

UNIVERSITY OF KWAZULU-NATAL

**PERCEPTIONS OF KNOWLEDGE TRANSFER OF FOREIGN
AFRICAN DOCTORS PRACTICING IN SOUTH AFRICAN
PROVINCIAL HOSPITALS**

By

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degree of Master of Administration in Human Resource Management**

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2012

DECLARATION

I,JOLY NZIAVAKE LUTAKWA.....declare that

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To each of the above, I extend my deepest appreciation.

DEDICATION

I dedicate this dissertation to my mum, brothers and sisters who offered me unconditional love and support throughout the course of this thesis.

Supervisor's permission to submit for examination

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Abstract

The study examined the factors affecting the African foreign doctors' perception of knowledge transfer with special reference to South African provincial hospitals. The influence of three organisational factors (Interpersonal relationships, Language & communication and organisational culture) and the demographic variables on knowledge transfer were assessed. From these variables four hypotheses were formulated and tested. The study employed a cross-sectional study and a total of 62 African foreign doctors practicing in South African provincial hospitals completed a structured questionnaire. The findings indicated that interpersonal relationships, language and communication as well as organisational culture influenced knowledge transfer. Also, there was a variation on the influence of language and communication on knowledge transfer among different age groups in the organisation. Based on the research findings the results were discussed and compared and contrasted to previous research and the literature review. The recommendations as outlined in a graphical representation indicate how the organisation can improve the transfer of knowledge and improve their efficacy in the process subsequently.

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CHAPTER 1

INTRODUCTION AND BACKGROUND TO THE STUDY

1. INTRODUCTION

The migration of medical doctors in and out of the country is a reality in South Africa today. More than a quarter of South Africa's registered doctors have already left the country. South African doctors have always been in high demand in countries such as Australia, the UK, Canada, and the US, mainly because of the good training provided by South African universities. However, this phenomenon has increased the strain on a country that already suffers a shortage of scientists, medical doctors, and engineers (Mutume, 2003). Research has shown, however, that while South Africa is losing medical doctors, it is also receiving doctors from both developing and developed countries (Couper, 2003).

Local hospitals wanting to capitalize effectively on the influx of doctors from other African countries must be able to overcome the challenge of transferring knowledge to these doctors.

1.1. BACKGROUND

The background to this study focuses on the concept of knowledge transfer and organisational factors (interpersonal relationships, language and communication and organisational culture) as well as the background to South African provincial hospitals.

1.1.1. Knowledge Transfer

According to Davenport and Prusak (1998), there are three main components of knowledge management: knowledge generation, knowledge codification and coordination, and knowledge transfer. Knowledge transfer is important, because the widespread use of information that already exists inside an organisation can represent a highly profitable use of resources (Davenport and Prusak, 1998). Davenport and Prusak (1998) agrees that one of the phenomena related to knowledge is that unlike material assets, which decrease as they are used, knowledge assets increase with use ideas breed benefits of increased organisational knowledge without having to expend the energy or cost associated with creating, codifying or capturing more knowledge.

1.1.1.1. What is knowledge transfer?

Knowledge transfer consists of the range of activities which aim to capture and transmit knowledge (either explicit, such as in patents or tacit, such as know-how), skills and competence from those who generate them to those who will transform them into economic outcomes (Catarino, 2009). Knowledge transfer is normally concerned with the process of moving useful information from one individual to another. In order for this transferred information to be useful, it must be critical to the success of the organisation (Davenport & Prusak, 2001).

Catarino (2009) notes that knowledge transfer includes both commercial and non-commercial activities, such as research collaborations, consultancy, licensing, spin-off creations, researcher mobility and publications (Catarino, 2009). Hence, an increase in the amount of knowledge transferred within an organisation has the potential to save an organisation money while positioning it to face future challenges more effectively. The implication for South African public hospitals is that transferring knowledge to African foreign doctors is a basic step for sustaining competitive advantage. However, success in knowledge transfer depends on these doctors' absorption capacities, and the willingness of local South African doctors in these hospitals to transfer knowledge (Ladd & Herminges, 2003).

1.1.1.2. The benefits of knowledge transfer

As the above analysis illustrates, the term 'knowledge' deals with certain activities that attempt to pass on knowledge from one unit(s) to another, or from one individual to another. Knowledge transfer can, therefore, provide a lower-cost alternative to the creation and codification of new knowledge. Increased sharing of knowledge might increase organisational knowledge without having to expend the energy or cost associated with creating, codifying, or capturing more knowledge (Catarino, 2009). Hence, increasing the amount of knowledge transferred within an organisation has the potential to save an organisation money while positioning it to face future challenges more effectively.

1.1.2. Individual Culture

Despite increasing globalization, cultural differences are still believed to play a very important role in achieving business success. They may impact positively, by facilitating communication between employees and business partners, but they may also inhibit knowledge transfer and as a result, hinder the competitive position of an organisation. It is crucial to be aware that culture meaningfully influences the will to share knowledge within an organisation and in a relationship. The invisible influences of national cultures become visible as soon as geographic borders are crossed. Many people are not aware of these influences until they start to interact with people from other cultures. In order to understand and cope with these differences, multicultural organisations need to develop a conceptual framework that appreciates how values, beliefs and cherished philosophies contribute to a society.

Brookhart and Loadman (1992) believe that there would be a gap in thinking which is likely to affect collaboration, when two groups of people with different cultural background collaborate, due to their inability to merge their ideas into one concept. Within an organisational setting, culture influences the success of knowledge management as it impacts on the way people relate to one another. Hence, culture in itself can be seen as a stepping stone to individual knowledge transfer.

Different authors define culture in different ways; however, for the purposes of this research culture is described as the collective perceptions, beliefs and values of employees in their workplace (Debowski, 2006). It is believed that individuals learn about their organisational culture from the first day in a new workplace as they hear stories, observe incidents and outcomes and experience the influences and consequences first-hand (Debowski, 2006).

Culture may have its sources in different aspects of human life, including language, nationality, education, profession, group, religion, family, social class, and corporate culture (Usunier 1993). All these elements influence every member of a society and thus, during reciprocal interactions, culture is learnt and transmitted to others. Culture cannot be limited only to the sum of elements. It is an ongoing process of acquiring and transmitting these factors. This implies that knowledge transfer is also enhanced locally as individuals share cultural similarities (Debowski, 2006).

Hofstede (2000), Hall (2001), Trompenaars and Hampden-Turner (1997) examined the differences between the national cultures and their influence on the organisation. In addition, Bradley (1991) links the concept of the cultural environment of a firm, with the micro-level impact of culture on an organisation. He argues that the factors that have the most influence at the macro-level are cultural variability (how fast the components of a culture are changing), cultural complexity (how easy it is to understand culture through given data and facts), cultural hostility (the attitude of the environment towards a foreign enterprise), cultural heterogeneity (the degree of homogeneity of culture of the country in which the firm operates), and cultural interdependence (how changes that take place in other surrounding cultures influence the cultural environment in a given country). At the micro-level, Bradley (1991) underlines the influence of national ideology (positively correlated in countries with a strong cultural identity), perceptions of foreigners as well as foreign products and attitudes towards the diffusion of innovation. Those elements have a very significant impact on the strategy of a company and its willingness to create good conditions for knowledge sharing. The multi-layered influence of those factors shows how complicated the proper understanding of cultural differences among people working in an enterprise and its co-operators, may be for managers.

Gesteland (2000) argues that the knowledge-sharing process is influenced both by cultural dimensions, and the organisational culture inside an organisation. Cultural dimensions reveal the overall characteristics of a country. They may significantly influence knowledge transfer within an organisation as well as among business partners. It is crucial for managers to overcome potential barriers to knowledge transfer that may be due to different cultural backgrounds. In order to establish an organisational culture that is conducive to knowledge sharing, managers have to be aware that culture has two levels of influence on the organisation: the macro and the micro. Combining the two may facilitate successful knowledge sharing.

1.1.3. Interpersonal Relationships

Interpersonal relationships in the workplace have a significant impact on people and their engagement in interpersonal social behaviours as well as on core processes such as coordination and error detection (Dutton & Ragins, 2007; Weick & Robert, 1993). In work contexts, high-quality relationships are key channels through which members engage in learning behaviours that help the organisation attain its goals (Lewin & Regine, 2000). The capacities enabled by high-quality interpersonal relationships allow members to exchange different forms of variable information and ideas which are critical to creating and sharing solutions to problems and new ways of improving work processes and outcomes.

1.1.4. Language and Communication

Scholars have pointed out that our thinking is affected by our language (Hofstede, 2001), and this may constitute a prime inhibitor in cross-national knowledge reception. A common language facilitates the formation of identity and provides structures for conceptualizing and reasoning (Whorf, 1940 cited by Ambos and Ambos, 2009). Marschan-Piekkari, Welch and Welch (1999a, 1999b) found that collaboration across linguistic boundaries frequently involves misunderstandings. This implies that knowledge transfer from South African medical doctors to doctors from countries such as Democratic Republic of the Congo or Cameroon will be negatively affected by linguistic distance, as one country is predominantly English, while the others are predominantly French.

Communicating tacit knowledge is made difficult by a lack of common agreements on language protocols, or standards relating to how to respond to knowledge requests, and issues of context management. Misunderstandings also can occur, with different interpretations depending on an individual's background. These problems arise due to a lack of appreciation of the contextual details. The knowledge sender might lack sensitivity in the evaluation of the context and how the knowledge might be interpreted by the receiver, while the knowledge seeker might not request information in an appropriate way and explicate the contextual subtleties. While information

transfer may occur, its interpretation might be incomplete and sometimes misunderstood (Desouza & Awazu, 2005).

1.1.5. South African Provincial Hospitals

Whether in the public or private sector, today's competitive business environment requires members of an organisation to share knowledge with one another (Nevis, Anthony & Gould, 1995; Davenport & Prusak, 1998; Drucker, 1998; Chow, Deng & Ho, 2000). Many organisations have concluded that effective knowledge sharing is the crucial way to lever their core competencies and gain competitive advantage (Gold, Malthotra & Segars, 2001). In this context, knowledge sharing becomes crucial for organisations that want to succeed.

More than a quarter of South African's registered doctors have already left the country. To replace these doctors and ensure the smooth running of public hospitals in South Africa, the country is relying on the remaining doctors' willingness to transfer their skills and competences to their fellow African foreign doctors who are willing to practice in South African public hospitals.

It has become clear that the mere possession of knowledge is not enough; what is required is its identification, sharing and application within and beyond the organisation (Walczak, 2005). Bearing this in mind, organisations have begun to look at how to increase organisational knowledge in order to gain a strategic advantage (Walczak, 2005).

In South African public hospitals, knowledge transfer from South African local medical doctors to African foreign doctors has the potential to increase the hospitals' effectiveness and hence, improve the quality of the services offered at these hospitals.

Based on the views of a select number of African foreign doctors trained in other African countries and currently practicing in South African public hospitals, this study investigates their perceptions of the level of knowledge transfer in South Africa public hospitals.

The significance of this research is to contribute to the understanding of the level of knowledge transfer from local South African doctors to African foreign doctors practicing in South Africa

whilst emphasizing the importance of individual culture, interpersonal relationships and language in the process of knowledge transfer.

1.2. MOTIVATION OF THE STUDY

The aims of this study are to assess the influence of the perceptions of African foreign doctors on the level of knowledge transfer and based on their perceptions develop ways of overcoming the barriers that according to them prevent knowledge transfer. The study will also examine the factors that affect knowledge-transfer behaviour from South African doctors to African foreign medical doctors, through the eyes of the African foreign doctors practicing in South African public hospitals.

1.3. PROBLEM STATEMENT

What are the perceptions of foreign African doctors practicing in South Africa provincial hospitals of knowledge transfer and to what extent do organisational factors affect knowledge transfer?

1.4. RESEARCH QUESTIONS

- Do the organisational factors (organisational culture, language & communication, interpersonal relationships) affect knowledge transfer and if so, to what extent?
- Are there significant intercorrelations amongst the respective organisational factors (organisational culture, language & communication, and interpersonal relationships) that have the potential to impact on knowledge transfer?
- Do the demographic variables gender, age, length of service as a medical doctor, length of service in South Africa, departments, and types of work permits, affect knowledge transfer?
- Do the organisational factors (organisational culture, language & communication, interpersonal relationships) significantly account for the variance in determining knowledge transfer?

1.5. RESEARCH OBJECTIVES

- 1) To conduct a literature review on knowledge transfer.
- 2) To assess the extent to which organisational factors (organisational culture, language & communication, and interpersonal relationships) affect knowledge transfer.
- 3) To determine whether significant intercorrelations exist between the respective organisational factors (organisational culture, language & communication, and interpersonal relationships) that have the potential to impact on knowledge transfer.
- 4) To establish the influence of the demographic variables of gender, age, length of service as a medical doctor, length of service in South Africa, departments, and types of work permits on knowledge transfer.
- 5) To determine whether the organisational factors (organisational culture, language & communication, and interpersonal relationships) significantly account for the variances in determining knowledge transfer.
- 6) To provide recommendations for future research and for attaining greater effectiveness in knowledge transfer.

1.6. HYPOTHESES

- ✓ There exists significant intercorrelations amongst the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer practice in the organisation, different barriers to knowledge transfer, channel of knowledge transfer) and the organisational factors that have the potential to act as barriers to knowledge transfer (organisational culture, interpersonal relationship and language & communication).
- ✓ There is a significant difference in the perception of employees varying in biographical profiles (gender, age, length of service as a medical doctor, length of service in South Africa, Department, nature of work permit) regarding the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer in the organisation, different barriers to knowledge transfer, and channel of knowledge transfer) respectively.

- ✓ There is a significant difference in the perception of employees varying in biographical profiles (gender, age, length of service as a medical doctor, length of service in South Africa, Department, nature of work permit) regarding the potential of the organisational factors (organisational culture, interpersonal relationships, language & communication) to pose as barriers to knowledge transfer.
- ✓ The four dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer practices in the organisation, different barriers to knowledge transfer, channels of knowledge transfer) significantly account for the variance in determining knowledge transfer.
- ✓ The three organisational factors (organisational culture, interpersonal relationship, language & communication) significantly account for the variance in knowledge transfer.

1.7. LIMITATIONS OF THE STUDY

The limitations of the study were as follows:

- The research only focused on three organisational factors and seven demographic variables as measures of knowledge transfer. Other factors that might influence knowledge transfer were not investigated in this research.
- Time and resource limitations resulted in a cross-sectional study where data was collected once and the sample consisted of only 62 participants.
- The study was limited to various South African provincial hospitals.

1.8. STRUCTURE OF THE STUDY

The structure of the study is as follows:

Chapter 1 provides an introduction and background of the study. The problem statement and research questions give rise to the objectives of the research. The conceptual model results in the hypotheses and the limitations of the study are highlighted.

Chapter 2 relates to knowledge transfer, the benefits of knowledge transfer, and the challenges of knowledge transfer. A literature review of knowledge transfer including strategies on how to overcome the barriers to knowledge transfer, knowledge management, steps of knowledge management, benefits of knowledge management were also discussed.

Chapter 3 entails organisational Factors affecting knowledge transfer. Literature on the three organisational factors and how they affect employees' participation in organisational knowledge sharing were also discussed. These include interpersonal relationships, language and communication, and organisational culture.

Chapter 4 relates to the research methodology. This chapter looks at the research design, choice of methodology, research strategy, research approach, time horizon, population, sampling, data collection methods and statistical tests.

Chapter 5 presents the result of the study. This chapter displays the descriptive statistics, correlations, multiple regressions, t-test, and the ANOVA test and provides a summary of the findings.

Chapter 6 entails the discussion of results. The discussion of results includes organisational factors; interpersonal relationships, language and communication, and organisational culture) in relation to knowledge transfer. Demographic variables are also discussed in terms of the findings. The chapter also compares and contrasts findings obtained with that of the other researchers. Using the results of the study, a framework was generated to display the impact of the sub-dimensions on knowledge transfer and the impact of organisational factors (potential barriers) to knowledge transfer.

Chapter 7 conclusions and recommendations. The conclusions and recommendations arising from the research are presented.

1.9. SUMMARY OUTLINE PER CHAPTER

This chapter provided a background to the research. The research questions, objectives and problem statement provided a framework for the research. The hypothesis and research aim.

The next chapter (chapter 2) includes a review of the literature which incorporates an indepth discussion in the areas of knowledge transfer and knowledge management.

CHAPTER 2

KNOWLEDGE TRANSFER

2.1. INTRODUCTION

Davenport and Prusak (1998) classify knowledge management into three main components: knowledge production, knowledge codification and co-ordination, and knowledge transfer. Among these three, knowledge transfer is considered to be the central aspect as it enables an organisation to distribute information, which is its most valuable resource, to its employees. Knowledge transfer benefits the organisation as it enables employees to take informed decisions (Davenport & Prusak, 1998). As opposed to material assets that shrink as they are utilized, knowledge resources are improved as they are used. This implies that sharing ideas/knowledge within the organisation will allow the organisation to increase its own knowledge without the additional costs associated with creating, codifying, or capturing more knowledge (Davenport & Prusak, 1998). Knowledge transfer is believed to be a wider concept than technology transfer as it includes other transfer channels, such as enhancing the potential of workers. In today's information economy, knowledge is recognised as an organisation's competitive asset (Teece, 1998). Therefore, knowledge transfer has become a very important element in determining the strength of an organisation. Knowledge transfer deals more with connection than collection of knowledge (Dougherty, 1999). The concept "collection" could not be used when referring to knowledge transfer as this concept is very specific and only deals with the implementation of knowledge. It does not provide for the continuous sharing of knowledge between those who possess knowledge and those who receive the knowledge. Instead, knowledge transfer is the process through which an organisational unit(s) exchanges skills and experiences with other units of the organisation (Argote & Ingram, 2000). According to Rogers (1983), knowledge transfer can be described as an attempt by an individual or group to replicate a particular type of information from another individual/group.

The Encyclopedia defines knowledge transfer as a practical way of bringing an amount of knowledge from one unit of an organisation to another or an effort to distribute knowledge widely throughout the organisation. Knowledge transfer comprises of a range of activities that

aim to accumulate and convey knowledge (either explicit, such as in patents or tacit such as know-how), skills and competence from those who create them to those who will convert them into profitable results. It includes commercial and non-commercial activities such as research collaboration, consultancy, licensing, spin-off creations, researcher mobility and publication. Knowledge transfer is beneficial to all categories of stakeholders, for the reason that effective knowledge transfer constitutes a key instrument for an organisation's success as it ensures that staff across the organisation possesses the essential skills to perform their job well. By allowing a two-way process of transferring ideas, research, results, experience, or skills between two different parties, knowledge transfer enables the organisation to create new knowledge and to make use thereof (RCUK, 2006). Hence, Sveiby (1997) argues that two main perspectives must be kept in mind when modeling knowledge transfer. Firstly, knowledge can be completely observed, stored or consecutively recycled and transferred. Secondly, knowledge is viewed as a process through which individuals interact by exchanging ideas with one another, meaning that knowledge is a developmental process of individuals who learn together.

The literature divides knowledge transfer into tacit and explicit knowledge. Researchers agree that explicit knowledge can pass more easily from one person to another than tacit knowledge. However, an organisation that needs to easily transfer tacit knowledge must ensure the development of individuals'/groups' tacit knowledge. The development of individual/group knowledge will enable the individual/group to understand themselves. This understanding, in turn is considered to be an important aspect of tacit knowledge transfer. Both knowledge giver and receiver need to understand their knowledge well, understand themselves as unique individuals and carefully assess their environment, and one another's values and beliefs before tacit and explicit knowledge can be transferred.

2.2. WHAT IS KNOWLEDGE TRANSFER?

Knowledge transfer is an ongoing series of actions that intend to capture and transmit knowledge (both explicit and tacit), and individual capabilities from those who create knowledge to those who will transform it and change it into monetary resources (Catarino, 2009). Hence, the increase into the frequency of knowledge transfer within an organisation enables the organisation

to save money while preparing it to successfully face prospective demands. The implication for South African provincial hospitals is that transferring knowledge to African foreign doctors practicing in these hospitals is a basic step for sustaining competitive advantage. However, success in knowledge transfer depends on employees' absorption capacities, the organisational learning climate, and the willingness of South African local doctors in these organisations to transfer knowledge (Ladd & Herminges, 2003). While the meaning of knowledge transfer may differ from one researcher to another, all the definitions agree on the fact that knowledge transfer involves the frequent, free movement of information that fosters improvement for business success.

2.3. BENEFITS OF KNOWLEDGE TRANSFER

As the above analyses demonstrates, the term "knowledge" deals with certain activities that attempt to pass on knowledge from one unit(s) of the organisation to another unit(s). Knowledge transfer provides a cheaper substitute for the conception and codification of new knowledge. This is true given that the more people share their knowledge or their effective ways of doing an organisational task, the more likely they will be to promote the organisation's performance levels. This leads to an improvement in the organisation's overall performance without having to invest more energy or money to create, codify, or capture new knowledge (Catarino, 2009). By ensuring that staff across the organisation possesses the required skills and knowledge to effectively perform their job the organisation is able to be successful. Effective knowledge transfer constitutes a key mechanism for organisational success. Furthermore, for an organisation the transfer of practicable knowledge will support the initiative to commonly seek solutions to problem encountered when working with one another. Transferring knowledge among organisational departments and people can produce considerable learning profit and significantly enhance the organisation's productivity and boost its chance of surviving in this competitive and ever changing environment (Argote, 1999).

2.4. CHALLENGES OF KNOWLEDGE TRANSFER

Although organisations recognise the importance of transferring knowledge, challenges such as funding, the organisational culture and climate, interpersonal relationships, and lack of time constitute real barriers to knowledge transfer. A lack of incentives for those who have knowledge to pass on to others who require it is also a barrier to knowledge transfer. Most organisations do not pay their staff proportionately to the work done in solving problems or transferring knowledge to new employees or their co-worker(s). Another obstacle to successful knowledge transfer is dealing with ambiguity. This refers to the fact that there are certain difficulties associated with transferring one's knowledge/know-how. Many people do not know how to impart a detailed and specific set of processes required to achieve a particular outcome.

- Knowledge transfer is difficult, especially because for most people knowledge is understood in its original context (Zollo & Winter, 2002). It is hard to recreate the original context and this obstructs knowledge transfer. In addition, people take most of their knowledge for granted and there are certain procedures that they will not mention when transferring knowledge. They assume that the other person knows it, and this obstructs knowledge transfer between individuals. This can be understood using Peter Senge's (1990) concept of the Mental Model, that postulates that individual knowledge (understanding) is determined by their own experience, education and training. Depending on an individual's background he/she will understand certain things in certain ways. This will influence the way people perform certain actions or tasks, and they might not think it necessary to share this information with others at the point of knowledge transfer. Husted and Michailova (2002) list six reasons behind knowledge transfer resentment:
 - The possibility of losing the worthiness of their own knowledge, the power associated with it, and preserving oneself from losing the brand that makes him or her more attractive in the job market;
 - Also, the fact that people see their knowledge as the fruits of their hard work does result in strong feelings of personal ownership that one will protect at any cost.
 - Lack of eagerness to devote their time to knowledge sharing. Lack of commitment in knowledge sharing on the part of individuals who possess knowledge, since the individual

does not see the benefit that he/she will get from sharing his/her knowledge. The knowledge holder may be reserved about sharing his/her knowledge with someone he/she perceives to be lazy or who is not making much effort to learn or to develop him/herself.

- Avoidance of exposure: Individuals may be unenthusiastic about sharing their knowledge for fear that by sharing their knowledge other people might discover inadequacies in their knowledge.
- Another reason why individuals do not share their knowledge is the fact that individuals are not sure how the person to whom they are transferring their knowledge will receive and interpret that knowledge.
- Organisational promotions are usually associated with individual skills; hence, some individuals resist sharing their expertise for fear of losing the benefits and authority linked with their knowledge.

2.5. LEVEL OF KNOWLEDGE TRANSFER

Within the organisational setting knowledge transfer can occur at different levels of the organisation including during day-to-day organisational activities, between the departments of the same organisation, but also between allied organisations that engaged in joint venture relationships or independent organisations. In addition, it is also estimated that knowledge is easily transfer between organisations or people who have some sort of relationship rather than independent people or organisations (Argote, 1999). However, some knowledge transfer practices can be useful in both people/organisations allied and independent people/organisations and if well dealt with knowledge transfer can give significant economic payback and competitive advantages for organisations/people engaged in it. The implication for this principle in South African provincial hospitals is that medical doctors in these hospitals who are performing similar activities or working within the same department/unit (for example, Surgery) can profit from knowledge sharing (Gupta & Govindarajan, 2001). It is, therefore, important that the managers in the provincial hospitals emphasise on the actions that will enable them to minimise the above mentioned barriers or any other barriers that might obstruct the transfer of the organisational knowledge between organisational members and departments requiring that particular knowledge.

2.6. STRATEGIES FOR OVERCOMING THE BARRIERS TO KNOWLEDGE TRANSFER

The previous section did identify barriers to exchange knowledge between and inside the organisational department(s). Below are some potential actions that managers may use in their effort to prevail over barriers such as encouraging an organisation setting where members are not afraid to exchange their knowledge with one another in its approach to grow its business and simultaneously stay ahead of their competition. This is true because knowledge exchange among individuals with different capabilities is believed to be at the heart of the continuous knowledge innovation as it is a prerequisite step for knowledge transfer (Nonaka & Takeuchi, 1995).

Furthermore, it is very important that those staff and department(s) that transfer knowledge need to know the reason behind transferring their knowledge, how it is going to be utilised, needs and gaps for those people/department(s) to whom their knowledge have to be transferred. The repercussion for this is that not everyone can transfer knowledge (Davenport & Prusak, 1998). Hence, knowledge transfer within and among allied organisations department(s) can be perceived as an dynamic practice that includes numerous steps from the individual(s) or department(s) starting with spotting the needed knowledge to pass on and ending with the understanding of how this knowledge is going to be used by those individual(s)/department(s) who receive it (Minbaeva et al., 2003). Accordingly, Argote, Moreland & Krishnand (1998) highlights the importance of a better understanding of the complex process of knowledge transfer within and between individual(s)/department(s) of the organisation and an understanding of the reasons why some transfer knowledge are more or less effective than others. In addition, the organisation needs to recognise that individual workers need to produce more in less time; hence, to incorporate knowledge transfer within the organisation, the organisation may need to intentionally allocate fixed time for knowledge transfer; this might mean, for example, setting one hour per week where people within the department come together to exchange their knowledge and work experience.

All training of knowledge management initiatives and giving concrete illustrations on how to go about performing a specific task could save an individual worker time and enable him/her to prioritise particular tasks in the future more successfully.

In addition, the organisation should accommodate supportive mechanisms for knowledge sharing. This might include professional associations, communities of practices, discussion forum, introducing face to face conferencing, online forums that offer unofficial spots like coffee rooms, bars, gymnasiums, game rooms where people can gather and bond with other people to develop the sense of belonging to the organisation and sharing prospects and discussing challenges encountered while performing their jobs.

Furthermore, the organisation should organise social occasions that enable all the stakeholders and clients to cooperate to improve cross-functional thinking and increase outside knowledge (Chetly & Vencent, 2003). The organisation should encourage staff members to sit together to share their work experience, achievement, and challenges on their working journey. More importantly, the organisation should emphasise the importance of transferring tacit knowledge over explicit knowledge for the purpose of individual and organisational learning.

The organisation committed to promoting knowledge transfer must invest effort in promoting extreme loyalty on the part of all the organisation's senior and middle management team on its attempt to share knowledge and to ensure transparency throughout the organisation on what has been achieved or what needs to be achieved (Conner & Patterson, 1982).

Also, the organisation should stress the importance of everyday knowledge sharing between individuals/department(s) and within departments in order to accomplish individual and departmental objectives.

In their attempt to enhance knowledge transfer within the organisation, genuine and concrete incentives should be offered to people who share their knowledge (Orvill & Hicks, 2000). Organisations should also ensure the ownership of knowledge transfer by its employees. This imply involving people in planning and development phases and recognising individual

contribution to knowledge transfer by either placing their name on the organisation website, or organisation newsletter, considering them for promotion, incentives, and career-enhancement. It is important to ensure that knowledge sharing and transfer is considered during performance appraisal and to identify the critical performance indicators. The organisation should also ensure that knowledge transfer practices form part of its ordinary performance appraisal. Organisations should also provide initiatives either in the form of training and information programs to enable the individual worker to grasp the worth of his/her knowledge and to help discover those coworkers that they might be able to assist. Organisations might also embark on practice like staff rotation to enable the individual worker to gain diverse skills and experience (Arthur, Woolcock & Sullivan, 1996). In addition, organisations should ensure that people recognise the significance of their input to their department and to the overall organisation. The organisation should also support trial and error learning, observation learning, discussion learning and collective problem solving. It is only by allowing people to commit a mistake that people will learn from them and in the process discover new and effective ways of performing their job. Also, the organisation should promote mentoring and coaching programs to enable those who are less experienced to learn from those with more experience. Staff must understand that learning is a two way processes during which individuals learn from one another; however little the experience of one might be. Training and development in language and communication capability should also be seen as a must for these organisations as these initiatives will improve communication capability throughout the organisation. It is imperative to encourage free and open communication between organisational members from different levels of organisation and to create a safe environment for organisational members to be open, creative, and forthcoming with new ideas and their beliefs and recognise and compensate that attitude. Always organisations should offer constructive feedback to individual workers and department(s). Diversity in term of age, gender, background, religion, sexual orientation, that might inform individual behaviour on how to respond to knowledge transfer practice often depend on technology. Hence, appropriate training should be provided for those experiencing difficulty in knowledge transfer due to their individual differences, inability to adapt with technology, background belief (gender related issue).

- **Social network**

Organisations should make available training and development in interpersonal relationship training (teach people how to network, socialise). Assign official and unofficial gathering space to improve work-related discussions and social interactions between people within and outside of the organisation. Create networking membership for supervisors and those requiring such opportunities. Run induction and training programs for new employees whereby the new employee can rapidly adjust and better connect with other people on all levels of the organisation. In addition, the organisation should clarify the role of each person in each department and ensure that each individual does in fact possess the required knowledge to successfully perform his/her role (Nazzaro & Stazzabosco, 2009).

- **Ownership over their intellectual property**

Organisations in the business of knowledge transfer should ensure that they publicly acknowledge organisational member contributions. The individual worker wants to know that his/her contribution does not go unnoticed. Hence, the process of honoring those who have contributed to the creation of knowledge and the sharing of knowledge needs to be done in front of colleagues and give incentives to encourage the behavior among colleagues. Reinforce the levels of trust by naming the individual(s) responsible and the required knowledge and information leader for each department. Find people with expertise to help redesign the system. Enhance trust between people by allowing them meet frequently face to face in both formal and informal setting. Those on the top of the organisation need to support habitual and direct interaction within the organisational department. Provide time for people to clarify their concern without fear of being victimised.

- **Languages training**

Organisations should never minimise the influence of language during the exchange of knowledge among people from different backgrounds especially when they use an unfamiliar language (Hermine, 2001). Hence, the organisation need to ensure that knowledge that individual workers are about to share is understood very well by those who are sending and those receiving as this is also seen as a critical factors in the use of knowledge that will be received.

Organisations operating in a multilingual society need to adopt a common language as a corporate language and be certain that most of the organisational knowledge and information is documented in this language. (Hermine, 2001) However, for a country like South Africa with eleven official languages and a history of oppression, the management of the organisation should show a clear support to individuals or ethnic groups who do not identify English as a common corporate language by allowing a variety of languages to be used during formal and informal networks. Furthermore, ensure that individual workers who have to communicate in a language other than their own are comfortable or are even given interpreters when necessary. Also, the organisation should provide language training when it is necessary.

- **Gender-related issues**

Organisations wanting to transfer knowledge should invest in gender-related policies. Organisations are operating in society where people have become more and more involved in the human right consciousness; hence to avoid any litigation managers need to minimise or eradicate gender-related-differences in direct confrontation and communication with relevant parties. It is important to overcome any cultural misinterpretations by introducing training and development. Differences in national cultures help people to be aware of cross-cultural dissimilarities especially when people from different backgrounds are working together.

- **Downplay the Dynamism of power**

The organisation needs to make sure that those in power do not abuse their power. Hence, there is a need to create a culture accommodating environment where people tolerate one another and should not fear to voice themselves, asking questions, and answering them when the answer is known.

- **Communities of Practice**

The organisation should create the community of practice (CoPs). The communities of practice are believed to be one of the most useful approaches to transfer a larger amount of knowledge between people with a common profession. The community of practice starts with a voluntary group of colleagues sharing the same profession who come together on a regular basis to learn

together and exchange their experience based on their common interest to develop their own performance, team and the overall organization (Wenger, 1998). The advantage of the CoPs for a provincial hospital is that they cut across multiple generations. Hence, introducing the community of practice within the organisation will encourage members of practitioners from different generations (older and younger generations) to interact with one another. That, in turn, is likely to enable the organisation to assemble beginners and specialists to get to mingle and know one another more quickly than could have been in a ordinary group within the organisation. Consequently, introducing community of practices within the provincial hospitals will enable these organisations to create a safe atmosphere for those with less experience to request help /guidance from those who are more experienced.

- **Mentorship programme**

The process of transferring knowledge can either be formal in a sense that careful preparation and planning is put into it and deciding what should or should not be transferred. Or it can also be transferred informally through the exchange of knowledge without any formal planning. The formal mentoring process happens when the mentorship is initiated by the organisation, well timed (well determined starting and ending time); a cautious match of partner is made after cautious assessment of skill analysis. The mentoring takes place informally when the mentor impulsively selects a mentee and then supplies him/her with a mixture of support. For the organisation, the formal mentoring programme has a strategic purpose to enable the organisation to totally ensure that the individual owner of the information deliberately transfers his/her specialised knowledge to those who are seeking knowledge. In this case, the organisations coordinator matches those knowledge holders with those individuals who are in the need of that type of knowledge and then frequently supervise the knowledge transferred to guarantee that the knowledge that is being transferred does in fact meet the business circumstances. In this scenario what is transferred is specifically the knowledge about a specific thing, which can also include the practicality of teaching someone how to go about performing a particular task. It is important to note that those involved in informal sharing knowledge are not condemned to befriend one another or commute to a long-term relationship because they may interact only a few times unlike mentor and protégée relationship. Within the formalised mentoring program, mentors

intentionally fulfill different functions which include role modeling, instructor, trainer, encourager, consultant, and being a sounding board for ideas. The efficient mentors prepare the protégée with practical know how, how business dealings happens, the secrets of business, and new skills to integrate the protégé into the organisation as a productive worker. However, this does not imply that the mentors would convert the protégée into self, but the efficient mentors should be able to allow the protégée to use their own diversity and uniqueness to accomplish their vision, and innovatively contribute to the development of the organisation. The advantage for organisation embracing the mentorship programme is that individual staff will be likely to be willing to stay with the organisation and in so doing help the organisation to save money for recruiting and training new employees. Also, the organisation will be able to develop the capacities of their employees by doing so help the individual worker to navigate career path options, and prepare them for advancement to new positions. It is with the increasing advantage of knowledge transfer that one cannot help but look at way on how to manage this valuable asset of the organisation.

2.7. KNOWLEDGE MANAGEMENT

Research in knowledge management (KM) has intensified due to its benefits associated with the concept of knowledge. Nevertheless, many organisation have not been able to successfully enjoy the benefits of their investment in development and the exploitation of their knowledge resources (Davenport, 1998; Swan et al; 1999). It is, therefore, important for the organisation to acknowledge that its competitive advantages are not only dependent on its possession of knowledge but also on its capability to exploit the knowledge resources effectively (Nelson & Winter, 1982). Hence, knowledge management for organisation is a tactical tool to manage its knowledge and successfully ensure that the knowledge is used properly. The following section will look at definition of knowledge management and its importance in knowledge transfers.

2.7.1. Definition

A numbers of definitions will be brought forward in this section to reflect the understanding of knowledge management from different perspectives.

Knowledge management is the appraisal of the organisational knowledge resources that highlights unique sources, important functions and identifies possible problems that obstruct knowledge flows in their organisation. Hence, the practice of knowledge management within the organisation enables the organisation to protect itself from knowledge obsolescence, seeks opportunities to enhance decisions, services and products through adding aptitude, increasing value and providing flexibility.

Knowledge management refers to the collection of processes that govern the creation, dissemination, and utilisation of knowledge. In this information age, knowledge management has a profound effect on the decisions that people make and the actions they take, both of which are enabled by knowledge of some type. It is, therefore, important that the organisation understands the processes that effect individual workers actions and decision and, where possible, the organisation should take steps to improve the quality of these processes and in turn improve the quality of the individual actions and decisions for which people are responsible.

Corporate knowledge management enables the organisation to link knowledge seekers with knowledge sources and knowledge is transferred.

Knowledge management (KM) can be define as the process of capturing, organising, and storing information and the experiences of workers and groups within an organisation and making it available to others (Web1, 2005).

Regan (2006) defines Knowledge management as the process of managing the organisation towards the continuous renewal of the organisational knowledge base. This means that the knowledge management programme is an attempt by an organisation to create a supportive structure, put IT-instruments with emphasis on teamwork and the diffusion of knowledge to all the organisation members. In this knowledge economy where information is the main resource, organisations are increasingly engaging in the management of their knowledge as a strategic move. The ideas of Information Analysis and Information Planning have, therefore, become the organisations main focus. Organisations are developing practices and methods as part of Knowledge Technology to analyse the knowledge sources in an organisation.

From the above definitions, one can agree that knowledge management should be seen as an enabler to achieve strategic business objectives. The knowledge management success can be linked to the achievement of real business results. This is so because the primary objective of any corporate knowledge management programme is to support the achievement of strategic business objectives. In other words, the starting-point for knowledge management is to understand first the organisation's business objectives. Meaning that process of knowledge management should never be treated as a technological project as this can lead the whole programme to failure. To be successful (and meaningful), knowledge management must not be an end in itself, but must be a strong enabler to achieving real business results.

According to Hariharan (2002), in order for the organisation to benefit from knowledge management strategy, the knowledge management strategy must flow from and align with the Business Strategy of the organisation. As mentioned already, knowledge strategies and knowledge management initiatives that are stand-alone and not linked to Business Strategy are not likely to succeed. Hence, the key to defining and implementing a knowledge strategy that will lead to business results will depend on actions such as identifying knowledge capabilities critical to business success, conducting a knowledge inventory & knowledge mapping, identifying knowledge gaps, defining & implementing initiatives to bridge the gaps, and measuring the business results. Hariharan (2002) detail specific steps in the knowledge management process.

2.7.2. Steps of knowledge Management

The value of knowledge management relates directly to the effectiveness with which the management of knowledge enables the members of the organisation to deal with the organisation's present situations and effectively prepare for the future. The knowledge management process is divided into different stages:

- Knowledge analysis refers to the process during which the organisation is able to analyse the usefulness, weaknesses and the appropriateness of its current knowledge. This step is believed to be a necessary step in the management of knowledge.

- Knowledge planning, however, is only done after the organisation has done its knowledge analysis; this process enables the organisation to plan for the future depending on gaps found in the analysis so that the planning process will enable the organisation to fill in the gap. An organisation will now be able to develop a multi-year knowledge plan that defines how the organisation will develop its knowledge resources, either by training its human agents, or by developing knowledge-based systems to support the human agents, or by other means that allow the organisation to stay competitive.
- Knowledge Technology as the word already implies, is the (application of) techniques and methods from the field of knowledge-based systems. Knowledge transfer is about the expert systems, and decision support systems.
- Computer Supported Work Systems (CSWS): This is a formal and informal (human) activity system, within an organisation where the (human) agents are supported by computer systems. The application of Knowledge Technology is very helpful in such work systems, although definitely not the only important factor in the analysis and design, nor in the effectiveness of the activity system.

2.7.3. Benefits of Knowledge Management

Different advantages are associated with knowledge management:

- Knowledge management complements and enhances other organisational initiatives such as total quality management, business process re-engineering and organisational learning, providing a new and urgent focus to sustain competitive position. None of this is possible without a continual focus on the creation, updating, availability, quality and use of knowledge by all employees and teams, at work and in the marketplace.
- Through the creation of a supportive structure, helping members to collaborate via the use of IT instruments and diffusion of knowledge, knowledge management enables the organisation to continuously renew its knowledge.
- It also helps the organisation to adapt, survive and compete in this ever-changing environment (Davenport, Thomas & Prusak, 1997)

- It helps the organisation to store its information in knowledge based databases and archive its specialised knowledge.

2.8. CONCLUSION

This chapter looked at the knowledge transfer. Firstly, knowledge transfer is believed to be an important process in the organisation that enables it purposefully transfers its essential and professional knowledge to those within the organisation who need it to avoid wasting time on unproductive behavior. The chapter further identified barriers to knowledge transfer such as language, time, distrust, lack of understanding, reluctance to change prejudices, too much concern for other people's opinions, fear of criticism, bad experiences in the past, lack of confidence, apparent lack of communication skills, lack of sensitivity in dealing with others, worries of losing out as others will exploit and benefit from your ideas, fear of superiors, lack of time, general reluctance to invest time for the sake of the knowledge could obstruct the organisation to transfer its knowledge between its employees (units). However, to overcome these barriers and ensure the effectiveness of knowledge sharing/transfer, it is advisable that the organisation introduces strategies such as creating a supportive working environment, language training, communities of practices, and mentorships programmes. In conclusion, one can support the statement that if well managed knowledge transfer can be an organisation's competitive advantage. Knowledge management consists of activities focused on the organisation gaining knowledge from its own experience and from the experience of others, and on the judicious application of that knowledge to fulfill the mission of the organisation. These activities are executed by marrying technology, organisational structures, and cognitive based strategies to raise the yield of existing knowledge and produce new knowledge. Critical in this attempt is the enhancement of the cognitive system (organisation, human, computer, or joint human-computer system) in acquiring, storing and utilising knowledge for learning, problem solving, and decision making for the success of the organisation.

CHAPTER 3

FACTORS AFFECTING KNOWLEDGE TRANSFER

3.1. INTRODUCTION

The previous chapter demonstrated knowledge to be the crucial resource of business, which shared and transferred effectively between individuals/units could enable the organisation to gain competitive advantage. Various factors play a critical role in determining the transferability of knowledge in an organisation. These factors may impact on individual willingness to transfer knowledge, including culture, language and communication, and interpersonal relationships.

3.2. THE ORGANISATIONAL'S CULTURE

Organisations are operating in a free market environment, where companies have to a larger number of job candidates from different cultural backgrounds (Friedman, 2005). This in turn, leads to formation multi-cultural organisations, where individuals from different cultures are working side by side within the national organisation. Organisations worldwide, including South Africa display more cultural diversity among their staff. The South African workforce is becoming more diverse. These diversities embrace not only cultural or ethnic diversity, but also age, gender and sexual orientation. The medical doctors at Durban's Addington hospital, for example, come from Cuba, Democratic Republic of Congo, Nigeria, Libyan, Somalia, as well as South Africa and other countries.

While globalisation has given local organisations like Addington and King Edward VIII hospitals the opportunity to choose from a wider pool of candidates, it also increases people's differences in term of their cultural ways of collaborating with one another. This requires an exploration of the impact of culture on the organisation's knowledge transfer and general functioning.

3.2.1. Effect of culture on the organisation

The impact of culture on the organisation is two-fold. On one hand, culture impacts on the organisation positively by giving it the opportunity to assess their problems from different perspectives and cultural backgrounds so that solutions are found and the more rewarding ones are adopted. Culture may also facilitate communication and knowledge sharing between employees from different environments as people are curious to find out how things are done elsewhere. However, culture may restrain knowledge transfer, weakening the organisation's competitive advantage over its opposition. This happens because the more people differ in their culture, the greater the misunderstanding and conflicts that may lead to failure if mismanaged. If dealt with without prejudice it may enhance performance (Karakowsky & Lam, 2002). It is, therefore, important for the organisation to ensure that it overcomes the barriers associated with cultural diversity. The challenge for these multicultural organisations is to develop new strategies to deal with an intercultural scenario. Organisations need to both deal with cultural understanding and consider new ways of transferring knowledge. They also need to critically understand the significant influence of an individual(s) culture in determining their will to share their personal knowledge with their co-workers.

3.2.2. Definition

Different authors define culture in different ways. Baden (2005) defines culture as a reflective process specific to every community, ensuring that traditions survive and serving to differentiate its society and its social subsystems. According to Gundykunst and Ting-Toomey (1988), individual culture represents the unconscious basic, collective and deep assumptions and beliefs that are common among people belonging to a certain society. Hence, culture has been described as a group(s) joint attempt that pressure the individuals to function (work) in a particular way (Gundykunst & Ting-Toomey, 1988).

Individuals' shared norms manage the way members of a particular society or organisation conduct themselves, conceptualise, make judgments, and even how they see the world. Therefore, shared norms generate propositional attitudes that tend to affect the members' behaviours. Employees are members of communities, such as working groups, departments, and

organisations that inform the standard of living of members of a particular society and how to co-ordinate their actions.

In this research study, culture is defined as values, customs, beliefs, and all the other consequences of human thought made by a particular group of people at a certain time that sets them apart from others (Kotabe & Helsen, 2001). Culture provides meaning, direction and motivation to the individuals by helping them to determine right from wrong. Hence, culture influences how individuals make everyday decisions and how they respond to their environment (Ott, 1989). The culture of a group can be defined as a collective of shared basic assumptions that the group learned in the process of solving its problems and that it uses to adapt to its external environment. Perceived adequate approaches are passed on to new members as the correct framework to resolve problems (Schein, 1992). While, organisations do frame their approach to problems, the inevitability of change needs to be acknowledged, requiring the group to evolve over time. This in turn, challenges the group to ensure that its members are effectively integrated into it and ensure the adaptation of the group to the external milieu for its survival. With time and continuous integration and the sharing of ideas, individuals within a group come to develop collective solutions to the problems they encounter over time; their set of shared assumptions and beliefs that are known as culture.

Individuals who belong to the same groups interact with one another in solving problems. They develop common strategies that allow them to solve problems and to function effectively in the ever-changing environment in which they operate. As the environment changes, individual problems will change and individual themselves will also have to change to adapt to their environment. Culture is hence not stable, but involves elements that stem from the different origins of individual existence; these include their communication system, nationality, education, profession, group, religion, family, social class and corporate culture (Usunier, 2000). These elements have an impact on the composite members of a certain society, and in the course of interaction individuals acquire and pass their culture on to others. The definition of culture should not only reflect the sum of elements but an acknowledgement that it is an ongoing process of acquiring and transmitting these factors. Different people from different societies or organisations have their particular customs and manner of working that are not similar to one

another or to the general culture of the whole (Ruuska, 1999). According to Wang (2001), culture shapes a worker's community by ensuring that the members of the organisation think and behave as the organisation requires.

One can, therefore, anticipate that many African foreign doctors practicing in South African provincial hospitals have their own way of working that is informed by their own background. This is not necessary in harmony with the local culture. This might have a negative impact on the transfer and receipt of knowledge in provincial hospitals.

3.2.3. Dimensions of culture

The dimensions of culture can be applied to different aspects, for example, an individual's beliefs and values, nations, organisations, and so on. It is widely accepted that important cultural dimensions for influencing the organisational behaviour are national culture (overall culture of the country) and organisational culture (the shared values and beliefs of people within the same organisation). While the external culture is national or regional, and composed of values, common perceptions, and similar views of reality, the organisational (internal) culture is constituted by the different groups that compose the organisational group as whole (Meschi & Roger, 1994). The overall national shared values and beliefs are central to determining the effectiveness of knowledge transfer in a multi-cultural organisation (Kedia & Bhagat, 1988). This is not surprising especially since the individual's surrounding environment plays an enormous role in determining the way individuals behave in relation to certain circumstances.

Bradly (1991) studied the impact of culture on the organisation by linking the cultural surrounding of the organisation and its impact on the lower level of the organisation. He argues that factors that may influence culture on the macro-level include the capacity of the culture to change rapidly, the complexity of the culture, antagonism or phobia towards foreign cultures, the extent to which the culture of the organisation resembles the culture in which that particular organisation carries out its business, and how country's business environment is affected by change happening in the other parts of the world. On the lower level of the organisation, Bradley (1991) argues that the country's social system of beliefs affect attitude toward foreigners as well

as foreign products and predisposition to be open to new ideas. He concludes that the sum of all the above-mentioned elements have a very significant importance on the how the organisation chooses to achieve its goals and its commitment to create a conducive environment for knowledge transfer. Cultural dimensions greatly affect knowledge transfer among organisational members and between the business partners.

This study assesses whether and the extent to which cultural differences between African foreign doctors and local South African doctors practicing in the provincial hospitals impacts knowledge transfer in the local organisation. It is crucial for managers in these provincial hospitals to prevent possible obstruction of knowledge transfer that may be linked to individuals' culture diversity. In cases where the organisation wants to create a conducive knowledge sharing environment, managers need to be informed about the two-fold nature of the impact of culture on the organisation and acknowledge that the organisation will only be able to succeed if it shares knowledge by combining the macro and the micro level. Geert and Hofstede quoted by Parumasur (2008) categorised national culture into four dimensions these including Power Distance, Individualism/Collectivism, Uncertainty Avoidance, and Masculinity/Femininity.

- ❖ Power Distance refers to the fact that members of the society/organisation consent that power is distributed unequally in an organisation/society (ITI ITIM International, 2003). The organisations in power distance societies are characterised by:
 - ✚ giving significance to the organisational hierarchy
 - ✚ decisions being made at the top of the organisation
 - ✚ inequalities between social groups being naturally accepted
 - ✚ special treatment given to those in position on power
 - ✚ unquestionable respect for people in higher ranks (Srite & Karahanna, 2006)
 - ✚ a general inclination toward bureaucratic organisations (Hofstede, 2001).

In contrast, organisations operating in societies with lower power distance:

- ✚ encourage egalitarian decision-making
 - ✚ promote fair treatment of the organisational members.
- ❖ Individualism/collectivism refers to the degree to which people believe they should be primarily responsible for themselves as opposed to collectively. In such organisation and

societies where people are integrated into groups, the higher individualistic society/organisation is characterised by:

- + promotion of personal initiative
- + everyone being expected to look after their self interest
- + competitiveness, achievement and individual decision-making process

In contrast, low individualistic/collectivist societies/organisations:

- + have strong, unquestioning loyalty within groups
- + do not usually associate reward with performance management
- + give less meaning to the societal/organisational hierarchy (Hofstede, 2001).

❖ Masculinity/Femininity refers to the degree to which organisation/society members value assertiveness and power, the acquisition of material goods and other resources. These organisations are characterised by:

- + value being placed on career advancement and salary growth
- + high levels of stress and conflict
- + value being placed on challenge, recognition and accomplishment and contentious learning.

In contrast, the feminine culture organisations/societies:

- + place emphasis on personal relationships and concern for others (Dubrin 1997, Hofstede, 1996).
- + value social aspects of work
- + have low levels of stress and conflict.

❖ Uncertainty avoidance refers to the extent to which organisational members do not tolerate unpredictability and ambiguity (Hofstede, 1980). The characteristic of high-avoidance culture are:

- + respect for authority
- + task orientation
- + focus on hierarchical organisations
- + highly bureaucratic organisation to avoid uncertainty

- ✚ rigid, detailed rules and regulations
- ✚ resistance to change
- ✚ avoid to take risk

In contrast, organisations in low uncertainty-avoidance cultures are characterised by:

- ✚ fewer rules and regulations
- ✚ encouraging risk taking behaviour
- ✚ participative decision making
- ✚ organic structures (Comings & Worley, 2001)
- ✚ tolerance of opinion that they are used to

3.2.4. Culture and knowledge management

Organisational culture constitutes an influential force that may influence knowledge management within an organisation. Furthermore, culture can obstruct the ability of an organisation to transfer knowledge by either boosting individuals' confidence to resist searching for or receiving knowledge or to resist efforts to share knowledge. It is, therefore, important that the organisation ensures that it creates an organisational culture that supports the transfer of knowledge throughout the organisation. For example, an organisation that is motivated to share knowledge will ensure that it does not focus on rewarding individual achievement, but will rather reward group effort. In this way, those who know will be motivated to share their knowledge with those in their group who do not know or have same difficulty in participating in their group assessment. Schein (1992) notes that, indeed, a strong organisational culture has generally been viewed as a conservative force. In contrast, innovative culture will focus on rewarding the individual who outperforms the others by presenting work that is extraordinary and very unique to the work of others (Cooke & Szumal, 2000). Individuals working in groups are likely to achieve greater results than when working in isolation. Hence, when a manager hands over an assignment to subordinates, he/she should ensure that he/she is involving the group as the whole rather than a particular individual. This implies that South African provincial hospitals need to adopt and promote a collective culture that upholds groups problem solving and idea generation. Working in a group has the potential to increase collaboration and knowledge sharing; however, group work is also associated with group members' dissatisfaction. Consequently, affect

organisations need to adopt a strategy that will bring about equilibrium and maintain the group harmony that is a vital part of multicultural organisations.

3.2.5. Approaches to overcome cultural barrier to knowledge transfer

According to Ajmal & Koskinen (2008), knowledge transfer can be promoted when organisational managers:

- Are aware of the function culture occupies in advancing or blocking knowledge transfer between individuals, groups and organisation(s)
- Understand their responsibility in promoting a culture that facilitates knowledge transfer. Understanding of cultural disparity can help managers find obstacles to knowledge transfer.
- Realise the challenges involved in changing individuals and the organisational culture.
- Ensure that the organisational culture is open to accepting new knowledge transfer activities. Managers must, therefore, prepare the organisation to accept, adopt and implement these activities.
- Foster an organisational culture that encourages the creation, sharing and utilisation of knowledge.
- Merge a myriad of organisational, departmental and professional cultures into an effective project culture that promotes knowledge management.

It is evident that the kind of behaviour displayed in an organisation is aligned with the values and beliefs of a particular country. Accordingly, organisations with multicultural teams need to recognise the complexity of the problem that may lead to dysfunction as a result of misunderstanding between people from different countries or cultural backgrounds (Mutabazi & Derr, 2003). The implication for South African provincial hospitals is that it is important that these hospitals acknowledge the pivotal of cultural values in dealing with heterogeneous medical doctors. Although, in time, experience will teach these organisations how to handle their heterogeneous workforce, in an ever-changing environment managers will have to be proactive in order to adapt quickly or else conflict will arise. To achieve multicultural team cohesiveness and productivity, the multicultural organisation should not overlook the cultural differences but rather incorporate these differences properly by drawing on all the organisational culture, values,

beliefs and roles. There is a need to develop a culture of complementarity that is favourable of cultural integration of culture differences (Mutabazi & Derr, 2003) cited by Parumasur, 2008 in Roodt & Von Tander, 2008). Barriers to knowledge transfer are created by the language and communication between people from different backgrounds use.

3.3. LANGUAGE AND COMMUNICATION

3.3.1. Introduction

Language is believed to be an important means of communication as it helps millions of people communicate or exchange ideas in their everyday lives and in the context of business. Language for that purpose can be perceived as being a part of speech. It is important and necessary for individual survival. To fully understand the message, it is important for an individual who is listening to someone to be able to put together what is being said with how it is being said (Nygaard & Pisoni, 1998). This is because language influences communication protocol and information and knowledge flows during individuals conversations (Piekkari, Kalla & Makela, 2006). When people are not able to understand one another this automatically leads to a dilemma in communication and information flow. Collaboration across linguistic boundaries involves misunderstanding that has the potential to bring about delays in decision-making. This has cost implication for organisations (Yoshihara et al., 2001). Like culture, language influences the individuals' action and interpretation of things (Claes, 1995). Hofstede (2001) points out that an individual's thinking is affected by his/her language; thus, language may constitute a prime inhibitor in cross-national knowledge reception. This implies that language differences will have a negative impact on quality and quantity of knowledge transfer between people from different nationalities (backgrounds). In his earlier study, Whorf (1940) postulated that common language facilitates the formation of identity and provides structures for conceptualising and reasoning. In the organisational setting, communication flows enable organisations to direct specific actions of their units according to their individual importance and to continuously adapt their response to the different conditions. Information is transferred using both formal and informal channels of communication.

Informal communication does require the organisations to devote considerable efforts to establish organisational shared norms and traits. Information flow can take place in several ways and include top-down, bottom-up, horizontal and diagonal flows. It may be spread in diverse manners such as oral, electronic and written. Language is important in facilitating communication and in giving information that plays an essential step in organisational learning and knowledge transfer among individuals (Tsang, 2002). In South African provincial hospitals information exchanges are being conducted using English, Africans, isiZulu and other local languages. Yet a large proportion of medical doctors relocating to South Africa come from countries like Democratic Republic of the Congo (DRC), and Cameroon where French is the official language. Some have little or no knowledge of the English language and/or any other official South African languages. Communicating within the work setting is next to impossible. It is inevitable that that these organisations will experience disturbance in communication flows as a result of language diversity. Hence, language can be viewed as one of the barriers to knowledge transfer in provincial hospitals. Kankanhali, Tan and Wei (2005) found that shared language and codes influence the conditions for knowledge exchange.

3.3.2. Language as a barrier

Victor (1992) who undertook research in communication in different cultures recognised the negative result of limited language skills. He argues that language still is a barrier for international workers. This can be applied to the transfer of knowledge in South African provincial hospitals. The fact that local doctors and African foreign doctors practicing in South African provincial hospitals are not able to communicate properly has an impact in terms of both quantity and quality of knowledge that will be transferred, how much of knowledge will be communicated and what is communicated. Language can bring about misunderstandings and create other barriers (Adler, 1991; Usunier, 1993) such as slowing down, and increasing cost of decision-making as everything takes more time. If different languages are involved, efficiency can be affected. This can become costly as it will affect decision-making process. In their research on cross-cultural communication, Asheghian and Ebrahimi (1990) found out that the degree to which two cultures differ will increase the pressures from the members from different cultures comprehend one another, making it difficult to communicate problems. Similar results

were produced in studies of internalisation processes that found that the culture and language differences interfere with the flow of information between people from two or more different nations (Johanson & Vahlne, 1977). Kone Annual Report (1996) found that when an organisation is constituted by the employees who do not share a common language, language acts as a barrier, particularly for the people at the lower levels of the organisation. Language affects communication in technical and non-technical information exchanges (Kone Annual Report, 1996).

Many African immigrant doctors working in South African provincial hospitals lack fluency in English and other South African languages. This results in the inability to accurately translate knowledge which affects knowledge sharing. The problem with language barriers goes further than immediate communication. In the South African context, the limited language skills of some foreign doctors appear to limit the possibilities for these doctors build horizontal relationships with local doctors. The inability of African foreign doctors to speak South African local languages sets them apart from the whole community of doctors within provincial hospitals. They are cut off from unofficial forums such as networks to build both horizontal and co-operative closeness (Ferner, Edwards & Sisson, 1995), which facilitate the transfer of knowledge.

Hambrick et al. (1998) also agree that when there is an interaction of people from different cultural backgrounds who do not share the similar values and cognitive schema and demeanor, these divergences influence the functioning of heterogeneous teams. They conclude that when groups have a common language that is not well known by some members of the group, it will impair group functioning, obstructing the exchange of information and the level of trust among the group members. Even when the groups share a common language, not everyone within the group will have the ability to confidently communicate complex ideas in a foreign language. Hence, language will not only reflect the context, but it may also manipulate social situations, and may also influence social interactions within teams (Chen, Geluykens & Choi, 2006).

3.3.3. Language as a catalyst to knowledge transfer

The possession of the required language skills, as discussed above, can be a powerful catalyst in the course of intergroup communication. This is particularly true when considering the importance of personal relationships as communication channels. As discussed earlier, language can facilitate horizontal communication across occupations and borders and can act as a unifying factor that holds the large organisation together. In this context, informal communication through personal relationships, and formal activities such as team building and joint training, are supported tools to help the organisation reach unity.

Furthermore, language barriers have the capability to prevent the adoption of a relatively flat organisation structure. The ramification for this is that in order to smooth the processes of the horizontal communication, organisations need to outline guidelines to thwart language concerns. Hedlund (1999) points out that unless there is a medium of communication, difficulty will arise to prevent knowledge being exchanged between employees. The implication is that shared language enhances communication exchanges in general as it enables people to value one another opinions. It is, therefore, not surprising that as organisations gather a diverse workforce either from expanding across countries or as they take advantage of the free movement of labour, language gradually becomes a problem for inter-cultural knowledge transfers. In this regard, Nahapiet and Ghoshal (1998) argue that a common language provides individuals with a common way of conceptualising and evaluating knowledge transfer. Language can, therefore, be viewed as a component of corporate identity that enables a multinational organisation to transmit and share knowledge (Phene, Madhok & Liu, 2005). The same can be said of national organisations with multiple cultures and languages.

Language training will enable the organisation to overcome the barriers to communication because communication can breakdown and affect knowledge transfer within the organisation due to the lack or improper use of vocabulary. Hence, all the staff within the multicultural organisation should be encouraged to participate in language learning programs. By improving one's language skills or by learning a second or third language, communication will be made more effective. The organisation could, therefore, offer financial incentives to staff to do so.

Furthermore, it is important for multicultural organisations to understand that intercultural communication does not take place in a void. Individuals and groups bring their own cultural backgrounds to the communications process. Hence, organisations need to carefully develop strategies for effective communication. One such strategy is for the organisation to create a written intercultural communication policy which clearly outlines its objectives and is accessible to all members of staff (Welch & Welch, 2008). Welch and Welch (2008), argue that such a policy should formalise the organisation's intentions:

- ✚ To create an atmosphere of trust
- ✚ To make everyone feel valued
- ✚ To empower the minority group/s
- ✚ To facilitate learning of intercultural communication skills
- ✚ To facilitate informal socialising.

(Welch & Welch, 2008).

3.4. INTERPERSONAL RELATIONSHIPS

This section examines the impact of individual relationships on knowledge transfer using the model of social network and social identity theory. In this complex world, everything exists in relationship to other things, and the interactions between different people and things in the system lead to complex, unpredictable outcomes. In fact, interactions or relationships among its agents are the organising principle. In everyday human beings' dealings, interpersonal relationships are the heart and soul of individuals' experience. One can say that interpersonal relationships are necessary for individuals' survival in society. This is supported by Schen (2006) who claims that healthy interpersonal relationships that are cooperative, co-dependent, and supportive contribute to their own well-being. However, unhealthy interpersonal relationships, meaning dependent, coercive, and non-supportive ones, can be one of life's greatest sources of stress.

Lewin and Regine (2000) conclude that in the workplace good relationships among an organisation's members are key component through which members engage in learning behaviours that help the organisation attain its objectives. This is because the interpersonal relationship has a meaningful effect on people and their commitment in interpersonal social behaviours as well as on core processes such as co-ordination and error detection (Dutton & Ragins, 2007). Good quality interpersonal relationships allow members of an organisation to exchange more valuable information and ideas which are critical to creating and sharing solutions to problems and new ways to improve organisation work processes and outcomes. Thus, interpersonal connections can be used as knowledge exchange catalysts and value between different people and group(s) (Nahapiet & Ghoshal, 1998). In the absence of the interpersonal relationships, individuals will be unwilling to share knowledge or any other information for that matter. The lack of relationships between people hinders knowledge transfer (Schultze & Orlikowski, 2004). Where there is no closeness in the relationship or where individuals are experiencing difficulty in communicating, knowledge transfer is less likely to occur. Organisations therefore need to pay attention to the relationship between the knowledge giver and the receiver. They need to invest time and resources in training to ensure that close relationships exist between those with equivalent skills and knowledge capacities.

Knowledge is defined as a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experience and information. Knowledge originates, and is applied in the mind of the knower (Davenport & Prusak, 1998). The transfer of knowledge, therefore, will be dependent on, among other things, individual co-worker openness and trust established between the knowledge receiver and the knowledge source (Inkpen, 2000). In other words, knowledge transfer/sharing between individuals is largely dependent on their interpersonal relationships and their willingness to share their knowledge (Levin & Cross, 2004). However, while individuals' relationship plays a larger role in knowledge sharing, it is important that the organisation creates a platform to establish knowledge sharing practice. This can be established through creation of a collaboration that frames the giving and receiving of knowledge as a responsibility and reinforces knowledge sharing through incentives and opportunities to engage in it. Creating a co-operative culture will be beneficial to the organisation in that it will enable the organisation to transfer knowledge at a

low cost by reducing conflicts, increasing participant's willingness to build on other's perspectives, ideas, and expertise and, therefore, facilitates knowledge sharing. McEvily, Peronne, and Zaheer (1997) argue that the degree of trust influences the extent of knowledge disclosure, screening, and sharing between different parties. The trust that a person has with members of a community has been found to be a significant predictor of his/her intention to exchange knowledge (Ridings, Gefen & Arinze, 2002).

3.4.1. Social Network Theory

Social network emphasises that where there is a significant link between the person who possesses or is giving the knowledge the recipient which relationship will motivate or trigger knowledge transfer (Hansen, 1999). Levin and Cross (2004) maintain that the attribute of knowledge owner and the knowledge receiver (attributes belonging to the individuals) have the potential to assist in knowledge transfer. Good relationships will lead to knowledge sharing, while lack of relationships will act as a barrier to knowledge transfer among individuals.

The implication of this is that the stronger the relationship between people/organisation, the easier knowledge will be transferred as the more emotionally involved two individuals are with each other and the more they are inclined they would be to exert effort in the form of knowledge transfer (Reagans & Mc EcEvily, 2003). Furthermore, the closer interpersonal relationships are between individuals/organisation, the more they reduce the risks of opportunistic behaviour as a result of mutual investment, leading to more open communication and a greater sharing of information, ideas and knowledge (Wilkinson & Young, 2002). This implies that in cases where there is a lack of quality relationships among individuals/organisations knowledge transfer is likely to be affected negatively as people will be more hesitant to share or transfer information.

Inkpen and Tsang (2005) maintain that the trusts between individuals develop over time and its foundation is the strength of a relationship (Burt, 2005). As trust increases between individuals/organisations, the more comfortable they are to transfer/share knowledge between themselves.

Gabarro (1978) argues that relationships are themselves the consequence of repeated communication and interactions among individuals. From tentative initiative exchanges, people move to familiarity and from there to more significant exchanges (Burt, 2005). Hence, the nature of the interpersonal relationship has a significant impact on whether or not individuals communicate with one another as well as the content and flow of their communication patterns.

3.4.2. Social Identity Theory

Social identity theory asserts that group membership creates in-group and enhancement in ways that favour the in-group at the expense of the out-group (Turner & Tajfel, 1986). Group identification is when individuals categorise themselves as belonging to one or another group of people (Nahapiet & Ghoshal, 1998). When the knowledge sources identify themselves with those who will benefit from their knowledge, this will smooth the progress of knowledge transfer between these two groups. Group identification is likely to boost desire for accommodating practice that promotes individual co-operative behaviour (Kramer & Goldman, 1995). When people strongly identify with a work group, they are genuinely motivated to transfer their knowledge to group members, even without any preceding interaction with them. Identification is central to encouraging those who are giving out knowledge and those who are receiving it. To explain this theory using the example of African foreign doctors and local doctors, local South African doctors do differentiate themselves from foreign doctors using the labels 'us' and 'them'. This theory predicts that there will not be any transfer of knowledge as people are unlikely to share knowledge with people they believe do not belong to their group. Local and African foreign doctors need to overcome the language of 'us' and 'them' and see themselves as belonging to the same group of medical doctors practicing in provincial hospitals.

Furthermore, it is important to acknowledge that while the group identity plays a greater role in the process of knowledge transfer, people also take into consideration the expertise of the source (O'Reilly, 1982). This implies that those receiving knowledge are likely value and solicit the knowledge of the colleague whose expertise is admired (Borgatti & Cross, 2003). Thus, the individual opinion of the expertise of colleagues plays an important role in knowledge transfer from the point of view of those who search for knowledge. Confidence in the quality of

colleagues' knowledge will increase the expected usefulness of knowledge transfer, thus motivating the knowledge recipient.

Both social network and identity theory support the fact that interpersonal relationships are at the heart of knowledge transfer within the organisational setting. It is, therefore, the duty of the organisation to create a favourable environment that support and promote individuals' relationships and co-operative behaviour as these are the prerequisites for knowledge transfer among individuals.

3.5. CONCLUSION

In a world of rapid changes like growing worldwide competition, knowledge becomes a key economic resource. Knowledge transfer within the organisation is demonstrated as the most critical task for the competitiveness of the organisation. This chapter examined three factors that have the potential to impact on knowledge transfer, which include culture, language and communication and interpersonal relationships. The first factor concerns individual culture that is defined as the individuals' basic collective and deeper assumption and beliefs as shared among people belonging to the same society. The impact of the culture on the organisation is two-folded. On the one hand, it gives the organisation the opportunity to look at the problems from different perspectives and on the other, culture creates misunderstandings among people from different backgrounds as people's approach of things is dictated by the way they were socialised.

Language and communication demands were, also, examined. The issue arises in inter-unit knowledge transfer when people do not share a common language. Shared language enhances communication and exchanges of knowledge between individuals and organisation units as it enables individual' to make sense of each other. To overcome, the language barrier it was, therefore, suggested that organisations introduce language training and ensure that they reinforce a policy of tolerance for people from different backgrounds.

Lastly, an interpersonal relationship as a barrier to knowledge transfer is examined using the social network and social identity theories. Both theories acknowledge the facts that people relationships is an important factor to determine their willingness to exchange knowledge; hence,

strategies like communities of practices, to enable the organisation to enhance individual relationship to promote knowledge transfer in the organisation are encouraged.

In conclusion, the chapter acknowledges the importance of factors such as culture, language and communication and interpersonal relationship during the course of knowledge transfer. It is, therefore, important for the organisation to overcome these factors to successfully transfer knowledge and secure their competitiveness among their competitors.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1. INTRODUCTION

The aim of this chapter was to discuss the research process undertaken to empirically assess how the individual factors affect the transfer of knowledge within an organisation setting. This chapter included the research procedure, the choice of methodology, time horizon chosen, population and the sample. It also outlines the data collection methods utilised, their presentation, and the statistical analysis of the results and the questionnaire.

The research was conducted in two phases. In the first phase, a literature review was conducted to understand the topic and the key dimensions that recurrently surface. The second phase involved an empirical analysis using quantitative research whereby data was collected by means of a structured questionnaire designed to establish how the different individual factors influence employees' knowledge transfer from the foreign doctors' perspective. The data is analysed statistically and depicted using tabular & graphical representations.

4.2. POPULATION AND SAMPLING

The population and sample are important aspects to the research. Describing the population and sampling method, frame and size to generalise the findings of the target population (Hair, Babin, Money & Samouel, 2003).

4.2.1. Population

A population is the entire group of people, events, or things that the researcher desires to investigate (Sekaran, 2006). They are important as they have the information the researcher is interested in collecting (Hair et al., 2003). In this study the population considered were African, non-South African graduates who obtained their degrees at medical schools outside South Africa, who are now living in South Africa, have a work permit and are working in this

country. Short-term locum doctors were not included. The population size is estimated 5277 foreign qualifying doctors. However, it was not possible to determine **exactly how many were from overseas and how many were from other African countries**. Hence, the exact population size of foreign, African doctors cannot be deduced. Roscoe (1975), cited in Sekaran (2003), advises that as rule of thumb a minimum sample size of 30 is acceptable for statistical analysis. In line with this, a minimum sample of 62 relevant respondents is viewed as being adequate and appropriate.

4.2.2. Sampling Frame

The sampling frame provides a working definition of the target population. A sampling frame refers to inclusive record of elements from which the sample is drawn (Hair et al., 2003). All foreign African doctors practicing in South African provincial hospitals constituted the sampling frame from which the sample was selected. The researcher obtained the pool of potential participants from her diverse contacts who represent people from different African countries.

4.2.3. Sampling Technique

The sampling technique refers to a variety of methods that enable the researcher to trim down the quantity of data she/he needs to gather by considering only data from sample population rather than the whole target population (Saunders, Lewis & Thornhill, 2007). The selection of a sampling method or technique to use depends on a number of interrelated speculative and practical issues. These include the type of the study, the intention of the study and the time and financial considerations (Hair et al., 2003). The sampling techniques are divided into two types: probability sampling and non-probability sampling (Saunders et al., 2007).

In probability sampling the elements in the population have the same probability of being chosen as sample subjects (Sekaran, 2006). This method is most commonly linked with survey-based research strategies where the researcher needs to make assumptions from his/her sample about his/her target population to answer research questions or to meet the objectives. The process of probability sampling can be divided into four phases:

- Identify an appropriate sampling frame for your research questions or objectives.
- Determine on the right sample size.

- Choose the most appropriate sampling technique and select the sample.
- Make sure that the sample is representative of the population (Saunders et al., 2007).

Non-probability sampling refers to the process where the study sample is chosen by experts who believe to be “representative”. Non-probability sampling proposes that there is a uniform allocation of characteristics within the extracted population. Therefore, the researcher believes that any sample extracted from a certain population would be representative of the population; hence, the results will be accurate. This method can be predisposed to individual bias as different experts would rarely agree on what is representative. Concern may arise when sample size is unknown, as the sample may or may not represent the population well and it will often be hard of the researcher to know how well he/she has done this.

Even with this shortcoming the use of non-probability sampling may be particularly justified when it is not viable or possible to carry out probability sampling. It can also be used when descriptive comments about the sample itself are desired. In other situations, such as applied social research, non-probability sampling can be very useful. To overcome the limitation of these methods, it is the responsibility of the researcher to ensure that any generalizations acquired from a non-probability sample are filtered through his/her knowledge of the topic being studied.

In this research, non-probability sampling technique called snowball sampling was chosen. This was due to the fact that, firstly, the known number of the population of African foreign doctors in South Africa has not been determined. Secondly, this population is not easily accessible and is spread all over the country. The researcher was not able to access lists of African foreign doctor practicing in South African provincial hospitals within a geographic area due to the lack of authorisation from the South African Department of Health. This meant that the researcher had to choose a sample that would be representative of doctors from different parts of the African continent practicing in South African provincial hospitals and draw the sample based on referrals or links.

4.2.3. 1. Snowball Sampling

Snowball sampling is a process where the researcher identifies individuals who meet the criteria for inclusion of his/her study. They are then asked to recommend others who they may know who also meet the criteria. In other words, the researcher identifies a few numbers of sample population from whom the required data are collected and who then help to identify other individuals who possess the same types of behaviours as themselves to be included in the sample. The referral process proceeds until the researcher attains his/her desired sample size.

In common with other non-probability sampling methods, the problem with snowball sampling is the possibility that the sample may be unrepresentative of the study population that is representing, leading to biased conclusions. In addition, the sample composition in snowball sampling is heavily influenced by the choice of initial seeds (the first of the sample population to be identified). This method, in practice, also tends to favour the more co-operative opposed to randomly chosen subjects and those that are part of larger personal networks.

The process of using snowball sampling was as follows:

- Initially the researcher used her contacts with six foreign, African doctors practicing in South African provincial hospitals across the country
- The researcher then relied on the initial group to help to identify other individuals from the focus community.
- Due to the fact that the study population is from different African countries, the researcher was able to identify a few people from one country who then were then used as seeds to identify the other members of their own particular community.
- After obtaining the list of potential participants recruited through the network or chain-referral method, the researcher then randomly selected the participants.

4.2.4. Sampling Size

Sekaran (2006) defines the sample size as the actual number of subjects chosen as a sample to represent the population's characteristics. Determination of the sample size is complex because a lot of factors need to be taken into account simultaneously (Hair et al., 2003). The sample size was composed of 62 African foreign doctors practicing in South African provincial hospitals.

The reason why the researcher chose this sample size was because it was not possible to collect a larger sample due to time constraints. The fact that doctors were dispersed in different locations meant that not all of them could be easily reached with limited resources. The composition of the sample may be described in terms of gender, age, length of service as a medical doctor, country of graduation, length of service in South Africa, department, length of working in own country, nature of work permit (Table 4.1).

TABLE 4.1
DESCRIPTIVE STATISTICS: BIOGRAPHICAL VARIABLES

Biographical Variable	Categories	N	%
Gender	Female	15	24.2
	Male	47	75.8
Age	21-30 years	4	6.5
	31-40 years	41	66.1
	41-50 years	12	19.4
	51 years and over	5	8.1
Length of service as a medical doctor	1-3 years	11	17.7
	4-6 years	16	25.8
	7-9 years	16	25.8
	10+ years	19	30.6
Country of graduation	DRC	28	45.2
	Rwanda	3	4.8
	Tanzania	2	3.2
	Nigeria	15	24.2
	Zimbabwe	2	3.2
	Botswana	1	1.6
	Other	11	17.7

TABLE 4.1 (CONTINUED)**DESCRIPTIVE STATISTICS: BIOGRAPHICAL VARIABLES**

Biographical Variable	Categories	N	%
Length of service in SA	Less than 1 year	3	4.8
	1-3 years	31	50.0
	4-6 years	22	35.5
	7-9 years	3	4.8
	10+ years	3	4.8
Department	Acute assessment unit	8	12.9
	Emergency unit	10	16.1
	Intensive care	3	4.8
	Neonatal unit	1	1.6
	Paediatric unit	9	14.5
	Other	31	50.0
Length of working in own country	Less than 1 year	7	11.3
	1-3 years	26	41.9
	4-6 years	12	19.4
	7-9 years	10	16.1
	10+ years	7	11.3
Nature of work permit	Permanent	12	19.4
	Contract – below 2 years	6	9.7
	Contract – 2 years and above	19	30.6
	Other	25	40.3
TOTAL		62	100

Table 4.1 reflects that most participants were males (75.8%) with only 24.2% being females. The majority of the participants were between 31-40 years (66.1%), followed by 41-50 years (19.4%), 51+ years (8.1%) and then 21-30 years (6.5%). The tenure or length of service that the individual medical doctors have worked for were also assessed. Most of the participants had tenure of 10+ years (30.6%), followed by 7-9 years (25.8%) and 4-6 years (25.8%), and lastly, 1-3 years (17.7%). In terms of country of graduation, the majority of the participants graduated in DRC (45.2%), followed by Nigeria (24.2%), other countries (Tunisia, Libya, Egypt, Ethiopia) (17.7%), Rwanda (4.8%), Zimbabwe (3.2%) and Tanzania (3.2%) and lastly, Botswana (1.6%). Regarding length of service, the majority of the participants have worked in South Africa for a period of between 1-3 years (50%), followed by 4-6 years (35.5%), 10+ years (4.8%), 7-9 years (4.8%) and less than 1 year (4.8%). With regards to the different departments that these doctors have been practicing in, the majority of participants worked in other departments than the ones that were given in the study (50%), followed by the Emergency unit (16.1 %), the Paediatric unit (14.5%), Acute assessment unit (12.9%), Intensive care unit (4.8%) and lastly, the Neonatal unit (1.6%).

Table 4.1 also indicates the length of service of participants in their own country before coming to South Africa and reflects most participants worked between 1-3 years (41.9%), followed by 4-6 years (19.4%), 7-9 years (16.1%), 10+ years (11.3%) and less than 1 year (11.3%). In terms of nature of work permits, the majority of participants indicated „other’ which included refugee status, permanent residence (40.2%), followed by those with a contract of 2+ years (30.6%), those with a permanent contract (19.4%) and lastly, those with less than 2 years of contract (9.7%).

4.3. DATA COLLECTION

Data collection methods are an integral part of the research design (Sekaran, 2006). It is nothing more than planning for and obtaining useful information on key, quality characteristics produced by the respondents as well as record keeping so that the data will be analysed in future. The process of collecting data is, therefore, to ensure that the researcher will obtain relevant or specific enough data to gain insight into and fulfill the objectives of study and to test the hypotheses. Hence, the key issue is not about how data is collected but rather about how the

researcher will go about obtaining useful data. Hence, data collection is a term used to describe a process of preparing and collecting data. The purpose of data collection is to obtain information to keep on record, to make decisions about important issues, to pass information on to others.

There are several data collection techniques, each with its own advantages and disadvantages. They include interviews, questionnaires and observation. Appropriate research methods greatly enhance the value of the research (Sekaran, 2006). In this study, a questionnaire was used to collect primary data.

4.3.1. Questionnaire

A questionnaire is a collection technique in which each respondent reads and answers the same set of questions in a predetermined order without an interviewer being present (Hair et al., 2003; Saunders et al., 2007). For the purpose of this research, a self-developed pre-coded questionnaire was used. The main objective of this research was to gather information that would give an accurate picture of dimensions under study. The self-administered questionnaire enabled the researcher to gather as much information as possible in a confined area. The reason behind using a self-administered questionnaire was that any doubts that the respondents might have on any questions could be clarified on the spot. The researcher was also afforded the opportunity to introduce the research topic and motivate the respondents to offer frank answers (Sekaran, 2006).

4.3.1.1. Questionnaire Design

The questionnaire design concerns the type of questions and the wording. Because designing questions is crucial element of many of data collection methods, it was important to ensure that the design structure of the questionnaire was simple, using the scaling format.

4.3.1.2. Structured Questionnaires

The purpose of the study was to determine the factors impacting on knowledge transfer of African foreign doctors practicing in South African provincial hospitals. The questionnaire development centred on the conceptual framework of the study as well as the research questions. The questionnaire was developed from the recurring themes that surfaced when conducting the

literature review and include individual culture, language and communication and interpersonal relationships.

The literature review also played an important part in the development of specific questionnaires. The questionnaire was developed specifically for this study and psychometric analyses were conducted to assess its validity and reliability.

Introductory information was provided to give an insight into the topic and the purpose of the study, including instructions on how to fill in the questionnaire.

Section A- Demographic data. In term of biographical data, nine questions were asked about age, gender, country where graduated, tenure, department, length of working in South Africa, language spoken, nature of the work permit. These items were nominally scaled and respondents were required to select the option by marking a cross (X) in the appropriate block that best describes them.

Section B- Composed of 16 questions on knowledge transfer. Respondents were asked to rate how they felt about situations of knowledge transfer in the public hospitals using a Likert Scale ranging from strongly disagree (1) to strongly agree (5). The reason for using this type of questionnaire format was that it is simple to fill in and does not take much time to answer (Leedy & Ormrod, 2005).

In **Section C**, respondents were asked to provide their views on the impact of the individual factors (individual culture, interpersonal relationship, language & communication) on knowledge transfer. These were measured using a 1-5 point Likert scale.

4.3.1.3. Presentation

According to Collis and Hussey (2003), a presentation can do much to encourage and help respondents to complete a questionnaire correctly. It can also make subsequent analysis much easier. For the purpose of the questionnaire to be apparent, the respondents must know the context in which the questions are being posed. The questionnaire was divided into sections. Instructions on how to answer the questions also included for example: „indicate the extent to

which you agree or disagree with the following statement'. Each question was numbered, presented in a logical order and classified in different sections and sub-sections.

4.3.1.4. Pilot Testing

Before distributing the questionnaire, it is essential to conduct a pilot test. This is a way to pre-test suitability of the questionnaire (Saunders et al., 2007). Therefore eight questionnaires were given out to eight subjects using as same procedures and protocols as that which will be used to draw the target population. The pilot test was used to check the validity of the questionnaire, and to determine if the language used was understandable, as well as to detect possible errors. This also helped to eliminate ambiguous questions and to check if additional questions are needed. A few errors were highlighted which were mainly typing errors. Some questions were removed.

4.3.1.5. Procedure

The questionnaires were sent out to the participants both personally by the researcher and by e-mail. The first participants were known to the researcher and were asked to provide names, phone numbers, and e-mail addresses of other possible participants. The researcher sent information about the study to these candidates by e-mail or by hand, depending on where about the candidate was located and the participants returned the completed questionnaires to the researcher by e-mail or by hand.

Informed consent was obtained by means of an information leaflet and an authorisation letter that accompanied the questionnaire. The responders received a phone call a week later after receiving the questionnaire to return it, if they had not already done so. All participation was voluntary.

Authorisation to carry out the study was approved by the Ethics Committee of the Faculty of Management Studies at the University of KwaZulu-Natal.

4.3.1.6. Cleaning the Data

The first process after data was recorded into SPSS version 15.0 was to check if errors occurred during the recording process. The researcher checked the frequencies of each variable and each individual question, looking at the total number of responses on each statement and the level of agreement.

4.3.1.7. Negatively Keyed Questions

The questions that were negatively keyed were reversed before testing for reliability and processing the data. Sekaran (2006) indicates that it is important to note that all negatively worded items in the questionnaire and first be reversed before the items are submitted for the reliability test in order to ensure that results obtained are correct.

4.3.1.8. Reliability

The research commenced by assessing the internal reliability of the questionnaire using the Cronbach's Coefficient Alfa. Reliability scales range from 0 to 1. The reliabilities not as much as 0.60 are considered poor, those in the 0.70 range, acceptable and those over 0.80 are considered to be good (Sekaran, 2006). The reliability of a questionnaire depends on how well it is able to consistently measure that which it is supposed to measure. In this respect, consistency relates to the extent to which different items are able to measure a concept and form a coherent set.

4.3.1.9. Validity

The researcher conducted a validity test using factor analysis. Validity refers to the degree to which it measures what it is supposed to measure (Pallant & Pallant, 2007). The validity determines the suitability of the questionnaire and was tested using factor analysis. Factor analysis consist of a collection of procedures for analysing the relations among a set of random variables observed, counted or measured for each individual group. According to Lureton and D'Agostono (1983), the purpose of the factor analysis is to account for the intercorrelations among variables, by postulating a set of common factors considerably fewer in number of these variables.

4.4. DATA ANALYSIS AND REPORTING RESULTS

After information is gathered through the use of the questionnaire, the data will be analysed statistically in order to interpret the data. Using the SPSS software package version 15.0 analysis of variance (ANOVA), T-test, Pearson Product Moment Correlation and regression analysis will be conducted. The results will be processed using both descriptive and inferential statistics. Descriptive statistics included frequencies, means and standard deviations. A Pearson Correlation Coefficient will be applied to establish the relationship between the organisational factors (culture, language and communicate and interpersonal relationships) and knowledge transfer. The t-test and ANOVA will be utilised to determine the whether significant differences in the study variables exist based on the biographical variables and Multiple Regression Analysis will be used to establish the significance of the study variables on knowledge transfer.

4.4.1. Descriptive Statistics

Descriptive statistics will be utilised to transform the data collected into meaningful information. This will involved describing the sample characteristics as well as the description of study variables using minimum & maximum values, means and standard deviations.

4.4.2. Inferential Statistics

Inferential statistics help to draw conclusions about the population based on the data obtained from the sample (Blanche & Durrheim, 2002). Different methods including correlations, one-way ANOVA, t-tests and multiple regression analysis will be utilised for the purpose of this research. These will be presented in terms of the hypothesis formulated in Chapter 1.

- **Pearson Product Correlation:** The correlation test will be conducted to assess whether significant intercorrelations exist amongst the dimensions (organisational culture, interpersonal relationships, and language & communication) impacting on knowledge transfer.

- **T-test:** The t-test measures the significant differences between two groups (Saunders et al., 2007), for example, males and females regarding the key dimensions of the study.
- **ANOVA:** The ANOVA compares the variability in scores between the three or more groups (Sekeran, 2006), for example, those in the variance age groups regarding the key dimensions of the study.
- **Multiple Regression Analysis:** The multiple regression analysis will be used in order to assess the impact of the organisational factors (organisational culture, interpersonal relationship, language & communication) on knowledge transfer (Pallant, 2007).
- The validity and reliability of the question will be assessed statically using **Factor Analysis** and **Cronbach's Coefficient Alpha** respectively.

4.5. CONCLUSION

This chapter provided an outline of how the research will be conducted as well as understanding of the target population and sample. The time horizon using a cross sectional study meant that the data will be collected once and deductive approach will make it possible to test the hypotheses. The sample size is considered manageable taking into consideration that a structured questionnaire is being used. This questionnaire was self-developed and reliability and validity analysis were conducted before proceeding with the data analysis.

CHAPTER 5

PRESENTATION OF RESULTS

5.1. INTRODUCTION

This chapter presents the results of both the descriptive and inferential statistics after the data was captured. Descriptive statistics included frequencies, percentages and, measures of central tendency and dispersion. The Pearson Product Moment Correlation Coefficient was applied to establish the relationship between the organisational factors (organisational culture, language and communication and interpersonal relationship) and knowledge transfer. The t-test and analysis of variance (ANOVA) were used to determine the influence of the biographical variables on knowledge transfer and the organisational factors respectively. Multiple regression was used to establish the impact of the sub-dimensions on knowledge transfer.

5.2. DESCRIPTIVE STATISTICS

The perceptions of respondents regarding knowledge transfer was assessed by asking respondents to respond to various items using a 1 to 5 point Likert scale. The results were processed using descriptive statistics (Table 5.1).

TABLE 5.1
DESCRIPTIVE STATISTICS: KEY DIMENSIONS OF KNOWLEDGE TRANSFER

Dimension	Mean	95% Confidence Interval		Variance	Std. dev.	Min.	Max.
		Lower Bound	Upper Bound				
Knowledge transfer process	3.70	3.57	3.84	0.289	0.538	2	5
Importance of knowledge transfer practices in the organisation	3.37	3.16	3.58	0.683	0.827	1	5
Different barriers to knowledge transfer	3.74	3.58	3.91	0.416	0.645	1	5
Channel of knowledge transfer	3.68	3.53	3.84	0.370	0.608	1	5

Table 5.1 indicates that the medical doctors perceive the dimensions of knowledge transfer differently, which in decreasingly level in terms of mean score values relate to are: different barriers to knowledge transfer (Mean = 3.74), the knowledge transfer process (Mean = 3.70), the channel of knowledge transfer process (Mean = 3.68) and lastly, the importance of knowledge transfer practices in the organisation (Mean = 3.37). A comparison of the mean score values against a maximum attainable score of 5 indicates that there is room for improvement in each of the sub-dimensions of knowledge transfer. In order to gain further insight into these sub-dimensions of knowledge transfer, frequency analyses were conducted.

With regard to the knowledge transfer process, 89.2% of the respondents have a positive perception as they either agreed or strongly agreed that they have modified their own work activities to incorporate what they have learnt from others to better their performance. In addition, 84.9% of respondents also agreed or strongly agreed that they have made significant improvements in their work performance through knowledge gained from their colleagues. Furthermore, 77.4% of respondents agreed or strongly agreed that their method of work

performance is more effective as a result of their experience gained in transferring knowledge. However, 22.6% of the respondents indicate that they do not express their opinions and thinking during discussions in meetings.

With regard to the importance of knowledge transfer practices in the organisation, 74.2% of participants positively agreed that the overall transfer of knowledge within the organisation will increase efficiency by using knowledge to improve work performance, as opposed to 9.7% of people who disagreed with this statement.

Regarding different barriers to knowledge transfer, 74.2% of respondents positively agreed that the intolerance for mistakes or need for help do constitute barriers for knowledge transfer, as opposed to 13.1% of respondents who disagreed with the statement.

With regard to the channels of knowledge transfer, 75% of respondents positively perceive the induction programme to be a most useful channel to transfer knowledge. In addition, 83.9% of the respondents also positively perceive the professional development programme to be a useful channel of knowledge transfer as opposed to 9.7% who did not believe so. Furthermore, a significant percentage of the respondents also had a positive perception about reflective practices (80.7%), project or collaborative work teams (77.4%) and networking (75%) as channels of knowledge transfer.

TABLE 5.2

DESCRIPTIVE STATISTICS: KEY DIMENSION OF ORGANISATIONAL FACTORS

Dimension	Mean	95% Confidence Interval		Variance	Std. dev.	Min.	Max.
		Lower Bound	Upper Bound				
Organisational culture	3.27	3.12	3.42	0.349	0.590.	2	5
Interpersonal relationship	3.60	3.45	3.75	0.365	0.604	1	5
Language & communication	3.36	3.21	3.52	0.365	0.604	2	5

Table 5.2 reflect the descriptive statistics of medical practitioners' perceptions of the dimensions that have the potential to act as a barrier to knowledge transfer in the organisation. The mean analyses indicate that interpersonal relationships (Mean = 3.60) is perceived to be the greatest barrier to knowledge transfer, followed by language and communication (Mean = 3.36) and lastly, organisational culture. A comparison of the mean score values against a maximum attainable score of 5 indicates that there is room for improvement in each of the dimensions that have the potential to act as barriers to knowledge transfer. In order to gain further insight into these dimensions, frequency analyses were conducted.

With regards to interpersonal relationships, 90.3% of the respondents had a positive perception, as they agreed that they were willing to provide help to others and 92% of them indicated that they are willing to collaborate with others during task performance. Furthermore, 82.3% of respondents had a positive perception about the easiness of communication within their department and across the organisation.

With regard to items relating to organisational culture and language and communication, the scores ranged between 1-5 and 2-5 respectively. This implies that some people did perceive organisational culture and language and communication as barriers to knowledge transfer whilst others did not.

5.3. INFERENCE STATISTICS

Inferential statistics were computed on the dimensions and sub-dimensions of the study to enable the researcher to draw conclusions regarding the hypotheses of the study.

5.3.1. RELATIONSHIP AMONGST THE SUB-DIMENSIONS OF KNOWLEDGE TRANSFER AND BARRIERS TO KNOWLEDGE TRANSFER

The Pearson Product Moment Correlation was computed between the sub-dimensions of knowledge transfer and the dimensions that have the potential to act as barriers to knowledge transfer.

Hypothesis 1

There exists significant intercorrelations amongst the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer practice in the organisation, different barriers to knowledge transfer, channel of knowledge transfer) and the organisational factors that have the potential to act as barriers to knowledge transfer (organisational culture, interpersonal relationship and language and communication) respectively (Table 5.3).

TABLE 5.3
INFERENCE STATISTICS: KEY SUB-DIMENSIONS OF KNOWLEDGE TRANSFER AND BARRIERS TO KNOWLEDGE TRANSFER

Dimension	r/p	Knowledge transfer process	Importance of knowledge transfer practice in the organisation	Different barriers to knowledge transfer	Channel of knowledge transfer
Organisational culture	r p	0.077 0.551	0.314 0.013*	-0.059 0.648	0.457 0.000**
Interpersonal relationships	r p	0.322 0.011*	0.558 0.000**	-0.094 0.466	0.507 0.000**
Language and communication	r p	0.139 0.282	0.41 0.001**	-0.159 0.217	0.397 0.001**

**** p < 0.01**

*** p < 0.05**

Table 5.3 indicates that there is a significant relationship between the knowledge transfer process and interpersonal relationships at the 5% level of significance. Likewise, there is a significant relationship between importance of knowledge transfer practice in the organisation and organisational culture at the 5% level of significance and interpersonal relationships, and language and communication respectively at the 1% level of significance. In addition, there is a significant relationship between channel of knowledge transfer and organisational culture, interpersonal relationships and language and communication respectively at the 1% level of significance.

Table 5.3 also indicates that organisational culture and language and communication do not significantly influence the knowledge transfer process. Furthermore, the organisational variables of organisational culture, interpersonal relationships, and language and communication do not influence the different barriers to knowledge transfer. Hence, hypothesis 1 may only be partially accepted

5.3.2 Impact of Biographical Variables

The influence of the biographical variables (gender, age, length of service as a medical doctor, country of graduation, length of service in South Africa, Department, length of working in own country, nature of work permit) on the dimensions of knowledge transfer respectively were evaluated using tests of differences (t-test and ANOVA).

Hypotheses 2

There is a significant difference in the perception of employees varying in biographical profiles (gender, age, length of service as a medical doctor, length of service in South Africa, Department, nature of work permit) regarding the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer in the organisation, different barriers to knowledge transfer, and channel of knowledge transfer) respectively (Table 5.4 to Table 5.9).

TABLE 5.4**T-TEST: DIMENSIONS OF KNOWLEDGE TRANSFER AND GENDER**

Knowledge transfer categories	Gender	N	Mean	Std. Deviation	t	df	p
Knowledge transfer process	Female	15	3.79	0.584	0.687	21.739	0.499
	Male	47	3.68	0.526			
Importance of knowledge transfer practices in the organisation	Female	15	3.28	0.704	-0.522	28.793	0.605
	Male	47	3.40	0.867			
Different barriers to knowledge transfer	Female	15	3.57	0.725	-1.114	20.854	0.278
	Male	47	3.80	0.616			
Channel of knowledge transfer	Female	15	3.59	0.368	-0.836	44.017	0.408
	Male	47	3.71	0.668			

Table 5.4 indicates that there is no significant difference in the perceptions of male and females medical doctors regarding the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer in the organisation, different barriers to knowledge transfer, and channel of knowledge transfer) respectively. Hence, hypothesis 2 may be rejected in terms of gender.

TABLE 5.5
ANOVA: DIMENSIONS OF KNOWLEDGE TRANSFER AND AGE

	Age	N	Mean	Std. Deviation	F	p
Knowledge transfer process	21-30 years	4	3.28	0.359	2.124	0.107
	31- 40 years	41	3.74	0.560		
	41- 50 years	12	3.55	0.379		
	51 years and over	5	4.08	0.584		
	Total	62	3.70	0.538		
Importance of knowledge transfer practices in the organisation	21-30 years	4	3.31	0.823	0.143	0.934
	31- 40 years	41	3.34	0.911		
	41- 50 years	12	3.42	0.698		
	51 years and over	5	3.58	0.440		
	Total	62	3.37	0.827		
Different barriers to knowledge transfer	21-30 years	4	3.50	0.605	0.276	0.842
	31- 40 years	41	3.74	0.742		
	41- 50 years	12	3.78	0.363		
	51 years and over	5	3.88	0.331		
	Total	62	3.74	0.645		
Channel of knowledge transfer	21-30 years	4	3.54	0.301	0.549	0.651
	31- 40 years	41	3.72	0.706		
	41- 50 years	12	3.52	0.376		
	51 years and over	5	3.86	0.206		
	Total	62	3.68	0.608		

Table 5.5 indicates that there is no significant difference in the perceptions of medical doctors varying in age regarding the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer in the organisation, different barriers to knowledge transfer,

and channel of knowledge transfer) respectively. Hence, hypothesis 2 may be rejected in terms of age.

TABLE 5.6
ANOVA: DIMENSIONS OF KNOWLEDGE TRANSFER AND LENGTH OF SERVICE
AS A MEDICAL DOCTOR

Length of service as a medical doctor		N	Mean	Std. Deviation	F	p
Knowledge transfer process	1-3 years	11	3.60	0.440	0.277	0.842
	4-6 years	16	3.76	0.444		
	7-9 years	16	3.66	0.748		
	10 or more years	19	3.76	0.478		
	Total	62	3.70	0.538		
Importance of knowledge transfer practices in the organisation	1-3 years	11	3.67	0.584	1.621	0.194
	4-6 years	16	3.22	0.914		
	7-9 years	16	3.09	0.943		
	10 or more years	19	3.56	0.714		
	Total	62	3.37	0.827		
Different barriers to knowledge transfer	1-3 years	11	3.58	0.606	1.619	0.195
	4-6 years	16	3.52	0.713		
	7-9 years	16	3.94	0.673		
	10 or more years	19	3.86	0.544		
	Total	62	3.74	0.645		
Channel of knowledge transfer	1-3 years	11	3.74	0.434	0.607	0.613
	4-6 years	16	3.55	0.558		
	7-9 years	16	3.62	0.866		
	10 or more years	19	3.81	0.474		
	Total	62	3.68	0.608		

Table 5.6 indicates that there is no significant difference in the perceptions of medical doctors varying in length of service as a doctor regarding the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer in the organisation, different barriers to knowledge transfer, and channel of knowledge transfer) respectively. Hence, hypothesis 2 may be rejected in terms of length of service as a medical doctor.

TABLE 5.7**ANOVA: DIMENSIONS OF KNOWLEDGE TRANSFER AND LENGTH OF SERVICE IN SOUTH AFRICA**

	Length of service in South Africa	N	Mean	Std. Deviation	F	p
Knowledge transfer process	Less than 1 year	3	2.92	1.283	2.103	0.092
	1-3 years	31	3.69	0.371		
	4-6 years	22	3.78	0.524		
	7-9 years	3	3.71	0.315		
	10 or more years	3	4.00	1.000		
	Total	62	3.70	0.538		
Importance of knowledge transfer practices in the organisation	Less than 1 year	3	2.78	1.453	1.745	0.153
	1-3 years	31	3.19	0.823		
	4-6 years	22	3.56	0.735		
	7-9 years	3	4.00	0.778		
	10 or more years	3	3.78	0.111		
	Total	62	3.37	0.827		
Different barriers to knowledge transfer	Less than 1 year	3	3.31	0.337	0.869	0.488
	1-3 years	31	3.73	0.684		
	4-6 years	22	3.84	0.663		
	7-9 years	3	4.03	0.127		
	10 or more years	3	3.36	0.459		
	Total	62	3.74	0.645		
Channels of knowledge transfer	Less than 1 year	3	3.23	1.615	1.563	0.197
	1-3 years	31	3.56	0.564		
	4-6 years	22	3.90	0.508		
	7-9 years	3	3.90	0.178		
	10 or more years	3	3.56	0.194		
	Total	62	3.68	0.608		

Table 5.7 indicates that there is no significant difference in the perceptions of medical doctors varying in length of service in South Africa regarding the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer in the organisation, different barriers to knowledge transfer, and channels of knowledge transfer) respectively. Hence, hypothesis 2 may be rejected in terms of length of service in South Africa.

TABLE 5.8
ANOVA: DIMENSIONS OF KNOWLEDGE TRANSFER AND DEPARTMENT

Department		N	Mean	Std. Deviation	F	p
Knowledge transfer process	Acute assessment unit	8	3.88	0.250	1.207	0.318
	Emergency unit	10	3.81	0.547		
	Intensive care	3	3.25	0.545		
	Neonatal Unit	1	4.13	.		
	Pediatric unit	9	3.88	0.583		
	Other	31	3.60	0.562		
	Total	62	3.70	0.538		
Importance of knowledge transfer practices in the organisation	Acute assessment unit	8	3.67	0.525	0.476	0.792
	Emergency unit	10	3.46	0.647		
	Intensive care	3	3.19	1.135		
	Neonatal Unit	1	2.56	.		
	Pediatric unit	9	3.25	0.687		
	Other	31	3.34	0.965		
	Total	62	3.37	0.827		
Different barriers to knowledge transfer	Acute assessment unit	8	3.72	0.536	0.867	0.509
	Emergency unit	10	3.88	0.486		
	Intensive care	3	3.06	0.801		
	Neonatal Unit	1	4.17	.		
	Pediatric unit	9	3.80	0.521		
	Other	31	3.74	0.730		
	Total	62	3.74	0.645		
Channels of knowledge transfer	Acute assessment unit	8	3.85	0.525	1.099	0.371
	Emergency unit	10	3.92	0.396		
	Intensive care	3	3.67	0.311		
	Neonatal Unit	1	3.23	.		
	Pediatric unit	9	3.86	0.236		
	Other	31	3.53	0.743		
	Total	62	3.68	0.608		

Table 5.8 indicates that there is no significant difference in the perceptions of medical doctors working in different departments regarding the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer in the organisation, different barriers to knowledge transfer, and channels of knowledge transfer) respectively. Hence, hypothesis 2 may be rejected in terms of departments.

TABLE 5.9

ANOVA: DIMENSIONS OF KNOWLEDGE TRANSFER AND NATURE OF WORK PERMIT

Nature of work permit		N	Mean	Std. Deviation	F	p
Knowledge transfer process	Permanent	12	3.81	0.269	0.738	0.534
	Contract – below 2 years	6	3.42	0.660		
	Contract - 2 years & above	19	3.70	0.502		
	Other	25	3.73	0.628		
	Total	62	3.70	0.538		
Importance of knowledge transfer practices in the organisation	Permanent	12	3.62	0.802	0.615	0.608
	Contract – below 2 years	6	3.48	0.863		
	Contract - 2 years & above	19	3.35	0.843		
	Other	25	3.24	0.837		
	Total	62	3.37	0.827		
Different barriers to knowledge transfer	Permanent	12	3.94	0.506	0.763	0.519
	Contract – below 2 years	6	3.47	0.630		
	Contract - 2 years & above	19	3.68	0.612		
	Other	25	3.76	0.732		
	Total	62	3.74	0.645		
Channels of knowledge transfer	Permanent	12	3.91	0.611	1.559	0.209
	Contract – below 2 years	6	3.83	0.405		
	Contract - 2 years & above	19	3.73	0.481		
	Other	25	3.50	0.700		
	Total	62	3.68	0.608		

Table 5.9 indicates that there is no significant difference in the perceptions of medical doctors with varying types of work permits regarding the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer in the organisation, different barriers to knowledge transfer, and channels of knowledge transfer) respectively. Hence, hypothesis 2 may be rejected in terms of nature of work permit.

Evidently, the various biographical variables do not influence the perceptions of medical doctors regarding the dimensions of knowledge transfer. Hence, hypothesis 2 may be rejected.

Hypotheses 3

There is a significant difference in the perception of employees varying in biographical profiles (gender, age, length of service as a medical doctor, length of service in South Africa, Department, nature of work permit) regarding the potential of the organisational factors (organisational culture, interpersonal relationships, language and communication) to pose as barriers to knowledge transfer (Table 5.10 to Table 5.15).

TABLE 5.10
T-TEST: ORGANISATIONAL FACTORS AS BARRIERS TO KNOWLEDGE
TRANSFER AND GENDER

Organisational factors	Gender	N	Mean	Std. Deviation	t	df	p
Organisational culture	Male	15	3.34	0.358	0.725	43.959	0.472
	Female	47	3.24	0.649			
Interpersonal relationships	Male	15	3.48	0.432	-0.859	34.823	0.396
	Female	47	3.61	0.634			
Language & Communication	Male	15	3.37	0.429	0.016	36.415	0.988
	Female	47	3.36	0.655			

Table 5.10 indicates that there is no significant difference in the perception of male and female medical doctors regarding the respective organisational factors (organisational culture,

interpersonal relationships, language and communication) as barriers to knowledge transfer. Hence, hypothesis 3 may be rejected in terms of gender.

TABLE 5.11
ANOVA: ORGANISATIONAL FACTORS AS BARRIERS TO KNOWLEDGE
TRANSFER AND AGE

	Age	N	Mean	Std. Deviation	F	p
Organisational culture	21-30 years	4	3.06	0.575	1.481	0.229
	31- 40 years	41	3.31	0.631		
	41- 50 years	12	3.04	0.471		
	51 years and over	5	3.63	0.304		
	Total	62	3.27	0.590		
Interpersonal relationships	21-30 years	4	3.58	0.366	.429	0.733
	31- 40 years	41	3.60	0.686		
	41- 50 years	12	3.43	0.315		
	51 years and over	5	3.76	0.346		
	Total	62	3.58	0.590		
Language & Communication	21-30 years	4	3.44	0.298	3.196	0.030*
	31- 40 years	41	3.44	0.638		
	41- 50 years	12	2.94	0.478		
	51 years and over	5	3.75	0.125		
	Total	62	3.36	0.604		

* $p < 0.05$

Table 5.11 indicates that medical doctors varying in age differ significantly in their perceptions regarding language and communication as a barrier to knowledge transfer at the 5% level of significance. In order to assess exactly where these differences lie, mean analyses were undertaken and it is noted that medical doctors between the ages 31- 40 years followed by those between the ages of 41-50 years (hence, those between 31-50 years) have a stronger opinion that

language and communication is a barrier to knowledge transfer than all other medical doctors. However, there is no significant difference in the perception of medical doctors varying in age regarding the remaining organisational factors (organisational culture, interpersonal relationships) as barriers to knowledge transfer. Hence, hypothesis 3 may only be partially accepted in terms of age.

TABLE 5.12
ANOVA: ORGANISATIONAL FACTORS AS BARRIERS TO KNOWLEDGE
TRANSFER AND LENGTH OF SERVICE AS A MEDICAL DOCTOR

Length of service as a Medical doctor		N	Mean	Std. dev.	F	p
Organisational culture	1-3 years	11	3.57	0.484	2.096	0.111
	4-6 years	16	3.08	0.340		
	7-9 years	16	3.12	0.678		
	10 or more years	19	3.37	0.675		
	Total	62	3.27	0.590		
Interpersonal relationships	1-3 years	11	3.76	0.327	1.471	0.232
	4-6 years	16	3.64	0.567		
	7-9 years	16	3.32	0.804		
	10 or more years	19	3.63	0.482		
	Total	62	3.58	0.590		
Language & Communication	1-3 years	11	3.50	0.491	.431	0.732
	4-6 years	16	3.43	0.487		
	7-9 years	16	3.26	0.694		
	10 or more years	19	3.32	0.691		
	Total	62	3.36	0.604		

Table 5.12 indicates that there is no significant difference in the perception of medical doctors varying in length of service as a doctor regarding the respective organisational factors (organisational culture, interpersonal relationships, language and communication) as barriers to

knowledge transfer. Hence, hypothesis 3 may be rejected in terms of length of service as a medical doctor.

TABLE 5.13
ANOVA: ORGANISATIONAL FACTORS AS BARRIERS TO KNOWLEDGE
TRANSFER AND LENGTH OF SERVICE IN SOUTH AFRICA

Length of service in South Africa		N	Mean	Std. dev.	F	p
Organisational culture	Less than 1 year	3	3.06	0.987	0.428	0.788
	1-3 years	31	3.29	0.531		
	4-6 years	22	3.22	0.676		
	7-9 years	3	3.19	0.376		
	10 or more years	3	3.64	0.428		
	Total	62	3.27	0.590		
Interpersonal relationships	Less than 1 year	3	3.04	1.630	0.736	0.571
	1-3 years	31	3.56	0.539		
	4-6 years	22	3.65	0.522		
	7-9 years	3	3.58	0.407		
	10 or more years	3	3.73	0.253		
	Total	62	3.58	0.590		
Language & Communication	Less than 1 year	3	3.08	1.048	0.260	0.903
	1-3 years	31	3.38	0.592		
	4-6 years	22	3.35	0.633		
	7-9 years	3	3.38	0.545		
	10 or more years	3	3.58	0.315		
	Total	62	3.36	0.604		

Table 5.13 indicates that there is no significant difference in the perception of medical doctors varying in length of service in South Africa regarding the respective organisational factors

(organisational culture, interpersonal relationships, language and communication) as barriers to knowledge transfer. Hence, hypothesis 3 may be rejected in terms of length of service in South Africa.

TABLE 5.14
ANOVA: ORGANISATIONAL FACTORS AS BARRIERS TO KNOWLEDGE
TRANSFER AND DEPARTMENT

Department		N	Mean	Std. Deviation	F	p
Organisational culture	Acute assessment unit	8	3.22	0.418	0.520	0.760
	Emergency unit	10	3.30	0.436		
	Intensive care	3	3.64	0.428		
	Neonatal Unit	1	2.67	.		
	Pediatric unit	9	3.36	0.441		
	Other	31	3.22	0.718		
	Total	62	3.27	0.590		
Interpersonal relationships	Acute assessment unit	8	3.87	0.237	1.362	0.252
	Emergency unit	10	3.59	0.267		
	Intensive care	3	3.83	0.289		
	Neonatal Unit	1	4.63	.		
	Pediatric unit	9	3.35	0.578		
	Other	31	3.55	0.730		
	Total	62	3.60	0.604		
Language & Communication	Acute assessment unit	8	3.55	0.578	0.497	0.777
	Emergency unit	10	3.34	0.583		
	Intensive care	3	3.71	0.402		
	Neonatal Unit	1	2.88	.		
	Pediatric unit	9	3.35	0.458		
	Other	31	3.31	0.682		
	Total	62	3.36	0.604		

Table 5.14 indicates that there is no significant difference in the perception of medical doctors varying in departments that they work in regarding the respective organisational factors

(organisational culture, interpersonal relationships, language and communication) as barriers to knowledge transfer. Hence, hypothesis 3 may be rejected in terms of department.

TABLE 5.15
ANOVA: ORGANISATIONAL FACTORS AS BARRIERS TO
KNOWLEDGE TRANSFER AND NATURE OF WORK PERMIT

Nature of work permit		N	Mean	Std. Deviation	F	p
Organisational culture	Permanent	12	3.40	0.625	0.658	0.581
	Contract – below 2 years	6	2.99	0.700		
	Contract - 2 years & above	19	3.25	0.450		
	Other	25	3.28	0.651		
	Total	62	3.27	0.590		
Interpersonal relationships	Permanent	12	3.94	0.558	0.997	0.401
	Contract – below 2 years	6	3.61	0.462		
	Contract - 2 years & above	19	3.49	0.480		
	Other	25	3.51	0.701		
	Total	62	3.60	0.604		
Language & Communication	Permanent	12	3.60	0.626	0.896	0.449
	Contract – below 2 years	6	3.17	0.773		
	Contract - 2 years & above	19	3.33	0.435		
	Other	25	3.33	0.664		
	Total	62	3.36	0.604		

Table 5.15 indicates that there is no significant difference in the perception of medical doctors varying in nature of work permit regarding the respective organisational factors (organisational culture, interpersonal relationships, language and communication) as barriers to knowledge transfer. Hence, hypothesis 3 may be rejected in terms of nature of work permit.

Evidently, the various biographical variables do not influence the perceptions of medical doctors regarding the respective organisational factors (organisational culture, interpersonal relationships, language and communication) as barriers to knowledge transfer, except for age which only influences perceptions of language and communication as a barrier. Hence, hypothesis 3 may be rejected.

5.3.3 MULTIPLE REGRESSION

Multiple regression was used to determine how much of the variance in knowledge transfer was due to the four dimensions of knowledge transfer. Furthermore, this statistic was used to determine how much of the variance in knowledge transfer was due to the organisational factors.

Hypothesis 4

The four dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer practices in the organisation, different barriers to knowledge transfer, channels of knowledge transfer) significantly account for the variance in determining knowledge transfer (Table 5.16).

TABLE 5.16

MULTIPLE REGRESSION: KNOWLEDGE TRANSFER AND ITS DIMENSIONS

Model	R	R Squares	Adjusted R Square	Std. Error of the Estimate	
1	0.771	0.594	0.587	0.281	
2	0.898	0.806	0.799	0.196	
3	0.960	0.921	0.917	0.126	
4	1.000	1.000	1.000	0.000	
Coefficient					
Model	Unstandardised coefficients		Standardised Coefficients	t	Sig
	B	Std. Error	Beta		
4 (constant)	0.000	0.000		0.000	1.000
Importance of knowledge transfer practices in the organisation	0.250	0.000	0.473	2.039E8	0.000
Knowledge transfer process	0.250	0.000	0.308	1.370E8	0.000
Different barriers to knowledge transfer	0.250	0.000	0.369	1.821E8	0.000
Channels of knowledge transfer	0.250	0.000	0.348	1.418E8	0.000

Table 5.16 indicates that the four dimensions of knowledge transfer (importance of knowledge transfer practices in the organisation, knowledge transfer process, different barriers to knowledge transfer, channels of knowledge transfer) significantly account for 100% of variance in determining knowledge transfer. Beta analyses were conducted in order to determine the extent to which these four dimensions impact on knowledge transfer. The result of the Beta analyses indicate that the four dimensions impact on knowledge transfer in varying degrees which in decreasing level of impact are:

- Importance of knowledge transfer practices in the organisation (Beta = 0.473)
- Different barriers to knowledge transfer (Beta = 0.369)
- Channels of knowledge transfer (Beta = 0.348)
- Knowledge transfer process (Beta = 0.308)

Hypothesis 5

The three organisational factors (organisational culture, interpersonal relationship, language and communication) significantly account for the variance in knowledge transfer (Table 5.17).

TABLE 5.17
MULTIPLE REGRESSION: KNOWLEDGE TRANSFER AND ORGANISATIONAL FACTORS

Model	R	R Squares	Adjusted R Square	Std. Error of the Estimate	
1	0.91	0.844	0.841	0.210	
2	0.966	0.934	0.931	0.138	
3	1.000	1.000	1.000	0.000	
Coefficient					
Model	Unstandardised coefficients		Standardised Coefficients	t	sig
	B	Std. Error	Beta		
3(constant)	0.000	0.000		8.937	0.000
Language & communication	0.333	0.000	0.383		
Interpersonal relationships	0.333	0.000	0.382		
Organisational culture	0.333	0.000	0.374		

Table 5.17 indicates that the organisational factors (language & communication, interpersonal relationships, and organisational culture) account for 100% of the variance in determining knowledge transfer. Beta analyses were conducted in order to determine the extent to which these organisational factors impact on knowledge transfer. The results of the Beta analyses indicate that the three organisational factors impact on knowledge transfer in varying degrees which in decreasing level of impact are:

- Language & communication (Beta = 0.383)
- Interpersonal Relationship (Beta = 0.382)
- Organisational culture (Beta = 0.374)

5.4 STATISTICAL ANALYSIS OF THE QUESTIONNAIRE

The validity and the reliability of the questionnaire were statically analysed using factor analysis and Cronbach's coefficient alpha respectively.

5.4.1 VALIDITY

The validity of the questionnaire relating to knowledge transfer was determined using factors analysis (Table 5.18).

TABLE 5.18

VALIDITY: FACTORS ANALYSIS - KNOWLEDGE TRANSFER

	Component			
	1	2	3	4
B9.5	0.846			
B9.3	0.819			
B9.6	0.815			
B9.7	0.764			
B9.1	0.753			
B9.4	0.739			
B9.2	0.726			
B9.9	0.625			
B11.4		0.765		
B11.3		0.653		
B15		0.619		
B12		0.587		
B7		0.576		
B11.2		0.536		
B11.5		0.534		
B5		0.524		
B6		0.513		
B11.6		0.513		
B10.5			0.741	
B2			0.645	
B10.8			0.628	
B4			0.615	
B10.1			0.597	
B10.2			0.580	
B10.11			0.569	
B109			0.564	
B3			0.547	
B10.4			0.531	
B10.6			0.518	
B16.2				0.769
B16.1				0.758
B13				0.577
Eigenvalue	6.038	5.525	4.936	3.264
% of total variance	14.04	12.85	11.48	7.59

Table 5.18 indicates that 8 items load significantly on Factor 1 and account for 14.04% of the total variance in determining knowledge transfer. All 8 items relate to the importance of knowledge transfer practices in the organisation and Factor 1 may, therefore, be labeled likewise.

Table 5.18 indicates that 10 items load significantly on Factor 2 and account for 12.85% of the total variance in determining knowledge transfer. From these 10 items, 7 items relate to channels of knowledge transfer and 3 items relate to knowledge transfer process. Since the majority of items relate to channels of knowledge transfer, Factor 2 may, therefore, be labelled likewise.

Table 5.18 indicates that 11 items load significantly on Factor 3 and account for 11.48% of the total variance in determining knowledge transfer. From these 11 items, 8 items relate to the different barriers to knowledge transfer and 3 items relate to the knowledge transfer process. Since the majority of items relate to different barriers to knowledge transfer Factor 3 may, therefore, be labeled likewise.

Table 5.18 indicates that 3 items load significantly on Factor 4 and account for 7.59% of the total variance in determining knowledge transfer. All 3 items relate to channels of knowledge transfer and, hence, factor 4 may be labeled likewise.

It is evident from the result that Factors 2 and 4 surface as channels of knowledge transfer and none of the factors are labeled as the knowledge transfer process. This is due to the fact that the items measuring the knowledge transfer process have sprinkled into Factors 2 and 4.

5.4.2 RELIABILITY

The reliability of the questionnaire relating to knowledge transfer and organisational factors were determined using Cronbach's coefficient alpha (Table 5.19 and 5.22)

TABLE 5.19
RELIABILITY: CRONBACH'S ALPHA - KNOWLEDGE TRANSFER

Cronbach's coefficient Alpha = 0.879

Table 5.19 indicates that the items determining the dimensions of knowledge transfer have a high level of internal consistency (Coefficient Alpha = 0.879). This means that the questionnaire determining knowledge transfer has high level of reliability. The items reliabilities range from 0.871 to 0.883 as is evident in Table 5.20.

TABLE 5.20
RELIABILITY: CRONBACH'S ALPHA – KNOWELDE TRANSFER

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
B1	149.37	309.483	0.493	0.874
B2	149.24	312.219	0.450	0.875
B3	149.11	316.495	0.337	0.877
B4	149.10	319.761	0.310	0.877
B5	148.56	321.791	0.259	0.878
B6	148.63	325.057	0.154	0.879
B7	148.87	319.196	0.322	0.877
B8	149.16	320.269	0.275	0.877
B9.1	149.42	302.707	0.636	0.871
B9.2	149.15	307.372	0.601	0.872
B9.3	149.34	307.572	0.497	0.874
B9.4	148.98	309.164	0.563	0.873
B9.5	149.31	305.987	0.583	0.872
B9.6	149.63	312.565	0.429	0.875
B9.7	149.55	307.399	0.502	0.873
B9.8	149.52	316.451	0.324	0.877
B9.9	149.18	308.050	0.570	0.873
B10.1	149.21	325.250	0.080	0.881
B10.2	149.19	322.224	0.157	0.880
B10.3	149.27	316.694	0.275	0.878
B10.4	149.73	314.268	0.313	0.877
B10.5	149.24	309.137	0.512	0.873
B10.6	149.13	328.639	-0.010	0.883
B10.7	148.89	322.167	0.219	0.878
B10.8	149.10	317.663	0.283	0.877
B10.9	148.97	320.130	0.236	0.878
B10.10	149.60	324.441	0.081	0.882
B10.11	149.47	315.532	0.312	0.877
B10.12	149.23	314.702	0.319	0.877

TABLE 5.20 (CONTINUED)

RELIABILITY: CRONBACH'S ALPHA – KNOWLEDGE TRANSFER

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
B10.13	149.31	323.429	0.114	0.881
B11.1	148.90	315.236	0.340	0.877
B11.2	148.73	313.088	0.492	0.874
B11.3	148.90	315.761	0.403	0.876
B11.4	148.76	316.842	0.463	0.875
B11.5	148.97	317.474	0.406	0.876
B11.6	148.98	311.983	0.479	0.874
B12	149.08	312.174	0.473	0.874
B13	148.84	313.974	0.410	0.875
B14	149.10	311.695	0.460	0.874
B15	149.08	318.239	0.273	0.878
B16.1	149.35	312.888	0.356	0.876
B16.2	149.23	306.079	0.482	0.874
B16.3	149.45	314.448	0.281	0.878

TABLE 5.21

RELIABILITY: CRONBACH'S ALPHA - ORGANISATIONAL FACTORS

Cronbach's coefficient Alpha = 0.906

Table 5.21 indicates that the items determining the impact of organisational factors on knowledge transfer have a high level of internal consistency (Alpha = 0.906). This means that the questionnaire determining organisational factors has a high level of reliability. The items reliabilities range from 0.901 to 0.909 as is evident in Table 5.22.

TABLE 5.22**RELIABILITY: CRONBACH'S ALPHA - ORGANISATIONAL FACTORS**

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
C1	120.66	336.162	0.388	0.905
C2	120.53	332.646	0.525	0.902
C3	120.42	339.198	0.398	0.904
C4	120.63	342.237	0.310	0.906
C5	120.73	342.137	0.381	0.905
C6	120.37	344.663	0.305	0.906
C7	120.58	333.362	0.561	0.902
C8	120.76	331.334	0.657	0.901
C9	120.35	337.610	0.439	0.904
C10	120.10	339.138	0.580	0.903
C11	120.21	334.529	0.653	0.901
C12	120.02	342.311	0.494	0.904
C13	120.23	345.424	0.371	0.905
C14	120.55	348.514	0.195	0.907
C15	120.55	334.711	0.537	0.902
C16	120.48	341.992	0.384	0.905
C17	120.19	338.323	0.523	0.903
C18	120.31	335.757	0.549	0.902
C19	120.34	337.015	0.467	0.903
C20	120.15	336.126	0.681	0.901
C21	120.31	332.937	0.588	0.902
C22	120.45	334.219	0.504	0.903
C23	120.19	333.306	0.676	0.901

TABLE 5.22 (CONTINUED)

RELIABILITY: CRONBACH'S ALPHA-ORGANISATIONAL FACTOR

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
C24	120.26	334.719	0.576	0.902
C25	120.15	333.372	0.603	0.902
C26	120.00	333.902	0.634	0.901
C27	119.48	347.106	0.277	0.906
C28	119.53	347.728	0.250	0.906
C29	119.76	335.891	0.608	0.902
C30	120.13	336.049	0.620	0.902
C31	120.02	341.983	0.403	0.904
C32	120.15	333.503	0.156	0.922
C33	120.35	330.561	0.646	0.901
C34	120.21	332.004	0.717	0.900
C35	120.26	342.293	0.387	0.905
C36	119.89	352.200	0.091	0.909

The reliability of the overall questionnaire comprising of both knowledge transfer and its dimensions as well as the organisational factors impacting on knowledge transfer were assessed and the Cronbach's Alpha for the overall questionnaire was 0.922. This indicates that the questionnaire has a high degree of reliability and reliably measures knowledge transfer, its dimensions, as well as the impact of organisational factors on knowledge transfer.

5.5 CONCLUSION

The results of the study have been presented using tabular representations and subsequently interpreted. These results broaden our understanding of African foreign doctors practicing in South Africa hospitals, in relation to their perception of knowledge transfer in these hospitals. However, the results gain value when compared and contrasted with the results obtained by other researchers in the field of knowledge management.

CHAPTER SIX

DISCUSSION OF THE RESULTS

6.1. INTRODUCTION

This chapter discusses the findings of the research. Where comparative literature is available, reference is made to previous researchers and their findings. The current research is valuable when one compares and contrasts the findings obtained with that of other researchers.

6.2. DISCUSSION OF THE RESULTS

6.2.1. Dimensions of Knowledge Transfer

The results indicate that the African foreign doctors perceive the dimensions of knowledge transfer differently, which in decreasingly level in terms of mean score values relate to different barriers to knowledge transfer, knowledge transfer process, the channels of knowledge transfer practices, the importance of knowledge transfer practices and lastly, the importance of knowledge transfer practices in the organisation:

- **Different barriers to knowledge transfer**

Different barriers to knowledge transfer was perceived as having the greatest influence on knowledge transfer (Mean = 3.74). Researchers indicate that, knowledge sharing is influenced by factors both at the individual and organisational level (Szulanski, 1995, 1996; Jensen & Szulanski, 2000, 2007; Bratianu & Orzea, 2010). At the individual level, one of the most important factors affecting the knowledge transfer process is trust. Most people are unlikely to share their knowledge and experience without a feeling of trust. People must have the feeling of trust that the people will not misuse their knowledge, and that the information that one receives is accurate and credible due to the source of information. The level of trust that exists between the organisation, its subunits, and its employees greatly influences the amount of knowledge that flows both between individuals and from individuals into the firm's databases, best practices achieved and other records (De Long & Fahey, 2000).

De Long and Fahey (2000) also suggested that culture influences behaviour central to knowledge creation, sharing, and use in several ways. Culture shapes assumptions about what knowledge is worth exchanging and also defines relationships between individual and organisational knowledge, determining who is expected to control specific knowledge, as well as who must share it. Also, culture creates the context for social interaction that determines how knowledge will be shared in particular situations shaping the processes by which new knowledge is created, legitimated, and distributed in organisations. Rigid, formal and command-and-control structures, for example, can promote functional efficiency at the expense of collaborative and innovative activities.

Szulanski (2000) agreed that the incapacity of the organisation to identify key people who possess the knowledge needed to be transferred may also pose as a barrier to knowledge transfer. This happens because not knowing those who have the “useful knowledge” makes it impossible for those who could benefit from it to access it.

In addition, Szulanski (2000) identifies lack of money, time, and management resources to pursue and study the knowledge in enough detail to make it useful as barriers to knowledge transfer. In a study undergone in eight companies, Szulanski (1995, 1996) analysed the internal stickiness of knowledge transfer. Stickiness refers to the difficulty of transferring knowledge. The study revealed that the most important barriers to the internal transfer of knowledge within a company are recipient’s lack of absorptive capacity, causal ambiguity, and arduous relationship (Szulanski, 1995, 1996). Absorptive capacity is a function of the recipient’s knowledge endowment prior.

Furthermore, lack of interpersonal relationships is also a barrier to knowledge transfer because people absorb knowledge and practice from other people they know, respect, and often like. If two managers have no personal bond, no tie or link which pre-establishes trust, they are less likely to incorporate each other’s experiences into their own work.

Lastly, but not least, lack of motivation has also been viewed as a barrier to knowledge transfer as people may not perceive a clear business reason for pursuing the transfer of knowledge of best practices if they lack motivation.

▪ **Knowledge transfer process**

Knowledge transfer process was perceived as having the second greatest influence on knowledge transfer (Mean = 3.70). The knowledge transfer process involves the transmission of knowledge from the initial location to where it is needed and is applied. It is considered as an important facet of knowledge management. Some researchers have argued that knowledge transfer process provides a firm basis for developing a sustainable competitive edge especially in this unstable business environment (Argote & Ingram, 2000). Similarly, Davenport and Prusak (2000) suggested that the knowledge transfer process involves two actions: (i) transmission of knowledge to potential recipient; and (ii) absorption of the knowledge by that recipient that could eventually lead to changes in behaviour or the development of new knowledge. Knowledge processes (knowledge management activities) are considered as a structured coordination for managing knowledge effectively (Gold, Malhotra & Segars, 2001). Typically, knowledge processes include activities such as creation, sharing, storage, and usage. Knowledge processes represent the basic operations of knowledge, and enablers provide the infrastructure necessary for the organisation to increase the efficiency of knowledge processes. Several empirical researchers investigated the relationship between knowledge characteristic (tacit vs. explicit) and knowledge transfer processes, finding that the higher the tacit level of the knowledge, the more difficult the knowledge transfer process is (Simonin, 1999). Several contextual factors including the organisational culture, organisational structure, incentive system and information technology are seen as factors that most influence the knowledge transfer process (Al-Alawi, Al-Morzooqi & Mohammed, 2007; Cabrera, Collins & Salgado, 2006; Chen & Huang, 2007).

▪ **Channels of knowledge transfer practices**

The channels of knowledge transfer practices in the organisation were perceived as being third out of the four dimensions influencing knowledge transfer (Mean = 3.68). A distinction, which is often applied regarding knowledge transfer channels, is between informal and formal. The communality between informal and formal channels is that they both collaborate to allow individuals or organisation(s) involved to share task-specific knowledge with a partner.

Accordingly, research revealed that formal channels, such as consultancy, joint research projects, community of practice (Wenger, 1991), social network, project/collaborative teams, mentoring, training, collaborative Research and Development are among the most used channels for knowledge transfer with public research institutes and universities in the chemical industry (Arundel & Geuna, 2004).

The Informal channels include informal interactions, observation, informal seminar, communication process (Alavi & Leidner, 2001), informal network (Johnson, 1992). In some cases, the informal channels of knowledge transfer allow knowledge transfer to occur when one is performing his his/her everyday work. Informal contacts are mainly considered to be useful for transferring knowledge between individuals. However, organisations still prefer a formal collaboration to prevent undesirable leaking of firm specific knowledge (Bosworth et al., 1996). Furthermore, researchers have revealed that the informal channels are relatively simple, uncomplicated and more flexible (Hakanson & Johanson, 1988). Von Hippel (1989) finds that informal know-how trading is a voluntary exchange of technical information and by nature it is a process which initiates technological spill-overs.

▪ **Importance of knowledge transfer practice**

The importance of knowledge transfer practice in the organisation was found to have the least, though strong enough, influence on knowledge transfer (Mean = 3.37). Informational resources take on particular importance for the transfer of good practices. According to Lenox and King (2001), employees need information to evaluate the costs and benefits of best practices. They continued to stipulate that employees also need technical advice while evaluating the existence

(or not) of an opportunity to adopt a given practice and while using this practice as well. Therefore, Lucas and Ogilvie (2006) conclude that behavioural-based incentives are designed to motivate employees to share information with colleagues about practices that can be adapted to their needs. Similarly, Ndlela and du Toit (2001) agree that knowledge transfer practices can bring a great deal of benefits to an organisation. They pointed out that through sharing and capturing of experiences and information, a better exploitation and collection of knowledge of individuals, organisations and professional bodies can be accomplished. By sharing information and knowledge, individual employees can learn from the work experience and know-how of others in the organisation (Kang, Kim & Chang, 2008). In addition, to this Kang et al. (2008: 1549) maintain that the sharing of knowledge should not only be viewed as a cost effective learning strategy but can also validate individual employees' accumulated knowledge.

6.2.2. Organisational factors impacting on knowledge transfer

6.2.2.1. Interpersonal Relationships impact on Knowledge transfer

The descriptive statistics displaying medical practitioners' perceptions of the dimensions that have the potential to act as barriers to knowledge transfer in the organisation indicate that interpersonal relationships (Mean = 3.60) were perceived to be the greatest barrier to knowledge transfer. This finding has been supported by previous research that concurs that interpersonal relationships or „strong ties” are an important factor in knowledge transfer (Burt, 1992, 2005; Granovetter, 1973, 1983; Krackhardt, 1992; Borgatti & Foster, 2003). Their finding is that a strong interpersonal connection between individuals will affect how easily knowledge is transferred between individuals. The rationale is that the more emotionally involved two individuals are with each other, the more time and effort they are willing to put forth on behalf of each other, including effort in the form of knowledge transfer (Reagans & McEvily, 2003). This is supported by Hansen (1999) who did a network study of new product development projects in the electronic industry, and found out that the transfer of complex knowledge requires strong ties between the transferring units. Similarly, Uzzi (1997) describes the importance of close ties in facilitating the transfer of proprietary, tacit knowledge within the US apparel industry. As a consequence, Uzzi terms these close ties as „special relations' characterised by critical information exchanges. He agrees that the presence of close interpersonal relationships in a

business network reduces the risks of opportunistic behaviour as a result of mutual investment, leading to more open communication and a greater sharing of information, ideas and knowledge (Wilkinson & Young, 2002).

6.2.2.2. Language and communication

Language and communication was found to be second out of the three dimensions of organisational factors acting as barrier to knowledge transfer (Mean = 3.36). Similar results were found by Chen and McQueen (2008) who in their study on knowledge transfer in cross-cultural business context concluded that the knowledge gap, communication and cultural difficulties hamper the knowledge transfer from US knowledge providers to China-based knowledge recipients. Because of the Chinese recipient's lower absorptive capacity, lack of common language and lack of a common cultural background with the US provider, the recipient has difficulty in absorbing the knowledge transferred from the provider (Chen & McQueen, 2008).

6.2.2.3. Organisational culture

Lastly, organisational culture was perceived to be the third barrier to knowledge transfer (Mean = 3.27). Accordingly, Holtbrugge and Berg (2004) found that the transfer of knowledge is positively related to the cultural proximity between the parties involved. The agreement here is that similarities in national contexts of the parties create some cluster of subsidiaries. This is so because knowledge is highly localised and embedded within a specific cultural context, thus the contextual similarity eases the transfer process. Similarly, different studies of knowledge transfer activities between Korean and Japanese subsidiaries have also shown that knowledge transfer goals are easily achieved because of their cultural alignment (Inkpen, 1996; Park, 2004). These is particularly true, since culture influences knowledge sharing as it shapes assumptions about what knowledge is, determines the relationship between levels of knowledge, shapes the creation and adoption of new knowledge, and creates a context for social interaction (De Long & Fahey, 2000). Culture influences the way knowledge flows throughout an organisation via vertical, horizontal and lateral communications of individuals (Nonaka & Toyama, 2002). In addition, culture strongly influences an employee's attitude, behaviour, motivation and willingness to

share knowledge and insights (Kwok & Gao, 2004). The more the person believes that information sharing is a social norm, that is, usual, correct, and a socially expected behaviour, the more they will be willing to share. Therefore, the effectiveness of intra-organisational knowledge transfer is affected by the degree of organisational culture in influencing the behaviour and attitude of individuals towards knowledge sharing, developing trust and stimulating their interactions in an organisation.

6.2.3. RELATIONSHIP AMONG THE SUBDIMENSIONS OF KNOWLEDGE TRANSFER AND ORGANISATIONAL FACTORS BARRIERS TO KNOWLEDGE TRANSFER

The results of the study indicate that there is a significant relationship between the knowledge transfer process and interpersonal relationships at the 5% level of significance. The research on network structure and knowledge transfer conducted by Reagans and McEvily (2003) clarify and extend the role of strong ties in the transfer process. The research supported that the strong connections between individuals have occupied a privileged position in the knowledge transfer process, in part because such connections are assumed to occur within a dense web of affiliations. They continued to assert that strong ties and social cohesion were correlated but that it was a mistake to equate their effects.

Likewise, there is a significant relationship between importance of knowledge transfer practice in the organisation and organisational culture at the 5% level of significance and interpersonal relationships, and language and communication respectively at the 1% level of significance. Ford and Chan (2003) and Minbaeva (2007) shared the opinion that employees with different cultures and languages in multinational organisations certainly pose challenges for knowledge sharing.

In addition, there is a significant relationship between channel of knowledge transfer and organisational culture, interpersonal relationships and language and communication respectively at the 1% level of significance. Previous researchers have supported that; diversity in the form of linguistic variation may disrupt group interaction processes and performance, because insufficient language skills and formations of language-based subgroups may hinder the use of available information (Williams & O'Reilly, 1998; Van Knippenberg, De Dreu & Homan, 2004).

Similarly, Zenger and Lawrence (1989) demonstrate that the presence of a shared language determines the efficiency of communication because it guides how individuals interpret, understand and respond to information. Welch and Welch (2008) also argue that language differences have a negative effect on the sender's ability to transmit knowledge due to the creation and driving of social networks and informal structural clusters through which knowledge circulates along linguistic boundaries. Consequently, organisation members that are familiar with the commonly shared language are more likely to understand and use available knowledge (Triandis, 1960). Speaking a shared language is particularly important in the transfer of personal knowledge or tacit knowledge that is difficult to articulate (Nonaka, 1994) and this type of knowledge may be vital for organisational success (Kogut & Zander, 1992). Accordingly, a shared language increases mutual understanding among organisation members and this helps them to communicate more effectively. Moreover, a shared language eases communication and thus assists in creating an environment encouraging knowledge sharing and will, therefore, be positively related to knowledge-sharing behaviours (Szulanski, 1996; Cabrera et al., 2006).

6.2.4. IMPACT OF BIOGRAPHICAL VARIABLES ON KNOWLEDGE TRANSFER

▪ Gender

The results (Table 5.4) indicate that there is no significant difference in the perceptions of male and females medical doctors regarding the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer in the organisation, different barriers to knowledge transfer, and channel of knowledge transfer) respectively. This result is in line with previous studies by Ojha (2005) who studied the impact of team demography on knowledge sharing in software project teams and Watson (2006) who did a multi-theoretical model of knowledge transfer in organisations and reported that gender had no significant impact on knowledge transfer. However, a study by Miller and Karakowsky (2005) indicated that there are significant differences between men and women in their effort to seek knowledge. Women gained more benefits from knowledge sharing (Irmer, Bordia & Karakowsks, 2002). A study by Lin (2006) indicated that women are more willing to share knowledge because they are more

sensitive to instrumental ties and have a need to overcome traditional occupational challenges. Pangil and Nasrudin (2008) found that there is a significant difference between men and women in terms of tacit knowledge sharing behaviour.

- **Age**

The results of the study (Table 5.5) indicate that there is no significant difference in the perceptions of medical doctors varying in age regarding the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer in the organisation, different barriers to knowledge transfer, and channel of knowledge transfer) respectively. These findings are supported by that of Ojha (2005) and Watson and Hewett (2006) who showed that age does not affect knowledge sharing behaviour. However, Reige (2005) suggested that difference of age could be also a potential factor for knowledge sharing behaviour. Furthermore, Gumus (2007) found that there were significant differences between age groups concerning knowledge collecting and not knowledge donating; people with the age between 36 to 40 are poor on collecting knowledge. A study by Keyes (2008) uncovered a more definite relationship between age and knowledge sharing.

- **Length of service**

The results of the study (Table 5.6) indicate that there is no significant difference in the perceptions of medical doctors varying in length of service as a doctor regarding the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer in the organisation, different barriers to knowledge transfer, and channel of knowledge transfer) respectively.

However, contrary to our finding, in a research study undertaken by Chow, Harrison and Mckinnon (1999) where the authors compared Chinese to the Anglo American culture, they established that employees with long work experience displayed an unwillingness to share knowledge by not sharing their own errors made in an organisation. The result of their study revealed that respondents who had approximately 7 years work experience displayed a negative relationship to the willingness to share one's errors with others in the organisation. The

difference in the results obtained in the current study regarding length of service and that of Chow et al. (1999) may be attributed to the fact that Chow et al. (1999) compared the Chinese and Anglo American cultures which is different from the African culture in this study.

▪ **Length of service in South Africa/Departments/Types of work permits**

The results of the study (Table 5.7) indicates that there is no significant difference in the perceptions of medical doctors varying the remaining demographic variables (length of service in south Africa, departments, types of work permits) regarding the dimensions of knowledge transfer (knowledge transfer process, importance of knowledge transfer in the organisation, different barriers to knowledge transfer, and channels of knowledge transfer) respectively. Due to the paucity of research that specifically assesses the influence of these demographic variables comparative findings could not be cited.

6.2.5. IMPACT OF BIOGRAPHICAL VARIABLES ON ORGANISATIONAL FACTORS

▪ **Gender**

The findings of the study (Table 5.10) indicate that there is no significant difference in the perception of male and female medical doctors regarding the respective organisational factors (organisational culture, interpersonal relationships, language and communication) as barriers to knowledge transfer. However, contrary to our finding, previous research has shown that there was a relationship between the cultural dimensions score and gender (Hofstede, 1991).

The non-significant findings may be due to the characteristics of the research sample, as the majority of the respondents were male medical doctors, which were a classic attribute of the traditionally dominated male professional (Toluwape, 2011). Also, this skewness may be due to the restricted mobility of women in Africa, as it may be less acceptable for women to move about and travel on their own; hence, women may find it more difficult to migrate, or may migrate shorter distances than men, internally, or within the region (as is the case in Africa) (Jolly, Reeves, and Piper, 2005). These two reasons could have influenced the results obtained.

- **Age**

The results of the study (Table 5.11) indicate that medical doctors varying in age differ significantly in their perceptions regarding language and communication as a barrier to knowledge transfer at the 5% level of significance. In order to assess exactly where these differences lie, mean analyses were undertaken and it is noted that medical doctors between the ages 31- 40 years followed by those between the ages of 41-50 years (hence, those between 31- 50 years) have a stronger opinion that language and communication is a barrier to knowledge transfer than all other medical doctors. However, there is no significant difference in the perception of medical doctors varying in age regarding the remaining organisational factors (organisational culture, interpersonal relationships) as barriers to knowledge transfer. In her research on the impact of culture on knowledge sharing, Brijball (2010) also found out that there was no significant difference in the perceptions of employees varying in age regarding the impact of the four dimensions of culture on knowledge transfer.

- **Length of service**

The results of the study (Table 5.12) indicate that there is no significant difference in the perception of medical doctors varying in length of service as a doctor regarding the respective organisational factors (organisational culture, interpersonal relationships, language and communication) as barriers to knowledge transfer. Similarly, Brijball (2010) found that there was no significant difference in the perception of employees varying in work experience with regards to impact of the four cultural dimensions on knowledge sharing.

However, in a research study, Chow et al. (1999) established that employees with longer work experience tend to show an unwillingness to share knowledge by not revealing their own errors made in the organisation. This can be explain by the individual's fear of losing power; after all, sharing knowledge may mean that people will not need him/her as much as they would have if he/she was the only one with that type of knowledge (Richter, 2008).

- **Length of service in South Africa/Department/Types of work permit**

The findings of the study (Table 5.13, 5.14, 5.15) indicate that there is no significant difference in the perception of medical doctors varying in the remaining demographic variables (length of

service in South Africa, department, types of work permit) regarding the respective organisational factors (organisational culture, interpersonal relationships, language and communication) as barriers to knowledge transfer. Due to the paucity of research that specifically assesses the influence of these demographic variables, comparative findings could not be cited.

6.2.6. FOUR DIMENSIONS OF KNOWLEDGE TRANSFER

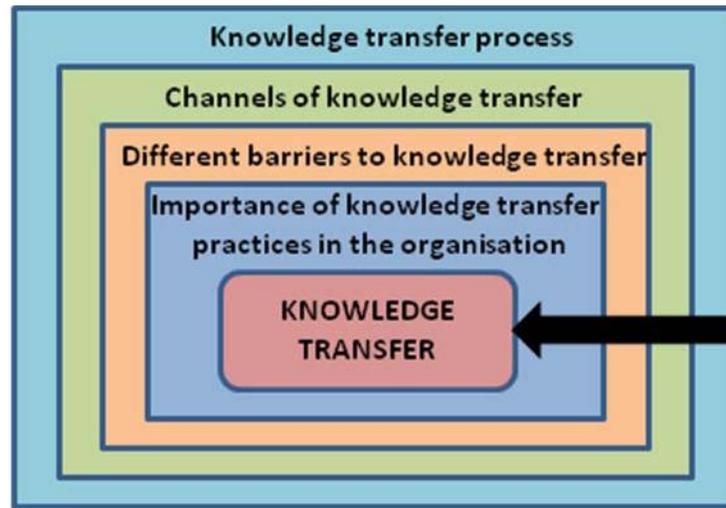
The four dimensions of knowledge transfer (importance of knowledge transfer practices in the organisation, knowledge transfer process, different barriers to knowledge transfer, and channels of knowledge transfer) significantly account for 100% of variance in determining knowledge transfer (Table 5.16). Beta analyses were conducted in order to determine the extent to which these four dimensions impact on knowledge transfer. The result of the Beta analyses indicate that the four dimensions impact on knowledge transfer in varying degrees which in decreasing level of impact are:

- Importance of knowledge transfer practices in the organisation (Beta = 0.473)
- Different barriers to knowledge transfer (Beta = 0.369)
- Channels of knowledge transfer (Beta = 0.348)
- Knowledge transfer process (Beta = 0.308)

These, impacts may be graphically represented (Figure 6.1). As one moves from the outermost segment to the innermost segment (as indicated by the black arrow) the impact of the dimensions on knowledge transfer increases.

Figure 6.1

Impact of the sub-dimensions on knowledge transfer



6.2.7. Organisational factors and its impact on Knowledge transfer

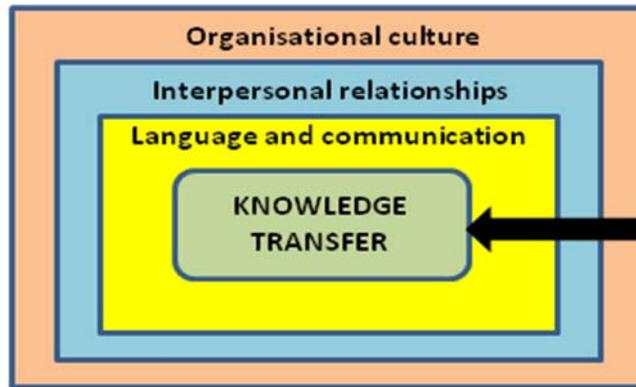
The organisational factors (language & communication, interpersonal relationships, and organisational culture) account for 100% of the variance in determining knowledge transfer. Beta analyses were conducted in order to determine the extent to which these organisational factors impact on knowledge transfer (Table 5.17). The results of the Beta analyses indicate that the three organisational factors impact on knowledge transfer in varying degrees which in decreasing level of impact are:

- Language & communication (Beta = 0.383)
- Interpersonal Relationship (Beta = 0.382)
- Organisational culture (Beta = 0.374)

These impacts may be graphically represented (Figure 6.2). As one moves from the outermost segment to the innermost segment (as indicated by black arrow) the impact of the organisational factors on knowledge transfer increases.

Figure 6.2

Impact of the organisational factors (potential barriers) on knowledge transfer



6.3. CONCLUSION

The results of the study have been discussed by comparing and contrasting them with the findings of similar research undertaken in the field. The influence of the biographic and demographic variables on the sub-dimensions of knowledge transfer and the influence of the organisational factors as barriers to knowledge transfer were assessed and discussed. The impact of the sub-dimensions of knowledge transfer (Figure 6.1) the factors that have the potential to act as barriers to knowledge transfer have been graphically represented (Figure 6.2) and serves as a foundation for recommendations based on the results of the study.

CHAPTER SEVEN

RECOMMENDATIONS AND CONCLUSIONS

7.1. INTRODUCTION

This chapter focuses on recommendations and conclusions drawn from the results of the study. The central theme of the research was to investigate the perceptions of knowledge transfer among African foreign doctors practicing in South African provincial hospitals. Recommendations for enhancing knowledge transfer and for addressing the organisational factors (interpersonal relationships, language and communication, and individual culture) affecting knowledge transfer will be presented.

7.2. RECOMMENDATIONS BASED ON THE RESULTS OF THE STUDY

From the findings of the research carried out among African foreign doctors practicing in South African provincial hospitals, the following recommendations can be made:

7.2.1. DIMENSIONS OF KNOWLEDGE TRANSFER

In order to overcome different barriers to knowledge transfer:

- It is imperative to create and nurture an environment of **trust** among employees and between employees and management within the provincial hospitals; as trust is believed to be the emotional glue that binds followers and leaders together (Bennis and Burt Nanus 1985:153). In order to build trust among doctors in South African provincial hospitals the following strategies could be used:
 - **Fairness and consistency:** People like to work and do business with individuals that are predictable and dependable. Individuals that easily change their viewpoint depending on who they are talking to, or refuse to make a decision because it may upset some people, are viewed as being weak. Hence, managers in provincial hospitals should ensure that their actions and decisions are predictable in similar situations; otherwise, they will be viewed as being untrustworthy. People trust those who are honest and consistent in their actions, those that fully disclose important information, who are willing to deal with tough issues, and who

are open about their objectives and motives. Organisations that prosper over the long run commit to fundamental integrity in their products and services, their processes and systems, and their people. They base their interactions with clients on honesty, integrity, and partnership. They hold their leaders and employees accountable for adhering to the highest ethical business practices in every aspect of their work.

- **Show respect:** Respectful individuals create a climate of trust by looking out for the best interests of another individual. Creating opportunities to learn, grow or be promoted for all the medical doctors in the provincial hospital will indicate to them that the hospital's leadership respects the ability of all their employees and wants them to succeed.
 - **Accountability:** All interpersonal relationships are ultimately based on personal responsibility and accountability. A climate of chaos is created by a lack of accountability. People are never sure if they will receive an open, honest answer when others do not take responsibility for their actions. A business will only flourish as long as the employees are held accountable for their actions towards the customers and one another.
 - **Cooperative environment:** Rather than avoiding a potentially challenging situation, it is better to confront it head on with a willingness to develop alternative solutions. Provincial hospitals should encourage doctors' cooperation during uncomfortable situations. This will indicate a willingness to help even in the most difficult of times. It will further establish that these hospitals will not run away from difficulties and can be trusted to stay with a challenge until it is resolved.
 - **Honesty with open communication:** Management within the provincial hospitals should encourage honest and open communication among their employees as this will not only encourage willingness on the part of employees to share their feelings and concerns but will also indicate that people do not have something to hide.
- It is also important to create a supportive culture that is collaborative, open and innovative; hence, conducive to knowledge sharing. To reinforce this culture, rewarding and recognising systems that support knowledge sharing is imperative. Strategies include rewarding group achievement rather than individual achievement, encouraging team-work, recognising individuals who share knowledge, encouraging social networking (community of practice, professional development programmes, social networks, reflective practices,

organisational communities, project collaborative teams, promoting mentoring programmes, training, and discussion rooms). Introducing these formal and informal professional networks in the organisation will encourage individual doctors to exchange their experiences, and knowledge. Overall, the adoption of these collaborative cultures will help the provincial hospitals to improve cooperation based on dialogue and mutual respect among peers (Canadian International development Agency, 2003) and will also enable individual employees to learn from each other. It will also foster an open and innovative culture within the organisation because an individual who is able to work well with others is essential for such a culture. The more interaction an individual has with peers and colleagues, the more the level of the interaction will improve.

- There is a need to locate subject-matter experts within the hospitals. The hospitals should also implement “skills databases” in order to „identify people with the right knowledge’. Skills databases will depend on individual doctors manually updating their profiles as their competencies and job functions change. A database administrator needs to be assigned to continually update the database as new employees are hired and existing employees leave or move within the organisation. A knowledge directory will enable employees to locate subject-matter experts in order to share tacit knowledge, and their experiences, “know how” and insights. After a user specifies the expertise she/he seeks, a knowledge directory returns a list of ranked subject-matter experts and their contact information based on the explicit knowledge assets those employees contribute to the knowledge management system. While a knowledge directory should eliminate the bulk of manual updating, it should also provide a way for administrators to modify the results returned.
- Time, money and management resources and support are success factors in knowledge management. It is, therefore, important for the hospitals to set aside periods of the workday for learning and practicing knowledge management. Employees with time for knowledge management also need coaching.
- The provincial hospitals should introduce an incentive system to motivate and encourage employees to share knowledge. This could be either extrinsically motivated, that is, achieve

goals that are apart from the work itself, or intrinsically motivated, that is, gain personal satisfaction from doing the job (Amabile, 1997). Increased salaries, bonuses and promotions are included in the former, while organisations apply more “soft” instruments like acknowledgement and personal development to the latter. Researchers like Osterloh and Frey (2000) and Mudambi et al. (2004) note the importance of intrinsic motivation mechanisms to support knowledge creation and sharing in an organisation. Neither incentives nor the type of incentives normally assumed effective, such as bonuses or promotions, are most effective at motivating knowledge sharing. Instead, employees favour intrinsically motivated incentives, such as colleagues’ acknowledgement and respect, improved reputation, and the possibility of professional or personal development.

In order to improve the process of knowledge transfer within the provincial hospitals:

- It is imperative that these organisations are able to create, share, store and use knowledge. This can be easily achieved by using methods such as Critical Incident Interviews or questionnaires. This will enable these organisations to tape the lessons of experience. By documenting the lessons of experience of the organisation’s most experienced performers, the organisation can capture the fruits of experience. This can include, for example, the documentation of “difficult cases” and how they were handled in order to lay the foundation for the development of their own knowledge that can be captured in a manual for employee reference.
- Information technology (IT) infrastructure is important for knowledge sharing and facilitates knowledge creation, knowledge storage, and knowledge sharing through better internal communication flows within an organisation (Alavi & Leinder, 2001; Hsu, 2008; Song, 2009). Knowledge sharing among project team members within the provincial hospitals could be increased through the use of IT, such as group decision support systems and networks, e-mail, chat sessions, online discussions, video conferencing, virtual classes, presentations, and reflective meetings (Song, 2009).

In order to enhance the channels of knowledge transfer in the organisation:

- The provincial hospitals should introduce informal channels like job-shadowing programmes. A job-shadowing programme is one strategy by which to transfer knowledge from one person or group to another. A less-experienced performer is paired up with a veteran performer. The veteran is asked to share knowledge (and perhaps hands-on practice) in dealing with the most difficult situations which he or she has faced on the job.
- Communities of Practice: This would involve doctors within the hospital forming a group that comes together to share information about a common problem, issue or topic. Such communities of doctors may meet in person or online. This will allow the organisation to store and transmit knowledge from one person (or group) to another person or group.
- Mentoring Programmes: A mentor is an experienced performer; a mentee is a less-experienced one. Mentors offer advice on what to do, how to do it and why it is worth doing in a particular situation. Such programmes will facilitate knowledge transfer among doctors.
- Information Exchanges: This strategy will require experienced doctors to sit at booths and dispense wisdom to less-experienced performers who visit them.
- Best Practice Studies or Meetings: One way to capture the lessons of experience is for the organisation's decision makers to do better than they have historically done in tapping their retiree base. Individuals with valuable knowledge can be placed on retainer to provide one-on-one phone guidance or even online or video-conference advice to less-experienced workers as they face problems.
- Investing in research and development programmes will ensure that the provincial hospitals are abreast of trends in the field of medicine.

In order to maximise knowledge transfer in the organisation, the organisation needs to:

- Encourage knowledge transfer by introducing behavioural base incentives to motivate individual doctors to share information with their colleagues about the best practice that

applies to their departmental needs. Hence, management should encourage individual doctors to attend and participate in the department weekly meeting, which will give each doctor a platform to discuss different cases and complications. This will allow the hospital to capture experiences that can then be collected and exploited to improve the individual's performance.

7.3. ORGANISATIONAL FACTORS

In order to strengthen the medical doctors' relationships in the provincial hospitals, it is critical that these organisations emphasise full managerial support in:

- Structuring formal task assignments (committees, training programmes).
- Informal activities (for example: sponsored team sports, doctors' camps, and team-building events) on a regular basis.
- A team-building programme, which requires these organisations to hire a team-building consultant to conduct an annual workshop at the employees' premises or at an off-site location; or the organisations can include a quick team-building game before or after a weekly meeting. One can try something as light as an ice-breaker game or something more complicated like holding a group discussion to solve a hypothetical workplace scenario. Effective team building should allow participants to learn how their colleagues' minds work, how they communicate and how their personalities influence their work styles. One can also give team members self-assessment questionnaires after problem-solving activities to help them learn even more about what helps their communication and what hinders it.
- It is important to have interpersonal skills training to improve communication skills, and conflict management skills that will enable the team members to learn how and when to confront or avoid confrontation, and when to force a position or when to compromise. It is important to create an open-door policy. As a way to improve communication, the organisation can also distribute a set of email etiquette guidelines to all employees. It is important to encourage employees to communicate as clearly and concisely as possible to avoid confusion. A friendly work environment is imperative. Improving interpersonal

relationships will enable employees to improve their personal output and the employer to improve collective productivity. Good interpersonal relationships within the provincial hospital work environment will lead to better teamwork, which will be guided by a better level of understanding among employees. Good relations among employees will lead to better productivity and less conflicts and issues to handle. In addition, good interpersonal relationships at the workplace provide a good environment for the employees to work in. Employees will feel like getting to work and attaining goals in such an environment. Better understanding among the employees will also reduce the conflicts between them and create an environment which will be welcoming. This will boost employee morale and inspire them to deliver quality work. Improving interpersonal relations at the provincial hospitals will serve a critical role in the development and maintenance of trust and positive feelings.

In order to overcome language and communication problems within the provincial hospitals, the following are suggested:

- Language training, depending on where the hospital is located, in a basic African language (for example, isiZulu in KwaZulu-Natal) should be provided for the medical doctors practicing in that particular hospital. This will allow employees to communicate effectively, improve their relationships with their co-workers who will no longer see them as “aliens”, but most importantly will bring them closer to their clients (patients).
- Interpersonal relationships training and sensitivity training; training medical doctors to effectively communicate horizontally between peers is essential in order to solve problems, perform job duties, prepare for meetings, and cooperate on important projects.
- Introduce different means of communicating within provincial hospitals: This includes memos, reports, meetings, face-to-face discussions, teleconferences, video conferences and electronic mail (Murphy & Thomas, 1962). This will allow effective horizontal communication between peers that is essential to solve problems, perform job duties, prepare for meetings, and cooperate on important projects.

In order to overcome issues of culture as barriers to knowledge transfer in provincial hospitals, these organisations need to:

- Introduce group work, with a low level of individualism and high level of collectivism to promote knowledge sharing. This collaborative culture will facilitate the elimination of rivalry. According to the literature, a collectivist culture allows organisations to maximise their ability to meet their needs, which provides the business with a competitive advantage (Reid, 2003).
- Introduce rewards and incentives: Rewards and incentives are critical factors and are important for project team members' willingness to share knowledge. These can be monetary or non-monetary incentives (Bartol & Srivastava, 2002). To encourage and create consistent knowledge sharing, monetary incentives such as financial rewards, salary increments and the like should be used (Davenport & Prusak, 1998). Rewards and incentives foster knowledge sharing. Rewards refer to financial incentives and recognition means non-financial incentives (Bartol & Srivastava, 2002, Bock et al., 2005; Ismail & Yusof, 2008).
- Leaders in these organisations also need to give their full commitment to the culture of transferring knowledge.

7.3.1. Impact of biographical factors on knowledge transfer

The study found that all the biographical variables (gender, age, length of service, length of service in South Africa/departments, types of work permits) had no influence on knowledge transfer. This finding contradicts much of the literature. For example, Miller and Karakowsky (2005) found that significantly more women were willing to share knowledge because they are more sensitive to instrumental ties and have a need to overcome traditional occupational challenges. A study by Gumus (2007) found that there were significant differences between age groups concerning knowledge collection and not knowledge donating, with people between the ages of 36 to 40 being poor on collecting knowledge. Keyes (2008) uncovered a definite relationship between age and knowledge sharing. In addition, Chow et al. (2000) found that

employees with approximately seven years experience displayed a negative relationship to willingness to share one's errors with others in the organisation.

7.3.2. Impact of biographical variables on organisational factors

This study found that biographical variables (gender, length of service, length of service in South Africa/departments, types of work permits) resulted in no significant differences in the perceptions of medical doctors regarding organisational factors (organisational culture, interpersonal relationships, language and communication) as barriers to knowledge transfer. Age was the only biographical variable that led to significant differences in perceptions regarding language and communication as a barrier to knowledge transfer. To overcome language barriers the provincial hospitals need to introduce language training facilities. These facilities could either be built on location or the hospitals could send their doctors to colleges for language training.

7.4. Recommendations for Future Research

- Sample size

For the purposes of this study, a sample size of only 62 respondents was utilised to get a sense of the process of knowledge transfer and the barriers to knowledge transfer. A larger sample size may be used to execute an extensive analysis, which could improve the validity and reliability of the results.

- Target population

The data was gathered from respondents employed at various South African provincial hospitals. To incorporate more employees in this research, either an in-depth study throughout South African provincial hospitals or a comparative study with South African private or semi-private hospitals could be undertaken.

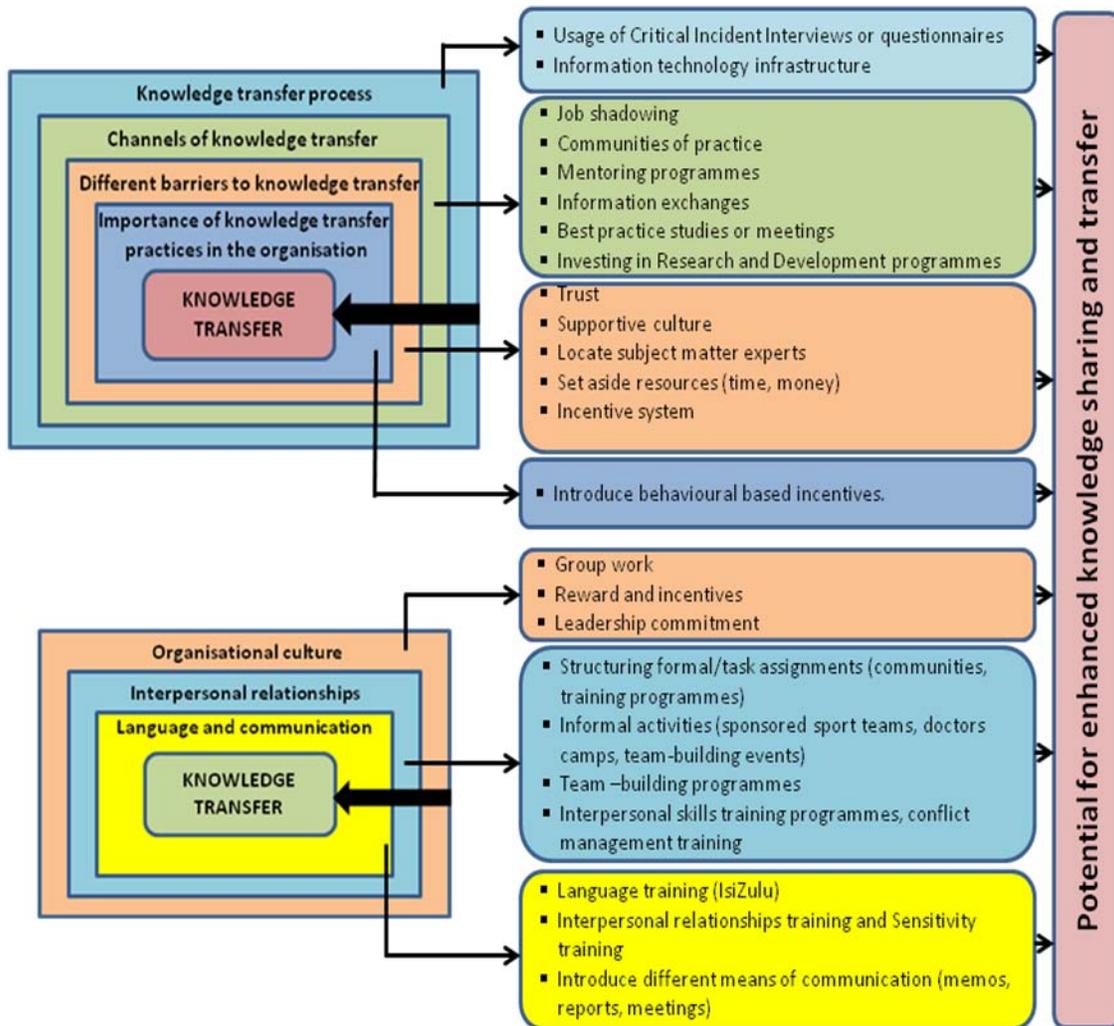
Further research could also use the probability sampling technique, which would reduce the short-comings of the non-probability sampling technique.

- Data collection techniques

For this study, questionnaires were the primary data collection method. To enhance the validity and reliability of results in future research, the triangulated approach using two other data collection methods could be used, for example, focus groups and interviews.

Figure 7.1

Strategy to overcome organisational factors (potential barriers) on knowledge transfer



7.5. CONCLUSION

Knowledge transfer plays a crucial role in the ever-changing organisation where the success of the organisation is significantly dependent on its ability to transfer its knowledge. However, the success of transferring individual knowledge from individuals to groups or groups to individuals is significantly dependent on the ability of the organisation to overcome both the dimensions of knowledge transfer (different barriers to knowledge transfer, the knowledge transfer process, channels to knowledge transfer, and the importance of knowledge transfer) and the organisational factors (interpersonal relationships, language and communication, and organisational culture) impacting on knowledge transfer. It is, therefore, important that organisations improve their understanding of the impact of the dimensions of knowledge transfer and the organisational factors impacting on knowledge transfer.

This study outlined different strategies that can help organisations to overcome the different barriers to knowledge transfer in the South African provincial hospitals. Strategies to overcome the barriers created by organisational factors are also presented (Figure 7.1).

The recommendations and conclusions discussed in this chapter represent just some of the steps that could possibly be taken by the provincial hospitals to reduce the impact of the dimensions of knowledge transfer and the organisational factors that are barriers to knowledge transfer. Undoubtedly, other recommendations could be used to successfully enhance employee knowledge transfer in organisations. This study will have an impact in the provincial hospitals and will assist them in decreasing the barriers to knowledge transfer; thereby enhancing the potential for knowledge sharing.

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APPENDIX I

UNIVERSITY OF KWAZULU-NATAL

School of Management

Master of Admin Human Resource Management Research

Researcher: Joly Nziavake Lutakwa (0738786339)

Supervisor: Professor Sanjana Brijball Parumasur (0312607176)

I am a registered student at the University of KwaZulu-Natal (Westville Campus) undertaking a Masters of Administration Degree in Human Resource Management. I am conducting a study on knowledge transfer from South Africa local doctors to African foreign doctors practicing in South African in order to create understanding of barriers to knowledge as perceived by foreign African doctors practicing in South African provincial hospitals. The research will enable the organisation to overcome these barriers. Your participation in this study, by completing the questionnaire, will result in a greater understanding of knowledge transfer and the barriers as perceive by the Africa foreign doctors. Answers will be treated anonymously. Individual responses will not be identifiable as they will be treated in aggregate when reporting the findings. Confidentiality will be given utmost importance.

I will gladly appreciate it if you could spare a few minutes to complete and email me back this survey questionnaire by the 20th November 2010 to my email address jlutakwa@gmail.com.

If you have any questions regarding the survey, please feel free to contact me at Email: 205517189@ukzn.ac.za / jlutakwa@gmail.com / 0738786339

Yours faithfully

Joly Lutakwa

Questionnaire: Topic: Perceptions of knowledge transfer of foreign African doctors practicing in South African provincial hospitals

Instructions for completing the Questionnaire

- a) Mark an X in the block to indicate applicable responses.
- b) Use the spaces provided to write your answers to the questions. Please print.
- c) Please do not leave blank spaces. If the question does not apply, please indicate “N/A”

Section A: Biographical data

Please answer the following questions by placing an X in the appropriate block to indicate your response to each question.

1. **Gender**

Female	<input type="checkbox"/>	1
Male	<input type="checkbox"/>	2

3. **Age**

21- 30 years	<input type="checkbox"/>	1
31- 40 years	<input type="checkbox"/>	2
41- 50 years	<input type="checkbox"/>	3
51 years and over	<input type="checkbox"/>	4

4. **How long have you been working as a medical doctor?**

Less than 1 year	<input type="checkbox"/>	1
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1-3 years 2
 4-6 years 3
 7-9 years 4
 10 or more years 5

5. **Country where you graduated your medical degree from**

Burundi	<input type="checkbox"/>	1
DRC	<input type="checkbox"/>	2
Rwanda	<input type="checkbox"/>	3
Tanzania	<input type="checkbox"/>	4
Nigeria	<input type="checkbox"/>	5
Namibia	<input type="checkbox"/>	6
Zimbabwe	<input type="checkbox"/>	7
Mozambique	<u> </u>	8
Botswana	<u> </u>	9
Other	<u> </u>	10 Specify: _____

6. **How long have you been working in South Africa?**

Less than 1 year	<input type="checkbox"/>	1
1-3 years	<input type="checkbox"/>	2
4-6 years	<input type="checkbox"/>	3
7-9 years	<input type="checkbox"/>	4
10 or more years	<u> </u>	5

7. **Which department are you currently working in?**

Acute assessment unit	<input type="checkbox"/>	1
Emergency unit	<input type="checkbox"/>	2
Intensive care	<input type="checkbox"/>	3
Neonatal Unit	<input type="checkbox"/>	4
Pediatric unit	<input type="checkbox"/>	5
Physical therapy unit	<input type="checkbox"/>	6
Other	<input type="checkbox"/>	7 Specify: _____

8. **Which of these South African language/s that you speak well**

Afrikaans	<input type="checkbox"/>	1
English	<input type="checkbox"/>	2
IsiNdebele	<input type="checkbox"/>	3
Isixhosa	<input type="checkbox"/>	4
Isizulu	<input type="checkbox"/>	5
Sepedi	<input type="checkbox"/>	6
Setswana	<input type="checkbox"/>	7
SiSwati	<input type="checkbox"/>	8
Sesotho	<input type="checkbox"/>	9
Tshivenda	<input type="checkbox"/>	10
Xitsonga	<input type="checkbox"/>	11

9. Number of years you have worked in your country before coming to South Africa.

Less than 1 year	<input type="checkbox"/>	1
1-3 years	<input type="checkbox"/>	2
1-4 years	<input type="checkbox"/>	3
7-9 years	<input type="checkbox"/>	4
10 years or more	<input type="checkbox"/>	5

10. Nature of your work permit

Permanent	<input type="checkbox"/>	1
Contract – below 2 years	<input type="checkbox"/>	2
Contract - 2 years and above	<input type="checkbox"/>	3
Other	<input type="checkbox"/>	4 Specify: _____

Section B: Knowledge Transfer

In each of the following statements indicate the extent to which you agree or disagree using the following scale:

1 - Strongly Disagree

2 - Disagree

3 - Neither agree nor disagree

4 - Agree

5 - Strongly agree

NO.	Statement	1	2	3	4	5
1.	I express a lot of opinions and thinking towards discussion topics in organisational meetings.					
2.	I transfer a lot of professional knowledge and expertise to others.					
3.	I transfer a lot of personal experiences to others.					
4.	I transfer a lot of methodologies of task performance to others.					
5.	I did modify my own work activities to incorporate what I learn from others for better work performance.					
6.	I have made significant improvements of my work performance through knowledge from colleagues.					
7.	My method of work performance is much more effective as a result of my experience in transferring knowledge over the years.					
8.	Overall, the process of knowledge transfer across the organisation is actively facilitated.					
9	The implementation of knowledge transfer practices within and across the organisation is to:					
9.1	Improve the competitive advantage of the organisation.					
9.2	Help integrate knowledge within and across the organisation.					
9.3	Improve the capture and use of knowledge from sources outside the organisation.					
9.4	Increase efficiency by using knowledge to improve work performance.					

9.5	Increase staff acceptance of innovations.					
9.6	Improve staff retention.					
9.7	Ease collaborative work of projects or teams that are separated (i.e. at different department).					
9.8	Identify and/or to protect strategic knowledge present in the organisation					
9.9	Promote the transfer of knowledge to other staff across the organisation.					

NO.	Statement	1	2	3	4	5
10.	The following factors hinder knowledge transfer:					
10.1	Communication.					
10.2	Different frames of reference (meaning different things in different contexts).					
10.3	Lack of trust.					
10.4	Status and rewards given to knowledge owners.					
10.5	Lack of financial incentives promoting knowledge and knowledge transfer to the organisation.					
10.6	Lack of motivation from head of department for knowledge transfer.					
10.7	Intolerance for mistakes or need for help.					
10.8	Not well defined/identified persons who have knowledge that is needed.					
10.9	Little commitment of head of department in knowledge transfer process.					
10.10	Individual culture.					

10.11	Social power relations.					
10.12	Resistance to change.					
10.13	Lack of time.					
11.	I find this channel most useful for knowledge transfer, in general:					
11.1	Staff induction programmes.					
11.2	Professional development programmes.					
11.3	Social networks.					
11.4	Reflective practices.					
11.5	Organisational communities.					
11.6	Project or collaborative work teams.					
12.	Most of my expertise has developed as a result of teamwork/collaboration.					
13.	I learn a lot from other doctors.					
14.	I always pass on my expertise and know-how to other doctors.					
15.	My organisation encourages senior doctors to transfer their knowledge to junior doctors.					
16.	I transfer my know-how and expertise through:					
16.1	Mentoring					
16.2	Training					
16.3	Discussion/face-to-face					

Section C: Organisational factors affecting knowledge transfer

In each of the following statements indicate the extent to which you agree or disagree using the following scale:

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither agree nor disagree
- 4 - Agree
- 5 - Strongly agree

NO.	Statement	1	2	3	4	5
1.	Decisions are made at the level where the best information is available.					
2.	Information is widely shared so that everyone can get the needed information.					
3.	Co-operation among medical doctors across different departments of the hospital is actively encouraged.					
4.	Authority is delegated so that people can act on their own.					
5.	It is easy to co-ordinate projects across different department of the organisation.					
6.	Medical doctors in the provincial hospitals co-operate with one another in doing tasks very well.					
7.	Medical doctors here do like one another and try to keep their relationships strong.					
8.	People understand and share the same organisation objectives.					
9.	Work gets done effectively and productively.					

10.	Overall, the atmosphere at the south African provincial hospitals is conducive to knowledge sharing.					
11.	My organisation emphasizes that team members need to learn continuously from each other regarding different issues.					
12.	My institution promotes self-actualization that is likely to increase individual knowledge.					
13.	My organisation fosters a shared philosophy that may increase the convergence of the goals shared by the institution.					
14.	My organisation discourages interpersonal communication that is likely to diminish relational channels.					
15.	My organisation encourages dependence which is likely to discourage the pursuit of individual knowledge.					
16.	My institution fosters a pursuit of power of knowledge that may put individual goals (e.g. Advancement solely for personal gain) at odds with organisational goals.					
17.	My organisation promotes innovation and knowledge transfer for staff benefit through the use of departmental experts and by other means					
18.	My organisation enables the foreigner African doctors to engage in knowledge transfer collaborations.					
19.	My institution provides high-quality and cost-effective services and training that meet the needs of the organisation and its members.					
20.	My organisation develops methods to evaluate changes in learning environments and to reward successful changes at both individual and departmental level.					
21.	My organisation supports the sharing of good practice between departments and individuals					
22.	My organisation sets up social networks for transferring information between local doctors and the new comer foreign doctors.					

23.	My organisation creates formal procedures to ensure that the lessons learned in the course of a project and collaborative work are passed along to others doing similar tasks.					
24.	I trust other colleagues in my organisation/department.					
25.	I feel that other people trust me.					
26.	I have a good friendship with others South African local doctors.					
27.	I am willing to provide help to others.					
28.	I am willing to collaborate with others during task performance.					
29.	I find it easy to communicate with others in my department across the organisation.					
30.	Overall, I have good and close relationship with my local south African colleagues.					
31.	I feel that my organisation gives me enough space to independently do my job.					
32.	I feel that my organisation treats all of us (foreign and local doctors) fairly.					
33.	I feel that people trust one another in my organisation.					
34.	I feel that my organisation has created a supportive environment for me to transfer knowledge.					
35.	I find that foreign African doctors in Africa provincial hospital are pressured to be more innovative.					
36.	I do feel that as foreign African doctor in south African provincial hospitals have to work hard to be accepted.					

37. Describe some cultural and communication particulars of local South African doctors in your organisation?

38. As a foreign African doctors, what it is like to work with South African local doctors’?

39. Please describe your interactions with local doctors and managers as well as others staffs within the organisation.

40. What cultural, communication, and linguistic challenges do you face in working with local South African doctors?

41. In provincial hospital, who are the most important people to you in terms of information flows?

42. How do you cope with the problems initiated by cultural, communication, and language differences?

43. How have these strategies (mentioned in 42. above) worked?

Very well	well	Neutral	somewhat	Not at all
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44. What kind of advice would you give to other foreign African doctors working in South Africa provincial hospitals?

45. Do you trust the local doctors?

Yes/ No

Please justify your answer:

46. Do you believe foreign foreign doctors in South African provincial hospitals have to work hard to be accepted?

Yes/ No

THANK YOU FOR YOUR TIME.