). They are required to create, capture, locate and share their organization's knowledge and expertise (Davenport et al. 1996; Nonaka 1994; Nonaka et al. 1998).

The education sector has not been exempted from these developments. Higher learning institutions (HLI) such as universities and colleges can be a case in point. These institutions are said to be in the knowledge business because in the course of undertaking their core business of teaching, conducting research and

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providing public service, HLI generate and utilise enormous amounts of knowledge.

Scholars such as Goddard, (1998) and Rowley, (2000) have contended that HLIs are now faced with the same marketplace challenges that besiege conventional businesses, such as competition and need to develop appropriate strategies to manage the knowledge and expertise of their academic staff.

Oosterlinck, (2001:1) however asserts that HLIs since inception "have been occupied with the fundamental elements of what we now call knowledge management" through their creation, collection, preservation and dissemination of knowledge functions, (Rowley, 2000).

Theorised by Drucker (1969) and popularised by scholars such as Nonaka and Takeuchi (1995), Senge (1990) and Wiig (1995), Knowledge Management (KM) was initially viewed as a concept in the field of business management. It has however evolved into a discipline whose principles can be applied across various fields. Its strength lies in the fact that it recognises that knowledge is key for the effective and efficient achievement of organisational goals and a large part of this knowledge resides in the organisations' human resource.

KM thus tries to ensure that what is known in one part of an institution is available to the others, in the case of HLIs, in all departments and schools. This distribution of knowledge helps academicians to learn from each other and to become both efficient and effective in their core activities. It also ensures that these institutions retain their knowledge despite large employee turn-over as a result of what is commonly known as the "brain drain".

At the heart of any KM strategy lies the concept of knowledge sharing. This is the ability among the various players to effectively distribute the knowledge they possess to others within the institution. This ability to share knowledge across an organization has been found to contribute to positive organizational performance. Research findings indicate that a "willingness to share" is positively related to profitability and productivity and negatively related to labour cost (Jarvenpaa & Staples, 2000). It is also seen to have a positive impact on growth and innovation, bottom line savings, increased customer satisfaction, increased shareholder value and learning. All these aspects provide some leverage to an institution over others.

In the context of HLIs, a knowledge sharing culture enables the free flow of academicians' know-how and know-why, by facilitating effective communication and collaboration. In so far as what is learned can be captured and shared with others, knowledge sharing enables subsequent professionals, even generations later, to build on earlier experience and prevent the need for costly re-work or of learning by making the same repetitive mistakes.

For Knowledge sharing to take place, there has to be willingness among involved parties to work together and share knowledge to their mutual benefit. The presence of collaborative effort, exchange of ideas, experiences, best practices, lessons learned and know-how in an institution are good indicators of knowledge sharing.

However, it has been observed that knowledge sharing processes have not been integrated in daily routines in HLIs. This is evidenced in the huge duplication of efforts by academicians, who for instance spend more time re-creating lecture material/course work as opposed to collaborated research (Woasinchai & Bechina, 2006).

Additionally, academicians seem to consider knowledge as their private property and are not seen to cooperate with each other to improve efficiency and quality in their work, giving no regard to the old adage that, "tree of knowledge" grows with the culture of sharing and communicating (Biloslavo & Trnavcˇevicˇ, 2007).

It can therefore be said that without an effective knowledge sharing culture, the efficiency and quality of work are compromised. This puts a strain on educational standards and opportunities to generate new knowledge are foregone.

## 1.1.1 Zambia's Situation Analysis

Zambia is a landlocked country in Sub-Sahara Africa. It occupies an area of 752,612 square kilometres and shares boarders with the Democratic Republic of Congo and Tanzania on the north; Angola on the west; Namibia on the south-west, Malawi and Mozambique on the east and; Zimbabwe and Botswana on the south.

A former British colony, Zambia has patterned its education system after its colonial masters. Learners progress from basic learning, through secondary and tertiary (higher education) levels. The formal education system in Zambia has a "9-3-4+ structure" i.e. nine years of basic, three of high school and four years (or more) of university education, (Zambia, 2006).

## 1.1.2 Higher Education

There is an array of higher learning institutions in Zambia, designed to meet the special needs of various sectors of the national economy for qualified personnel. The sub-sector can be divided into two categories, i.e. those falling under the

Ministry of Education and those registered under the Technical Education, Vocational and Entrepreneurship Authority (TEVETA) in the Ministry of Science, Technology and Vocational Training. The former include universities and teacher training collages, while the latter provide technical education, arts, business and vocational training.

In addition, different government ministries have HLIs falling under them and these are particularly useful in meeting the training needs of individual ministries. Currently, the Ministry of Agriculture, Food and Fisheries runs the Natural Resources Development College (NRDC) and other agriculture-based institutions; Cabinet Office operates the National Institute of Public Administration (NIPA); the Ministry of Defence has the Military Training Establishment of Zambia; while the Ministry of Health has a number of colleges for nursing, medical and dental training.

Furthermore, some parastatals like Zambia Telecommunications Limited (ZAMTEL) and Zambia State Insurance Corporation (ZSIC), as well as a number of private companies, such as banks, also fund and run their own HLIs. The country has moreover seen an increase in privately run HLI, as well as the establishment of branches of foreign-based HLI, like the Australian Institute of Business and Technology (AIBT) and Cavendish University.

### 1.1.3. Academicians in HLIs

The education sector has not been spared from the loss of qualified manpower that other sectors are currently facing. Economic factors, increased mortality rates due to the HIV pandemic as well as migration of professionals to the Diaspora have taken their toll on the staffing levels within these HLIs.

For instance, the number of academic staff at both public universities recorded a decline in 2005 from the previous academic years. The number of lecturers declined from 552 to 468 at the University of Zambia and from 263 to 157 at the Copperbelt University in 2004, (Zambia, 2006). The situation is very similar in privately run HLIs.

The increased turnover among academicians has resulted in a devastating decline of qualified teaching staff in the country's HLIs, a situation called the "brain drain" as these academicians take away with them a vast amount of institutional knowledge needed for these institutions to gain competitive advantage over other players. Under the prevailing situation, it has become apparent that now, more than ever, HLIs need to "uncover", harness and leverage their knowledge asset if they are to survive in today's competitive knowledge economy.

Thus, in investigating if a knowledge sharing culture exists among academicians in HLIs in Zambia, the researcher explored the attitudes, perceptions, beliefs and understanding of the academicians. The research also investigated possible factors that could aid or hinder knowledge sharing practices among academicians.

## 1.2    Statement of the Problem

Scholars have indicated a growing perception among academicians that the knowledge they possess is their private property and are thus not willing to engage in knowledge sharing activities. However, despite research being conducted on the same, no literature gives indication of the scenario in the Zambian context. It is against this background that this research sought to

investigate the knowledge sharing culture among academicians in higher learning institutions in Zambia.

## 1.3. Significance of the Study

The research findings were expected to give insight on the current state of knowledge sharing culture among academicians in higher learning institutions, thereby providing direction for policy improvements. The findings would add to the already existing literature for future research in the field of Knowledge Management.

## 1.4.  Objectives

1. To investigate the knowledge sharing culture among academicians in higher learning institutions in Zambia.

2. To explore factors that aid or hinder knowledge sharing among academicians.

## 1.5  Research Questions

Do academicians share their knowledge and experiences with each other in their field of specialization?

What factors aid or hinder the sharing of knowledge among academicians in higher learning institutions?

## 1.6  Theoretical Framework

Some scholars have studied the concept of knowledge sharing through the organisational behaviour theory, while others have used the theory of reasoned action. However, because knowledge sharing is in essence the exchange of

knowledge amongst the various actors in an organisation, this study focused on the Social Exchange Theory (SET) for its theoretical framework.

### 1.6.1 Social Exchange Theory

The theory is derived from economics' rational choice theory and the study of relationships and "exchanges", (Hall, 2003). It proposes that individuals evaluate alternative courses of action, in order to get best value at lowest cost from any transaction completed. According to the theory, individuals interact with others based on a self-interested analysis of the cost and benefits and hence initiate exchanges with other actors who control resources that are valued.

It suggests that human beings make social decisions based on perceived costs and benefits. The hypothesis asserts that people evaluate all social relationships to determine the benefits they will get out of them. According to this supposition, individuals consciously and unconsciously evaluate every social situation in terms of what they will have to put into it and relate this to the benefits they think they may get out of it. Consequently, the greater the perceived benefit, the higher the investment in that particular relationship.

Homans (1961) is credited with the consolidation of the foundations of the theory and his "Social Behaviour: Its elementary forms" (Homans, 1961) is viewed as initial work on this theory. Other scholars such as Richard Emerson, Peter Blau and Karen Cook often reference Homans, while Thibaut and Kelley (1959) further developed the theory by adding to the reasons people engage in exchange.

### 1.6.2 Social Exchange Theory and Information Science

While the social exchange theory has served as background to research in a number of subject area domains, it would appear that it has not yet been discussed widely in the context of information science. However, it is believed that research in information science addresses issues of relevance to its

concepts and assumptions. According to Hall (2001, 2003) and Andolsek (n.d), studies of scholarly communication represent knowledge sharing as a social process "where actors share information and have social relationships through research communities and invisible colleges", (Borgman, 2000, p. 144).

Meadows' (1998) work also indicates that researches on the processes of scholarship tend to consider how and *why* scholars publish. Similarly citation analysis refers to the social connectivity of researchers and its impact on the development of knowledge bases. Aspects of these relationships, such as trust as a basis for co-operative work (Davenport & Cronin, 2000), it has been argued, depend to a certain degree, on social exchange.

## 1.6.3 Concepts and Assumptions

Knowledge sharing can be conceptualized as situations of exchange in which individuals relate to each other in different ways, involving different rules, norms and traditions of reciprocity regulating the exchange. The following analytical concepts and assumptions can be applied to an organizational set up: Employees (*Exchange actors*), in order to obtain what they need and value (*Exchange resources*) are seen to engage in various forms of exchange (*Exchange processes*). This is made possible through the dependent relationships they have established with others (*Exchange structures*), (Halls, 2001).

In addition, many factors are seen to be at play and influence (either by aiding or hindering) this exchange process. Some of these are:

a. *Conditions of exchange*

Social exchanges are seen to happen in a particular environment. A number of features when combined can provide an atmosphere conducive for exchange to occur. Studies by Cohen (1998), Constant et al (1994) and Ruggles (1998) give reference to the need for strategies to change people's

behaviour regarding knowledge sharing. Hall (2001) identified such an organisation with such an environment as having the following features:

· one that makes knowledge sharing as an explicit responsibility
· one that encourages experimentation
· one that values all contributions, regardless of the originator's status
· one that promotes communities for knowledge sharing
·one that furnishes employees with appropriate information and communication   technology (ICT) tools

b. *Exchange Resources*

In a market place, someone has a good/service that others may not have, but have need of. This particular need is what necessitates an exchange. Moreover, for any transaction to occur there must be a currency of exchange. These are referred to as resources of exchange and act to "compensate" or reward the one satisfying the other's need. It is seen as a *"benefit"* on the part of the one giving the good/service and a *"cost"* on the part of the one receiving.

If it is therefore presumed that knowledge possessed by an employee in an organisation is a private good, then it is up to that employee to decide whether to share or hoard it.  To encourage that employee to share their knowledge, he/she will have to be persuaded that it is worth their while to enter into a *transaction* where they can exchange their knowledge for some kind of a resource. He/she will weigh what the exchange will cost him/her (or what he/she will have to forego) against what he/she stands to benefit before actually making a decision.

When this exchange is initiated by employees (un-institutionalised), then these exchange resources are, more often than not, at the discretion of the giver/determined by the giver (Blau, 1964). Hence, in the process of social

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exchange employees may exchange different resources, some material in nature, while others may be symbolic resources such as power, respect, a sense of belonging, honour, emotions, etc. (Etzioni, 1968). If the exchange is sanctioned by the organisation (institutionalised), certain motivators or incentives are used as resources. These can include recognition/awards, promotions, financial returns such as bonuses, etc.

## c. Exchange Processes:

In order for social exchange to occur in an organisation, interaction between and among various actors there must exist. This is because an organisation does not just consist of a sum of individuals who wish to keep important knowledge to themselves. An organisation consists of individuals, teams, departments with shared meanings, goals and aspirations, who need to work together towards a common purpose. This gives rise to the need to share information, to keep others updated on progress made etc.

Exchange processes are thus seen as the *sum of interactions* that facilitate social exchange. This is made possible through the relationships or networks that various actors form between and amongst them, as well as the strategies that an organisation may employ. These relationships/networks are called Exchange structures and an organisation may have either formal or informal exchange structures or even both.

For example, a group of employees may meet over lunch to share ideas or brainstorm on a particular topic of interest, or an employee may solicit advice from a colleague concerning certain work processes. This maybe within or outside one's particular field/specialization.

Strategies may include interactions, meetings, conferences/seminars, group assignments/tasks, peer reviews, collaborative research etc. The advent of information communication technologies (ICTs) has enhanced these interactions

by providing new avenues such as communities of practice, intranets, blogs, wikis etc, which cut across time and space.

d. *Culture*:

Human beings are social beings and each is considered different in character. Each employee thus brings to the organisation their own definitions of right and wrong, what is important and their own rules of how things should be done. An organisation also has its own rules and regulations that guide employees' actions and provide a standard way of seeing things. Thus an organisation's culture is a sum total of employees' and organisation's Norms and values. Culture deals with issues of trust, honesty, openness, loyalty, selflessness, reciprocity, commitment, cooperation/collaboration, judgement between right and wrong, etc. They inevitably have a significant impact on *why, how, when* and *with whom* employees engage in social exchange.
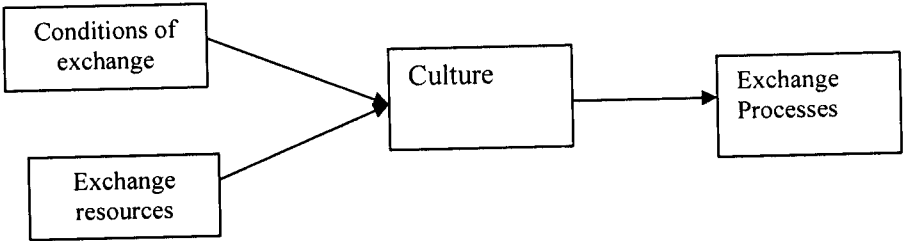


**Figure1.Knowledge sharing model**

| | | |
|---|---|---|
| Dependant variable: | Exchange processes = | Knowledge sharing |
| Independent Variables: | Exchange conditions = | Organisational factors |
| | Exchange Currencies = | Costs and Benefits |
| Intervening Variable: | Culture | |

*Adapted from Hall, (2001)*

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## 1.7    Operational Definitions

### 1.7.1  Knowledge management:

There is currently no agreed-upon definition for Knowledge Management. It can be seen as an "organizational change process" concerned with harnessing the intellectual assets of an organisation in pursuit of successful business, (McManus & Loughridge, 2002). These assets include the organisation's formal information, its expertise and the know-how. KM thus involves uncovering the knowledge within the organisation, through its capturing, transformation and sharing processes.

Bassi (1998), Gupta (2000) and Worasinchai & Bechina (2006) describe it as an organized and systematic approach encompassing processes such as use, storage, sharing, transferring and retrieval of knowledge. What scholars seem to agree on is that KM is aimed at ensuring sustainable grown of the organisation as well as improvement in services and outcomes, (Petrides & Nodine, 2003).

In this dissertation, KM is viewed as *strategies* and *practices* used in organizations to identify capture and adopt the insights and experiences of employees into work processes.

### 1.7.2  Knowledge sharing:

Knowledge sharing can be viewed as activities through which knowledge, i.e. information, expertise and experiences are exchanged within a discipline, a community or organisation. According to Christensen (2007), knowledge sharing is the process intended at exploiting existing knowledge, identifying existing and accessible knowledge, in order to transfer and apply this knowledge to solve

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specific tasks better, faster and cheaper than they would otherwise have been solved.

### 1.7.3  Culture:

According to Sathe, in Gurteen (1999:1), culture is "the set of important understandings (often unstated) that members of a community share in common." These shared understandings consist of our norms, values, attitudes, beliefs and 'paradigms', influence the way people perceive and do things.

In this research paper, a knowledge sharing culture is viewed as one in which individuals, singularly and collectively; adhere to *norms, values, attitudes* and *beliefs that* encourage the free flow of knowledge. Knowledge sharing culture is therefore, defined as one in which knowledge is valued, where its creation, sharing and utilization are a natural part of organizational processes.

### 1.74  Exchange actors

In the social exchange framework, social actors are individuals engaged in various exchange processes, as either those who possess the commodity or those that seek the commodity, (Hall. 2003). In the context of this research, exchange actors are academicians in HLIs engaged in some form of knowledge sharing activity.

### 1.7.5  Exchange resources

Under the social exchange theory, exchange resources are things are used to encourage or facilitate an exchange. They may be viewed as "currencies", meant to compensate the one giving away the commodity, (Hall, 2001).  In this

research, these include various types of motivators and incentives given to academicians to encourage knowledge sharing activities.

### 1.7.6  Conditions of exchange

Under the theory of social exchange, conditions of exchange are seen to be the various features existing given environment. These include interactivity, a spirit of teamwork, availability of ICTs as well as policies and strategies that encourage the exchange of ideas, (Hall, 2001). The existence of these features is seen to enhance knowledge exchanges amongst the various actors.

In this research paper, conditions of exchange are viewed as characteristics of an institution that when combined can provide an atmosphere conducive for knowledge sharing.

### 1.7.7  Theory of reasoned action

The theory was developed by Martin Fishbein (1975) and Icek Ajzen (1980) and is useful in predicting behavioural intention. The theory postulates that a person's volitional (voluntary) behaviour is predicted by his attitude (individual beliefs) toward that behaviour and how he thinks other people would view them if they performed the behaviour (subjective norms).

Thus, the theory holds that a person's attitude, combined with his subjective norms, form his behavioural intention.  Fishbein and Ajzen however, stress that attitudes and norms are not weighted equally in predicting behaviour, "Indeed, depending on the individual and the situation, these factors might be very different effects on behavioural intention..." (Miller, 2005:127).

## 1.8　Scope of the study

The scope of this study is confined to determining whether a knowledge sharing culture exists among academicians in higher learning institutions in Zambia. It is not intended to delve into the area of information seeking behaviour nor the intricacies of knowledge transfer.

Rather, the study focuses on academicians' understanding, perceptions of knowledge sharing as well as identifying major factors that influence knowledge sharing. Thus, the results should be interpreted within the context of the areas under investigation and in no way be taken as a reflection of what might obtain outside these areas.

## 1.9　Summary

This chapter has introduced the investigation of the existence of a knowledge sharing culture among academicians in higher learning institutions in Zambia. The chapter also gave background information on the country and its education system, thereafter presented the problem under investigation, the rationale, purpose and objectives of the study, as well as the specific objectives through which the objectives are addressed.

The next chapter presents a review of literature relevant to this study in order to place the investigation within the context of similar surveys. It also provides the theoretical and conceptual framework for the study.

# CHAPTER TWO

## LITERATURE REVIEW

This chapter presents a review of literature found to be of relevance to the phenomenon under investigation. It will highlight findings of previous research on knowledge sharing culture and the various factors that influence it. The chapter will close with a summary of issues dealt with in the chapter as well as the questions raised.

## 2.0    Knowledge management

Although it has been practiced in one form or the other for some time in the business field, Knowledge management (KM) is a relatively new concept in the education arena. It is not surprising then, to note that there is a dearth of literature on knowledge sharing culture among academicians.

Literature in the field of KM has increased over the years, especially with the shift from a production based economy to one where the harnessing and exploitation of intellectual property is the key to competitive advantage, (Drucker 1969).

Knowledge is intangible and thus difficult to manage as it resides in people's minds. Some scholars have sought to define it, but have generally come to a consensus that no one definition is possible and can only be contextualised. What is agreed upon is that it exists in various forms, such as tacit and explicit, (Nonaka & Tateuchi, 1995).

Explicit knowledge is that knowledge which is easy to capture and codify. It can be put into words, portrayed in a diagram, stored as well be easily shared and

communicated. On the other hand, tacit knowledge is highly personal and said to be linked to beliefs, perceptions, know-how and values. Because of this, it is not easily stored or shared, (Edwards, 2003).

KM is seen as a means of capturing both tacit and explicit knowledge and making it available for organisational use. It has been defined as the practices and process of creating, organising, disseminating and exploiting knowledge in pursuit of business objectives, (Bassi, 1998).

## 2.1 Knowledge sharing

Knowledge is said to exist in two forms, that is tacit and explicit knowledge and both these forms are present in any given institution. Explicit knowledge on the one hand is said to be documented information that can aid action. It can be expressed in formal, shared language, such as words, drawings or numbers. Tacit knowledge on the other hand is referred to as know-how and learning embedded within the minds of the people in an organization. It involves perceptions, insights, experiences, and craftsmanship, (Biloslavo & Trnavcˇevicˇ, 2007; Kidwell, Vander Linde et.al., 2000; Polanyi, 1966; 1993; Kakabadse et.al. 2001).

Many researchers (Hansen, Nohria and Tierney, 1999; Rowely, 2000) agree that it is this knowledge, in all its pervasiveness, that needs to be effectively managed by collecting, codifying, storing, retrieving and reconstructing it for use by those who need it. This movement of knowledge is made possible through knowledge sharing.

Scholars have given indication of lack of an agreed-upon definition of knowledge sharing. This could partly be because views on knowledge sharing are rooted in knowledge management literature.

According to Cummings (2003), the concept of knowledge sharing can be traced back to technology transfer and innovation literature, where it is said that "the proper implementation of knowledge sharing can lead to effective innovation, manufacturing processes, organizational designs and quality products". Drawing upon this theory, Jain (2007) says that for learning, and in essence, growth to occur in organizations, knowledge must be communicated and shared effectively. The two views place knowledge sharing as the link between innovation and learning, and by extension, education.

## 2.2   Knowledge Sharing Culture in Education

Knowledge sharing concerns the willingness of individuals within an organisation to share their knowledge with others. This takes place in a cultural context (Koufie & Usoro, 2006), i.e. the interaction of individuals and their environment. And because culture influences employee behaviour by promoting values that either support or hinder organisational goals (Martins & Terblanche, 2003), there is need to culture and its relationship with knowledge sharing. Davenport and Prusak (1998) found that interactions and exchanges of knowledge are embedded and affected by cultural forces such as reciprocity, trust, reputation and selflessness.

Work by Adams (1965), also highlighted the link between knowledge sharing and trust. The authors found that two types of trust existed, one was benevolence-based trust and the other being competence-based trust. The former had to do with one actor viewing another as one who will not harm another when given the opportunity. The latter views another as being knowledgeable in that particular subject area.

Adams and others thus found that knowledge sharing amongst actors was more effective when the recipient viewed the source as both competent and benevolent. It was also found that common language, shared vision, discretion and receptivity were some factors which actors employed to determine if an

individual was trust worthy. Their findings give emphasis to the role that perception and shared values play in the exchange of knowledge among actors.

Gurteen (1999) and Hofstede's (2001), defined culture as 'commonly held beliefs, attitudes and values' and 'the collective programming of the mind that distinguished one group from another' respectively. It is clear that values have strong influence on the organisation culture. Fennessy, (2002) agrees with this, adding that some of the underlying cultural issues to consider when applying a knowledge management strategy include the roles, values and norms of the members.

De Long and Fahey, (2000) raised some points on how organisational culture impacts knowledge sharing. The first point is that culture shapes what knowledge is and what knowledge is worth sharing. Secondly, that culture defines the relationship between the employee and organisational knowledge. This point was later supported by Wasko & Faraj, as cited in Kim (2007) and point towards knowledge ownership i.e., if an organisation generally views knowledge as a private good, then there will be a general reluctance among employees to share their knowledge. The third point is that culture establishes the context for employee interaction, determining how knowledge should be shared in a particular situation.

Ipe (2003) agrees with this, saying knowledge sharing is often affected by the relationship existing between sender and receiver. Campbell (2009) calls this last point as power politics, a situation where knowledge is used as a means of control or influence. In such situations the phrase "knowledge is power" is the maxim.

Evidence from Tippins' (2003) study of knowledge management in business colleges, highlighted these points and the fact that knowledge sharing among academicians was compounded by existing institutional cultural and bureaucratic practices. The author cited examples such as the perception of knowledge as proprietary as resulting in academicians' unwillingness to share their knowledge freely.

It is thus clear from the literature that cultures that openly support knowledge sharing create an environment that facilitates interaction favourable for leveraging knowledge, hence building a knowledge sharing culture in HLIs. Researches to determine the existence of such a culture in HLIs have been undertaken by a number of scholars. For instance, Suhaimeea et. al. (2006), Poh Yen, Jain et. al. (2007) discovered the existence of some form of knowledge sharing among academicians in HLIs, albeit very poor.

Suhaimeea et. al, (2006), explored the status of knowledge sharing culture among the Community of Practice in the 17 public universities in Malaysia. Their findings revealed that only 47.1% of the universities had begun incorporating KM in their work processes. The study also found that there was low awareness among academicians on the importance of knowledge sharing, evidenced by the fact only five universities indicated an understanding of the importance of a knowledge sharing culture.

Suhaimeea et. al, (2006), moreover suggested the introduction of motivators as a means of encouraging knowledge sharing within these institutions. This is in agreement with the writings of Skyrme (2008), Jain et.al. (2007) and is discussed further below as stimulating knowledge sharing.

Mittal (2008), in a study to investigate the knowledge–behaviour of academicians, also found evidence of some form of knowledge sharing existing among academicians. She cited the use of information interaction tools such as groupware, as well as the undertaking of collaborative projects among her respondents as evidence of knowledge sharing. The author however noted that academicians were far much better at creating and collecting internal knowledge as opposed to sharing, understanding and adopting this knowledge and practices to their situations. She also made two observations in her report that the researcher found very intriguing and these are that:

1. Academicians with higher qualifications had a lower tendency to share knowledge, and

2. As they grew older, academicians' inclination to share knowledge reduced.

And despite the fact that Mittal (2008) did not furnish an explanation to account for either of these observations, the researcher was interested to see if the above-mentioned scenarios were applicable to the Zambian context.

## 2.2.1  Types of Knowledge Sharing

Sharing of knowledge in an organization takes place in different forms, ranging from casual chats among colleagues over a cup of tea, to departmental/faculty meetings, to technology-enabled sharing. Informal person-to-person interactions allow for a personal or intimate touch. Factors that would explain the success of the knowledge sharing in this type of activity include personal relationship and trust, (Cheng et.al, n.d.)

Sharing through a central repository, such as an information/knowledge management system is another way of exchanging knowledge with other. A number of organizations tend to adopt this form as it allows concurrent sharing

Websites, internal and external, are fast becoming favoured means of sharing knowledge. Intranets and email are common means of communication among academicians for internal communication and to exchange ideas with colleagues. They are not only cost effective, but are an effective way of sharing knowledge across time and space.

Moreover, professionals, academicians inclusive, gather themselves into groups that allow them to share pertinent knowledge or help solve particular problems. These communities of practice of practice are often a way of people with similar interests to share ideas and experiences. Cheng et.al. (n.d.) found that cultivating communities of practices could be an effective mechanism to promote the sharing culture as they depend on their members' constant knowledge generation and sharing.

According to Robertson (2004), other web-based opportunities for knowledge sharing include weblogs (or simply 'blogs') which can be used by teams or project groups as a means of sharing with the wider institution progress made or even individuals as diary entries meant to communicate on a particular idea or subject. Wikis are another opportunity to share as they are "editable" webpage's whose content can be edited, improved, expanded etc by those with knowledge on the particular subject.

Knowledge management initiatives such as knowledge management systems are now widely available in many institutions. These applications range from databases, to search engines, knowledge maps, expert advice or "help desks", etc. These are useful in facilitating organizational knowledge sharing by systematically storing and filing knowledge within depositaries (Pan et al. 2003). More recently wiki tools are increasingly utilized by organizations to internally share organizational related knowledge.

## 2.3    Factors that aid or hinder Knowledge Sharing

Researchers have advanced a number of factors responsible for aiding or hindering the sharing of knowledge in HLI. They are discussed here as stimulating and inhibiting factors.

### 2.3.1. Motivators

Smith & McKeen (2003) drew attention to two conflicting assumptions about why people do or do not share knowledge. The first is that knowledge sharing is not "natural" and therefore needs to be motivated.

This is an assumption that has been discussed in some literature (Tan, 2000, Davenport, 1994). In fact, many writings suggest that there is a positive relationship between perceived rewards expected for engaging in knowledge sharing, (Jain et.al. 2007, Gupta, 2008; Skyrme, 2008). Gupta & Govindrajan (2000), for instance, found that an incentive system in an institution encourages individuals to share their knowledge.

Their findings tie in very well with Suhaimeea et. al, (2006), whose findings revealed a need for motivators such as monetary incentives, public recognition and reward, performance evaluations as well as promotions to stimulate academicians in Malaysia to share their knowledge.

However, Smith & McKeen (2003) found that this assumption was not popular among their respondents, among them academicians. They instead held the view, as did Gurteen, (1999), that knowledge sharing would occur naturally if barriers within an organisation were removed.  Gurteen's objection to overt rewards as a "Stimulus-response" system was based on his view that the

removal of obstacles or barriers to knowledge sharing, first at individual, then institutional level was the right step in creating a knowledge sharing culture. In his view, what is important is an individual's move from the "knowledge is power" paradigm, to one of "sharing knowledge is power".

McManus & Loughridge (2002) found that the idea of motivators was also closely associated individual efforts. They found that there as a perception among academicians that they were rewarded on the basis of their individual efforts, rather than collaborative efforts, where shared tasks and responsibilities resulted in knowledge sharing. This perception is reinforced in HLIs where employees were rewarded solely for individual achievements, such as attainment of higher qualification. One is however inclined to view this perception as a contradiction of the behaviours that the motivators were meant for, i.e., to encourage the sharing of knowledge.

### 2.3.2  Time and Knowledge overload

Another assumption by Smith & McKeen (2003), is that people are not inclined to share their knowledge because they are overloaded with more than enough already. While there are various debates about the existence of such an overload (Smith & McKeen, 2003; Davenport, 1994), I am persuaded by Smith & McKeen's (2003) argument that despite an employee's inclination to share knowledge, when his/her work leaves little time for engage in activities outside immediate tasks, it leaves very little time to engage in knowledge sharing.

### 2.3.3  Organisation Policies

Organizations comprise different types of structures such as formal departments, project teams, communities of practices and informal networks. Each structure

has its own characteristics relating to what is the purpose of the structure, who belongs to the structure and what holds the structure together (Wenger et.al, 2002).

These, by and large, have an impact on how knowledge flows and by what means. HLIs tend to be distributed organizations with "loosely" connected departments/units, each with its own way of way of doing things. Thus depending, on hierarchical structures and rules governing, knowledge flow in one part of the organization may vary from the others, as may inter-departmental knowledge flow.

Thus, good policies backed by an environment that encourage the free flow of knowledge are seen as stimulators for knowledge sharing. Policies that recognise the value of knowledge make the sharing of knowledge a normal part of daily work processes. According to Jain, Sandhu & Sidhu,(2007), policies that encourage rotation of staff in various positions, training opportunities such as workshops or seminars, mentoring, public recognition or awards etc are seen to encourage staff to share their ideas and experiences.

In addition, support from organisation leaders such as top management, is seen to give impetus to their subordinates to adopt such knowledge sharing initiatives, (Suhaimeea, Abu Bakarb & Aliasc, 2006; Smith & McKeen, 2003).

### 2.3.4. Infrastructure

In addition, infrastructure support is the vehicle that facilitates the actual sharing of this knowledge. The use of knowledge sharing tools such as Information Communication Technologies (ICTs) with consideration of other organisational factors, greatly enhance organisation-wide knowledge exchanges.

Liang et al (2008) in their study of whether the social exchange model could be used to explain individual knowledge sharing behaviour, found that ICTs played a considerable moderating role in interpersonal factors such as one's commitment to the organisation, his social interaction and as well as his trust.

However, Osunade et.al. (2007) in a study on internet for knowledge sharing usage among academicians in Nigeria, found that besides e-mail and searching for topical information, very little use was made of other Internet facilities. Thus knowledge sharing and collaborative features available through the internet were not utilized. They also found that problems of availability, user-friendliness and cost of accessing the internet were the major hindrances.

Some scholars have however expressed concern over misplacement of ICTs in certain organizations, saying that ICTs in themselves are insufficient to bring about knowledge sharing. According to Hendricks (1999) "the role of ICTs for knowledge sharing can only be fully understood it is related to the motivation for knowledge sharing". Kim and Jarvenpaa (2008) emphasized the importance of the existing relationship between the communicating parties as a formula to shape technology-enabled knowledge sharing.

Gurteen (1999) adds that while the use of ICTs in organizations has made "knowledge sharing a reality – in the past it was impossible to share knowledge or work collaboratively with co-workers around the globe", focus should be on the people. It is thus important to implement ITCs well, train and educate its intended users for effective use in order to help bridge the gap between those that have knowledge and those that need it.

## 2.3.5. Organisational structure and Trust

The structure of these institutions is another factor that has been identified as inhibiting knowledge sharing. According to McManus & Loughridge (2002), who found that because universities and colleges were a 'collection of very loosely connected departments", it was often difficult to create a favourable knowledge sharing atmosphere. While further research is needed to determine the impact on knowledge sharing that a centralised structure has, as opposed to a decentralised. It is however true that bureaucracy (and the resulting red-tape) and hierarchical level in an organization tend to have a negative impact on communication and this may hinder knowledge sharing in an organisation, (Hendricks, 1999).

Findings by Jain et.al., (2007) and Sun & Scott (2005) indicate the lack of trust among colleagues, either by reputation or competence and organisational structure are some reasons cited as causing challenges in knowledge sharing among academicians.

Additionally, Tippins (2003) found that the distinctive differences among academicians pose a challenge as they fear losing their competitive advantage over their colleagues. Hence differences such as qualifications (Bachelors, Masters, and PhDs), as well as positions (departmental or institutional) are seen as a hindrance in knowledge sharing

Another barrier is complacency among academicians. Some have become satisfied with the knowledge gained over the years and no longer see reason to share. They view what they have as enough as it has "served them well" and so seen little or no need to engage in any knowledge exchange. This is clearly seen among certain academicians who year after year continue to merely reproduce course material (Woasinchai & Bechina, 2006), without adding any new knowledge to it.

The literature reviewed indicated that knowledge sharing was practiced in a number of HLIs in one form or other. However, it was not well understood as a concept and was seen as fragmented efforts by a few academicians. A number of factors that aid or hinder knowledge sharing among academicians have also been identified. No indication is however given as to what is obtaining on the Zambian scenario and so it is hoped that the present study will yield findings that will help in filling this existing gap in knowledge.

## 2.4    Summary

This chapter presented a review of literature relevant to the study. In it, the place of knowledge sharing in education was identified; findings by previous researches highlighted and a number of questions requiring further consideration were raised.

The next chapter will detail the methodology employed in the collection and analysis of data. It will highlight specifics of the research design, population, sample size and data analysis procedures.

# CHAPTER THREE

## METHODOLOGY

The current chapter will discuss the methodology employed .in the study. It will present details relating to the type of research design employed in the study, the study area, sample size, the data collection instruments and procedures, as well as data analysis process.

## 3.0    Research Design

This was an exploratory case study, qualitative in nature, which sought preliminary information in the field of Knowledge management. This approach is ideal for researches where not much is known about the phenomenon under investigation, thus requiring extensive preliminary work in order to gain familiarity with the phenomenon, (Babbie, 1989; Fraenkel & Norman, 2003). It was thus chosen in order to bring to the fore information about the state of knowledge sharing in Zambia. In this way, findings from the research would lay ground work for subsequent researches in the field.

## 3.1    Population

The population comprised all academicians in 40 higher learning institutions in Zambia, i.e., colleges and universities, both public and private.

## 3.1.1  Study Sample

A large sample of 150 academicians was drawn from 15 HLIs in Zambia. Two-stage random sampling was used to select respondents to answer the

questionnaires. This sampling technique was used to ensure that a representative sample was conveniently drawn in relation to the size and diversity of the population. It has been used in researches with vast and heterogeneous populations, (Fraenkel & Norman, 2003).

The first stage involved sampling 15 institutions using simple random sampling. Listings of Ministry of Education (MOE) and Ministry of Science, Technology and Vocational training (MCTVT) registered institutions were used as sampling frames. The sampled institutions were diverse and included both public and private universities, sector-specific institutions such as teacher training colleges, business colleges, agricultural as well as technical and vocational training institutions. In the second stage, 135 academicians were randomly selected from the sampled institutions. The respondents drawn were from various disciplines and faculties, including the humanities and social sciences as well as the sciences.

Additionally, one other respondent from each sampled institution was purposively selected to take part in interviews. These 15 respondents were drawn from management positions. The aim of the interviews was to gain in-depth information that would supplement as well as enable the researcher to contextualise the data collected via the questionnaires.

## 3.2    Research Instruments/ Data Collection

The study used self-administered questionnaires and interview guides to collect data. Questionnaires were used as a means of extracting vast amounts data from the respondents within the limited time available.

Questionnaires were chosen due to their versatility, which allows a researcher to combine both inductive and deductive approaches to data collection, using a combination of open-ended and closed-ended questions, (Beiske, 2002).

The interviews, held with key informants within management, were chosen to yield qualitative data that served two purposes. The first was to verify data gathered from the various institutions and was very useful in the data cleaning process. The second purpose was to gather supplementary or in-depth information that would help the researcher interpret information given in the questionnaires. They were thus used to get more in-depth information.

### 3.2.1 Qualitative Research

A review of existing literature was used to gather data. This process was done through desk research by collecting readily available materials and information from the internet, newspapers and books on Knowledge Management from its perceived origins to the present.

In-depth interviews also provided another means for qualitative data collection. The information gathered from key informants' responses pertaining knowledge sharing provided a context in which the researcher could better understand questionnaire responses.

### 3.2.2 Quantitative Research

Quantitative data collection was done using a structured questionnaire. The research had a high response rate of 89 percent. Out of the 135 questionnaires distributed, 10 were not returned and five were "spoilt".

The questionnaire instrument was divided into three sections. It had a total of 25 questions. The first section consisted of questions that focused on respondents'

personal background and their institution. These were basically demographic questions about age, gender, academic qualification, length of service, position held and institution ownership. This section had a total of nine questions, both open and closed ended.

The second part had seven questions that sought to assess respondents' understanding of the term "knowledge sharing" as well the type of knowledge they shared. The last part of the questionnaire had nine questions and sought information on existing knowledge sharing opportunities in institutions, usage of new technologies as well as factors that influenced or hindered the respondents' knowledge sharing.

## 3.3    Data Analysis

After the data gathering exercise, the data was cleaned, and then coded for analysis. The coding was conducted by assigning numbers to the various responses. In this research, *nominal, ordinal and interval levels* of measurements were used for coding the data.

Quantitative analysis involved using the Statistical Package for Social Sciences (SPSS), a computer software programme. Among the statistical procedures used were frequencies and cross tabulations. SPSS frequencies and cross tabulations of the different independent and dependent variables were run. The results are presented in detail in various tables in the following chapter. The details are also reflected in the descriptive discussion.  Qualitative analysis involved sorting out the qualitative data into categories of responses.

## 3.4.  Limitations of the Study

*Financial and Time constraints:*  The data collection exercise was undertaken at a time when a number of the sampled institutions were conducting examinations. Thus, many of the targeted respondents were either pressed for time or not available at all. This resulted in the researcher being unable to collect as much data as would have ideally been possible. As a consequence, some of the views that may have added richness and diversity to the research findings were not captured.

## 3.5 Summary

This chapter presented detailed the methodology used in the study in as far as data collection and data analysis were concerned.

The next chapter will give a presentation and interpretation of the findings of the study regarding the existence of knowledge sharing culture among academician in higher learning institutions in Zambia.

# CHAPTER FOUR

## PRESENTATION OF FINDINGS

This chapter will give the research findings from the data collection on knowledge sharing culture among academicians in higher learning institutions. The presentation will be is arranged according to the research objectives and questions as set out in chapter one.

## 4.0    Demographics

Sixty percent of the higher learning institutions sampled were colleges while the remaining 40% were universities. Out of these, 70% were government-run institutions, and the remaining 30% were privately run. Out of the sampled respondents, nearly 66% were academicians from colleges and 34% from universities

Table 1.

### Type of institution

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | College | 79 | 65.8 | 65.8 | 65.8 |
| | University | 41 | 34.2 | 34.2 | 100.0 |
| | Total | 120 | 100.0 | 100.0 | |

Sixty-five of these respondents were male, accounting for 54% of the total number, while 55 were female, making up the remaining 46 percent. Nearly 36% of the respondents were between the ages of 31 and 40 years old, 27% were between 41 and 50 years old, about 28% were 51 years and above.

**Table 2.**

**Highest educational level/qualification**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | DIPLOMA | 4 | 3.3 | 3.4 | 3.4 |
| | BACHELORS | 36 | 30.0 | 30.3 | 33.6 |
| | MASTERS | 53 | 44.2 | 44.5 | 78.2 |
| | POST GRADUATE DIPLOMA | 20 | 16.7 | 16.8 | 95.0 |
| | DOCTORATE | 1 | .8 | .8 | 95.8 |
| | PhD | 5 | 4.2 | 4.2 | 100.0 |
| | Total | 119 | 99.2 | 100.0 | |
| Missing | System | 1 | .8 | | |
| Total | | 120 | 100.0 | | |

Table 2 presents data on the highest levels of education attained by the respondents. Forty-four percent of the respondents were Masters degree holders, 30% had Bachelors' degrees, while 16% had attained Post-graduate diplomas.

Additionally, 68% of the respondents held the rank of lecturer, 26% were senior lecturers while professors and associate professors accounted for only 3.3%. The remaining 2.5% accounted for those that indicated other institution-specific ranks such as Program coordinator, Project leader, etc.

Furthermore, 43% indicated holding an administrative position in their institution, with 29 respondents being Heads of their departments or sections, nine being Deans or Assistant Deans and 14 stating other institution-specific administrative positions, such as Program Manager, etc.

Fifty-eight percent had worked for their institutions for less than five years, 31% had worked for between six to 10 years, while only 11% had worked for their institutions for longer than 10 years.

## 4.1    Knowledge Sharing

The respondents were asked if they were familiar with the term "knowledge sharing." From the responses, 88 percent of the respondents indicated that they were familiar with the term "knowledge sharing", while 11 percent indicated that they were not.

Out of those that said "YES", 47 were masters' holders, 31 were bachelors' holders and 18 were post-graduate diploma holders, while the remaining nine comprised diploma, doctorate and PhD holders.
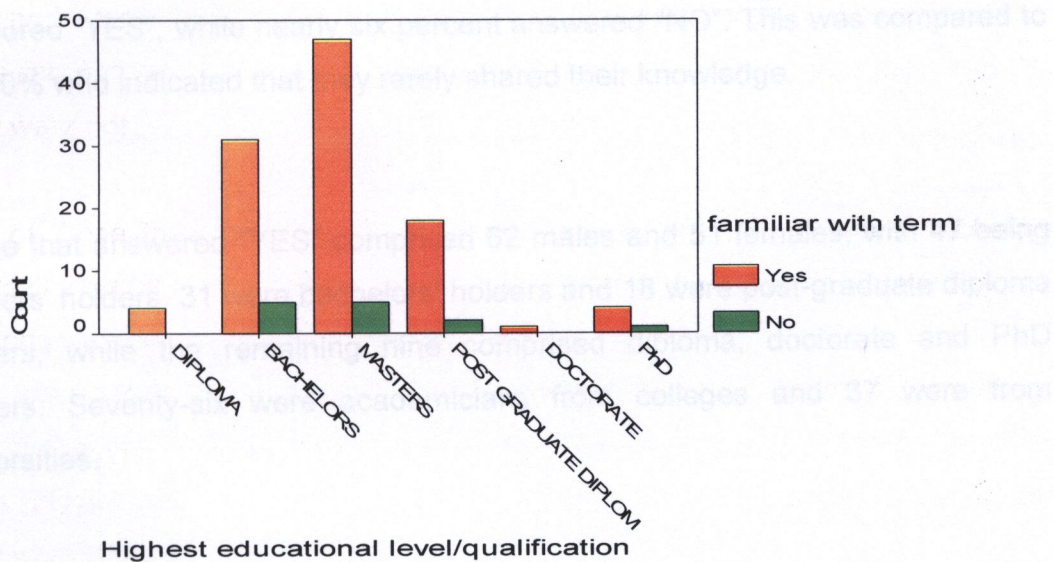


**Figure 2. Levels of education vs. familiarity with knowledge sharing**

Further test carried out revealed that there is a positive relationship between the respondents' level of education and the responses given concerning their familiarity with the term knowledge sharing. This is shown in table 3.

**Table 3.**

**Symmetric Measures**

| | | Value | Asymp. Std. Error[a] | Approx. T[b] | Approx. Sig. |
|---|---|---|---|---|---|
| Interval by Interval | Pearson's R | .021 | .100 | .222 | .824[c] |
| Ordinal by Ordinal | Spearman Correlation | -.006 | .094 | -.068 | .946[c] |
| N of Valid Cases | | 118 | | | |

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.


## 4.1.1 Knowledge sharing within own field of Specialization

When asked if they shared knowledge within their fields of specialization, 94.2% answered "YES", while nearly six percent answered "NO". This was compared to the 10% who indicated that they rarely shared their knowledge.


Those that answered "YES" comprised 62 males and 51 females, with 47 being masters' holders, 31 were bachelors' holders and 18 were post-graduate diploma holders, while the remaining nine comprised diploma, doctorate and PhD holders. Seventy-six were academicians from colleges and 37 were from universities.


Sixty-seven percent of these held the rank of lecturer, 28% were senior lecturers, while two percent were professor and associate professor. Among these, 59% did not hold any administrative positions, 23% were departmental/sectional heads, eight percent were deans and assistant deans, while 10% held other institution-specific positions, such as project coordinator. On average, those who said "YES" had worked for their institution for less than five years.

Those that answered "NO" comprised three males and four females, with three at bachelors' degree level, two at masters' level, one at postgraduate diploma level and one at PhD level.

A correlation test was carried out to determine if there was a relationship between rank held by an academician and knowledge sharing within their field of specialization. Tables ... below display the results.

**Table 4 KS in own field * rank held Correlation**

**Symmetric Measures**

| | | Value | Asymp. Std. Error[a] | Approx. T[b] | Approx. Sig. |
|---|---|---|---|---|---|
| Interval by Interval | Pearson's R | -.044 | .055 | -.482 | .631[c] |
| Ordinal by Ordinal | Spearman Correlation | -.027 | .084 | -.293 | .770[c] |
| N of Valid Cases | | 120 | | | |

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

**Table 5  KS in own field * rank held Chi-square test**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | .327 [a] | 4 | .988 |
| Likelihood Ratio | .618 | 4 | .961 |
| Linear-by-Linear Association | .234 | 1 | .629 |
| N of Valid Cases | 120 | | |

a.  8 cells (80.0%) have expected count less than 5. The minimum expected count is .06.

The same tests were run for administrative position held and their knowledge sharing within their field of specialisation.  The tables below show the results.

**Table 6  KS in own field * administrative position Correlation**

**Symmetric Measures**

| | | Value | Asymp. Std. Error[a] | Approx. T[b] | Approx. Sig. |
|---|---|---|---|---|---|
| Interval by Interval | Pearson's R | -.044 | .055 | -.482 | .631 [c] |
| Ordinal by Ordinal | Spearman Correlation | -.027 | .084 | -.293 | .770 [c] |
| N of Valid Cases | | 120 | | | |

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

**Table 7 KS in own field * administrative position Chi-square**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 10.187 [a] | 4 | .037 |
| Likelihood Ratio | 9.103 | 4 | .059 |
| Linear-by-Linear Association | 6.303 | 1 | .012 |
| N of Valid Cases | 120 | | |

a. 7 cells (70.0%) have expected count less than 5. The minimum expected count is .23.

From the tests, it was found that there was a fairly stronger relationship between knowledge sharing and rank held, as compared to the weaker relationship with administrative position held. However, results from further analysis using the chi-square test on both the relationships of rank and administrative position held with knowledge sharing were positive, but with low significance as the sample distribution was skewed towards lecturers.

## 4.1.1.1    Type of knowledge shared

Asked what type of knowledge they shared within their field of specialization, 24.2% of the respondents indicated they shared teaching methodologies, 22.5% indicated research findings, while 18.3% indicated developments in their field. Table 4 is a presentation of this data.

**Table 8**

### Type of knowledge shared in own field

|         |                          | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------------------------|-----------|---------|---------------|--------------------|
| Valid   | N/A                      | 8         | 6.7     | 6.7           | 6.7                |
|         | Research findings        | 27        | 22.5    | 22.5          | 29.2               |
|         | Developments in your field | 22      | 18.3    | 18.3          | 47.5               |
|         | Lecture notes/resources  | 14        | 11.7    | 11.7          | 59.2               |
|         | Teaching methodologies   | 29        | 24.2    | 24.2          | 83.3               |
|         | Work processes           | 10        | 8.3     | 8.3           | 91.7               |
|         | Best practices           | 7         | 5.8     | 5.8           | 97.5               |
|         | Other                    | 2         | 1.7     | 1.7           | 99.2               |
|         | all the above            | 1         | .8      | .8            | 100.0              |
|         | Total                    | 120       | 100.0   | 100.0         |                    |

## 4.1.2  Sharing outside own field of Specialization

In response to the question "Do you share knowledge with colleagues in other fields of specialization?", 81.7% answered YES, while 10.8 % answered NO. The remaining 5.8% accounted for respondents to whom this question did not apply, as they did not share their knowledge at all.

Those that answered "YES" comprised 55 males and 44 females with 45 being masters degree holders, 27 bachelors' degree holders, 18 post graduate diploma holders, four diploma holders and four at doctorate and PhD level.  Four were from colleges, while 35 were from universities.

Those that answered "NO" comprised seven males and six females, with five at bachelors' degree level, six at masters' level, one at postgraduate level and one at PhD level.



Figure 3: knowledge sharing outside own field vs. Educational qualification.

## 4.1.2.1     Type of Knowledge Shared

Research findings and work processes accounted for nearly 23% and 33% respectively of the types of knowledge shared by academicians outside their field of specialization. Teaching methodologies accounted for 13%, those who shared developments in their field and best practices accounted for about nine percent, while less than one percent indicated all the above types. Table 5. displays this data.
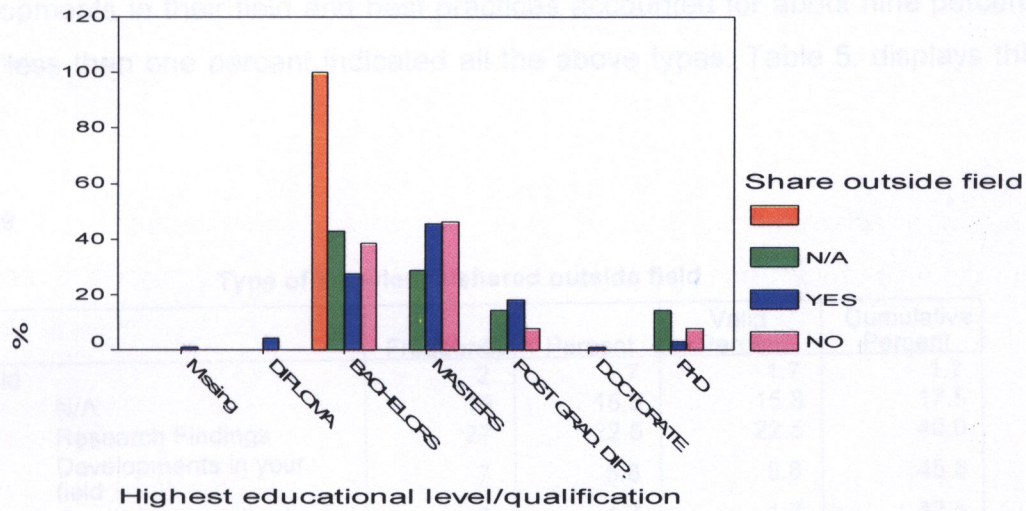
Table 9

### Type of knowledge shared outside field

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid |  | 2 | 1.7 | 1.7 | 1.7 |
|  | N/A | 19 | 15.8 | 15.8 | 17.5 |
|  | Research Findings | 27 | 22.5 | 22.5 | 40.0 |
|  | Developments in your field | 7 | 5.8 | 5.8 | 45.8 |
|  | Conference proceedings | 2 | 1.7 | 1.7 | 47.5 |
|  | Teaching methodologies | 16 | 13.3 | 13.3 | 60.8 |
|  | Work processes | 39 | 32.5 | 32.5 | 93.3 |
|  | Best practices | 3 | 2.5 | 2.5 | 95.8 |
|  | Other | 4 | 3.3 | 3.3 | 99.2 |
|  | All the above | 1 | .8 | .8 | 100.0 |
|  | Total | 120 | 100.0 | 100.0 |  |

## 4.2     Opportunities to Share

For the question "What opportunities exist for knowledge sharing in your institution?" meetings and person-to-person interactions had the highest frequencies with 26% and 33% respectively. Emails had a frequency of eight percent, discussion forums and peer reviews each had nearly seven percent, while journals/publications had less than one percent.

## 4.2.1  Preferred opportunities to Share

Table 6 below is a presentation of frequencies for the responses from the question "which of these (opportunities to share) do you prefer to use?"

**Table 10**

**Preferred opportunities to share**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | | 1 | .8 | .8 | .8 |
| | N/A | 7 | 5.8 | 5.8 | 6.7 |
| | MEETINGS | 30 | 25.0 | 25.0 | 31.7 |
| | DISCUSSION FORUMS | 12 | 10.0 | 10.0 | 41.7 |
| | COLLABORATIVE RESEARCH | 2 | 1.7 | 1.7 | 43.3 |
| | PEER REVIEWS | 6 | 5.0 | 5.0 | 48.3 |
| | EMAIL | 15 | 12.5 | 12.5 | 60.8 |
| | PERSON-TO-PERSON | 41 | 34.2 | 34.2 | 95.0 |
| | JOURNALS/PUBLICATIONS etc | 5 | 4.2 | 4.2 | 99.2 |
| | N/A | 1 | .8 | .8 | 100.0 |
| | Total | 120 | 100.0 | 100.0 | |

Person-to-person interactions with colleagues scored the highest frequency of 34%, formal meetings had 25%, emails had nearly 13% and discussion forums accounted for 10%, while peer reviews only had a five percent frequency and those that preferred using collaborative research only accounted for less than two percent.

Reasons given for the preference of meetings and person-to-person interaction fell in three major categories, which are "ease of use", "effectiveness" and "quality vs. quantity".

### 4.2.1.1 Meetings

#### 4.2.1.1.1 Ease of use

- "Meetings are formal and orderly"

- "Everyone is allowed to share their point of view, they are interactive"

- "'no training needed, just following protocol"

## 4.2.1.1.2 Effectiveness

- Agendas guide the sharing, so each point/subject is thoroughly dealt with and concluded before moving to the next."

- "Divergent points are also considered and minuted for future reference".

- "Regular meetings help to be up-to-date with what is going on and where there is room for improvement".

## 4.2.1.1.3 Quality vs. Quantity

- "meetings provide valuable, reliable and timely information"

- "Depending on subject, meetings are good source of a lot of information, especially technical information.

- "A lot of details are presented in order for decisions to be made"'

## 4.2.1.2 **Person-to-person interactions**

### 4.2.1.2.1 Ease of use

- "They are more intimate, allow you to freely share ideas with someone you have developed rapport with."

- "it is convenient and happens naturally i.e. you can just walk into a colleague's office or meet over lunch and as the conversation progresses, knowledge is shared"

- "The easiest way to share knowledge is through the "grapevine" (gossip) because it is informal, no restrictions on how or when to say what"

## 4.2.1.2.2 Effectiveness

- "with friends you are able to seek clarification where not clear, or solicit feedback"

- "it is easier to take or give advice on a one-on-one basis, from someone you trust as you can easily gauge intentions as being genuine or not"

- "it is easier to get the intricate details of a subject, background and information that may not ordinarily be made public."

## 4.2.1.2.3 Quality vs. quantity

- "Knowledge acquired in this way is good quality if you use competent and trusted sources."

- "depending on subject, person-to-person interactions yield more information as friends are not restrained by protocol and may even be shared in confidence."

## 4.2.1.3 E-mails

### 4.2.1.3.1 Ease of use

- "e-mails are easy to use if you have basic knowledge of computers"

- "almost everyone has an e-mail address, this makes it easier to reach more people"

- "they are convenient to use, no special rules to follow when communicating, all you need is ability to read and use computer".

### 4.2.1.3.2 Efficiency

- "they are fast and affordable, makes communication and sharing of ideas almost instant"

- "With e-mail, time and distance are eliminated as barriers to sharing. You can even share to more people in different locations"

- "they are versatile, there are a lot of added features in email services to make it even more effective, e.g. Instant messaging, video conferencing etc

### 4.2.1.3.3 Quality vs. quantity

- "large amounts of information can be shared with others almost immediately"

- "Because the information is in written, it is easy to verify. Also because you will know which sources to trust, it is easier to ensure quality control".

## 4.2.1.4 Discussion forums

### 4.2.1.4.1 Ease of use

- "They are interactive, no training required, just knowledge of topic/subject under discussion"

### 4.3.1.4.2 Efficiency

- "wide audience means more knowledge will be shared with others, different opinions will be shared"

- "has the advantage of synergy, where the sum of the resultant knowledge is of greater value than the individual ideas/knowledge"

### 4.2.1.4.3 Quality vs. Quantity

- "the knowledge shared in such fora is of high quality because here experts present what they know and others make contributions."

- "large amounts of knowledge are generated from such fora, as they are interactive and the wide audience is give chance to make contributions and ask questions".

## 4.3   New Technologies

Sixty-nine percent of those who engage in knowledge sharing indicated that they also used new technologies, while 25% said they did not. Five point eight percent accounted for those to whom this question did not apply.

Websites accounted for nearly 51% of the new technologies used among the respondents, communities of practice usage was at nearly 11 and wikis at nearly 6%. Figure 4. shows the distribution of these frequencies.

**New Technologies used**
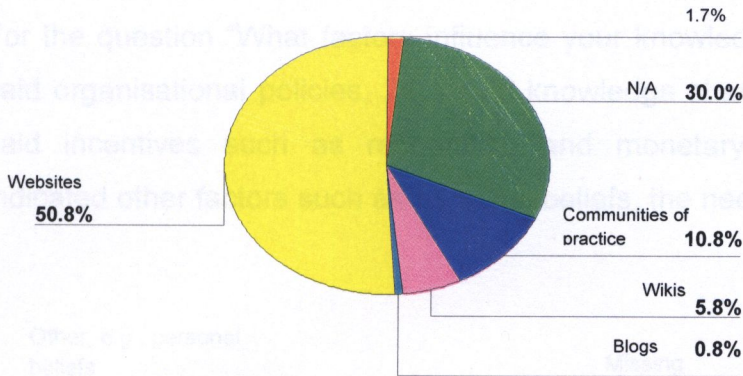


**Figure 4. New technologies used for knowledge sharing**

Nearly 69% of those that indicated using websites for knowledge sharing were from government run HLIs and 31% were from privately run HLIs. Of these 42 were from colleges, while 19 were from universities.

Ninety-two percent of those that indicated using communities of practice (CoP) were form government run HLIs, while the remaining ones were from privately run HLIs. Of these, eight were from colleges and five from universities. Those that indicated that they used blogs were all from government run HLIs, with seven from colleges and seven from universities.

**Table 11**

**Technologies used * Type of institution Cross tabulation**

Count

|  |  | Type of institution | | Total |
|---|---|---|---|---|
|  |  | College | University |  |
| Technologies used | N/A | 25 | 11 | 36 |
|  | Communities of practice | 8 | 5 | 13 |
|  | Wikis | 2 | 5 | 7 |
|  | Blogs | 1 |  | 1 |
|  | Websites | 42 | 19 | 61 |
|  |  | 1 | 1 | 2 |
| Total |  | 79 | 41 | 120 |

## 4.4 Factors that aid or hinder Knowledge Sharing

### 4.4.1 Factors that aid knowledge sharing

For the question "What factors influence your knowledge sharing?", nearly 32% said organisational policies, 24% said knowledge sharing initiatives, about 11% said incentives such as recognition and monetary incentives. About 12% indicated other factors such as personal beliefs, the need to help others, etc.
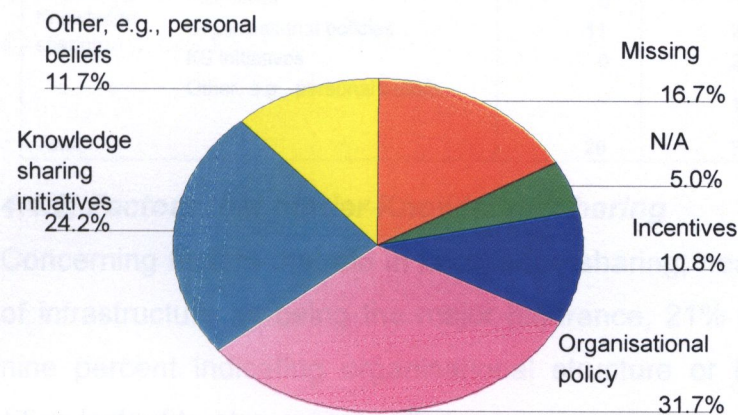


**Figure 5. Factors that aid knowledge sharing.**

Seventy percent of those that cited organisational policies as influencing their knowledge sharing were from government run HLIs, while 30% were from privately run ones, with 23 being academicians from colleges and 15 from universities.

Ninety percent of those that cited knowledge sharing initiatives as major influencing factors were also from government run HLIs, with 21 coming from colleges and eight from universities.

And among those that indicated incentives such as influencing factors, 62% were from government run HLIs and 38% were from privately run HLIs. Of these nine were from colleges and five from universities.

All those that indicated other reasons, such as personal beliefs, were from government run HLIs, with nine coming from colleges and five from universities.

**Table 12.**

**Factors influencing KS * Institutional ownership Cross tabulation**

Count

| | | Institutional ownership | | Total |
|---|---|---|---|---|
| | | Private | Government | |
| Factors influencing Knowledge sharing | N/A | 4 | 2 | 6 |
| | Incentives | 5 | 8 | 13 |
| | Organisational policies | 11 | 26 | 37 |
| | KS initiatives | 6 | 23 | 29 |
| | Other, e.g., personal beliefs, | | 14 | 14 |
| Total | | 26 | 73 | 99 |

### 4.4.2. Factors that hinder Knowledge Sharing

Concerning factors that aid in knowledge sharing; nearly 43% indicated that lack of infrastructure as being the major hindrance, 21% citing or lack of motivation, nine percent indicating organisational structure or bureaucracy, eight percent citing lack of trust amongst colleagues.
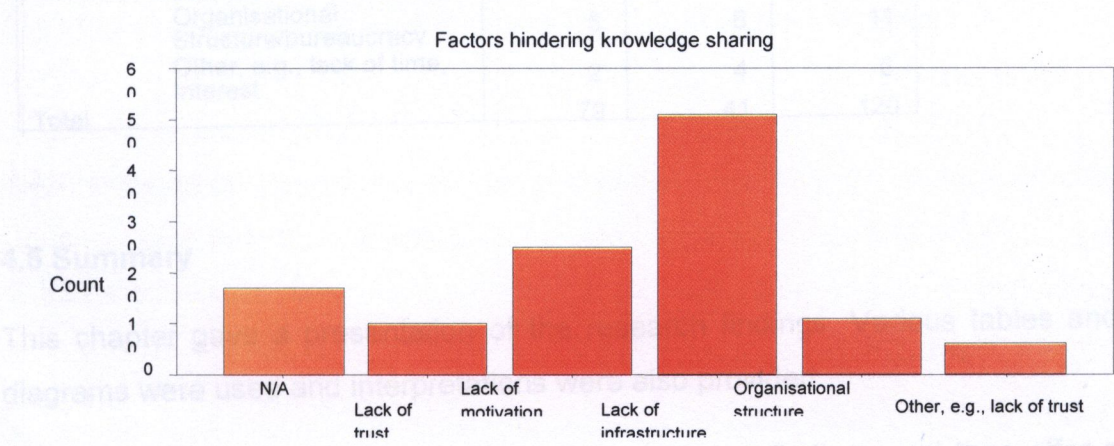


Figure 6. Factors that hinder knowledge sharing.

Moreover, 69% of those who cited lack of infrastructure as a hindrance were from government run colleges, while 31% were from run private run universities. Of those that cited lack of motivation as major hindrance, 32% were from

those that cited lack of motivation as major hindrance, 32% were from government run HLIs, 17 from colleges, eight from universities. Similarly, 80% of those that indicated lack of trust were from government run HLIs, while 20% were from private run institutions, seven being academicians from colleges, three from universities.

Ninety-one percent of those that said organisational structure/bureaucracy was their manor hindrance were from government run institutions, while the remaining nine percent were from privately run HLIs, five from colleges, six from universities. Table 6 below presents this data.

Table 13 .

**Factors hindering KS * Type of institution Cross tabulation**

| | | Type of institution | | Total |
| | | College | University | |
|---|---|---|---|---|
| Factors Hindering KS | N/A | 13 | 4 | 17 |
| | Lack of trust | 7 | 3 | 10 |
| | Lack of motivation | 17 | 8 | 25 |
| | Lack of infrastructure support | 35 | 16 | 51 |
| | Organisational Structure/bureaucracy | 5 | 6 | 11 |
| | Other, e.g., lack of time, Interest | 2 | 4 | 6 |
| Total | | 79 | 41 | 120 |

## 4.5 Summary

This chapter gave a presentation of the research findings. Various tables and diagrams were used and interpretations were also provided.

The next chapter will provide the discussion of these findings and then offer a conclusion based on the discussion.

# CHAPTER FIVE

## INTERPRETATION AND DISCUSSION OF FINDINGS

This chapter will present the interpretation and discussion of the findings of the research on the existence of a knowledge sharing culture among academicians. The presentation is arranged according to the research objectives and questions as set out in chapter one. Based on the findings, the chapter will draw a conclusion. It will then make recommendations with regard to policy formulation and areas requiring further research.

## 5.0    Interpretation and Discussion

These research findings are of great importance because, together, they provide a picture that would help to determine whether a culture of knowledge sharing exists among academicians in HLIs in Zambia. The interpretation and discussion thus seek to address the research objectives in light of these findings.

## 5.1    Objective one: to investigate the knowledge sharing culture among academicians in HLIs in Zambia.

When viewed as communities, HLIs can be regarded as social structures made up of different institutional arrangements. They consist of units, departments and faculty all work together to meet the institution's core functions of teaching, carrying out research and providing public service. In carrying out their various tasks, academicians engage in a lot of interaction and these interactions lead to the sharing of various types of information and ideas, both formally and informally. And interactions where knowledge is valued, where its creation, sharing and utilization have seen result in frequent knowledge exchanges, (Hall, 2001).

The research findings indicate that the concept of knowledge sharing is well understood among academicians in HLIs in Zambia. Nearly 90% of those surveyed indicated that they were familiar with the term "knowledge sharing". Furthermore, their descriptions of the concept indicated that they did consider knowledge to be of some value to them and to those around them.

Respondent number 12 described knowledge sharing as "giving and receiving ideas, information, skills and expertise with those around you, so that each one is able to benefit from what others know." Respondents number 67 and number 120 viewed it as "teamwork", where every member's input is seen as "adding value for the successful attainment of common goals". Respondents number five and number 85 described it as "showing others where they can find information that can help them in their work" and "offering guidance to colleagues about issues they are not familiar with" respectively. These views give clear indication of the importance attached to knowledge and its distribution, i.e. value addition and goal attainment.

Others in their descriptions highlighted the ways in which knowledge sharing is done. "Knowledge sharing is exchanging ideas with others through discussions, meetings or conferences", respondent number 76 said, while number 99 called it "disseminating information using communication channels such as one-on-one chats, emails or meetings."

In their descriptions, respondents number 17 and number 52 highlighted the different types of knowledge shared emphasising the need to share both. Respondent number 17 described knowledge sharing as "transferring the knowledge in your head to others either by writing it down or by explaining so that it is not lost when you move or die". Respondent number 52 said "the exchange of teaching material, text books, or material you stumble upon, such

and research publications, so that others can get ideas of what is obtaining in a particular area of interest".

Thus, contrary to findings on awareness by Suhaimeea et. al. (2006), Poh Yen (2008) and Jain et. al. (2007), there is evidence of high great awareness concerning knowledge sharing and its importance among academicians in HLIs in Zambia.

It has been found that most academicians in Zambian HLIs do engage in knowledge sharing activities. The research findings clearly show that more than 90% of the surveyed academicians frequently exchanged knowledge with colleagues within their field of specialization, while more than 80% engaged in frequent knowledge sharing outside their fields of specialisation.

The study also established that there was a relationship between knowledge sharing and educational qualifications. From the findings, it was observed that those engaged in frequent knowledge exchanges were masters' degree holders who accounted for 41% of those that shared within their field of specialization and 39% accounting for those that shared outside their field. The study also found that there is a relationship between leadership roles, such as ranks and positions held, with knowledge sharing. Due to certain limitations, however, the study could not conclusively determine the direction of these relationships.

This peer-to-peer kind of knowledge sharing confirms Ipe's (2003) findings that knowledge sharing is often affected by the relationship existing between sender and receiver, as well as Mittal (2008) who found that older and more qualified academicians were more likely to share their knowledge with their peers.

Knowledge frequently shared among colleagues in the same field included specialisation-specific knowledge such as personal research findings, teaching

methodologies and developments in their particular field. Abstracts and full research articles were found to be frequently shared among those actively engaged research. On the other hand, academicians are seen to frequently share their work processes and research findings with colleagues outside their field of specialization. Teaching methodologies are also shared. However, it was discovered that this is not as frequent and may be probably done for comparison purposes, as methodologies are often discipline specific.

A number of reasons have been forwarded to explain the differences in what is shared and the frequency, both within and across disciplines. Although cultural issues such as trust (either by reputation or competence) and reciprocity are the most prominent reason, as studies by Jain, Sandhu & Sidhu, (2007) and Sun & Scott, John (2005) found, present research findings did not conclusively determine which of these are applicable in Zambian HLIs.

Nevertheless, these differences often lead to what Campbell (2009) calls "power politics", where those that have knowledge want to hoard it as a means of achieving "competitive advantage" over those who do not. This is very common in HLIs as career advancements and promotions are often based on academic or scholarly achievement, as opposed to team work.

With an array of knowledge sharing opportunities existing in today's HLIs, academicians are exposed to both formal and informal tools at their disposal. This includes discussion forums, peer reviews, collaborative research as well as publications such as journals and newsletter, both in-house and external. Since academicians are research oriented, it would be expected that they would be more inclined to publications and collaborative research as a means of sharing knowledge.

The findings however indicate the contrary. Instead, nearly 60% of the respondents indicated a preference for meetings and person-to-person

interactions as opposed to collaborative research and publications. They were cited for their ease of use, effectiveness and for their ability to generate quality and large amounts of knowledge.

Meetings are favoured for their formal structure, leading to an orderly and timely exchange of knowledge by means of an agenda. They are also very interactive and so acts as a forum where many can have their views on a particular subject heard.

Person-to-person interactions were found to be the most preferred form of non-institutionalised knowledge sharing opportunities in HLIs. Findings indicate that over 34% of the surveyed academicians favoured these types of interaction as they were intimate, unstructured and unrestricted nature, allowing them to freely and conveniently seek clarification or feedback where needed.. The interactions take place in ordinary, everyday interactions among academicians over lunch, when one academician seeks the advice of another, etc. This is in line with Cheng et.al (2008) findings about the reasons for the popularity of person to person interactions as a means of sharing knowledge

It was however found that what is shared and how frequently these exchanges occur are usually determined by conditions prevailing, as well as the perceived costs and/or benefits those engaged in the exchange attached to it.

The use of technology in HLIs provides another avenue through which knowledge amongst academicians can be shared effectively and efficiently. A number of "new technologies" have in the recent past been developed. Common among these are communities of practice (CoPs), virtual groups of academicians of similar interests, intranets, weblogs which are shared on-line journals where

people post daily entries about their personal experiences in nearly every field, and wikis, the most commonly known being Wikipedia;

Websites accounted for 50% of the technologies used by academicians in HLIs for knowledge sharing. The most common use of websites was browsing or to search for information on topics of interest. As a means of sharing knowledge, this was done mainly through the posting of comments or feedback after one had viewed the contents of a website. This is in disagrees with findings by Osunade et.al (2007) who found that there was very limited use of the internet among academicians. However, the research did not conclusively establish to what extent collaborative features of these technologies were used for knowledge sharing.

### 5.1.1 Summary
The above findings provide answers the question raised by objective two, which sought to investigate the knowledge sharing culture among academicians in HLIs in Zambia. They confirm earlier findings by Suhaimeea et. al. (2006), Poh Yen, Jain et. al. (2007) and Mittal (2008), which revealed the existence of knowledge sharing culture in HLIs.

### 5.2 Objective two: to explore the factors that aid or hinder knowledge sharing

Various conditions have been identified as influencing the sharing of knowledge among academicians in HLI. While some of these factors aid knowledge sharing, others are clearly seen as hindrances.

According to the findings, policies and knowledge sharing initiatives were identified by nearly 56% of the surveyed academicians as aiding knowledge

sharing. Some of the policies found to be supportive of knowledge sharing in HLIs in Zambia include the rotation of certain leadership positions such as departmental/sectional headship, requirement to hold scheduled meetings at different levels (departmental/sectional, school/faculty etc), setting up of staff development programs, budgetary allocations for collaborative research, adoption of knowledge management programs, etc.

Knowledge sharing initiatives include the introduction of institutional intranets, creation of knowledge maps, staff directories, exchange programs among institutions, discussion forums etc. These findings correspond with earlier findings by Suhaimeea, Abu, Bakarb & Aliasc, (2006); Smith & McKeen , (2003) and Jain, Sandhu & Sidhu (2007).

The fact that 70% percent of those that cited organisational policies and 90% of those that cited knowledge sharing initiatives as influencing their knowledge sharing were from government-run HLIs is an encouraging point to note. This is because government, being the main enforcing body, could ensure that there is a spill-over effect in as far as polices and initiatives are concerned. It can be hoped that privately-run HLIs will take a leaf from government-run ones in formulating and implementing policies that encourage knowledge sharing.

The lack of adequate infrastructure support and motivation were conditions identified by nearly 64% of the surveyed academicians as the major hindrances to knowledge sharing. Infrastructure has to do with the facilities and equipment needed for the sharing of knowledge. This includes various communication tools such as ICTs, defined communication processes, procedures to follow, etc. Awareness, accessibility to and ability to use this infrastructure can help bridge the gap between those that have knowledge and those that need it.

There seems to be less infrastructural hindrances in privately run HLIs in as far as knowledge sharing is concerned. This is evidenced by the fact that only 31% of the respondents from privately run HLIs cited the lack of infrastructure as challenge to sharing their knowledge.

This can be attributed to two reasons. One is the fact that most of the privately run institutions are relatively younger than government ones, having been established after the liberalisation of the economy in the 1990s. Hence their infrastructure, in comparison to that found in older government run HLIs is relatively better. The other reason is to do with funding. Privately run institutions are generally better funded than government ones and so they are able to afford regular maintenance or upgrading.

Thus, it is in government run institutions that the research found lack of infrastructure cited highly as a challenge to knowledge sharing. This is highlighted by the common thread found in responses to the question "how can these factors be best addressed to encourage the sharing of knowledge among academicians?"

Respondent number 16 said, in part "... improve organisational infrastructure, especially ICTs", Respondent number 26 answered: "develop sustainable infrastructure and staff training", while other respondents like numbers 76, 94 and 113 were more specific and suggested purchase of newer and faster computers, improving access to the internet and introduction and training of use of knowledge management systems.

The absence of motivators, when coupled with inadequate infrastructure support, tends to be a major challenge for knowledge sharing. Findings indicate that 21% of the surveyed academicians found the lack of motivators a hindrance, as compared to the nine percent who cited organisational structure (and the resulting red tape) and the eight percent who cited lack of time. As in the case with lack of infrastructure, those that cited lack of motivators as a hindrance were from government run HLIs, more being from colleges than universities. This calls for a critical look into issues of motivation and infrastructure on government run colleges in as far as encouraging knowledge sharing is concerned.

Motivators also encourage academicians to share knowledge, as they feel compensated for their efforts. Motivators can range from public recognition such as employee of the month awards, recognition as experts in the field or promotions to financial motivators such as bonuses or salary increments.

So while scholars have been found that when it comes to the decision as to whether to share or not to share, unless the perceived benefits exceed the costs of sharing, sharing behaviour is hard to re-enforce, (Hendricks, 1999, Skyme, 2008). However, this research did not find evidence of deliberate motivators specifically aimed at rewarding and re-enforcing knowledge sharing among academicians.

This is in harmony with earlier findings by scholars such as Gupta & Govindrajan (2000) and Suhaimeea et.al, (2006) that despite their importance, there is a lack of that an incentive system in HLIs aimed at encouraging individuals to share their knowledge.

## 5.2.1 Summary

The above findings provide answers the question raised by objective two, which sought to explore the factors that aid or hinder knowledge sharing among academicians. Aiding factors were identified as knowledge sharing initiatives and favourable policies as factors that aided knowledge sharing, while lack of motivators and inadequate infrastructure were found to be the major hindrances.

# CHAPTER SIX
## CONCLUSION AND RECOMMENDATIONS

## 5.2    Conclusion

The existence of a knowledge sharing culture is an important aspect of knowledge management in any given institution. This is because it facilitates the flow of knowledge throughout an organisation, from those that posses it to those that need it for the successful completion of various tasks, to add value to their work or for the attainment of organisational objectives.

These research findings clearly reflect the existence of such a culture among academicians in HLIs in Zambia. This evidenced by high awareness and participation in frequent knowledge sharing exchanges, both within and outside academicians' fields of specialization. It is also clear that whilst many opportunities to share exist within HLIs, academicians prefer those that involve higher interactivity, such as meetings and person-to-person interactions, where openness and shared norms are key.  Additionally, the frequent use of new technologies highlights academicians' potential to share their knowledge across the traditional restraints of time and space.

The research also showed that knowledge sharing initiatives and favourable policies in HLIs are the major factors aiding knowledge sharing among academicians in HLIs in Zambia. Academicians are drawn to knowledge sharing initiatives and are thus encouraged to share more knowledge, while the existence of policies that were supportive of knowledge sharing, helped employees to view it as a natural part of their job requirements.

On the other hand, the major hindrances to knowledge sharing among academicians were identified as inadequate infrastructure and lack of motivation. Without the necessary infrastructure and tools at their disposal, academicians are prevented from optimal knowledge sharing exchanges. Furthermore, the lack

of adequate motivators was identified as another hindrance to knowledge sharing. This is because academicians view motivational rewards as compensation for their knowledge sharing and are thus, less likely to share knowledge if they judge the motivation as inadequate.


## 5.2   RECOMMENDATIONS

- The researcher recommends that relevant policies aimed at tackling the need for motivators and improved infrastructure support should be formulated in order to strengthen knowledge sharing cultures in HLIs in Zambia. This is important in order to address specific concerns raised in this exploratory study.

- Secondly, the researcher recommends that further research be carried out to determine the information seeking behaviour of academicians. Such information would serve as a means of bridging the gaps between those that seek knowledge and information for their problem solving and those that have the information and knowledge sought.

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**Appendix 1.** Questionnaire

Questionnaire Number:_____

## UNIVERSITY OF ZAMBIA

## DEPARTMENT OF LIBRARY AND INFORMATION STUDIES

## DIRECTORATE OF GRADUATE AND RESEARCH STUDIES

## QUESTIONAIRE TO INVESTIGATE KNOWLEDGE SHARING CULTURE AMONG ACADEMICIANS IN HIGHER LEARNING INSTITUTIONS IN ZAMBIA

I am a postgraduate student carrying out the above research in partial fulfilment for the award of Master in Library and Information Studies (MLIS). The information collected will be used for academic purposes **only** and <u>confidentiality</u> will be observed.

Thank you for your co-operation.

## SECTION A.

1. Sex        1.     Male            ( )

                     2.     Female         ( )

2. Age        1.     20 -30          ( )

                     2.     31 – 40        ( )

                     3.     41 -50          ( )

                     4.     51 – 60        ( )

                     5.     61 years and above     ( )

3. Educational Level     1.     Diploma            ( )

                     2      Masters           ( )

                     3.     Postgraduate diploma     ( )

                     4.     Doctorate         ( )

                     5.     PhD                ( )

4a. What is your rank

1. Lecturer ( )    2. Senior lecturer ( ) 3.Associate professor ( )    4. Professor ( )

5. Other (specify).......................................................

b. What administrative position (if any) do you hold?

1. Head of Department / Section ( )   2. Assistant Dean ( )   3. Dean   ( )

4. Other (specify) ..................................................................

5. Type of institution.        1.        College                          ( )

                               2.        University                       ( )

6. Name of institution.

..........................................................................................

..........................................................................................

7. How long have you worked for the institution?

                               1.        Less than 5 years               ( )

                               2.        5 – 10 years                    ( )

                               3.        11 – 15 years                   ( )

                               4.        16 – 20 years                   ( )

                               5.        21 – 25 years                   ( )

                               6.        26 years or more                ( )

**SECTION B.**

8a. Are you familiar with the term knowledge sharing?

    1.  Yes ( )        2. No ( )

b. What is your understanding of the term "knowledge sharing"?

.................................................................................................

.................................................................................................

.

9a. Do you engage in any knowledge sharing with colleagues in **your** field of specialisation?

    1. Yes ( )        2. No ( )

**If "No", go to question 16. If "yes", continue with question 9b.**

9b. What type of knowledge do you share with them? *(tick the relevant)*

1. Research findings ( ) 2. Developments in your field ( )  3. Lecture notes ( )

4. Teaching methodologies ( ) 5. Work processes ( ) 6. Best practices ( )

7. Other (specify)...............................

10a. Do you engage in any knowledge sharing with colleagues in **other** fields of specialisation?

    1. Yes ( )        2. No ( )

b. What type of knowledge do you share with them? *(tick the relevant)*

1. Research findings ( )   2. Developments in your field  ( )

3. Conference proceedings ( )   4. Teaching methodologies ( )

5. Work processes ( )    6. Best practices ( )

7. Other (specify) .....................................

11. How often do you share your knowledge?

1. Frequently ( ) 2.  Rarely ( )

## SECTION C

12.  What opportunities exist for knowledge sharing in your institution ( *tick the relevant*)

1. Meetings ( )  2. Discussion forums ( )   3. Collaborative research ( )

4. Peer reviews ( ) 5. Email ( )   6. Person-to-person ( )

7.  Journals/publications ( )  8. Other (specify) ...................................

13a. Which of these do you prefer to use?

...............................................................................................................

b. Why?

..........................................................................................................................................................

..........................................................................................................................................................

14a. Do you use any of these new technologies to share your knowledge with colleagues?

     1. Yes ( )  2. No ( )

*If "No", go to question 16. If "Yes", continue with question 14b.*

b. If "Yes", which technologies do you use? (tick the relevant)

  1. Communities of practice ( )  2. Wikis ( ) 3. Blogs ( ) 4. Websites ( )

  5. Twitters ( )  6. Other (specify) ..............................................................

c. How often do you use them to share your knowledge with colleagues?

  1. Very often ( )  2. Often ( ) 3. Not often ( )

15. What factors influence your knowledge sharing?

  1. Incentives ( )  2. Organisational policies ( )  3. Knowledge sharing initiatives ( )  4. Other (specify).............................................................

16. What factors hinder you from sharing your knowledge?

   1. Lack of trust  ( )   2. Lack of infrastructure support  ( )
   3.Lack of motivation ( )   4. Organisational structure  ( )

   5. Other (specify)...............................................................


17. In your opinion, how can these factors be addressed in order to encourage the sharing of knowledge among academicians?

..................................................................................................................
..................................................................................................................


*Thank You for your time*