

**THE RELATIONSHIP BETWEEN INDIVIDUAL KNOWLEDGE  
TRANSFER AND BEHAVIOUR PATTERNS IN THE DEVELOPMENT OF  
SMALL BUSINESSES**

by

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## DECLARATION

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I declare that **“THE RELATIONSHIP BETWEEN INDIVIDUAL KNOWLEDGE TRANSFER AND BEHAVIOUR PATTERNS IN THE DEVELOPMENT OF SMALL BUSINESSES”** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

.....

SIGNATURE

(Mr. Gustave Mungeni Kankisingi)

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DATE

## **ABSTRACT**

This study investigated the relationship between individual knowledge transfer methods, self-study and work experience and behaviour patterns, facilitation, conduct and ability in the development of SMEs. This study further sought to find out if gender had an effect on the behaviour patterns. The study is empirical and cross sectional in nature. A questionnaire was used to collect data from 200 employees of selected SMEs in Durban-South Africa. Findings show that there is a positive, significant relationship between the knowledge transfer method self-study and behavioural aspects, facilitation, conduct and ability. In addition, this study found that work experience had an insignificant correlation with facilitation, conduct and ability. Finally, the study found that there are no gender differences in terms of facilitation, conduct and ability. It is recommended that all the stakeholders in the SME sector continuously analyse the internal organisational environment to ensure that knowledge resources are effectively used for productive employees' behaviour.

### **Key terms:**

Individual knowledge transfer; behaviour patterns; self-study; work experience; gender differences; facilitation; ability; ethical conduct; development of SMEs

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## **CHAPTER ONE: INTRODUCTION**

### **1.1. INTRODUCTION**

Creating an environment in the organisation which allows members to share what they know is a challenge for many organisations. It appears critical to study the relationship between individual knowledge transfer and behaviour in the process of small business development. Nieman (2006:22-24) states that the dichotomy between unsophisticated processes and limited resources characterises small businesses and hampers their development. According to Gottschalk (2010:213-214) and Liebowitz (2004), the foundation of knowledge flows is based on individual members of the business organisation who also depict different behaviour in reacting to the process of establishing a transfer platform. MacDuffie (1995), in Schuler and Jackson (2007:80-81) further refers to explaining the concept of discretionary behaviour, where both the sender and receiver of knowledge are mostly influenced by individual behaviour patterns that can be either a barrier or a bridge for transfer of knowledge.

Wong and Aspinwall (2004:47-48) state that small businesses have their own considerations and problems pertaining to knowledge management which are different to corporations. It can be argued that despite the fact that the previous research projects were conducted on the topic of individual knowledge transfer in small businesses, there is still a necessity to investigate how the transfer of individual knowledge and behaviour correlate in, and affect small business development.

In this context, Schwandt and Marquardt (2000:9-11) state that the common focus of many businesses was to access new technology to facilitate knowledge transfer and improve business processes. Nieman (2006:11) says, further, that small businesses tend to grasp new technologies more quickly than big businesses. In the same context, Mohsam and van Brakel (2011) state that small businesses use information technologies in order to capture, store and disseminate information for their competitive advantage.

It can be argued that there is a tendency to overlook the insights of members' behaviours in establishing a learning culture for the enterprise. As pointed out by Desouza and Awazu (2006:8), small businesses, in contrast to larger businesses, are individual-centred in transferring either explicit or tacit knowledge. It can be argued that the closeness and easy interactions of employees in small and medium enterprises (SMEs) constitute an advantage for the transfer of individual knowledge in case when employees exhibit productive behaviours. According to Schermerhorn, Hunt, Osborn and Uhl-Bien (2011:285), individuals have knowledge-based or expert power; to maintain their status or position and they have the ability to control other members' behaviour in the process of knowledge transfer. In the same context, Schuler and Jackson (2007:80) state that a basic premise of human capital theory is that the capital does not belong to the firms, but to the individuals who possess knowledge. In this context, the limitation of resources in small businesses raises complexity to create and maintain individual knowledge.

## **1.2. RESEARCH PROBLEM**

Both the survival and development of small businesses are dependent on the knowledge they generate and can retain. This knowledge resides in individuals. Small businesses are composed of a few individuals and this makes the knowledge generation, transfer and retention more critical for their survival.

As pointed out by Goetsch and Davis (2010:11), the employees (inclusive of owners) of small businesses who possess tacit knowledge are assumed to be more productive or better performers than co-workers in the process of business development, but this may not be the case.

For example, as pointed out by Lewis (2011:2) and Taruwinga (2011:68), entrepreneurs are born with natural intelligence and creativity, but they need to be shaped in accumulating relevant skills and know how to be successful. Cope, Kempster and Parry (2011:276-277) also state that the complexity and necessity of tacit knowledge transfer is likely to result in conflict of interest within the business organisation's structure. As aptly stated by Hislop (2013:94) businesses tend to neglect individual behaviour that facilitates the learning process. This results in the poor transfer of knowledge from the knowledgeable individuals to other members in the organisation. In addition, Cope, et al., (2011:271) point out that at the growth

stage in the development of a small business, leadership and knowledge crises emerge as contextual and structural changes become necessary.

**Problem statement:** It is therefore not clear how the behaviour of knowledgeable individuals relates to the effective knowledge transfer in small businesses.

### **1.3. THE PURPOSE OF THE STUDY**

There is relatively limited literature relating to knowledge management studies on the small business landscape (Wong & Aspinwall 2004:44-45; Desouza & Awazu 2006:33). This is the case despite the fact that their success depends to a great extent on the intellectual capital they possess.

This study provides an understanding of the relationship between individual knowledge transfer and behaviour in Small Business organisations. This understanding will help small businesses to better appreciate and manage human capital and possibly enhance the competitiveness of their firms. This study will guide employees in converting their individual skills, experience and knowledge into organisational capabilities and values. This study will further help managers and entrepreneurs to evaluate the performance of their employees' talent in understanding possible behaviour associated in establishing learning organisations. As pointed out by Warr & Conner (1992) cited in Pinder (2008:20), job competence is a set of knowledge and behaviours which determines the degree of job performance and consequently the business performance. This study's prime outcome will possibly provide managers and entrepreneurs, premises to new mind-sets regarding knowledge capability and appropriate behaviour for survival and competitiveness of small businesses

### **1.4. THE AIM AND OBJECTIVES OF THE STUDY**

The aim of this study is to establish the relationship between the transfer of individual knowledge from talented employees to co-employees and a select set of behaviours of these individuals. The study intends to establish whether employee behaviour facilitates or hinders facilitates the success of knowledge sharing in SMEs. It is expected that the resultant synergy from the knowledge-behaviour of employees can consequently be used as a competitive tool for the success of small businesses. The aim will be further investigated through the following sub-objectives:

1. To establish mechanisms allowing small businesses to reinforce organisational citizenship behaviour of talented individual employees in the process of knowledge transfer.
2. To identify factors involved in improving ability and conduct of knowledge workers in small firms' capacity building.
3. To determine how the relationship or lack of relationship between individual knowledge transfer and a select set of behaviours could assist managers/owners of small businesses to adapt their business models.
4. To determine if gender has an effect on knowledge transfer

To meet the above mentioned objectives, the theoretical ground and measurement of variables of this research are mainly based on the study conducted by Moorhead and Griffin (2010:80-81), which discovered three types of individual behaviour at a workplace in a business. These types of behaviour include: (1) Task performance (ability), (2) Organisational citizenship (facilitation), (3) Functional and dysfunctional behaviours (conduct).

In this context, typical behaviours observed in an employee may be a bridge or barrier to individual knowledge transfer in business activities. Secondly, this study is based on the work of Fu, Li and Johnson (2011:386) who stated that acquisition and use of individual knowledge require at first (1) strong self-study that can be measured by formal qualification or education of the employee. Furthermore, individual knowledge stemming from (2), learning-by-doing, is linked to the work experience of an employee. Lastly, individual knowledge was a result of sustainable (3) inter-personal interactions over time which could be measured by the level of communication of employees in SMEs. This study's aim is to establish the relationship between individual knowledge transfer and behaviour in SMEs: on the one hand this will be done through (1) educational qualification (self-study) and (2) experience, and on the other hand, (1) ability, (2) ethical conduct and (3) facilitation. The following section states the research hypotheses.

## **1.5. RESEARCH HYPOTHESES**

The study's hypotheses are listed below:

### **Hypothesis 1: Relationship between work-experience and behaviour patterns**

**Ho1.1** There is a statistically significant correlation between work experience and the ability of employees to perform different tasks in SMEs

**Ho1.2** There is a statistically significant correlation between work experience and ethical conduct of employees in SMEs

**Ho1.3** There is a statistically significant correlation between work experience and facilitation behaviour of employees in SMEs

### **Hypothesis 2: Relationship between self-study and behaviour patterns**

**Ho2.1** There is a statistically significant correlation between self-study and the ability of employees to perform different tasks in SMEs

**Ho2.2** There is a statistically significant correlation between self-study and ethical conduct of employees in SMEs

**Ho2.3** There is a statistically significant correlation between self-study and facilitation behaviour of employees in SMEs

### **Hypothesis 3: Gender and difference in behaviour**

**Ho3.1** There is a statistically significant difference between gender and the ability of employees to perform different tasks in SMEs

**Ho3.2** There is a statistically significant difference between gender and ethical conduct of employees in SMEs

**Ho3.3** There is a statistically significant difference between gender and facilitation behaviour of employees in SMEs

The delimitations of the study are discussed next.

## **1.6. DELIMITATIONS OF THE STUDY**

The organisations will be small and medium enterprise (SME), with 5 to 50 paid employees and full time employees as prescribed by the National Small Business Act, No 102 of 1996. However, the focus of this study is on small business that encompasses micro, very small and small businesses. The analysis will focus on tacit knowledge at the individual level, and as noted by Schwandt & Marquardt (2000:127), tacit knowledge is usually within the individual. Nonaka (1994:16) defines tacit knowledge as knowledge embedded in the human brain that cannot be transferred easily, and Grant (1996:111) asserts that tacit knowledge is demonstrated only in its application. In tacit knowledge transfer, employees' behaviours are involved, but only a select set of expected behaviours which includes facilitation, ability and conduct are considered. Furthermore, this study focuses on

definition and analysis of knowledge as an organisational resource and capability embedded in its employees. The behaviour will be defined in the context of facilitation, ability and conduct of employees to sustain business values pertaining to knowledge transfer and business development.

The SME must be a profit seeking organisation from any sector. The activities of the SME must require use of knowledge. Furthermore, the study is based on individual members of business organisations who are assumed to be in positions which portray knowledge-behaviour relationships. The next section provides the definition of key concepts relevant to knowledge transfer, behaviour and SMEs.

## **1.7. DEFINITION OF CONCEPTS**

The appropriate meaning of concepts used in this study has to be clarified in order to reduce possible confusion. The relevant meaning of knowledge, behaviour, small business and development used in this study are explained below:

### **1.7.1. Knowledge**

Leibold, Probst and Gillert (2005:16) defined knowledge in referring to information technology and based on its distinction with data, information and wisdom.

- ❖ Data is elements of analysis; it is represented in letters or numbers without meaning.
- ❖ Information is a data with context (Tuomi, 1999:108).
- ❖ Knowledge is information with meaning. At this level, relevant information may be analysed and synthesized in order to refer to intelligence (Desouza & Paquette 2011:37).
- ❖ Wisdom is knowledge adding insight and sound judgement.

Knowledge is the main resource for a firm's competitive advantage (Gottschalk 2010:88) in reference to the knowledge-based theory of the firm.

### **1.7.2. Tacit or individual knowledge**

Nonaka (1994) has defined tacit knowledge as rooted in action, commitment and involvement in a specified environment: it is unarticulated and consequently less permissible to transfer (Little, Quintas and Ray, 2002) and it also has both cognitive

and technical elements that cannot be shared in an explicit form and is difficult to separate from the knowledge source (Desouza & Paquette, 2011: 336).

### **1.7.3. Explicit knowledge**

According to Nonaka (1994:16) who referred to Polanyi's definition, explicit knowledge is codified and transmittable in formal and systematic language. It is knowledge that is easy to transfer in using formalised ways (Little et al., 2002) and it is knowledge that is formal and systematic and able to be articulated and transmitted through words and numbers as people are aware of it (Desouza & Paquette, 2011:331).

### **1.7.4. Knowledge worker**

Redman and Wilkinson, (2009:279-280) have defined a knowledge worker as someone who has a high level of creativity in their work, in making extensive use of intellectual, social and action based skills. According to Moorhead and Griffin, (2010:48-49), a knowledge worker is defined as an employee who adds value in an organisation because of what he knows and is willing to share.

### **1.7.5. Workplace behaviour**

According to Moorhead and Griffin, (2010:80), workplace behaviour (WB) is defined as a model of action that is depicted by members of the business and which directly or indirectly influences organisational effectiveness.

### **1.7.6. Individual behaviour**

Gibson, Ivancevich, Donnelly and Konopaske (2009:6) define individual behaviour (IB) as a person's intention to act towards someone or something in a certain way. According to Tuan (2011:7) the understanding of individual behaviour is crucial to knowledge transfer. It can be argued therefore that the closer the relationship among employees within the business organisation is, the easier the transfer of tacit knowledge.

### **1.7.7. Ethical behaviour**

Rossouw and van Vuuren (2010:4) define ethical behaviour (EB) as a behaviour that seeks to serve one's own interest by simultaneously caring about the interests of

others. Nelson and Quick (2008) have defined EB as acting in ways consistent with one's personal values and simultaneously with organisational and societal values. According to Robbins and Coulter (2012:163) the concept of ethical communication as part of ethical behaviour is the fact that the relevant information transferred, is true in every sense, and not deceptive in any way. However, the ethical communication is crucial in small business due to the fact that transfer of tacit knowledge depends on social interaction.

#### **1.7.8. DEFINITION OF SMALL AND MEDIUM ENTERPRISES (SMEs)**

According to the National Small Business Act 102 of 1996, South African terminology of small, medium and micro enterprises (SMMEs) is equivalent to internationally commonly used terminology of small and medium enterprises (SMEs). This study used SMEs' terminology; and the concepts "enterprise, firm and business" were also utilised interchangeably. The Act states that small, micro and medium enterprises must have:

- Minimum of five and maximum of two hundred full time employees.
- Minimum and maximum of annual turnover and gross asset value excluding fixed property of consecutively R0.15-R50 and R0.10-R18 millions.

The detailed classification of SMEs is as follows:

##### **1) Micro-enterprises**

Micro enterprises are survivalist businesses often in informal sector with minimal asset value, few paid employees and generating income below the minimum standard.

##### **2) Very small enterprises**

Very small enterprises are operating in different formal sectors with a minimum of 10 and maximum of 20 paid employees.

##### **3) Small enterprises**

Small enterprises are well established businesses, applying complex business practices and operating in different formal sectors with maximum of 50 paid employees.

#### **4) Medium enterprises**

Medium enterprises are operating in different formal business sectors using more complex business practices and structures with minimum of 100 and maximum of 200 paid employees

#### **5) Entrepreneurs**

Longenecker, Moore, Petty and Palich, (2008:6) defined entrepreneurs as risk taker individuals who discover the needs in a market environment and launch new enterprises in order to meet those needs.

#### **1.7.9. Business development**

According to Hassanien, Dale and Clarke (2010:2), development in the context of business is defined as the process by which a business improves its performance in using internal, external or joint resources. This definition of development is also adopted by the study.

### **1.8. GEOGRAPHIC AREA OF THE STUDY**

The choice of Durban in the province of KwaZulu Natal has been motivated by its strategic position in the economic mainstream of the province and the country globally due to its busy port. Durban has got six economic activity areas which include: South Central, North Central, Inner West, North, South and Outer West area. The first two are the focus of this study as they constitute the Durban Metropolitan Area (DMA) where the sample was drawn. According to KZN-DEDT (2010:4), one of the programmes through which the growth and development of the small enterprise sector will be promoted is through the human capital and capacity building programme. It is also important to point out that the researcher lives in Durban. The structure of this study is elaborated in the next section.

### **1.9. STRUCTURE OF THE STUDY**

This study comprises five chapters which are structured as follows:

- ❖ Chapter one introduces the topic and covers the domain, background, problem, purpose, objectives, questions, delimitation, definition of concepts of this study and structure.

- ❖ Chapter two focuses mainly on the review of previous literature relevant to individual knowledge transfer and behaviour in SMEs.
- ❖ Chapter three highlights the applied research methodology and covers research design, population and sample, research instrument, data collection, and analysis. Also the validity and reliability of the study are discussed.
- ❖ Chapter four firstly presents the research findings in the format of statistical summaries, secondly it covers and summarises the different statistical measurement of research items to test research hypotheses. It further presents and analysis results to establish the existence or not of the correlation between individual knowledge and a select set of expected behaviours. Lastly, it focuses on the discussions and interpretations of the research results.
- ❖ Chapter five: conclusions and recommendations provide to summary and conclusions of research findings and also highlight limitations of the study. This chapter also provides recommendations and suggestions for further studies.

## **1.10. CONCLUSION**

The introduction as chapter one provided the overview of the topic: “the relationship between individual knowledge transfer and behaviour patterns in small businesses”. This chapter highlighted the research problem’s grounding, the sphere as well as the expectations of this study. Secondly, the research problem, aim, objectives, hypotheses were stated. Thirdly, the working terms of this study were defined and the reason Durban was chosen to conduct this study was justified. Finally, the structure of this study was addressed and the content of every chapter was briefly discussed.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1. INTRODUCTION

This chapter focuses on the concept of knowledge and its transfer in small enterprises. It further looks into the concept of behaviour at the workplace and in the SME sector. In addition, this chapter discusses SMEs in knowledge economy and lastly the conclusion summarises the key literature highlighted in this chapter.

It is important to review the relevant literature on the relationship between individual knowledge transfer and behaviour patterns for development of small businesses. According to Redman and Wilkinson (2009:426-429), knowledge management is a relatively new subject and it only started to capture the interest of people in the mid-1990's.

Despite the amount of literature on the topic, the debate is still open on key issues, and one of them is the best method of persuading workers to share their knowledge with each other. They confirmed that the linkages between knowledge management and the topic of human resource management still necessitated attention.

During its early stage, knowledge management tended to ignore people related issues, but there has been a shift, originated from the research on socio-cultural factors, which has provided premises to shape workers' attitudes towards knowledge management in encouraging them to share their knowledge (Redman & Wilkinson 2009:426).

Scarborough, Wilson and Zimmerer (2009:56) highlighted the fact that small businesses have an advantage over big business organisations when it is about managing knowledge, due to the former's size and simplicity. But they stated that small firms need to identify what their workers know in order to incorporate this knowledge into the business, facilitate its transfer or sharing between members and leverage it through useful knowledge. Desouza and Awazu, (2006:33) found that the traditional reasons to pay attention to knowledge management in small business were:

- 1) SMEs compete on know-how and therefore they have to use knowledge to their favour.
- 2) The owner must ensure that knowledge is not only used but also transferred among employees and;

- 3) SMEs are judged by external stakeholders based on the SME's knowledge and knowledge-exploitation capabilities.

However, Desouza and Awazu (2006:33) stated that despite the need to manage knowledge in SMEs, little is known about knowledge management in these businesses. As noted by Wong and Aspinwall (2004:44-45) there is relatively limited literature relating to knowledge management studies on the small business landscape. They found that most of the publications are focused on case studies conducted on small companies in order to determine the perception towards knowledge management (KM).

According to Mohsam and van Brakel (2011:4), large business organisations were first to formally apply knowledge management when SMEs were still unaware of its application. They confirmed that despite the utilisation of knowledge in small businesses, the knowledge management was not the focus of small businesses' managers or owners.

Peters and Brijlal's (2011:265) study on SMEs in KwaZulu Natal concluded that there was a relationship between the entrepreneur's level of education and their business success. But there is still a necessity to determine to what extent the knowledge acquired by an entrepreneur is transferred to members of the business organisation. This chapter focuses on theoretical frameworks and it aims to describe concepts pertaining to the relationship between individual knowledge transfer and behaviour patterns within small businesses. It will consist of (1) definition of concepts and (2) discussion of the literature relating to knowledge and a select set of behaviour in the small businesses.

## **2.2. KNOWLEDGE**

The literature presents several interpretations of knowledge which need to be explained in order to provide a contextual understanding relevant to this study. The relevant definition for this study is that individual knowledge refers to the sum total of experience and learning residing within an individual.

According to Liebold, Probst and Gillert (2004:16), when knowledge is applied to a community, it refers to the sum total of experience and learning residing within an individual, group, enterprise, or nation. In the same context, Gotteschalk (2010:38) stated that knowledge at individual level in the business can be described as where

the employees spend their working hours, what they do and why they do it. This confirms that where employees use their knowledge, how and why they do their work determines the level of individual knowledge in the business irrespective of the size of the business.

Desouza and Paquette (2011:37) asserted that knowledge allows an individual to interpret, analyse, and act upon the information and it can be based on individual's judgemental ability of past experiences.

Based on the above description, it is necessary to categorise knowledge of a business organisation in terms of tacit and explicit. This distinction originated from the creation and transfer of knowledge (Nonaka, 1994:15-16), but the focus of the following section will be on types of individual knowledge.

### **2.2.1. TYPES OF INDIVIDUAL KNOWLEDGE**

Polonyi (1958) cited in He and Li, (2010:273) described individual or tacit or personal knowledge as a knowledge which is acquired with little support of other people or resources and has direct relevance to individual goals. In the same context, Drucker cited in He and Li (2010:274) defined tacit knowledge in a management context as knowledge that cannot be explained by language, but can be acquired through demonstration and practice. According to Nonaka (1994), individual knowledge is rooted in the action, commitment and involvement of the knowledge worker. It can be argued that action, commitment and involvement are dependent on employees' behaviour in the use or transfer of individual knowledge and consequently affect the development of SMEs.

According to Gourlay (2002:4-5), there were five types of individual knowledge that could be subdivided into two groups which are: things not (yet) put into words and things inexpressible in words. The first group includes trade secrets, things overlooked and presuppositions. The second group includes knowledge by acquaintance or familiarity. Table 2.1 below represents the five types of individual knowledge in two groups.

Things not (yet) put into words	Things inexpressible in words
Trade secrets	'Knowledge by acquaintance or familiarity' e.g. sounds, smells, etc
'Thinks overlooked' e.g. craft knowledge/skill	
Presuppositions	"The open-textured character of rule-following" acquired through practices

Figure 2.1: Groups of individual knowledge

Source: Gourlay, (2002:4)

Gourlay, (2002:4) confirmed that tacit knowledge that could be put into words tends to remain tacit for three reasons: first, there was a concern with power and secrecy as no one bothered to recognise the knowledge or tried to explicate it. Second, there was concern over presuppositions that people hold about tacit knowledge. But he stated that there was a possibility of making this type of knowledge explicit. In contrast, Gourlay (2002:5) stated that there was tacit knowledge that could not be expressed in words due to the fact that it relates to sensuous experience or practice and rule-following. He confirmed that the open-textured character rule-following implies that any rule to carry out an action requires specifications, but the latter would also require rules for their interpretation. There was no option for this knowledge to be converted into explicit knowledge. The next section discusses different sources of tacit knowledge.

### 2.2.2. SOURCES OF KNOWLEDGE

According to Tuan (2011), knowledge donation and knowledge collection were important concepts used to explain the creation and transfer of individual knowledge. He described knowledge donation as the communication based upon the individual's will to transfer intellectual capital. In contrast, knowledge collection is the persuasion of others to share what they know. Given the differences in the nature of tacit or individual and explicit knowledge, Fu, Li and Johnson (2011:386) confirmed that the sources and mechanisms for learning and acquisition are also different. The acquisition of tacit knowledge requires (1) strong self-study, (2) learning-by-doing, and (3) requires sustained inter-personal interaction over time.

According to Andres, Andres, Showdhury and Alam (2007:95-96), the self-efficacy theory to tacit knowledge sharing as illustrated in figure 2.2, indicates that tacit knowledge is

shared through behaviours. This knowledge should increase under certain conditions such as consideration of team members; current opportunity to share knowledge; and appreciation or acknowledgement of the transferor in sharing knowledge (persuasion).

The same authors further indicated that in an attributional analysis, a person would positively or negatively consider his/her capability based on the environment, task, and beliefs, especially as knowledge in technical work is often learned from co-workers. The figure 2.2 below depicts the sources of individual knowledge, its interpretation and transfer.

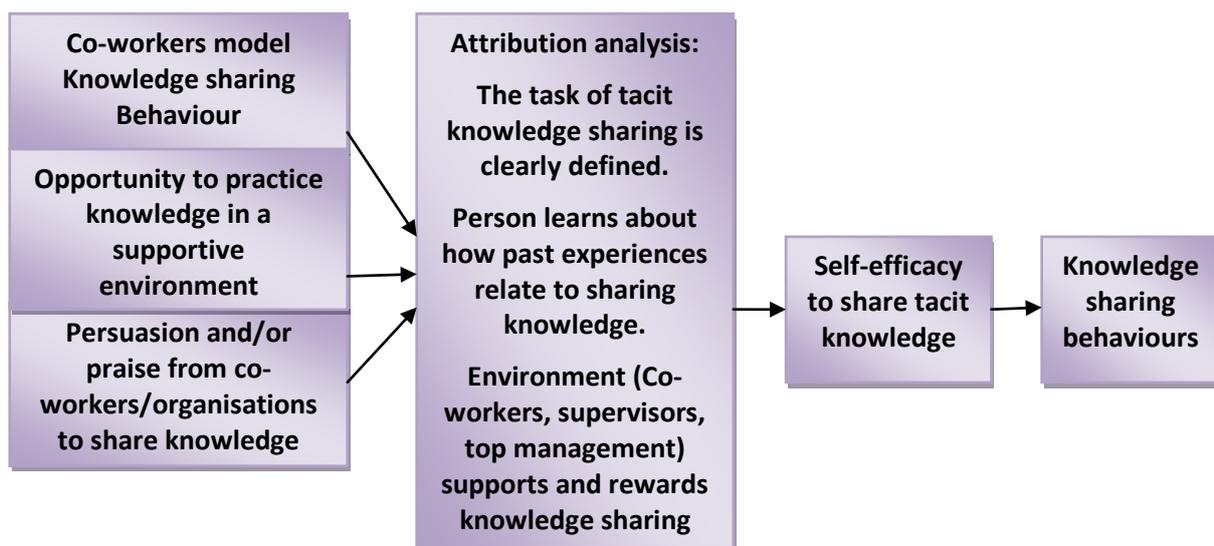


Figure 2.2: Source and transfer individual knowledge

Source: Andres, Andres, Showdhury and Alam, (2007:96)

### 2.2.2.1 Self-study

According to Fu et al. (2011:386), strong self-study characterised the individual effort and ability to obtain individual knowledge over a period of time. These efforts through a formal or informal training and education, lead to cognitive skills of employees in the business.

### 2.2.2.2 Learning-in-doing

According to Fu et al. (2011:386), learning by doing is a very important source of individual knowledge. This individual knowledge cannot be codified or articulated as it is acquired through practicing or doing something over and over again during a

long period of time. This conclusion indicated that the transfer of individual knowledge was a function of work experience of employees in the business.

### **2.2.2.3 Interpersonal interactions**

According to Fu et al. (2011:386), the interpersonal interactions of employees constituted a proper channel for individual knowledge transfer as it is embedded in a person. It can be argued that organisational culture affects employees' behaviours and is crucial for employees' transfer of know-how. The transfer of knowledge is likely to be done through improved communication combined with the experience of employees in the business.

The factors influencing individual knowledge transfer are discussed next.

### **2.2.2.4. Factors influencing individual knowledge transfer**

#### **1) Self-study**

Self-study combines orientation during a period of time through education (qualification) and personal cognitive ability.

#### **2) Work experience**

According to McShane and Glinow (2002:100), learning through experience works best in the case of a strong learning orientation. There is a creation of new knowledge through employees' interactions which allow them to perform tasks and achieve their goals through action learning. This learning involves employees in real complex and stressful problems usually: in teams to provide solutions to business.

#### **3) Gender**

According to McShane and Glinow (2002:375), gender differences influence tactics. This suggests that women are viewed as less influential when they try to directly influence others by exerting their authority or expertise, as compared to men. In this context, the "soft" tactics such as friendly persuasion is used by women and will differ with "hard" tactics such as upward appeal and assertiveness which are applied by men. McShane and Glinow (2002:374) stated that those with expertise may be more successful using

persuasion than power. The same authors confirmed that women are more likely to admit to a mistake and accept remarks than men.

The literature confirmed that female employees are more likely to build better interpersonal relations through communication, allowing the transfer of their skills than male employees. The concept of knowledge transfer is discussed in the next section.

### **2.2.3. KNOWLEDGE TRANSFER**

Argote and Ingram (2000:151) defined knowledge transfer (KT) at an individual and organisational level. Firstly at an individual level, they referred to Singley and Anderson's (1989) definition of KT as how knowledge acquired in one situation applies or fails to apply to another. Secondly, at organisational level, they have defined transfer as a process used in the organisation through which one unit such as group, department, or division is affected by the experience of another. According to Desouza and Paquette (2011:266), the ability of employees to share knowledge in the business at functional or geographic area is the key to the success of knowledge initiatives. Desouza and Paquette (2011:180) pointed out that the transfer strategies are dependent on the type of knowledge (tacit and explicit) and shifts of knowledge in terms of its primary source, location and dynamism within business organisation. This is why Evans (2011:419-421) asserted that the transfer and sharing mechanisms of knowledge within the organisations often sets high-performing organisations apart from the rest.

Different behaviours in the workplace are discussed next.

### **2.3. WORKPLACE BEHAVIOUR**

According to Moorhead and Griffin, (2010:80), workplace behaviour (WB) is defined as a model of action that is depicted by members of the organisation and which directly or indirectly influences organisational effectiveness.

#### **2.3.1. BEHAVIOUR PATTERNS**

According to Hersey, Blanchard and Johnson (2001:104), the patterns of behaviour are characteristics that describe individuals or groups interacting with other people. Hersey et al. (2001:105-106) confirmed that it is essential to know why people behave in a certain way as things are getting done through them. Evans (2011:18)

asserted that behaviour is a quality characteristic in human interactions. It can then be argued that individuals' behaviour will determine whether employees are prepared on one hand to share what they know with co-workers, or on the other hand to create an environment where managers support and persuade employees to share their individual knowledge in SMEs.

### **2.3.2. TYPES OF INDIVIDUAL BEHAVIOUR**

According to McShane and Glinow (2014:27), there are five types of individual behaviours (IB) mostly discussed under organisational behaviour (OB). The types of IB as depicted in figure 2.2 are the following: task performance behaviours (TPB), organisational citizenship behaviours (OCB), counter production work behaviours (CWB), joining and staying with the organisation (JSOB) and work attendance behaviours (WAB). Based on the definition of Moorhead and Griffin (2010:80), workplace behaviour (WB) is defined as a model of action that is depicted by members of the business and which directly or indirectly influences organisational effectiveness. This model did not consider the size of businesses, but just acknowledges the existence of individuals' interaction in the organisation.

#### **2.3.2.1 Task performance behaviours as ability**

According to McShane and Glinow (2014:27), task performance behaviour described an individual behaviour that supports organisational objectives. This type of behaviour is goal-directed and involves different dimensions of business.

In the same context Moorhead and Griffin (2010:80) stated that task performance behaviours are the sum of work-related behaviours that the business expects the employees to display in performing their tasks. This requires the application of knowledge from previous self-learning, experience gains through learning-by-doing and interpersonal interaction-learning cultivated through better communication. According to Robbins, Odendaal and Roodt (2004:47), ability describes an individual's capacity to perform various tasks in a job which is made up of intellectual and physical abilities. The former is the type of ability which carries out mental activities and the latter is relevant to less skilled, standardised jobs with demanding information-processing requirements.

### **2.3.2.2. Organisational citizenship behaviours as facilitation**

According to McShane and Glinow (2014:27), the organisational citizenship behaviours refer to the behaviours of employees that prove their commitment to go beyond their normal job duties. This type of behaviour describes the disposition of employees to help others without selfish intent, get involved in organisational activities, avoid unnecessary conflicts and perform tasks beyond the call of duty. In the same context, Moorhead and Griffin (2010:81) confirmed that organisational citizenship (facilitation behaviour) is the extent to which an employee's personal behaviour makes a positive overall contribution to the organisation.

### **2.3.2.3. Functional and dysfunctional behaviours as conduct**

These behaviours constituted conduct that can harm or favour the sustainability of SMEs, and have been stated under three factors which include counterproductive, joining and staying and work attendance behaviours.

#### **❖ Counterproductive work behaviours (CWBs)**

McShane and Glinow (2012:28) stated that counterproductive work behaviours (conduct) constitute voluntary behaviours that have the potential to harm the business by reducing the effectiveness of its employees or property or functioning. These behaviours include the acts of commission and omission. The former behaviours constitute deliberate acts that harm the business and its employees, and the latter depict behaviours that lead to ignoring and avoiding actions that could benefit the business and its employees. According to McShane and Glinow (2012:28), counterproductive behaviours are associated with personality traits such as Machiavellianism which is discussed later in another section of this chapter.

#### **❖ Joining and staying with the organisation**

It remains critical for business to maintain a low turnover rate. McShane and Glinow (2014:28) stated the importance of hiring and keeping talented employees to perform work within the business. The same authors highlighted that the intellectual capital of the business was the knowledge residing in the heads of employees.

### ❖ Work attendance behaviours

Business productivity depends on efficient use of the time allocated to different tasks in the business. According to Moorhead and Griffin (2010:80), absenteeism occurs when the individual employee is not present at work regardless of whether there is legitimate reason or not. Moorhead and Griffin (2010:81) discovered that different factors affect employees' absenteeism, but the fact remains that the output of the business suffers. These types of individual behaviours at the workplace applied to small and big business organisations and are depicted in figure 2.3

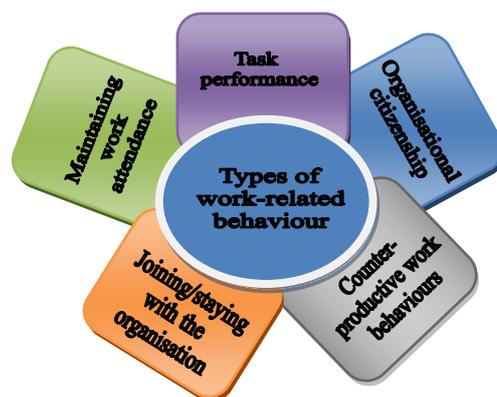


Figure 2.3: Types of work-related behaviour

Source: McShane and Glonow, (2014:27)

### 2.3.4. Organisational behaviour

Robbins, et al. (2004:7) defined organisational behaviour (OB) as what people do within an organisation and how their behaviour impacts on its performance. According to Gibson, Ivancevich, Donnelly and Konopaske (2009:15), organisational behaviour covers relationships among the management functions and individuals, group, and organisational effectiveness. It can be asserted that the tacit knowledge nature and application necessitate the understanding of individual levels of behaviour within the business organisation.

It can be assumed that among the five types of individual behaviours at the workplace, on one hand, performance, organisational citizenship, high attendance and hiring and maintaining talented employees are likely to contribute positively to transfer of individual knowledge. On the other hand, counterproductive behaviour such as poor attendance and skilled employees leaving the business are assumed to be harmful for the transfer of individual knowledge.

## **2.4. SMALL BUSINESSES**

According to KZN-DEDT (2010), the definition of a small enterprise is based on the National Small Business Act, No. 102 of 1996, and based on qualitative and quantitative criteria. It is a separate and distinct business entity, managed by one or more owner(s), with annual turnover not exceeding 13 million and with less than 50 paid employees in any specific business sector or sub-sector of the economy. For reason of clarity, small enterprises are classified as micro, very small, small and medium enterprises.

### **2.4.1. SMEs OVERVIEW**

Desouza and Awazu (2006:32) stated that SMEs have become a vital part of national economies, regardless of whether the country is developed, developing or underdeveloped. Parker (2009) highlighted the criticality of small business on self-employment workforces. The same author indicated that the country members of organisation for economic co-operation and development (OECD) put policy into place to intensify their support of the SME sector.

In the context of South Africa, it has been the priority of government since 1995 to move away from the dominance of large and capital intensive firms in order to promote small enterprises (KZN-DEDT 2010:11).

The KZN small enterprises development strategy has established that there was a need for human capital and capacity building for small firms to survive and compete (KZN-DEDT 2010:22). According to Nieuwenhuizen (2011:32-33), the entrepreneur must utilise the intellects of people, unlock and share in his people skills and use wisdom in nurturing relations within the firm. According to Nieman (2006:9-12), the existence of small business plays different roles in the economy. These include building a link in the supply chain, close relationship with the customers and community, employment creation, reducing the gaps left by big business, easy start up for new entrepreneurs and new experiences for employees. As defined in chapter one, this study considered small businesses as those with less than 50 employees. The next section describes how individual knowledge is critical for the development of SMEs.

#### **2.4.2. SUCCESS OF SMEs THROUGH INDIVIDUAL KNOWLEDGE TRANSFER**

The success and failure of SMEs is analysed in the context of knowledge management implementation in small firms, and is based on the study conducted by Wong and Aspinwall, (2004). Wong and Aspinwall (2004:49) argue that the success or failure in transferring individual knowledge in SMEs is characterised, among other things, by how the knowledge transfer present advantages and disadvantages for SMEs' development. That is, through a business structure and a set of behaviours. This selected set of behaviours is referred to as facilitation, ability and conduct is crucial for success or failure of individual knowledge transfer leading to development or lack of development of SMEs.

KZN-DEDT (2010:17) in their study stated that, despite the contribution of small enterprises in giving the marginalised individuals access to the mainstream of the economy, the sector faces tremendous challenges. It experiences challenges which include: legal and regulatory framework, access to information and advice, access to marketing and procurement, access to finance, the physical infrastructure, capacity building, management skills, industrial relations and labour issues, access to appropriate technology, lack of joint ventures, and taxation and financial burdens. The next section will discuss the relationship between individual knowledge and behaviour factors in SMEs.

#### **2.5. INDIVIDUAL KNOWLEDGE TRANSFER AND BEHAVIOUR PATTERNS IN SMEs**

At this point, it is imperative to describe what the term business organisation implies and the conditions needed in order for it to exist and function successfully.

An organisation, regardless of sector or size is constituted by a group of people with special skills, knowledge and other attributes in order to work together to accomplish individual, group and organisational goals (Hodge, Anthony & Gales 2003:9). From the above statement, it can be confirmed that the distinctiveness of individuals in terms of knowledge, skills and behaviour could be explained through the model of Holcim. This model is two-fold, focusing on both knowledge or experience and behaviour (Leibold, et al, 2005:171).

According to this model, being successful today does not guarantee future success. The performance needs to be continually strengthened through improvement of operations and efficiency in systematically addressing knowledge, skills and

processes. Leibold et al. (2005) stated that in improving professional knowledge and skills, it is imperative to address the attitude which represents behaviour. The combination of knowledge and behaviour for performance improvement is depicted in figure 2.4 below:

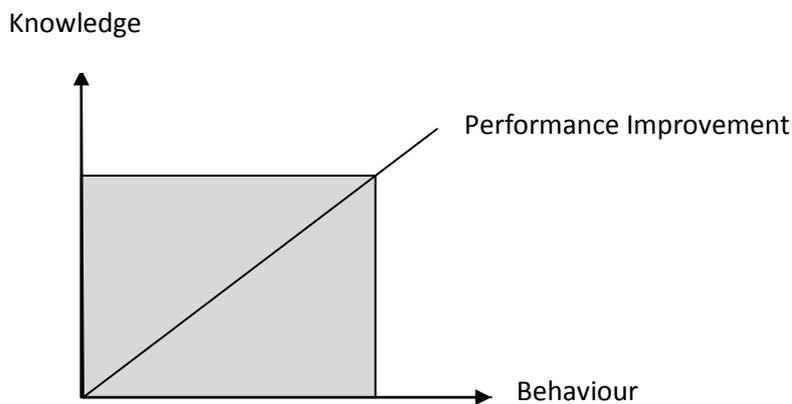


Figure 2.4: Holcim, Performance improvement

Source: Leibold, et al. (2005:171)

The above-mentioned model rests on the premise that knowledge is an asset of the organisation, but that it can only become capability when it is applied. Leibold et al., (2005:172) stated that expertise is applied through behaviour in order to achieve performance improvement. It is depicted that the increase in knowledge and high appropriate attitude or behaviour will consequently improve performance. According to Gertler (2003), tacit knowledge as “know how” is acquired through informal mechanisms of learned behaviours and procedures.

It is essential to adapt and deepen the Holcim performance improvement model to the researcher proposed model as depicted in figure 2.5. As noted by Singley and Anderson (1989) in Argote and Igram (2000:151) how knowledge is transferred and acquired from education or experience applies or fails to apply through employees’ behaviours. The figure 2.5 below: depicts the sources of individual knowledge transfer in correlation with individual behaviour factors.

Furthermore, Sengupta, (2013:4) pointed out that the gender dimension might cause discrepancies in the transfer of knowledge. The author acknowledged the difference between man and woman in the transfer of knowledge.

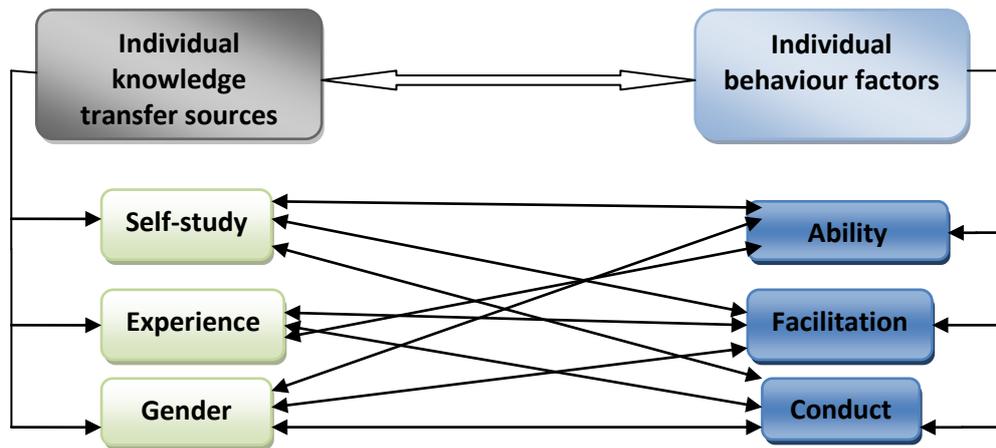


Figure 2.5: Relationship between individual knowledge transfer and behaviour  
Source: Researcher

The next section discusses the individual knowledge transfer in SMEs.

### 2.5.1. INDIVIDUAL KNOWLEDGE TRANSFER IN SMEs

This section examines the literature of tacit knowledge sharing in SMEs. It consists of an overview of tacit knowledge, the importance of tacit knowledge, the dimension of knowledge in SMEs, and factors affecting knowledge transfer in SMEs.

Argote and Ingram (2000:152) stated that knowledge transfer and its measurement within the organisation are realised through changes in knowledge or performance in any unit of the organisation. Levy, Loebbecke and Powell (2001:642) have identified three dimensions of knowledge sharing within the organisation which are synergy, leverage and reverse impact. They highlighted that the application and benefit of the above dimensions would depend on the size of the organisation. Small businesses seem not to be able to benefit from synergy or leverage and have negative reverse impact as compared to big organisations (Levy et al., 2000:4). According to Desouza and Paquette (2011:182), knowledge transfer has two important components that are source and recipient. In this context, tacit knowledge is easily transferred when the two components have social connection and belong to the same social network allowing interactions that facilitate knowledge sharing (Desouza & Paquette, 2011:183).

#### 2.5.1.1. Overview of individual or tacit knowledge

Little, Quintas and Ray (2002:10) stated that understanding the nature of tacit knowledge and recognising its dimensions have become a challenge for

organisations. Tacit knowledge (TK) is highly personal and values and emotions are associated with it (Little et al. 2002:55). According to Grant (1996), firms allow individuals to specialise in different areas of knowledge, but immobility of tacit knowledge brings complexity. He stated that all learning into organisations takes place inside an individual human.

As shown in figure 2.6, tacit knowledge is created through experiential knowledge and routine knowledge. Little et al. (2002:55) found out that, on one hand, the experiential knowledge asset is tacit knowledge which is the outcome of shared experiences amongst members of the organisation through the accumulation of skills in embracing one another. On the other hand, a routine knowledge asset consists of tacit knowledge which can be identified in the actions and practices of the organisation such as operational know-how and organisational routines and culture.



Figure 2.6: Categories of knowledge asset  
Source: Little et al., (2002:55)

Tacit knowledge creates both competitiveness and advantage for a business organisation due to its uniqueness, and the fact that it is relationship-based also it is non-replicable in a case where the individual is part of the organisation and decides to leave (Desouza & Paquette, 2011:50). The next section discusses the importance of individual knowledge in SMEs.

### 2.5.1.2. Importance of individual knowledge in SMEs

April and Izadi (2004) highlighted that the important aspect of tacit or explicit knowledge is the degree to which it is shared within the organisation.

Gertler (2003) stated that tacit knowledge creates unique capabilities for firms, and it is important for innovation and growth, new product development or any other value creation. The ever-changing business environment impacts on how business organisations obtain, maintain and leverage their capabilities in order to ensure competitive advantage (Cronje, Du Toit, Marais & Motlatla 2004:82-83). The social nature of tacit knowledge presents the opportunity for it to be captured, maintained and shared within small organisations, due to the limited number of members and their interactions (Fernandez & Sabherwal 2010:26 and Scarborough et al., 2009:56). According to Desouza and Paquette (2011:164-165), the success of tacit knowledge transfer depends on the realisation of the importance of knowledge, the need for transfer and social relationship between transferor and receiver in the business organisation.

Fernandez and Sabherwal (2010:34-35) stated that to locate the place of tacit knowledge in the organisation, the concept of intellectual capital should be clarified. They defined intellectual capital as the sum of all knowledge resources of the organisation which is subdivided into human capital (tacit knowledge), social capital and organisational capital. The place of tacit knowledge in the organisation may be identified in the figure 2.7:

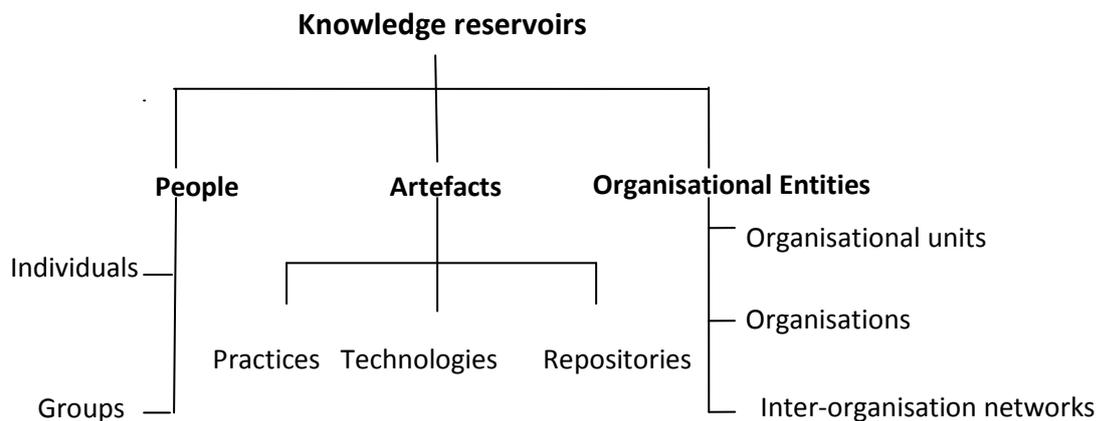


Figure 2.7: Tacit or individual knowledge location

Source: Fernandez and Sabherwal, (2010:33)

Fernandez and Sabherwal (2010:31-32) confirmed firstly that tacit knowledge resides in individuals within organisations; this situation places pressure on small and big firms to retain individuals who are either retiring or leaving the organisation. But due to interactions of members, the tacit knowledge is likely to reside within the

organisation. Secondly, knowledge in artefacts is embedded in procedures, rules, norms, systems, books, and documents resulting from people's innovative initiatives and practices (Fernandez & Sabherwal, 2010:33). Finally, the knowledge in organisational entities emerges through different levels of organisational relationships either internal or external.

### **2.5.1.3. Dimension of tacit knowledge transfer in SMEs**

Loebbecke and van Fenema (1998) identified three dimensions of knowledge sharing in organisations, which are: synergy, leverage and negative reverse impact. They have defined and described these concepts referring to SMEs as following:

- 1. Synergy** is the extent to which co-operation yields additional value beyond the sum of members' individual knowledge. The members' behaviour constitutes therefore the key driver to reinforce co-operation and facilitate knowledge transfer in order to create synergy. But SMEs were not benefiting from synergies due to lack of co-operative design and inter-dependence as their system is a precondition of trade (Levy et al., 2000:4).
- 2. Leverage** is the potential of knowledge receivers' to increase the value of knowledge transferred individually beyond the process of co-operation. The authors have identified that SMEs have low leverage due to limitations of resources in terms of poor ability to manage both the knowledge exchange process and the outcome.
- 3. Negative reverse impact** has been defined and described in SMEs as the extent to which the receiver's use of knowledge acquired during co-operation lowers the sender's original value (Levy et al., 2000:3). The expertise power decreases due to what is shared through co-operation.

Levy et al., (2000) identified firstly that the three dimensions are independent, but can operate together. Secondly, large organisations benefit from synergy and leverage and have less negative reverse impacts than SMEs. They have confirmed that resource constraints and a focus on survival restrict SMEs from taking advantage of these dimensions.

#### **2.5.1.4. Problems of tacit knowledge transfer in SMEs**

The need to develop a new product, to innovate or to grow, makes it a necessity for either big or small firms to be concerned about the tacit knowledge transfer. According to Gertler (2003) the critical problem of tacit knowledge in the literature was the question of whether tacit knowledge can be transferred. Therefore, Gertler (2003) highlighted the fact that the main problem with tacit knowledge's may be subdivided into the following three sub-problems:

##### **❖ How to produce it**

At this level, Gertler (2003) identified that the problem has both private and social dimensions. The private dimension focuses on the capacity to produce knowledge workers through the investment in individual or human capital in providing training and education. The social dimension is referred to as collaboration, interaction and co-operation within the firm, allowing talented individuals to share their know-how through informal social mechanisms.

##### **❖ How to find and appropriate it**

According to Gertler (2003), the challenge or responsibility of a manager is to find tacit knowledge wherever it may reside in or outside the firm. The ability to appropriate tacit knowledge in the organisation depends on social relations during the processes of product or service production.

##### **❖ How to reproduce or share it**

Finally, Gertler (2003) confirmed that in order to share tacit knowledge widely, deep interactions among all parties involved are critical. He highlighted the importance of promoting social learning processes to facilitate knowledge diffusion. According to Cumberland and Githens (2012), the organisational culture has an influence on whether tacit knowledge is transferred or not. However, based on the fact that the owner/manager personality highly impacts on SMEs' culture, he/she is likely to play a key role in KT.

Gertler (2003) concluded that to solve the problems of creation, appropriation and diffusion of individual knowledge, on one hand the learning region or tacit knowledge

source has to be determined. On the other hand, the routines or practices must be established and knowledge enablers or 'knowledge activists' should be identified to facilitate the transfer within the organisation. According to Wong and Aspinwall (2004:50-51), the communication in the small firms is faster than big organisations due to their flat structure and low level of bureaucracy. They stated that the employees are always in close contact in two-way communication. Their findings confirm that there is a strong foundation in SMEs for knowledge transfer despite the issues of creation and appropriation of knowledge.

## **2.5.2. INDIVIDUAL BEHAVIOUR IN SMALL BUSINESSES**

The definition of individual behaviour as stated by Gibson, Ivancevich, Donnelly and Konopaske (2009:6) is relevant to this study. They defined individual behaviour (IB) as a person's intention to act towards someone or something in a certain way.

According to Wong and Aspinwall (2004:51), the limited number of members is more salient in SMEs in terms of a unified culture. The commonly shared values and beliefs among a small number of employees underlie behaviour and actions within small firms. Generally, their cultures appear to be more organic and fluid than that of the large corporations. But the culture is easily shaped and affected by the personality of the owner-managers who dominate, and may be either dictatorial or less committed (Wong & Aspinwall, 2004:51). Nelson and Quick, (2008:110) have stated that ethical behaviour is influenced by two major factors which are individual characteristics and organisational factors.

It is therefore necessary to refer to the concept of employees' individual behaviour in order to understand organisational behaviour as depicted in the figure 2.8. Individual behaviour within small businesses will be discussed under the following subsections: individual factors on ethical behaviour and organisational factors on ethical behaviour

### **2.5.2.1. Individual factors on ethical behaviour**

Moorhead and Griffin (2010:20) highlighted that the required behaviour directed to productivity and individual behaviours resulted from a person's participation in the organisation. But according Robbins et al. (2004), expectations of increasing productivity and competition at marketplace or workplace puts pressure on employees. They are forced to cut corners, break rules and engage in other

compromising practices (Robbins et al., 2004:14). In this section, the four individual factors impacting on ethical behaviour are going to be explained.

- 1) **Value systems:** Nelson and Quick (2008:111) stated that values are enduring beliefs that a specific mode of conduct or end state of existence is personally or socially preferable to an opposite specific mode of conduct. This is because beliefs are about right or wrong and provide foundation for ethical behaviour (Nelson & Quick, 2008:111). They have differentiated instrumental and terminal values. The former represents the acceptable behaviours in achieving an end state such as honesty, self-sufficiency, ambition, etc. But terminal values represent the goals to be achieved such as self-respect, freedom and love.
- 2) **Locus of control:** According to Moorhead and Griffin (2010:71-72), locus of control is the extent to which people believe that their behaviour has an impact on what happens to them. However, Robbins et al. (2004:123) stated that people's ethical or unethical behaviour is based on their internal or external locus of control.
- 3) **Machiavellianism (Mach):** According to Robbins et al. (2004:86), an individual high in Machiavellianism is pragmatic, and believes that ends can justify means. It has been discovered that high Machs may provide advantages when they interact face to face with others and when the situation has the minimum rules and regulations, thus allowing improvisation (Robbins et al., 2004:89). But Moorhead and Griffin, (2010:72) described high Machs as behaviour directed at gaining power and controlling other people behaviours.
- 4) **Cognitive moral development:** Trevino and Nelson (2004) stated that good moral reasoning research was conducted by Kohlberg (1958), who confirmed that when people behave morally, they must, among other things, decide what course of action is morally right for them and for others and then choose it. Moral development goes through stages which include pre-conventional, conventional and post-conventional, and the higher the

reasoning stage, the more ethical their behaviour would be (Trevino & Nelson, 2004:113).

### 2.5.2.2. Organisational factors on ethical behaviour

These factors may vary from one organisation to the other, but the following are commonly found either in small or big firms:

- 1) **Codes of conduct:** According to Robbins et al. (2004), the code of conduct consists of behavioural undertakings by organisational members that reflect the underlying core values of the members. Scarborough et al. (2009:757-759) highlighted the fact that high standard behaviour is expected within the firm because ethics and morality cannot be legislated.
- 2) **Other organisational factors:** According to Nelson and Quick, (2008:115) ethics committee, training programmes, ethical communication, norms, modelling, and rewards and punishment are all the mechanisms to reinforce ethical behaviour within the organisation.

The figure 2.8 depicts the individual and organisational factors affecting ethical behaviour.

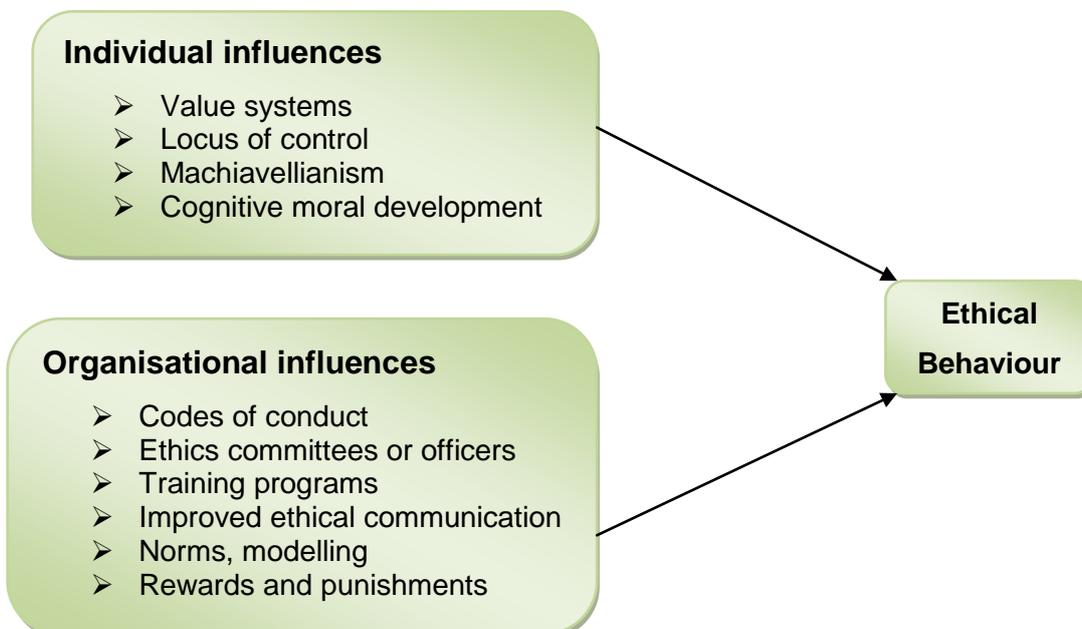


Figure 2.8: Individual/Organisation model of ethical behaviour

Source: Nelson and Quick, (2008:110)

The challenges and benefits of ethical behaviour in SMEs are discussed next.

### **2.5.2.3. Challenges and benefits of Ethical behaviour in SMEs**

Goetsch and Davis (2010:75) stated that ethical challenge within the organisation stems from human nature combined with competitive global marketplace. Some look at ethical practices as loss of business opportunities, ignoring the long term benefit of avoiding both harm and the affirmative benefits (Goetsch & Davis, 2010:75-77). Longenecker, Moore, Petty and Palich (2008:32-33) stated that the challenges and benefits of small firms are directed at their integrity. They confirmed that profit and ethical standards make small businesses vulnerable and expose them to compromising their integrity. But at the same time they have got high benefit in the marketplace if they keep their integrity. According to Scarborough et al., (2009:755) the ultimate decision on whether to abide by ethical principles remains individual, although it can be influenced within the firm.

### **2.5.3. SMEs IN KNOWLEDGE ECONOMY**

Scarborough et al. (2009:19-20) stated that this new structure of the economy favoured small firms due to their low cost of managing and transmitting knowledge and information. According to Nieuwenhuizen (2011:8), the new economy presents opportunities and threats for small businesses or entrepreneurs. According to Gibb (1997:15), the knowledge economy has forced small firms to be learning about organisation in order to be competitive. But he also highlighted the fact that employees' knowledge and skills could not be dissociated from their behaviour within the organisation. Therefore under this section, the following subsections will be discussed: overview of SMEs; the need for tacit knowledge in SMEs; critical success factors for SMEs and the challenges and failures of SMEs.

#### **2.5.3.1. Small businesses need for tacit knowledge**

Desouza and Awazu (2006:40) stated that SMEs are people-centred in managing knowledge; and so the humanistic aspect is considered in de. They confirmed that knowledge is created, shared, transferred, and applied via people-based mechanisms, and technology plays only an automation role. SMEs compete in their know-how; therefore the fact that they possess limited resources implies knowledge as a resource should be used to their advantage (Desouze & Awazu, 2006:33).

According to Wong and Aspinwall, (2004:46) the need for knowledge in SMEs stemmed from a “pull” and “push” perspective. The former identifies the potential benefits or improvements which are critical for small businesses, whereas that push perspective refers to the external or environmental thrusts that push them to the forefront of knowledge. Wong and Aspinwall, (2004:47) confirmed that on one hand from the pull perspective, knowledge is a key resource, strategic asset, and contributes to improving competencies and performance of organisations. On the other hand from the push perspective, the uniqueness of tacit knowledge allows SMEs to respond effectively to the external environment. It is a survival tool and reason for sustainable competitive advantage for SMEs (Wong & Aspinwall, 2004:47).

According to Heavin and Adam (2011), it is therefore evident that knowledge transfer can happen on the basis of person-to-person interactions within SMEs. Person-to-person constitutes the focus of this study as far as tacit knowledge is concerned.

#### **2.5.4. DEVELOPMENT OF SMEs**

Development is a concept with multiple meaning based on the context. With reference to the definition of Hassanien, Dale and Clarke (2010:2), business development is a process by which a business improves its performance in using internal, external or joint resources. Knowledge transfer plays a critical role at different stages of business development as far as capacity building is involved.

From the above definition, the development of small business refers to a progressive process in terms of improvement of all the operational and management components of the business organisation. According to Wong and Aspinwall (2004:49), development and lack development of SMEs are presented through advantages and disadvantages of the following: ownership and management, structure, culture and behaviour, systems, processes and procedures, customer and market share, and human resources of SMEs.

It can be argued that the development of small businesses will involve positive changes in business performance improvements through the above factors. In contrast, the lack of development is observed through an inability of the business to improve its management practices, structure, human resources, market share, business processes and culture. The characteristics of SMEs are discussed in the following sections.

#### **2.5.4.1. Ownership and management:**

Wong and Aspinwall (2004:49) stated that the decision-making in SMEs is centralised and the final power of control lies in the hands of owner-managers. This situation opens an opportunity to the owner-manager if he can identify the need for tacit knowledge and become the engine for knowledge implementation within a small firm. In contrast, it is always difficult for owner-managers to identify the need for knowledge as they are busy with the daily operations for SMEs' survival, and often lack managerial skills and competence (Wong & Aspinwall, 2004:49).

#### **2.5.4.2. Organisational structure**

The communication line is always shorter and direct in SMEs due to the single, flatter and less complicated structure (Wong & Aspinwall, 2004:50-51). But Wong and Aspinwall (2004:50) argued that the disadvantage was the degree of specialisation or level of tacit knowledge within the firm.

According to Bates, Botha, Goodman, Ladzani, de Vries and de Vries (2005:389) the organisational structure constitutes a system of working relationships that links employees and clarifies what task they do, and how and where they do it. It could be argued that the level of the relationship among employees in SMEs was critical for the success of individual knowledge transfer.

#### **2.5.4.3. Culture and behaviour**

According to Wong and Aspinwall (2004:51), SMEs have unified cultures. Therefore, the limited number of employees is tied to a commonly shared value and belief that underlies their behaviour and actions. But Wong and Aspinwall (2004:51) confirmed that the personality and outlook of owner-managers may impede the transfer of tacit knowledge as culture and behaviour within the small firms are strongly attached to the personalities of the owners.

#### **2.5.4.4. Human resources**

Employees know each other more intimately and have regular face-to-face contact with one another because of their limited number. Therefore the collaboration among employees is often easy and facilitates tacit knowledge transfer (Wong & Aspinwall, 2004:51-52). However, lack of resources has prevented SMEs from employing highly

qualified employees and from undertaking training programmes to leverage employees' knowledge (Wong & Aspinwall, 2004:52).

#### **2.5.4.5. Systems, processes and procedures**

Wong and Aspinwall (2004:51) highlighted the fact that the systems of SMEs are people-dominated, and the processes are flexible and easily adaptable to changes. In contrast, the same authors confirmed that the activities and operations are governed by informal rules and procedures which may hinder knowledge transfer and its efficient use.

#### **2.5.4.6. Measure of development in SMEs**

The development of SMEs regarding the relationship between individual knowledge transfer and individual behaviours of employees at the workplace is likely to be measured firstly, by the level of power and control of the management in terms of quality decision making and the effective management systems of SMEs. Secondly, the frequency in recruiting an extra person and the number of experienced and qualified employees in SMEs. Finally, SMEs must assess the level of efficiency of processes and procedures in the execution of tasks and the flow of information within and between business functions (Wong & Aspinwall 2004).

From the literature review, the study makes the following hypotheses:

#### **Hypothesis 1: Work-experience**

**Ho1.1.** There is a statistically significant correlation between work experience and the ability of employees to perform different tasks in SMEs

**Ho1.2.** There is a statistically significant correlation between work experience and ethical conduct of employees in SMEs

**Ho1.3.** There is a statistically significant correlation between work experience and facilitation behaviour of employees in SMEs

#### **Hypothesis 2: Self-study**

**Ho2.1.** There is a statistically significant correlation between self-study and the ability of employees to perform different tasks in SMEs

**Ho2.2.** There is statistically significant correlation between self-study and ethical conduct of employees in SMEs

**Ho2.3.** There is a statistically significant correlation between self-study and facilitation behaviour of employees in SMEs

### **Hypothesis 3: Gender**

**Ho3.1.** There is a statistically significant difference between gender and the ability of employees to perform different tasks in SMEs

**Ho3.2.** There is a statistically significant difference between gender and ethical conduct of employees in SMEs

**Ho3.3.** There is a statistically significant difference between gender and facilitation behaviour of employees in SMEs

## **2.6. CONCLUSION**

This chapter on literature review introduced and discussed the concepts of knowledge, workplace behaviours and SMEs. The theoretical ground of the correlation between individual knowledge transfer and behaviour in SMEs was provided. Previous findings confirmed that tacit knowledge benefits small businesses due to their growth and improvement oriented nature. These findings explained that leadership role of owner-managers in understanding and identifying the need for knowledge as well as creating an environment conducive to tacit knowledge transfer for business development. According to Armstrong (2012:171), the degree to which employees are committed to do their jobs and depict positive discretionary behaviour depends more upon the ways they are led and managed.

This chapter also confirmed that previous findings acknowledged that there are minor differences between men and women in terms of interpersonal relationship and communication in the business. Other findings implied that men and women even differ in cognitive abilities. The factors of individual knowledge and behaviours were discussed and led to the propositions of this study.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1. INTRODUCTION**

Hussey and Hussey, (1997:54) pointed out a difference between research methodology and research method.

Research methodology, according to Hussey and Hussey (1997:54) refers to the approach to research, from theoretical standpoint to the collection and analysis of data. The research method is the means by which data can be collected and/or analysed. Welman, Kruger and Mitchell (2007:2) state that research methodology consists of explaining the logic behind research methods and techniques. The following sections will be described and explained: the research paradigm and design as well as the target population, and the techniques used to select the sample and collect, analyse and interpret data. Finally, the logic behind the validity and reliability is explained as well as limitations arising in conducting this study.

### **3.2. RESEARCH METHODOLOGY AND PARADIGM**

According to Hussey and Hussey (1997:54), the research paradigm refers to the progress of scientific practice based on peoples' philosophies or assumptions about the world and the nature of knowledge. It justifies how research should be conducted in providing a universally accepted framework. It asserts that the research paradigm has to address three different levels: philosophical, social and technical (Hussey & Hussey, 1997:47). Hussey and Hussey (1997:48) confirm that at a philosophical level, it reflects basic beliefs about the world, but at social and technical level, a paradigm is used consecutively to provide guidelines about the way that the researcher should conduct his or her study and the methods and techniques to be adopted.

According to Welman et al. (2007:8), the purpose of quantitative research can be summarised as follows: Firstly, it evaluates objective data consisting of numbers by using the complex structured methods to confirm or disprove the research hypotheses. Secondly, the investigation is conducted from an outsider's perspective in order to avoid bias in keeping the objective view of the facts during the research process. Thirdly, the quantitative method keeps the research process as stable as possible in collecting the facts which will not change easily. Lastly, this method

focuses on control of the investigation and structure of the research situation, reliability of these results and statistical significance of these results (Welman et al., 2007:8-9). According to Cooper and Schindler (2011:160-164), in contrast to the quantitative method, the qualitative method is sometimes labelled as interpretative research due to the fact that it strives to develop understanding through detailed description such as building theory without testing it, and using subjective data in trying to achieve an insider's view through observation. The researcher is also a participant or catalyst of the study, as the involvement is high in a qualitative research. Further, the sample design is a non-probability and purposive, and relatively small (Cooper & Schindler, 2011:163).

Pellissier (2007:15) stated that the effect of any management study is always influenced by the choice of the research methodology which may or may not depend on researcher's training or preference.

### **3.3. RESEARCH DESIGN**

This study will be conducted using quantitative methods, particularly non-experimental research; firstly because the survey design is appropriate to answer the research question(s). As Welman et al. (2007:92-93) confirm, this chosen design will allow us to examine the relationship between two or more variables without any planned intervention or manipulation. Secondly, the data analysis and interpretation of results will be done through statistical techniques such as descriptive statistics and correlation measurement.

According to Coldwell and Herbst (2004:36-37), a research design provides the glue that holds the research project together, it is a structure which includes all the major parts of the research project such as sample, measures, treatment and methods in addressing research question(s).

Polonsky and Waller (2011:94) maintain that the research design is the "framework or blueprint" for a better way of collecting the information needed for the project. The appropriate design will enable the researcher to save resources and ensure the validity and reliability of the research project (Polonsky & Waller, 2011:94). This study will be conducted by using descriptive research with survey design used in distributing a structured questionnaire to members of small firms. Polonsky and Waller (2011:94) confirmed that the descriptive research surveys describes certain

characteristics, or functions that management is likely to be interested in, such as market conditions, purchase behaviour, and so forth. According to Coldwell and Herbst (2004:47), organisational behaviour studies use descriptive research in order to provide diagnostic analysis, such as the reason the employees feels a certain way without referring to causal relationship evidence. It is, therefore, important to highlight that the decision to consider the survey strategy for data collection is dependent on the nature of the research project as well as the expectations of the supervisor (Polonsky & Waller, 2011:94). According to Saunders, Lewis and Thornhill (2009:144), the survey strategy is commonly used in business and management research and is appropriate to answer questions like the following: who? What? Where? How much? and how many?

Considering this project, which is built on the understanding of possible correlation relationships, survey design allows one to produce relevant models of relationship between variables. According to Coldwell and Herbst (2004:47), survey is about asking people questions and then examining the relationships among the variables in trying to understand attitudes or patterns of past behaviour.

Survey design presents some advantages as well as disadvantages which need to be addressed before being used effectively. Coldwell and Herbst (2004:48) highlight the fact that survey design is cost-effective as compared to other designs. According to Mouton (2001:152-153), on one hand, the strengths of survey design are firstly, the potential to generalise in large populations if a well-defined sampling has been implemented. Secondly, the reliability of measurement is high if the questionnaire is properly constructed; and finally, high construct validity is observed if proper controls have been implemented. These advantages may be interpreted in this project in terms of the criticality of selected cases and appropriateness of questions within the structured questionnaire. The purpose will be to allow and ensure generalisation and reliability within a limited budget. On the other hand, Mouton (2001:153) states that the limitations of survey design are depicted in the lack of depth and insider perspective which sometimes leads to criticisms of "surface level" analyses. The other limitation is that the survey data tends to be sometimes very sample and context specific (Mouton 2001:153).

This is a suitable method, especially when focusing on correlation relationship studies in using a structured questionnaire. In contrast, Saunders et al. (2009:461)

state that the investigation of cause-and-effect relationship and manipulations of variables are relevant for experimental research.

These limitations may affect this study due to non-probability sampling used and the large size of the population from which the sample is drawn. Small businesses seem to be born on regular basis in different business sectors or subsectors making it difficult to select a highly representative sample.

### **3.4. POPULATION AND SAMPLE**

According to Welman et al. (2007:52-53), population includes all units of analysis or cases from which a sample is taken and conclusions are made. According to Hair Jr., Celsi, Money, Samouel and Page (2011:164,) a population or universe is the total of all the elements that share common characteristics such as people, supermarkets, churches, school and so forth. Likewise, the target population refers to the complete group of objects or elements relevant to the research project (Hair Jr., et al., 2011:165).

The population consists of members of small organisations (managers and employees) in the Durban central business district. The small businesses which are relevant and critical to this study are identified through different government and private agencies such as the Durban Chamber of Commerce and Industry, the business directory Yellow Pages and the Ethekewini Municipality's Business Support Unit. Considering the fact that non- probability sampling was used, the criticality of cases within the small business sector was important to answer research questions.

#### **3.4.1. Population**

Hair Jr., et al. (2011:11) highlights the necessity of data for business research, regardless of whether quantitative or qualitative investigation is conducted. They defined a sample as a relatively small subset of the population. According to Polonsky and Waller (2011:139), the issue of sampling is important when planning to collect primary data. In order to obtain data survey, it is impossible to contact everyone in the target population; instead, it is crucial to focus on a representative sample of the target population. The small business organisations which are critical to this study were identified through different government and private agencies such as the Durban Chamber of Commerce and Industry, the business directory Yellow Pages, Small Enterprise Development Agency (SEDA) and the Ethekewini

Municipality's Business Support Unit. Based on the National Small Business Amendment Act 102 of 1996 (Nieman 2006:5-6), a small and medium business is defined in terms of the quantitative criteria, it is a separate and distinct business entity with a total number of 5 to 50 paid employees; it is a total annual turnover of R0.2 million to R13 million and a total gross asset value, excluding fixed property, of R0.1 to R5 million. This definition encompasses micro, very small and small enterprises which operate in the formal sector. Though much of the study's discussion has used the term SMEs, the medium enterprise does not constitute part of the sample.

From the data base of Durban Chamber of Commerce and Industry (DCCI), the total population of SMEs in the Durban Metro, including medium enterprises, is 1620.

### **3.4.2. Sampling**

According to Pellissier (2007:32), sampling can be classified as probability and non-probability sampling. The first selects the sampling randomly and the probability of each element to be selected is determined ahead (Hair Jr., et al 2011:167). In contrast, the non-probability sampling does not guarantee the inclusion of each element of the target population. The sampling is a process of selecting a small group of cases from a large group of individual people or things. The sample selection can be done as follows:

- ❖ The sampling frame or working population: is a list of elements from which the sample is drawn (Zikmund, Babin, Carr & Griffin 2010:391).
- ❖ The sampling size: According to Hair Jr., et al. (2011:176-177), the relevant sample sizes can be drawn on either a large or small population. Taking into account the number of small businesses in different sectors, and the people who are employed by them, the relevance of units selected is more important for a study.

### **3.5. DATA COLLECTION**

According to Hair Jr., et al. (2011:185-186), the data collection is a crucial task in the research process and the suitable type of data collection depends essentially on the question(s) being asked. The information characterising behaviour, attitudes, beliefs, and expectation was collected for this study and the respondents had to complete the survey questionnaires with the involvement of the researcher. The face-to-face

questionnaire was used in order to present the questionnaire to the respondents at a convenience location. Hussey and Hussey (1997:64) confirmed that despite the fact that it is an expensive and time-consuming method, it guarantees a high respondent rate, and comprehensive data can be collected. It is also very useful for sensitive and complex questions within the questionnaire.

The design of questions necessitates the researcher to first identify and bear in mind the characteristics of the potential audience such as education, literacy and so forth. Regarding question design, on one hand, it is important that the type of questions and their wording are well clarified. On the other hand, reliability and validity of the results should be enhanced (Hussey & Hussey, 1997:162-165).

The choice of non-probability sampling, particularly purposive or judgment sample in this study was based on the discretion of the researcher. A total of 50 SMEs constituted the sample and the sample was selected from the Durban Chamber of Commerce and Industry membership directory.

The unit of investigation consists of two hundred (200) employees who are working full-time in 50 small businesses in different sectors. The individual members must be full time, employed within the business, and be engaged in any task within the organisation. From the 50 SMEs, the four most senior personnel were chosen from each organisation, giving the researcher a sample of 200 (50 x4). Given the size of SMEs, both owner-managers and employees were included in the sample.

The data sources and the self-administered questionnaire are discussed below:

### **3.5.1. Data source**

The following departmental and public agencies' databases have been consulted as source of data for this study.

- Small enterprise development agency (SEDA)
- Yellow Page database business directory
- KwaZulu-Natal Department of Economic Development and Tourism
- the Ethekewini Municipality's Business Support Unit
- Durban Chamber of Commerce and Industry (DCCI)

The above data sources have been considered for the following reasons:

- ❖ They exist and operate in the city

- ❖ They are active in the city.
- ❖ They update the contents of their database at least annually

However, although many data sources were consulted; the sample was drawn from the Durban Chamber of Commerce and Industry (DCCI) membership directory of SMEs.

The reason for this was that the data source has been found to be more reliable and inclusive because it contains information from other sources listed above. The database also included SMEs with at least 5 employees and was operating from the Durban Metropolitan area. The database contains a population of 1620 businesses mostly SMEs in different business sectors. A total of 50 SMEs was selected randomly allowing equal opportunity for each element of the population to be selected. All sectors were represented in the targeted population and based on the above procedure, the sample error was reduced.

The figure 3.1 below depicts the procedure used to select the sample:

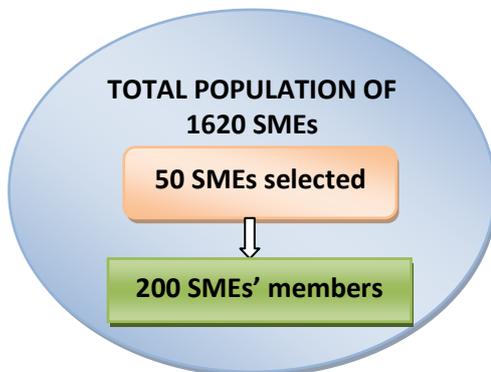


Figure 3.1: Population and sampling

Source: Researcher

### 3.5.2. Self-administrated questionnaire

The questionnaire was designed with structured questions, to collect the data on the constructs of individual knowledge transfer and a select set of expected behaviours in SMEs. The questions have been formulated in simple language to test the research hypotheses, taking into account ethical considerations. The consent of respondents was obtained and anonymity was maintained as indicated in the covering letter in the appendix A. In addition, this study ensured that the employees

and their respective organisations would not be harmed by the outcome of this research by maintaining confidentiality.

The questionnaire has been self-designed to test the correlation between the research variables.

The publications consulted in the development of the questionnaire encompass books, journal articles, reports and other reliable documents.

The questionnaires were delivered and collected personally by the researcher. As noted by Welman et al. (2007:154) a satisfactory response rate may be obtained from the target population if the questionnaire is delivered and collected personally. The researcher had to verify with the managers that the business met the requirements of this study, and he then delivered the questionnaire face-to-face to ensure the responses were collected immediately. This procedure has allowed the researcher to obtain 100% response rate. The section below will discuss the content of the questionnaire and the relevant constructs as stated in chapters one and two of this study.

### **3.5.3. Research instrument**

According to van der Velde, Jansen and Anderson (2004:106-107), the written questionnaire is an appropriate instrument design to use and takes into account the following advantages: research time frame, number of units to be analysed, cost, and anonymity of respondents, as well as simplicity in collecting and processing data. It also presents disadvantages: for instance relating to the time invested in constructing the questionnaires and to the general low response rate due to lack of researcher intervention as compared to oral interview (van der Velde et al., 2004:107). As Welman et al. (2007:152) confirmed that, survey questionnaires may be used to obtain different types of information from respondents such as:

- ❖ Biographical details in terms of age, educational qualifications, income, and so forth
- ❖ Typical behaviour, such as preferences
- ❖ Opinions, beliefs, and convictions about a topic or issue.
- ❖ Attitudes: for instance a pay system.

This research project has used the biography, opinions, beliefs, convictions and behaviour information of participants in order to answer the research questions. The utilisation of closed questions to collect primary data for this study is basically

justified by the easiness for both the researcher and the participant to self-administer the questionnaire in terms of time and efforts. The secondary data as relating to literature review was equally used and stemmed from variety and credible sources relevant and pertinent to this project. The questionnaire consisted of two sections comprising the demographical information of the participants and twenty-five questions. The sections were subdivided as follows:

**Section 1** provided demographical information of the participants: age, experience, race, sectors, occupation, gender and education.

**Section 2** covered the twenty-five questions relevant to individual knowledge and behaviour factors

- ❖ **Statement 1** focused on four questions relating to employees' **abilities** in performing different tasks in SMEs.

This section covers the four questions relating to the ability of the employees to execute tasks in SMEs which are measured on the Likert 5 interval scale of 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5 strongly agree. It includes aspects such as business awareness of individual knowledge and its transfer, decisions on maintaining talented employees, one view on business priority between knowledge and ethical behaviour.

Statement refers to the questionnaire questions 6, 10, 15 and 19.

- ❖ **Statement 2** built its questions around productive or counterproductive behaviours of employees in SMEs. The statement under this section highlights six questions of **ethical conduct** of employees in relation to individual knowledge transfer and are measured on a 5 point Likert scale of 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5 strongly agree. The six questions covered the following aspects: ethical behaviour in transferring individual knowledge, one view on the regulation of individual knowledge transfer, business priority of ethical behaviour, and ethicality in the transfer of individual knowledge.

Statement covers questions 1, 12, 13, 14, 18 and 20 of the questionnaire.

- ❖ **Statement 3** included eleven questions relevant to the **facilitation** behaviour of employees in SMEs and they are measured on the Likert 5 interval scale of 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5 strongly agree. The eleven questions covered aspects such as, the sharing of knowledge, one view on the importance of sharing knowledge, employee interaction within the business, processes followed in knowledge sharing and how management shares and transfers knowledge to employees. In reference to the questionnaire, the questions of this statement are: 2,7,8, 9, 11, 17, 21, 22, 23, 24 and 25

The sources of individual knowledge including self-study, experience (learn-by-doing and interactions) and gender are clarified. Firstly, the **self-study** refers to the educational qualification of the respondents as well as to statements which show the attributes of employees' individual knowledge. The education of respondents was measured on the ordinal of scale of 1=pre-matric, 2=matric, 3=post-matric, 4=diploma, 5=degree, 6=higher and 7=other. Also, the following statements which show the attributes of individual knowledge, are measured on the 5 interval Likert scale of 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5 strongly agree.

Secondly, the **work experience** of respondents allowed employees to acquire individual knowledge through learning-by-doing and interpersonal interactions in SMEs. This was measured on the ordinal scale of 0-1 year, 2-5 years, 6-10 years, 11-15 years, 16-20 years, 21-25 years and 26 years and more.

The **gender** of respondents has been used to establish difference in terms of individual knowledge transfer and behaviour by men, or women. Gender was also measured on the nominal scale of man, woman

The appendixes A and B include respectively the letter of interest to conduct research, and clarification of research purpose; and relevant statements and demographic information in the exhaustive surveys questionnaire.

#### **3.5.4. Pilot study**

Bryman and Bell (2011: 273) confirmed that it is desirable to conduct a pilot study before administering a self-completion questionnaire to the sample, as the procedure

presents advantages, especially as the closed questions were used. It consists of the following advantages:

- ❖ Fixed-choice answers are provided by participants.
- ❖ It gives respondents a sense of confidence.
- ❖ It creates the openness and focus of participants as well, and ensures that the questions are understood by them.

Five people, three employees and two small business owners who were not part of the sample, were asked to answer the questions in order to ensure the clarity of the questionnaire. This pre-testing allowed for the rectification of ambiguous questions and contributed to the refinement of the research instrument.

### **3.6. DATA ANALYSIS AND INTERPRETATION**

According to Zikmund et al. (2010:70), data analysis is the process of understanding the data that has been collected. This implies that the utilisation of an appropriate analytical technique for data analysis should be based on the information requirements, the characteristics of research design and the nature of data collected (Zikmund et al., 2010:70). It is important to highlight that data is described first before being analysed, and the distinction between the two stages must be maintained in the framework for data analysis (Biggam 2008:113). Zikmund et al. (2010) pointed out that at the preparation level, raw data is edited to ensure consistency, completeness and legibility before being codified and stored in order to become ready for analysis.

Data analysis and interpretation cannot be interchangeable as the first is about gathering, cleaning and examining of the data whereas the latter is making sense or putting into perspective the data generated (Polonsky & Waller, 2011:159). According to Walliman (2011), different levels of measurement can be used depending on the nature of data to be measured. Data was analysed using a statistical package for the social sciences (SPSS) in order to provide useful information for business and management purposes. Further, descriptive and correlation analyses were used for this study.

### **3.7. VALIDITY AND RELIABILITY**

According to Bryman and Bell (2011:41-43), the validity of a research project is concerned with the integrity of the conclusions that are generated from the study, whereas reliability focuses on the question of whether the results of a study are replicable. This subsection will discuss the concepts of external and internal validity as well as reliability.

#### **3.7.1. External validity**

Bryman and Bell (2011:42) stated that external validity focuses on the question of research results generalisation beyond the specific research context. This raised the question of the importance of how the units of analysis were selected in order to ensure the sample representativeness within quantitative study (Bryman & Bell, 2011:42). According to Coldwell and Herbst (2004:41), using external validity is the wrong way to generalise the results. The same authors identified three major threats of external validity as in the way of making the generalisation. It consists of people, place and time. This implied to the question of whether the result of the study would be the same with different people, at a different place and time. Coldwell and Herbst (2004:81) stated the necessity of using a random sample instead of a non-random one and the use of the “theory of proximal similarity” more effectively. The latter is based on the idea of incorporating into the investigation more typical cases, on the premise that it is typical of the situation as a whole and thus has a high degree of similarity with the aspects.

This study used judgemental or purposive sampling due to the fact that extreme, heterogeneous, critical and typical cases were selected in the sample. As Saunders et al. (2009:239-240) state that in extreme cases, heterogeneous or maximum variation, critical cases, typical cases, and homogeneous sampling allow selection of cases that depict similarities across the industry and ensure that the study complies with external validity despite the use of non-probability sampling.

#### **3.7.2. Internal validity**

Coldwell and Herbst (2004:40) confirmed that internal validity is the validity of the inferences as relating to cause-effects relationships, but the research was a non-experimental study. According to Saunders et al. (2009:372-373), internal validity in

a questionnaire refers to the ability of the instrument to measure what exactly it is intended to measure. However, as relevant to the questionnaire, the following validity types may be depicted:

- ❖ Content validity: is the extent to which the measurement (questions) covered adequately the research questions.
- ❖ Criteria-related validity (predictive validity): this is the ability of the measure (questions) to make precise and accurate predictions.
- ❖ Construct validity: It is the extent to which the measurement questions measure the constructs that intended to be measured (Saunders et al., 2009:373).

To respond positively to internal validity, at first, the questionnaire has been subjected to the scrutiny of academics, professionals and practitioners in the field of business management in order to ensure its effectiveness. Secondly, corrective measures have been taken in order to refine the questions of the questionnaire after the pre-testing. Finally, the construction and development of the questionnaire took into consideration the previously done research as depicted in Chapter Two Review of Literature concerning the relationship between individual knowledge transfer and behaviour pattern in SMEs.

### **3.7.3. Reliability**

According to Saunders et al. (2009:156), reliability is the extent to which the data collection techniques or analysis procedures within a research design produce consistent results. Polonsky and Waller (2011:128) emphasised the necessity of the replication of the research findings in asking the questions of measures, observations and transparency. At first, the measures must produce the same results on other occasions; secondly, similar observations must be reached by other observers, and lastly, the need for transparency of the results from the raw data (Saunders et al., 2009:156). Hussey and Hussey (1997:57) asserted that the reliability of the responses received is very crucial in quantitative study. Saunders et al. (2009:156-157) confirmed however that the following threats may hamper the reliability of the study:

- ❖ Subject or participant error – this threat is due to the wrong timing of the participant to complete the questionnaire.

- ❖ Subject or participant bias – this is the instance where the participant may respond only in a way to get rid of the questionnaire or to satisfy his/her boss or in order to respond according to what researcher wants to hear.
- ❖ Observer error – an unclear way of asking questions in the observations results in irrelevant answers or the wrong approach used in eliciting the answers.
- ❖ Observer bias – this threat has to do with the observer's way of interpreting the replies.

To remedy the above threats and ensure reliability of this study the mechanisms below were used:

- ❖ The questionnaire has used closed questions format in order to keep the same standard of answers provided by participants
- ❖ Pre-testing of the questionnaire was done to ensure precision, clarity and, good understanding of questions.
- ❖ The anonymity of participants was maintained in order to guarantee them that there was no risk of being victimised because of providing certain answers.
- ❖ The face-to-face questionnaire has allowed a high level of responses in order to build an acceptable sample.

### **3.8. CONCLUSION**

This chapter has covered the methodological approach used in order to test research hypotheses. It discussed the research paradigm, design, and selection of sample from the population, research instrument and data collection, analysis and interpretation of research data. It has also highlighted the validity and reliability of the research project.

To test research hypotheses, the constructs have been developed and a questionnaire was used to gather empirical data. This is to be analysed in order to establish the existence and the levels of correlational relationship between knowledge transfer and behaviour factors. In chapter four the findings of the investigations will be presented, analysed and interpreted.

## **CHAPTER FOUR: DATA ANALYSIS AND RESULTS**

### **4.1. INTRODUCTION**

Analysis of data provides insight into and discussion of, the research findings. This chapter focuses on the presentation and description of findings stemming from data analysis. It covers the demographic information as provided in part one of the survey questionnaire. It further presents and analyses the opinions of respondents on the twenty five statements in the questionnaire. Descriptive statistical analysis presents frequencies of respondents, mean and standard deviations. In addition, the correlation analysis technique is used to assess the significance of the relationship between variables. The focus will be on three factors of individual knowledge transfer and three factors influencing behaviour of employees at the workplace as stated in chapter two.

### **4.2. DESCRIPTIVE STATISTICAL ANALYSIS**

The results are summarised and presented using tables and graphs. According to Welman, Kruger and Mitchell (2007:231), descriptive statistics describe and summarise the data obtained from the units of analysis. This study used the mean, median, mode and standard deviations as descriptive statistical techniques to describe and summarise data. Hair JR., Celsi, Money, Samouel and Page (2011:354) also asserted that pie charts, histogram, bar charts and bar diagram might be used as statistical tools to represent and visualise the results of a study. Welman, et al. (2007:232) defined descriptive statistical techniques as follows:

- ❖ Mean or arithmetic mean – is defined as the average score for a group and is equal to the total individual scores divided by the number of scores.
- ❖ Median – is the mid-value in a frequency distribution arranged in size order.
- ❖ Mode – is frequently occurring value in a frequency distribution.
- ❖ Standard deviation – is the addition of the differences (deviations) between each observation and the mean ending by adjustments. It is dispersion within a data set. In the same context, Hair Jr., et al. (2011:314) confirmed that a standard deviation of (<1) proves consistency in the opinions of respondents and (>3) indicates that there is variability in their opinions of respondents.

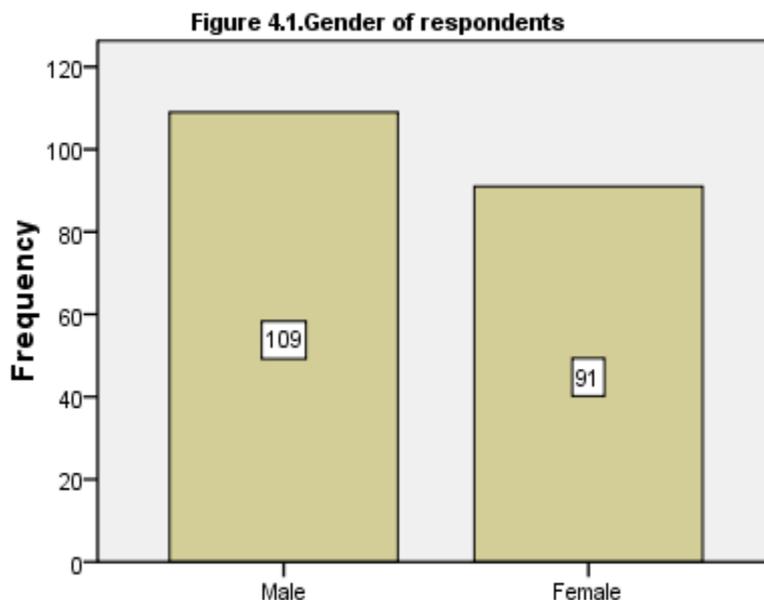
The next section summarises the demographic information of respondents

#### 4.2.1. DEMOGRAPHIC PROFILE OF RESPONDENTS

Under this section, the demographic profile of respondents is presented, described and interpreted. It consists of gender, length of service, race, and occupational position in SMEs, sectors or subsectors of SMEs, as well as level of education of respondents. It further discusses the findings and explains the expected and actual demographic information of respondents relevant to this study. In addition, it justifies the impact of those differences on the research findings.

##### 4.2.1.1. Gender of respondents

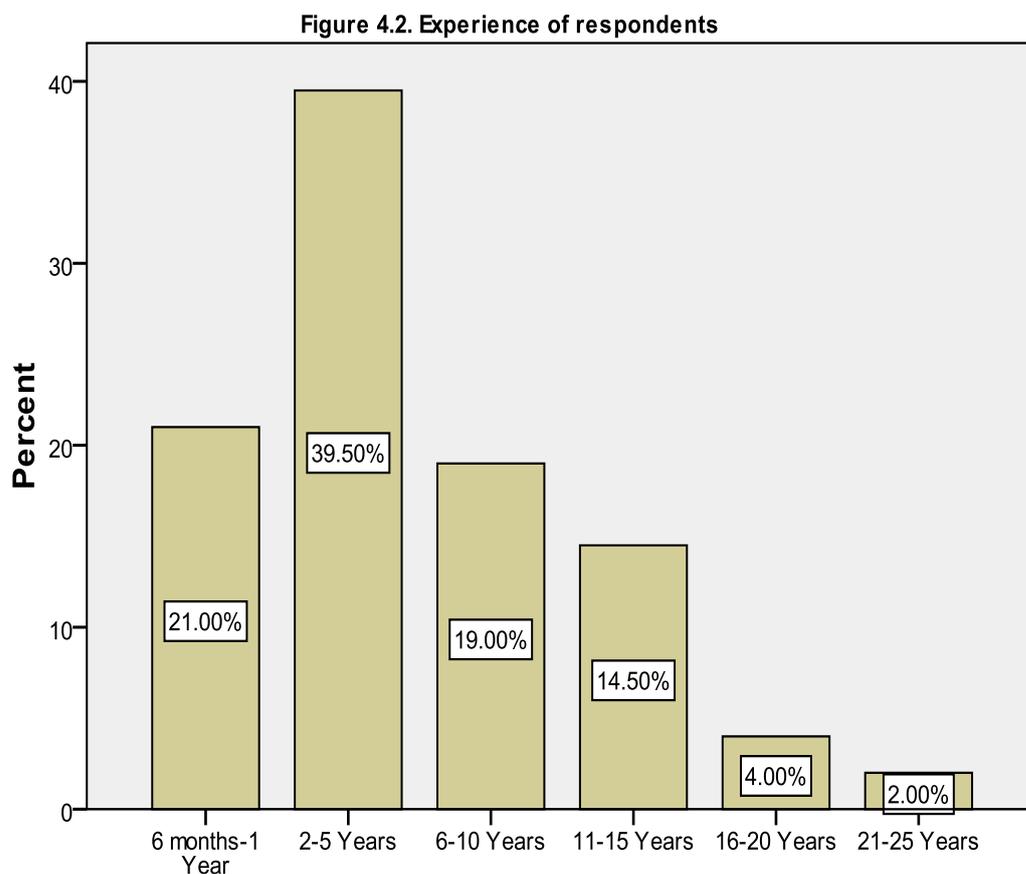
Based on the sample of 200 respondents, 109 (54.5%) were male respondents and 91 (45.5%) female. The Figure 4.1 below depicts gender participation. It confirms that the number of male participants surpasses females in the small business sector as far as gender is concerned. This slight difference of (9%) or 18 participants confirms that the male still dominates the SME sector despite the efforts to close the gender gap. The sample is therefore representative of the population of SMEs as far as the gender of respondents is considered.



##### 4.2.1.2. Experience of respondents

As presented in figure 4.2, the (39.5%) or 79 respondents had worked in small businesses for 2 to 5 years. They are followed by (21%) or 42 respondents and (19%) or 38 respondents who had worked respectively 6 months to 1 year and 6 to

10 years. The (14.5%) or 29 respondents had worked 11 to 15 years, whereas (4%) or 8 respondents have been involved in SMEs from 16 to 20 years. Furthermore, 2% or 4 respondents had worked for 21 to 25 years and none of them had worked for more than 26 years. In this context, the dominant respondents are those who worked in SMEs for more than two years, and they constitute 79% of the respondents. It can be argued then, that the study sample complied with the requirement set for this study in terms of the expected work experience of the respondents.

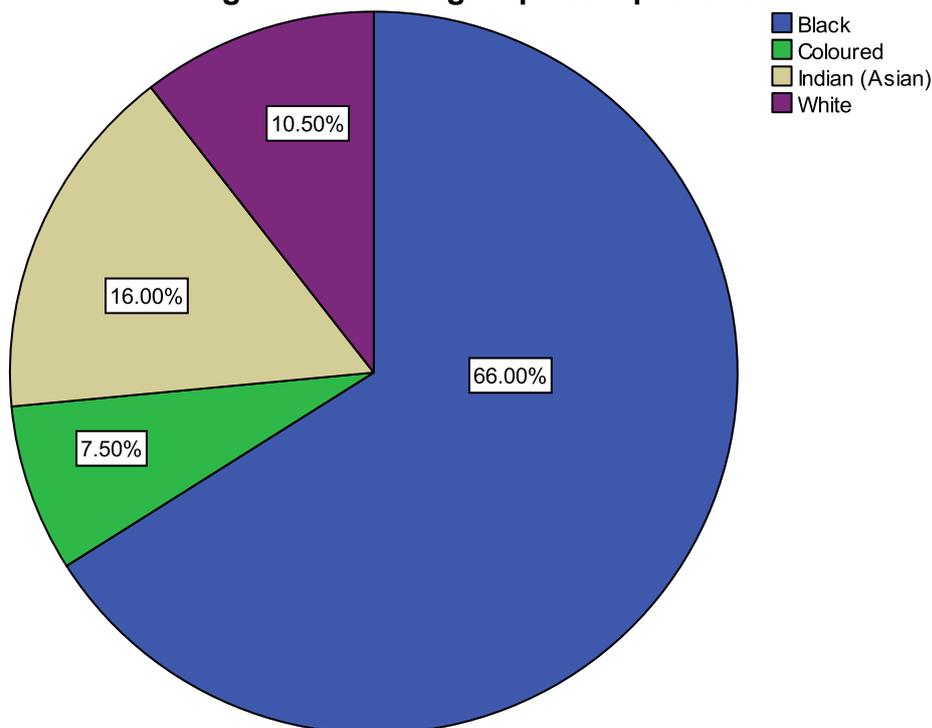


#### **4.2.1.3. Race group of respondents in SMEs**

The race groups as indicated in figure 4.3 shows that Black constituted 66% or 132 respondents, followed by Indian (Asian) 16% or 32 respondents. The sample was dominated by Black as they made more than half of the sample. White and Coloured employees represented 10.5% or 21 and 7.5% or 15 of respondents respectively. All the race groups of respondents were represented despite the dominance of black with 66% of the sample followed by Indian (Asian) with 16%. This representation justifies the fact that the province of KwaZulu-Natal is black dominated and that

demographically they constitute more than 60% of the general population in the province. Furthermore, Indians occupied the second position after blacks with 16%; this is due to their high concentration in the Durban area. In addition, White and Coloured closed the list with 10.5% and 7.5% of respondents respectively. It can lastly be justified that the government agencies and private sector strive to encourage the previously disadvantaged community, mostly African, to get involved in the SME sector. Based on the above-mentioned description, it can be confirmed that the sample was a fair and representative result as far as race groups are concerned.

**Figure 4.3. Race group of respondents**

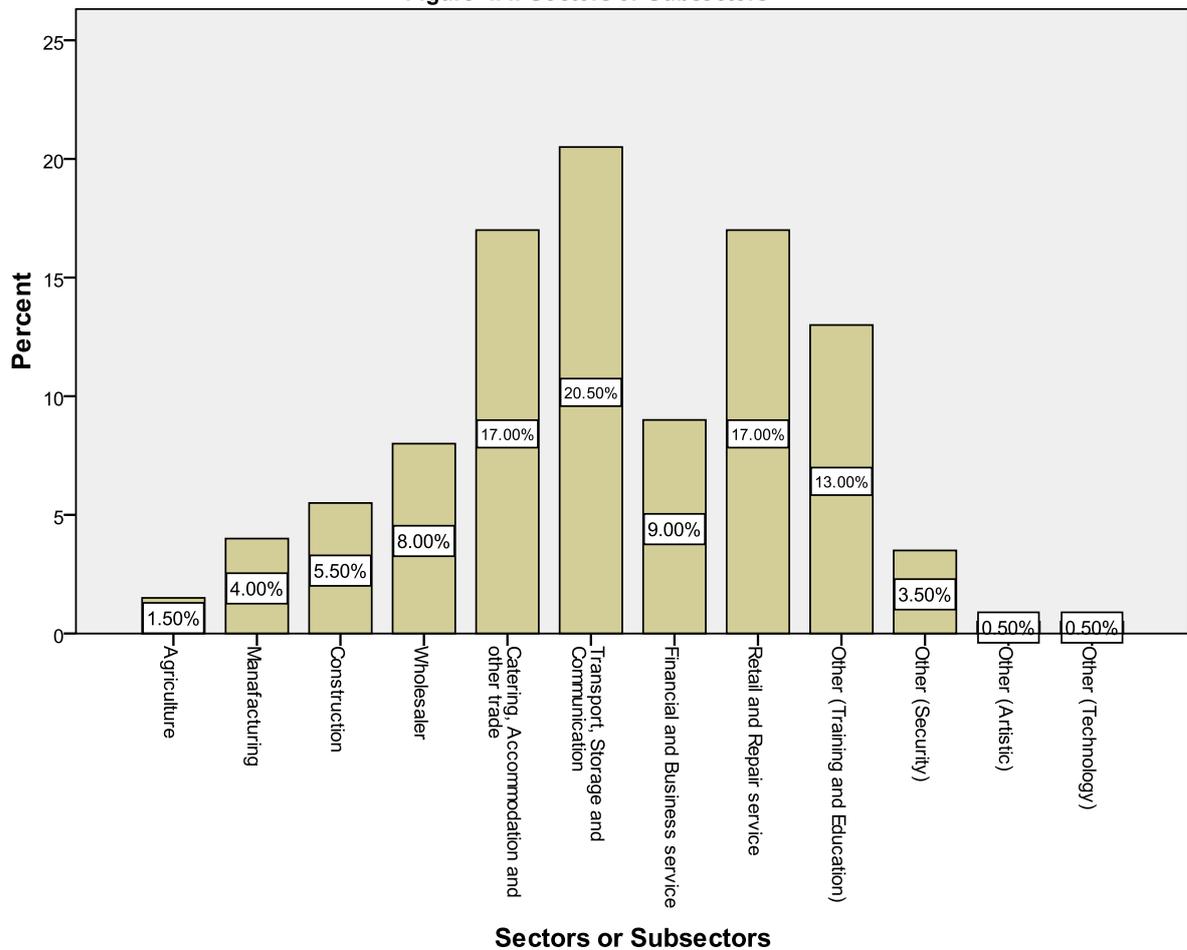


#### **4.2.1.4. Sectors or subsectors of respondents in SMEs**

The representation in terms of business sectors or sub-sectors is shown in figure 4.4 as follows: Agriculture 1.5%, Manufacturing 4%, Construction 5.5%, Wholesaler 8%, Catering, accommodation and other trade 17%, Transport, storage and communication 20.5%, Financial and business services 9%, retail and repair service 17%. In the category of other, Education and Training, Security, Artistic and technology were represented consecutively at 13%, 3.5%, 0.5% and 0.5%. It is obvious that respondents working in the transport, storage and telecommunication sectors dominated the sample. It can be clarified that all sectors and subsectors as

planned were represented. It was found that the dominant sectors were transport, storage and telecommunication followed by catering, accommodation and other trade as well as education and training. The proliferation of certain sectors such as communication (Internet cafe, Public phone, etc), catering (restaurants), accommodation (guesthouse, real estate agencies), education and training (private FET colleges) may be justified by easy entry into the market as well as the needs of the market. It can also be argued that the diversity of sectors and minimum government regulations give respondents the opportunity to choose an appropriate option. The private FET colleges increase is justified by the matric rate improvement, limited space at universities and public FET colleges.

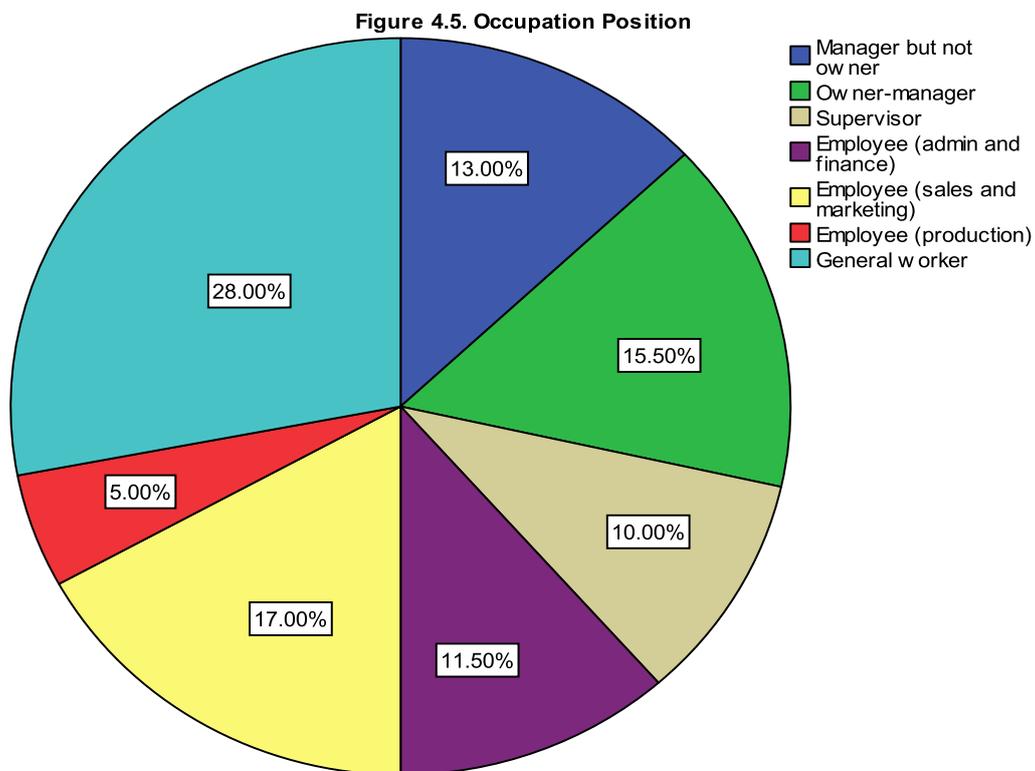
**Figure 4.4. Sectors or Subsectors**



#### **4.2.1.5. Occupation of respondents in SMEs**

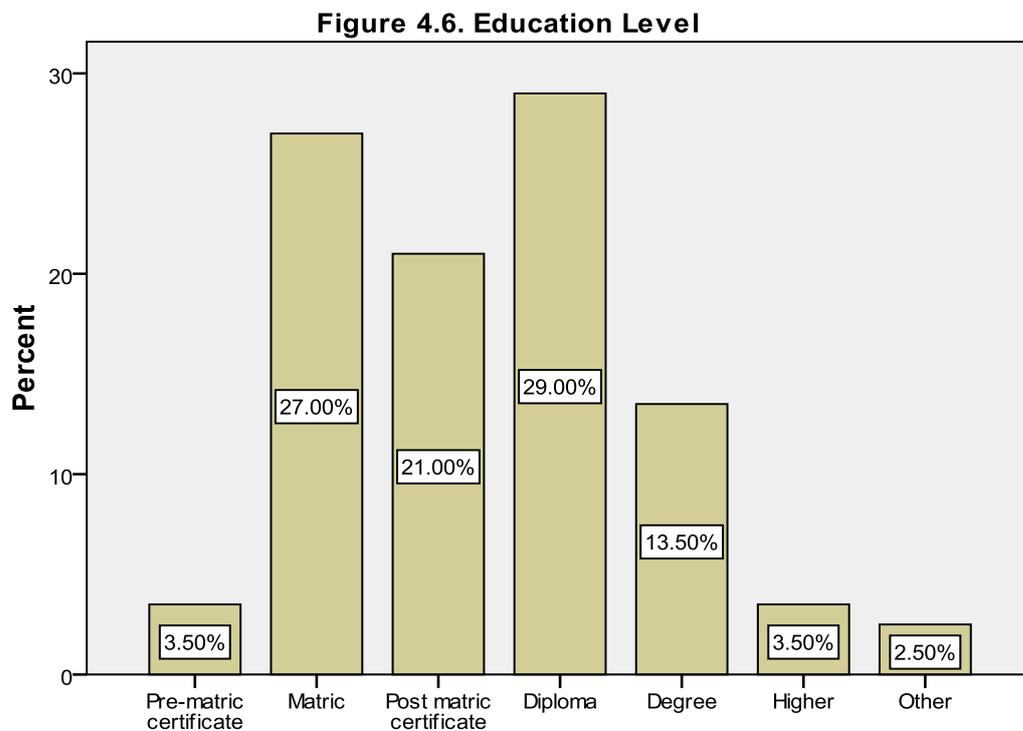
As depicted in figure 4.5, managers who were also owners of SMEs represent 15.5% followed by 13% of those who were employed as managers. The supervisors were 10% of the sample, and considered as part employee group because they were

under the authority of managers. The respondents, who work in administration and finance, sales and marketing, production and in any other sector classified as general workers departments, were represented respectively as 11.5%, 17%, 5% and 28%. The occupations of participants are subdivided into two, and comprised management and employees, who constituted 28.5% and 71.5% of the sample respectively. It was planned that the sample would contain managers/owners and all the employees of SMEs regardless of functions. The results show a fair representation of occupation position as members of SMEs include managers/owners and all other employees. It can be argued that apart from general work (unclassified positions); sales and marketing, employees lead with 17% of the respondents and dominate the sample. This is due to the aggressiveness of SMEs in selling their products or rendering services to achieve survival and growth. It is therefore an acceptable ratio of the sample as it does not affect the outcome of this study because it provides diverse opinions of managers, owners and employees of different business functions.



#### 4.2.1.6. Level of education of respondents

As shown in the figure 4.6, diploma respondents dominated, with 29%, followed by matric, post-matric and degree holder respondents who represented 27%, 21% and 13.5%, respectively. Proportion of respondents with pre-matric qualifications was 3.5% as well as those with other unspecified qualification whose share constituted 3.5% of the sample. Lastly, the high degree holders made up were 2.5%. As it was planned to target respondents who could understand the research topic in order to respond relevantly to the statements within the questionnaire, the results reveal that 69.5% were above the matric level and only 2.5% did not complete their matric. Furthermore, the respondents in possession of a diploma qualification dominated the sample with 29%. It can be confirmed that the sample was well represented as a high rate of the employees were equipped with necessary knowledge to provide reliable opinions to the subject of this study. The above figures prove that SMEs are able to attract skilled employees and consequently they have got potential to benefit from individual knowledge.



The following section summarises and presents the data. It focuses on the mean scores of factors describing individual knowledge transfer and behaviour patterns. It further uses statistical tools to summarise data from twenty-five statements.

### **4.2.3. BEHAVIOUR VARIABLES: MEANS STATISTICAL ANALYSIS**

It was stated in the literature review that the three factors of individual knowledge transfer are self-study, work experience and gender. The individual behaviour is represented by ability, ethical conduct and facilitation. The next subsections will focus on the mean scores of individual knowledge transfer and behaviour factors according to the distribution of the responses.

#### **4.2.3.1. Ability**

Table 4.1 shows the task performance behaviour which was observed through the ability of employees to perform tasks in SMEs. The attributes of four statements are used to reveal the opinions of two hundred respondents relevant to the ability of employees in SMEs. The highest mean scores (3.84) proves agreement of respondents on the statement of whether the manager is aware of employee's individual knowledge in SMEs. It can be interpreted that managers of SMEs are able to identify potential in individual employees, but respondents remained neutral on the question whether the managers were fully aware of employees' ability to transfer knowledge to co-workers. It is observed that almost all statements depict mean scores close to (3) and above. It can be argued that the lower mean score of (2.62) relating to a statement of whether it is difficult to suspend or fire a talented employee proves that the average of respondents expressed disagreement and neutrality. This describes the paradox which may stem from individual knowledge and counter-productive behaviour in SMEs. It translates how an employee with individual knowledge may also be unproductive. It also raises questions on what should be prioritised between good or acceptable behaviours and talent in the SMEs.

The standard deviation lies between (0.907) and (1.340) and reveals that despite the variability in opinions of respondents, all responses are close to the mean as all the values vary around 1.

**Table 4.1. Mean Statistics: Ability**

Statement 1	N	Minimum	Maximum	Mean	Std. Deviation
The manager is aware of employee's individual knowledge.	200	1	5	3.84	.907
Manager is aware of individual knowledge transfer in the business	200	1	5	3.45	1.088
Manager prioritises individual knowledge over ethical behaviour.	200	1	5	2.74	1.025
It is difficult to suspend or fire a talented employee.	200	1	5	2.62	1.340
Valid N (listwise)	200				

**4.2.3.2. Ethical conduct**

As depicted in table 4.2, conduct is measured by six questions on the scale of 1=strongly disagree to 7=strongly agree. Conduct is observed through the employee's productive and counter-productive behaviour at the workplace in relation to the transfer of individual knowledge in SMEs. Table 4.2 reveals the highest mean score of (4.16) and further confirms that the average respondents agreed and strongly agreed, whereas the lower score of (2.37) proved disagreement and neutrality. It can be highlighted that the highest mean score relates to the statement that individual knowledge is increased by employee ethical behaviour. In contrast, the lower mean score represents the statement whether the resentment to transfer knowledge is in the code of conduct.

It can be interpreted that though it is acknowledged in SMEs that positive behaviour is important for the transfer of knowledge; respondents disagree that there are rules regulating the transfer of knowledge. Furthermore, the standard deviation of (0.673) to (1.279) shows variability among the opinions of respondents despite the tendency of all the values towards (1) minimising variability in the distribution.

**Table 4.2. Mean Statistics: Ethical conduct**

Statement 2	N	Minimum	Maximum	Mean	Std. Deviation
IKT is increased by ethical behaviour.	200	2	5	4.16	.673
Resentment to transfer knowledge is in the code of conduct.	200	1	5	2.37	1.114
Resentment to transfer knowledge should be stated in the code of conduct.	200	1	5	3.28	1.196
Manager may easily identify employee who resents sharing expertise.	200	1	5	2.95	1.279
Manager prioritises ethical behaviour over individual knowledge.	200	1	5	2.82	1.083
It is unethical not to transfer knowledge in business.	200	1	5	3.15	1.011
Valid N (listwise)	200				

#### **4.2.3.3. Facilitation behaviour**

The table 4.3 depicts the facilitation mean measured on a scale of 1=strongly disagree to 5=strongly agree with eleven statements of facilitation attributes. The facilitation in this study is a factor that determined the organisational citizenship behaviour of employees in SMEs in the transfer of individual knowledge. It reveals the highest mean score of (4.51) followed by (4.28) and the lowest of (2.77). On the one hand, the highest mean score proves that respondents agreed and strongly agreed that individual transfer is important in SMEs, and ethical behaviour improves the ability to share knowledge. This study found that almost all the statements show the mean scores above (3) -justifying agreement. On the other hand, the lower mean score of (2.77) stems from the statement about whether there is a process followed in the small businesses to share individual knowledge. The lower mean score confirms that it is difficult to establish a framework as to how employees should share individual knowledge. It can be argued that the average of respondents disagreed, and some remained neutral, as the mean is close to three. The

respondents also agreed that managers transfer, facilitate and prioritise the transfer of individual knowledge in small businesses.

The standard deviation values which are from (0.634) to (1.310), reveal variability in the opinions of respondents, but it can also be argued that the variability is negligible as the distribution deviation values are around (1) compared to the mean scores of (2.77) to (4.51) for all the statements related to facilitation.

**Table 4.3. Mean Statistics: Facilitation**

Statement 3	N	Minimum	Maximum	Mean	Std. Deviation
Ethical behaviour improves the ability to share knowledge.	200	1	5	4.28	.726
IKT is one of the priorities of the business.	200	1	5	3.57	1.154
Knowledge transferability of an employee is one of the criteria for employment.	200	1	5	2.84	1.117
Employees transfer their knowledge to one another.	200	1	5	3.68	1.045
IKT is important in the business.	200	2	5	4.51	.634
Employee must use knowledge at workplace, but has the right not to share it.	200	1	5	2.85	1.199
The level of IKT has to be measured by employees who interact in business.	200	1	5	2.99	.897
The level of IKT has to be measured by managers of the business.	200	1	5	3.18	1.011
There is a process followed to share individual knowledge.	200	1	5	2.77	1.310
Manager transfers knowledge to employees.	200	1	5	3.94	1.092
Manager facilitates knowledge transfer among employees.	200	1	5	3.71	1.077
Valid N (listwise)	200				

The next section provides the criteria for interpretations; afterwards it tests and discusses the research hypotheses

### **4.3. RESEARCH HYPOTHESES**

The above section describes the mean scores and standard deviation of different factors in order to understand the central tendency and dispersion as well as reliability of data. This section will test the relationships between different variables as well as the significance of those relationships

#### **4.3.1. CORRELATIONS**

Hair Jr. et al., (2011:351-353) stated that the correlation analysis can be conducted through the determination of a correlation coefficient. This coefficient shows the direction of relationship which can be positive, negative or of no association. It also shows the levels of the relationship in terms of very strong, high or moderate.

Bryman and Bell (2011) emphasised that the correlation and statistical significance are mostly affected by the size of the sample. The Pearson correlation measure has been used to establish the existence and strength of the relationship between individual knowledge transfer and behaviour factors.

Polonsky and Waller (2011:179) defined Pearson's correlation ( $r$ ) or Pearson's product moment correlation as correlation technique that is used to measure parametric data on an interval scale, and to visually depict the correlation relationship scatter diagram or scatter gram.

The data analysis and interpretation emphasises the presence, nature, direction and strength of association of variables. The basis for interpretation is as follows:

The correlation coefficient ( $r$ ) ranges from +1.00 to -1.00, this is from perfect positive relationship to perfect negative relationship. The sign + indicates that the increase of one variable affects the increase of the other and likewise the sign =- means that the decrease of one variable results in the increase of another (Hair Jr., et al., 2011:351).

##### **1) Statistical significance of the correlation:**

This refers to the value ( $p$ ). The  $p \leq 0.01$  confirms that correlation is statistically significant at 99% and  $p \leq 0.05$  indicates a statistical significance at 0.95 level of confidence (Welman, et al., 2007:252).

## 2) Strength of the relationship:

- a) The  $+0.81$  to  $+1.00$  means that there is a very strong positive correlation whereas  $-0.81$  to  $-1.00$  depicts a very strong negative correlation.
- b) The correlation coefficient ( $r$ ) of  $+0.61$  to  $+0.80$  and  $-0.61$  to  $-0.80$  shows positive strong correlation and negative strong correlation respectively.
- c) The coefficient of  $\pm 0.41$  to  $\pm 0.60$  indicates that there is a positive moderate correlation or a negative moderate correlation.
- d) The  $r = \pm 0.21$  to  $\pm 0.40$  confirms a positive weak correlation or a negative weak correlation.
- e) The correlation coefficient ( $r$ ) of  $\pm 0.00$  to  $\pm 0.20$  reveals a very weak positive correlation or a very weak negative correlation. At this level the relationship is negligible (Hair Jr., et al., 2011:351-354).

The results of the correlations tests carried out are shown in the table 4.7. The study's propositions are stated below and discussed together with the analysis of the results.

- There is a statistically significant correlation between work experience and behaviour (Ability Ho1.1, conduct Ho1.2 and facilitation Ho1.3)
- There is a statistically significant correlation between self-study and behaviour (Ability Ho2.1, conduct Ho2.2 and facilitation Ho2.3)

**Table 4.4. Pearson Correlation Coefficients**

		Experience	Self-study	Facilitation	Ethical Conduct	Ability
Experience	Pearson Correlation	1	.097	.115	-.113	.154*
	Sig. (2-tailed)		.173	.106	.112	.030
	N	200	200	200	200	200
Self-study	Pearson Correlation	.097	1	.183**	.296**	.345**
	Sig. (2-tailed)	.173		.010	.000	.000
	N	200	200	200	200	200
Facilitation	Pearson Correlation	.115	.183**	1	.374**	.511**
	Sig. (2-tailed)	.106	.010		.000	.000
	N	200	200	200	200	200
Conduct	Pearson Correlation	-.113	.296**	.374**	1	.636**
	Sig. (2-tailed)	.112	.000	.000		.000
	N	200	200	200	200	200
Ability	Pearson Correlation	.154*	.345**	.511**	.636**	1
	Sig. (2-tailed)	.030	.000	.000	.000	
	N	200	200	200	200	200

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

It is important to indicate that the analysis will be based on the 0.01 significance (a statistically higher level test) only, and so limited comment will be made on the 0.05 level.

The correlation analysis will allow establishing the existence of relationship between individual knowledge transfer and a selected set of expected behaviours. It will further determine the strength of possible relationship and provide appropriate interpretations.

#### **4.3.2. HYPOTHESIS 1: Relationship between work-experience and behaviour patterns**

**Ho1.3** There is a statistically significant correlation between work experience and ability of employees to perform different tasks in SMEs

**Ho1.2** There is a statistically significant correlation between work experience and ethical conduct of employees in SMEs

**Ho1.3** There is a statistically significant correlation between work experience and facilitation behaviour of employees in SMEs

### **Correlations between work-experience with facilitation, ethical conduct and ability**

Table 4.4 shows that the correlation between work-experience and facilitation is positive and insignificant as shown by a coefficient  $r = 0.115$  at 0.01 significant level. Results also show that there is negative and insignificant correlation between work experience and ethical conduct as shown by a coefficient  $r = -0.113$  at a  $p$  value of  $0.112 > 0.01$ . Another positive and weak correlation is observed between work experience and ability as indicated by a correlation coefficient of  $r = 0.154$  at a  $p$  value  $0.03 < 0.05$ , insignificant at 99% level of confidence, but this relationship is significant at the 95% significance level. It can be concluded that there is an insignificant relationship between work experience and a select set of expected behaviours facilitation, conduct and ability; tested at 99% significance level therefore, the hypotheses Ho1.1, Ho1.2 and Ho1.3 are all rejected.

#### **4.3.2.1. There is a statistically significant correlation between work experience and the ability of employees to perform different tasks in SMEs (Ho1.1)**

Table 4.4 shows positive and insignificant correlation between work experience and ability. The result of this study proves that the above stated research hypothesis is rejected. The implication of this result could be that the long length of services in the SMEs may only allow employees to do the routine operational activities in the business without taking business to another level. The findings might further justify the lack of adapting business strategies to changes in business environment by many SMEs. There is evidence though, to confirm that seniority may vary with employees' abilities to perform various tasks in SMEs, but in an insignificant way. In addition, it can be interpreted that individual knowledge has to be shaped and adapted to business context and environment in order to be useful in SMEs. The findings might also justify that the nature of the SME (simplicity) does not require or demand a variety of skills of experienced employees.

#### **4.3.2.2. There is statistically significant correlation between work experience and ethical conduct of employees in SMEs (Ho1.2)**

The table 4.4 shows a negative but weak correlation between work experience and ethical conduct in SMEs. This result means that the length of service of employees in SMEs negatively correlates with ethical conduct of employees, though not in a significant way. It implies that the work experience of employees in SMEs cannot justify the ethical conduct in sharing their skills to achieve business objectives and goals. There is evidence though, to confirm that work experience might lead to negative conduct in transferring individual knowledge in SMEs, but it is insignificant to be realised in the business. The research hypothesis stated is therefore rejected.

Robbins, Odendaal and Roodt (2004:270) and McShane and Glinow (2002:43) found out that the expertise of experienced employees improved their effectiveness in supporting business development. In contrast, Goetsch and Davis (2010:323-324) argued that territorial behaviour and dependency created by expert power is likely to harm the transfer of individual knowledge in the development of SMEs.

The latter observation is in line with the study's findings of a negative weak correlation between work experience and ethical conduct. This study further argues that senior employees might deliberately avoid transferring individual knowledge as there are no rules compelling them to do so.

#### **4.3.2.3. There is a statistically significant correlation between work experience and facilitation behaviour of employees in SMEs (Ho1.3)**

This study finds that there is a positive but insignificant relationship between work experience and facilitation behaviour of employees in SMEs. It can be argued that there is not enough evidence to confirm that either the long or short length of service of an employee in SMEs would facilitate the transfer of individual knowledge in a significant way. It was stated in literature that the work experience of employees was the source of individual knowledge transfer in SMEs and it was assumed that the most experienced employee would facilitate individual knowledge transfer.

Contrary to the literature, this study argues that a positive weak relationship between work experience and facilitation behaviour proves senior employees of SMEs do transfer knowledge though not in a significant way.

These results further raise questions on the transparency and openness of communication among employees to facilitate knowledge transfer. In addition, this

study argues that these results might stem from the lack of willingness of knowledge workers, and persuasion from the small business managers/owners to facilitate individual knowledge transfer.

#### **4.3.3. HYPOTHESIS 2: Relationship between self-study and behaviour patterns**

**Ho2.1.** There is a statistically significant correlation between self-study and ability of employees to perform different tasks in SMEs

**Ho2.2.** There is a statistically significant correlation between self-study and ethical conduct of employees in SMEs

**Ho2.3.** There is a statistically significant correlation between self-study and facilitation behaviour of employees in SMEs

#### **Correlations between self-study and facilitation, ethical conduct and ability**

The table 4.4 depicts a positive and significant correlation as shown by a coefficient  $r = 0.184$  at  $p$  value of  $0.010 \leq 0.01$ . Secondly, there is a positive and significant correlation between self-study and conduct at  $p$  value of  $0.000$  and correlation coefficient  $r = 0.296$  and between self-study and ability as reflected by a coefficient  $r = 0.345$  at 99% confidence level. There is therefore a positive significant relationship between self-study and a select set of expected behaviours, and therefore the research hypotheses Ho2.1, Ho2.2 and Ho2.3 are all accepted.

##### **4.3.3.1. There is a statistically significant correlation between self-study and the ability of employees to perform different tasks in SMEs (Ho2.1)**

Table 4.4 depicts a weak, positive but significant correlation between self-study and ability at correlation coefficient  $r = 0.345$  and  $p$  value of  $0.000 < 0.05$ . This result leads the researcher to accept the research hypothesis that there is a statistically significant correlation between self-study and ability of employees to perform different tasks in SMEs. The literature review found that talented and qualified employees show strong task performance behaviour. This study reveals a significant correlation between self-study and ability and confirms this result is in accordance with the above stated literature assertion. This result also implies that SMEs might fully capitalise on limited capability for competitiveness. However, the unsophisticated processes as stated in literature could still raise concern as to what

extent the knowledge worker is used in complex tasks as compared to general or routine tasks leading to slow innovation in SMEs.

In reference to Desouze and Awazu (2006:33) and Wong and Aspinwall (2004:46) findings, SMEs were the source of innovations, but in the context of this study, it can be argued that the relationship between what the employees know and the type of tasks they perform in SMEs is critical for innovations leading to business development. This finding further confirms that complex tasks may be attempted by unskilled employees resulting in poor performance, consequently hampering innovative initiatives and business development.

#### **4.3.3.2. There is a statistically significant correlation between self-study and ethical conduct of employees in SMEs (Ho2.2)**

The table 4.4 depicts a positive and significant correlation between self-study and the ethical conduct of employees. The hypothesis is therefore accepted.

It can be interpreted that the positive significant correlation proves that individual knowledge acquired through self-study is likely to improve the conduct of employees in sharing knowledge and support, in a significant way. On the other hand McShane and von Glinow, (2014:28) found that qualified employees were likely to leave the business for other opportunities elsewhere.

This study finds that individual knowledge transfer is not regulated in SMEs. It further argues that with counter-productive behaviour, such as voluntary refusal to share individual knowledge, and conflict of interests, higher turnover in business is unlikely to happen because of the skills or qualifications of employees. On the contrary, the literature has stated that skilled employees might decide to stay in the business because it is the right thing to do and because they are attached to the personality of owner through the unifying culture of SMEs.

The literature review further confirmed that Machiavellian behaviour, values and locus of control can be linked to talent or the high qualification of employees in a positive way. This study confirms that SMEs are likely to benefit from the individual knowledge of employees because of the significance of the relationship between self-study and ethical conduct of employees. It also confirms that the locus of control is likely to benefit SMEs if qualified employees make a positive impact, through their ethical conduct, on co-workers, in transferring their knowledge. In addition, this significant relationship confirms that ethical conduct is likely to play a critical role

when employees with high Machs interact face-to-face with co-workers. Such high Machs are crucial in ethical environments as there are no rules and regulations relating to individual knowledge transfer in SMEs. The finding also supports the literature view that qualified or skilled employees with high Machs in position of power are likely to avoid selfish behaviour and dysfunctional organisational politics in a significant way in support of the business.

#### **4.3.3.3. There is a statistically significant correlation between self-study and facilitation behaviour of employees in SMEs (Ho2.3)**

Table 4.4 reveals that there is a positive weak correlation between self-study and facilitation at coefficient  $r=0.183$ . This significant relationship accepts the research hypothesis that there is a statistical significant correlation between self-study and facilitation behaviour of employees in SMEs. It can be argued that the high qualification and special skills of employees enhance their facilitation behaviour in SMEs in a significant way.

As asserted by Levy, Loebbecke and Powell (2000:4) SMEs were likely to benefit from the synergy and leverage of individual knowledge through co-operation. The findings of this study confirmed that SMEs have the potential to reach synergy and leverage through knowledge transfer of skilled employees. Further, this significant relationship can also be interpreted in line with what Gottschalk, (2010:213) indicated: that for the transfer to take place there should be sufficient willingness and commitment from both the transferor (skilled employees) and receiver (co-employees) to share and learn business technical knowledge to support business development.

#### **4.3.4. ANOVA TEST: Individual behaviours with regard to Gender groups**

Under this section, one-way ANOVA will be used to examine statistical differences between gender and a select set of expected behaviour in SMEs.

#### **4.3.5. HYPOTHESIS 3: Gender and difference in behaviour**

The hypothesis (Ho3) states that: There is a statistical difference between the mean variable of gender and behaviour (ability Ho3.1, conduct Ho3.2 and facilitation Ho3.3). As stated by Hair Jr., et al., (2011:336) the one-way ANOVA might be used

to examine a study with a single independent variable to determine the statistical differences between the group means.

**Ho3.1.** There is a statistically significant difference between gender and the ability of employees to perform different tasks in SMEs

**Ho3.2.** There is statistically significant difference between gender and the ethical conduct of employees in SMEs

**Ho3.3.** There is statistically significant difference between gender and facilitation behaviour of employees in SMEs

It can be interpreted that the ANOVA results depicted in the table 4.5 reveal that there are statistically insignificant differences between the gender of respondents and a select set of behaviours which include ability, facilitation and conduct. These insignificant differences may be explained through the p values of **0.943**, **0.626** and **0.632** respectively. The p values are >0.05 and prove that there are similarities in the opinions of different gender groups as related to facilitation, ability and conduct factors. In respect of these results, this study shows that males and females in SMEs express the same opinions regarding facilitation, ability and conduct in the transfer individual knowledge.

**Table 4.5. ANOVA: Gender and behaviour pattern variables**

		Sum of Squares	Df	Mean Square	F	Sig.
Facilitation	Between Groups	.128	1	.128	.005	.943
	Within Groups	4856.427	198	24.527		
	Total	4856.555	199			
Ethical Conduct	Between Groups	2.739	1	2.739	.238	.626
	Within Groups	2277.856	198	11.504		
	Total	2280.595	199			
Ability	Between Groups	1.343	1	1.343	.231	.632
	Within Groups	1153.137	198	5.824		
	Total	1154.480	199			

Table 4.5 depicts that there is no significant difference between the mean values of gender and facilitation, as it can be observed that the p value of  $0.943 > 0.05$  proves that there is statistically insignificant difference. Secondly, there is no significant difference between the mean values of gender and conduct at a p value of  $0.626 > 0.05$  confirming no statistical significance. Lastly, table 4.5 also reveals there is insignificant difference between the means gender and ability at a p value of  $0.632 > 0.05$  indicating therefore statistical insignificance.

Hypotheses Ho3.1; Ho3.2 and Ho3.3 are therefore rejected.

#### **4.3.5.1. There is a statistically significant difference between gender and ability of employees perform different tasks in SMEs (Ho3.1)**

The findings show a statistically insignificant difference between the mean values of gender and ability to perform tasks in SMEs. The research hypothesis is therefore rejected, as this study reveals no difference between men and women. The literature review suggested that male and female differ on leadership style and interpersonal relations of communication and conflict resolution approaches. It further confirmed as well that gender differences in the influence tactics used by women are viewed as less influential when they try to directly influence others by exerting their authority or expertise as compared to men (McShane and Glinow, 2014:183).

Other studies confirmed that psychologists have found that there were minor differences between men's and women's abilities. The findings of this study could not establish differences between gender in terms of ability or disability to perform and complete various tasks in SMEs. Based on the above analysis and interpretation, the SME sector constitutes an opportunity for both men and women to engage and contribute to its capacity building. It can also be argued that women should be taken seriously in capacity building as their contribution and expertise can no longer be undermined and underestimated in SMEs' development process.

#### **4.3.5.2. There is a statistically significant difference between gender and ethical conduct behaviour of employees in SMEs (Ho3.2)**

It is also found that there is no statistically significant difference between the mean values of gender and ethical conduct. It can be argued that the conduct of employees regarding sharing individual knowledge with co-workers does not depend on their gender. There is no evidence to confirm that the conduct or misconduct of

employees in the transfer of their individual knowledge could be related to a certain gender. The literature review stated that “soft” tactics such as friendly persuasion is used by women and will differ from “hard” tactics such as upward appeal and assertiveness which is applied by men (McShane & Glinow, 2002:374). The literature further stated that women were more likely to admit mistakes and accept remarks than men. But the findings of this study indicate, therefore, that a knowledge worker’s good and bad conduct or ethical and unethical conduct in SMEs cannot be attributed to the employees’ gender.

It can then be interpreted that ethical behaviour in SMEs is independent of employees’ gender. The study finding breaks and counters any cultural stereotype and inequality related to gender differences in the SMEs internal management. This study confirms that failure to comply with business ethical standards in terms of effective and efficient use of knowledge cannot be related and attributed to the gender of employees.

Based on the above analysis and interpretation, the research hypothesis that there is statistically significant difference between gender and ethical conduct is rejected.

#### **4.3.5.3. There is a statistically significant difference between gender and facilitation behaviour of employees in SMEs (Ho3.3)**

It was stated in the literature review that the female gender is more likely to use a style conducive to significant transfer of individual knowledge through interpersonal relations. It can be confirmed that gender differences do not affect the transfer of individual knowledge among co-workers in SMEs as purported in literature. The fact that there is a statistically insignificant difference between gender and facilitation in SMEs proves that this study rejects gender differences when it comes to facilitate the transfer of individual knowledge. This confirms that, regardless of which gender the employee is, he/she may or may not be able to facilitate the transfer of individual knowledge among co-workers in SMEs. The literature confirmed that women are more likely to interact well with co-workers than men do. But this study confirms that although individual knowledge is shared through interactions, nothing proved, in the context of SMEs, that women are more likely to facilitate individual knowledge better than men.

The next section will test the reliability of this study through Cronbach’s Alpha reliability coefficient.

#### 4.4. RELIABILITY TEST

According to Welman et al. (2007:147), Cronbach's Alpha determines the degree to which the items of a research instrument or questionnaire measure the same attributes. The coefficient of 0.60 and higher is considered acceptable for reliability purposes, as the closer the coefficient to 1 the higher the consistency reliability. Based on the results in table 4.6, it can be agreed that the research instrument measured the same attributes and confirmed the reliability of this study, since as shown in table 4.6; the Cronbach's Alpha test of reliability coefficient shows an alpha coefficient of **(0.701)** which is higher than the acceptable (0.60).

**Table 4.6. Reliability Statistics**

<b>Cronbach's Alpha</b>	<b>Number of Items</b>
.701	25

The next section concludes the study results as discussed in this chapter.

#### 4.5. CONCLUSION

This chapter presented the empirical results of this study, firstly, the demographics profiling was established and in terms of experience, employees who worked for 2 to 5 years dominated and constituted 39.5% of the sample. All the sectors and subsectors were represented, but transport, storage and communication dominated the sample with 20.5%, followed by catering, accommodation and other trade with 17% as well as retail and repair service which also accounted for 17%. Furthermore, all the occupation positions were represented and the education level shows that 46% of respondents had more than a matric qualification. Secondly, the frequencies of responses were obtained for the twenty five statements and descriptive and other statistical measurements such as mean score, and standard deviation were established. Furthermore, Cronbach's Alpha test of reliability coefficient was calculated at (0.701) in order to test the internal consistency, and reliability showed an acceptable level.

The study's hypotheses were tested and confirmed that there are statistically significant relationships between individual knowledge transfer from self-study employees and a select set of behaviours (ability, ethical conduct and facilitation). The study further confirmed that no statistical significance was found between work experience and facilitation, conduct and ability of employees in SMEs.

In addition, no significant differences were observed between gender and facilitation, ethical conduct and ability.

The next chapter will summarise the research results and provide logical recommendations stemmed from this study.

## **CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS**

### **5.1. INTRODUCTION**

This chapter focuses on summarising the research findings in the light of previous chapters. It will firstly provide an appropriate summary of different research variables in relation to research hypotheses and objectives, as previously stated in chapter one. Secondly, relevant recommendations are provided to different stakeholders who are likely to use this study as a tool to improve the state and strategic position of their businesses. Thirdly, this chapter will highlight limitations that could affect the findings of this study, and finally it will suggest ground for further research related to this topic in order to sustain and continually improve strategies of small businesses through human capital and business processes.

### **5.2. CONCLUDING REMARKS**

Chapter 1 examined the current state of SMEs in Durban and the overview of efforts from the private and public sectors to improve their capacity. It also laid the foundation for scientific and practical justification of the necessity to conduct this study. Chapter 2 reviewed literature and led to the formulation of the research constructs which include individual knowledge variables, work experience, self-study and gender and those of a select set of expected behaviours such as facilitation, ethical conduct and ability. Chapter 2 further led to the formulation of research hypotheses. In addition, in chapter 3, research methodology revisited different research approaches and led to the choice of an appropriate research methodology used in this study

The complexity of tacit knowledge stems from the nature of human beings. The individual employees' distinctive behaviour is critical to the transfer of skills in business organisations. This study intended to establish mechanisms allowing small businesses to reinforce the organisational citizenship behaviour of talented individual employees in the process of knowledge transfer. Further, to identify factors involved in improving the ability and conduct of knowledge workers in small firms' capacity building. Lastly, it wanted to establish how the existence or non-existence of the correlation between individual knowledge transfer and behaviour factors might be able to assist small businesses to assess and predict the efficiency of human capital,

and possible strategic options could be taken in order to improve the performance of small firms.

It is found that SMEs recognised the importance of individual knowledge and its transfer for small businesses success. This is in contrast to previous studies, which found that little is known in SMEs regarding knowledge management and the necessity of sharing skills in a small business. The previous findings confirmed that knowledge management was not well known, or was less of a concern of managers in small firms. This study acknowledged that the managers are well informed on the importance of individual knowledge and showed concern on best ways to share it. This study confirms that SMEs lack of a significant relationship between work experience and behaviour factors (facilitation and ethical conduct) are likely to hamper progress in terms of business competitiveness and sustainability. It also confirms that there are no differences between men and women in transferring individual knowledge as far as facilitation, ethical conduct and ability are concerned.

The aim of this study was to establish the relationship between individual knowledge transfer and the select set of expected behaviours. It finds that there is a significant relationship between self-study and a select set of expected behaviours in SMEs, but this is insignificant between work experience and behaviour.

The sections below will summarise the analysis and interpretations from chapter 4, based on research hypotheses of gender, work experience and self-study in relation to facilitation, conduct and ability.

### **5.2.1. WORK EXPERIENCE**

#### **5.2.1.1. Ability of employees to perform different tasks in SMEs**

The findings of this study reveal that there is an insignificant relationship between work experience and ability of employees to perform their tasks at 99% confidence level. It can be summarised in stating that new development in a business environment may justify the inability of experienced employees to perform certain tasks. Certain technical knowledge such as strategic planning may require more than routine business activities in SMEs. The nature of activities may force experienced employees to update their business knowledge in order to share it and initiate innovations in SMEs.

In summary, a knowledge worker's self ability might blind his/her judgement and impede the knowledge transfer. In this context, the research objective to identify factors involved in improving the ability behaviour of the knowledge worker has been achieved.

#### **5.2.1.2. Ethical conduct of employees in SMEs**

The findings of this study show that there is no statistically significant correlation between work experience and the ethical conduct of employees in SMEs. The seniority of employees does not necessarily guarantee their ethical conduct in SMEs. These findings can be proven to be risky for the survival and development of SMEs, as experienced workers are supposed to play a critical part and to be role models in the transfer of skills. Although the relationship is insignificant, the negative correlation should be a concern to SMEs. The study found out that senior employees may be exposed to what constitutes breaking rules and regulations through the deliberate refusal to integrate new employees; this as a quest to get or maintain power or because of pressure of competition and the need for survival. Experienced employees conduct might lead them readily leave the organisation for better opportunities elsewhere. The study's objective to identify factors involved in improving the conduct of knowledge workers in small firms' capacity building has been met.

#### **5.2.1.3. Facilitation behaviour of employees in SMEs.**

The research hypothesis above is rejected, as no significant correlation is found between work-experience and the facilitation behaviour of employees. The literature found that experienced employees are likely to know better the functioning of the business through accumulated business skills. But this study confirms that there is no evidence to prove beyond reasonable doubt that work experience significantly enhances the facilitation behaviour of employees in SMEs.

Therefore the insignificant relationship between experience and facilitation behaviour should be a concern for SMEs, because workers who gain knowledge through experience do not use their skills to significantly facilitate the transfer of skills. Organisational citizenship has to be reinforced through appropriate mechanisms such as fairness, to improve internal communication and reduce negative impact in the process of transferring knowledge.

## **5.2.2. SELF-STUDY**

### **5.2.2.1. Ability of employees to perform different tasks in SMEs**

This above research hypothesis is accepted as this study confirms that there is a significant relationship between self-study and ability of employees to perform tasks in SMEs. The formal qualification of employees in SMEs as shown in figure 4.6 confirms that 69.5% of respondents are above matric level; this is an opportunity for SMEs to effectively and efficiently utilise employees' knowledge.

The study further proves that there is no shortage of skills in SMEs, but other factors such as uniqueness of the employees' knowledge may be considered.

In summary, a positive and significant relationship between self-study and ability proves that the skilled employees are likely to diffuse and use their knowledge through performing different tasks in a SME situation. This study further confirms the intellectual and physical capacity of a self-learner employee is critical to improving the co-employees ability to capture knowledge and drive innovations. This meets the study's objective, which sought to identify factors involved in improving the ability of knowledge workers in small firms' capacity building.

### **5.2.2.2. Ethical conduct of employees in SMEs.**

This study found that there is a significant relationship between self-study and ethical conduct, and therefore the hypothesis is accepted. It can be summarised that highly qualified employees are likely to depict a significantly ethical conduct in sharing their individual knowledge or skills in SMEs. Self-study-skilled employee shows positive conduct such as punctuality at work, willingness to stay in the business and always acts in a manner that supports the values and development of the business in the long-term.

The significant relationship between self-study and ethical conduct constitutes an opportunity where the personality traits such as locus of control and Machiavellianism in the knowledge worker affect positively the knowledge capability of SMEs. This study further confirms that SMEs are likely to benefit from individual knowledge, as ethical values prevail and vary positively in a significant way along with employees' skills. The study's aim to establish mechanisms allowing small businesses to reinforce the organisational citizenship behaviour of talented individual employees in the process of knowledge transfer has therefore been met.

### **5.2.2.3. Facilitation behaviour of employees in SMEs.**

The research hypothesis is accepted as there is a significant relationship between self-study and facilitation behaviour of employees in SMEs.

It can be summarised that the skilled employees do contribute significantly to the capacity building of SMEs. In this context, the lack of mechanisms to control individual knowledge transfer constitutes a challenge for small firms as it relies on the willingness of employee. The finding proves the commitment, involvement and willingness of the self-study skilled employees to go beyond business expectations in facilitating and sharing knowledge with co-employees. It can then be concluded that self-study skilled employees are proven to be good facilitators of knowledge transfer in SMEs.

The study objective to establish mechanisms allowing small businesses to reinforce the organisational citizenship behaviour of talented individual employees in the process of knowledge transfer has been met.

### **5.2.3. GENDER**

#### **5.2.3.1. Ability of employees to perform different tasks in SMEs**

The above stated research hypothesis is rejected because the covariance between gender and ability of employees to perform tasks is statistically insignificant.

There is no evidence to prove that a particular gender might lead an employee to perform tasks better than others. The literature suggested that women soft approach could differentiate them from men in terms of the ability to perform tasks and transfer individual knowledge to co-workers; this study argues that there is no difference between men and women.

#### **5.2.3.2. Ethical conduct of employees in SMEs.**

The findings of this study results in the rejection of the above research hypothesis. The gender of employees is proven not to be the function of their ethical or unethical conduct in the transfer of individual knowledge in SMEs.

The previous study findings confirmed that women are more likely to admit guilt than men, to communicate better than men and to treat co-workers better than men. This study confirms that there is no evidence to underpin the assertion that change in gender will result in change of conduct. This once again reiterates that gender

differences do not reflect the values and good practices of employees in sharing their know-how in SMEs.

### **5.2.3.3. Facilitation behaviour of employees in SMEs**

The research hypothesis rejection proves that, it is more about individual disposition, than gender differences that causes employees to facilitate the transfer of individual knowledge in SMEs. This study rejects any suggestion from the literature that women may facilitate individual knowledge more easily than men. The SMEs are likely to get the benefit individual knowledge from both men and women. It is therefore paramount to encourage and empower the participation of women in order to enhance their involvement in the SME sector. The research objective of finding out if gender has an effect on knowledge transfer has therefore been met.

The aim of this study was to find out the relationship between individual knowledge transfer and behaviour. This study has managed to do so. The study's objectives were (1) to establish mechanisms allowing small businesses to reinforce organisational citizenship behaviour of talented individual employees in the process of knowledge transfer. (2) To identify factors involved in improving ability and the conduct of knowledge workers in small firms' capacity building. (3) To determine how the relationship or lack of relationship between individual knowledge transfer and a select set of behaviours could assist managers/owners of small businesses to adapt their business models and (4) to determine if gender has an effect on knowledge transfer.

The above stated objectives have been achieved as summarised in this chapter.

## **5.3. RECOMMENDATIONS**

The researcher undertook to study the limited scope of this topic in order to establish how individual knowledge could be well used in SMEs as an asset to enhance organisational capability. It seems, therefore, that this is a vast topic that requires further research to reach more informative findings and conclusions, enabling managers, owners and strategists of SMEs: to improve the quality standard of products and services; to sustain, grow and become job creation engines of the economy. Nevertheless, it is paramount to consider this little contribution in the field of management through the following recommendations that stem from this study:

- ❖ It is recommended to managers of SMEs to identify the behaviours of employees in order to monitor their performance and commitment in business development.
- ❖ Beyond multitasking roles of employees, it is recommended to managers to use knowledge workers in their areas of expertise in order to fully utilise knowledge resources.
- ❖ It is recommended to owners and managers to establish internal mentorship programmes where senior employees use success cases from all over the world to convey certain business skills to new employees in SMEs
- ❖ The researcher recommends to management of SMEs to continuously analyse the internal organisation to ensure that knowledge resources are effective.
- ❖ Managers and owners of SMEs are recommended to establish mechanisms to identify talented employees or those with special skills who can improve business competitiveness regardless of their gender, educational qualifications or positions in SMEs
- ❖ Managers in partnership with all stakeholders must continue to improve employees' business skills through seminars, workshops, mentorship, on the job training, business incubations, etc., regardless of the seniority, gender and qualifications of employees.
- ❖ It is recommended to all members of SMEs, employees and managers, to make sure that they understand the changes in business environment and to be equipped to adapt their skills and respond to changes effectively within the environmental complexities of SMEs.

- ❖ Optimal use of individual knowledge through understanding of productive behaviour and building a learning environment of knowledge in order to efficiently and effectively utilise the scarce resources.
- ❖ Initiate tasks allowing employees to share their individual knowledge with co-workers willingly, without persuasion and constraints through improvement of communication.
- ❖ Managers and owners must emphasise the necessity to fully use individual knowledge for innovations in SMEs, through talent management and ethical business practices.
- ❖ Managers and owners should instil and encourage employees to cultivate a knowledge sharing culture as well as teamwork, to ensure the smooth succession and sustainability in SMEs. In improving internal communication, identifying and resolving dysfunctional conflicts, maintain fairness and trust among employees.
- ❖ It is recommended to the management of the SMEs to initiate and identify knowledge projects and protect the intellectual capital of the business for long term competitiveness and innovations.
- ❖ Managers, owners, employees, government agencies, lenders, civil society, etc. are recommended to promote gender equality and participation as far as women's involvement is concerned, in order to close the gap between men and women in the SME sector for the purpose of alleviating poverty, empowering women, promoting an entrepreneurial spirit among women, etc.
- ❖ It can also be recommended to government agencies and private incubations in KwaZulu-Natal-province to avail themselves of updated data of the SME sector as far as recent development and activities in the province are concerned.

#### **5.4. LIMITATIONS OF THE STUDY**

According to Hussey and Hussey (1997), limitations identify potential weaknesses in the research which may hamper, for instance, the generalisation of the findings. Also Walliman (2011) emphasised that there is no research project that can provide all the answers. Therefore any contribution to knowledge is acceptable as long as the limitations of the study are highlighted in order to avoid overstatement of the case when conclusions and recommendations are made (Walliman, 2011:158). This study presents the following limitations:

- ❖ Only the metropolitan area of Durban was considered for this study. However, other countries, other provinces of South Africa and even remote or rural areas might reach different conclusions.
- ❖ All the business sectors or subsectors might not have been covered; therefore the inclusion of uncovered sectors and subsectors may reach different conclusions. It is also possible that a study into a single industry may lead to different conclusions.
- ❖ A more quantitative sample which is drawn on a clear sample frame provided by SMEs' support services may possibly lead to different conclusions as the statistics of SMEs continually change.
- ❖ Taking into consideration the definition of SMEs in other countries in Europe and USA as far as number of employees and the size of business capital are concerned, a similar study on SMEs may possibly reach other conclusions.

#### **5.5. SUGGESTION FOR FURTHER RESEARCH**

This study focuses on small firms and raises other questions considering the criticality of individual knowledge transfer in the development of SMEs regardless of size. It is important to highlight that further research can also be conducted using case studies of big organisations in South Africa or other parts of the world. Furthermore, it is crucial to study how the relationship between individual knowledge and behaviour could affect the recruitment process in SMEs and business development in general. There is also a need to study the relationship between

individual knowledge and research & development department in SMEs especially in the context of ongoing innovations.

Finally, it can be suggested that a study be conducted on the transfer of individual knowledge in relation to the organisational structure of SMEs, using a bigger sample size.

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## **APPENDIX A: COVERING LETTER**

Gustave Kankisingi Mungeni  
P.O BOX 5262  
Durban 4000

Dear Sir/Madam,

I am student at the University of South Africa (UNISA) and conducting research for my M tech of technology degree (Business administration). The research project is titled “the relationship between individual knowledge transfer and behaviour patterns for the development of small businesses in Durban”. For the purposes of obtaining data, a completion of questionnaire is needed.

Hereby, I humbly request your assistance in completing the questionnaire that should not take more than 10 minutes of your time. In the process of this study, your participation is voluntary, your identity will remain anonymous and information provided strictly confidential. I would like to appreciate and thank you in advance for your co-operation.

If you need more information concerning this research project from another person than the researcher, please do not hesitate to contact my supervisor Dr Sheperd Dhliwayo, ([dhliwayos@yahoo.com](mailto:dhliwayos@yahoo.com)), Department of Business Management, UNISA.

Thank you for your valuable input into this project.

Yours faithfully

UNISA student: Gustave Mungeni Kankisingi

Student number: 36421898

## APPENDIX B: SURVEY QUESTIONNAIRE

### A STUDY INTO THE BETWEEN INDIVIDUAL KNOWLEDGE TRANSFER AND BEHAVIOUR PATTERNS FOR DEVELOPMENT OF SMALL BUSINESSES

#### Part one. Demographic classification of data

Choose the relevant box by ticking with X:

##### 1.1. Your gender

Male	Female	Other ( I swear)

##### 1.2. Your length of service or work experience in the small business

0-1 year	2-5 years	6-10 years	11-15 years	16-20 years	21-25 years	26 and more years

##### 1.3. Your race group

Black	Coloured	Indian (Asian)	White

##### 1.4. Your occupation position within the small business

Manager but not owner	Owner-manager	Supervisor	Employee (administration, finance)	Employee (sales & Marketing)	Employee (production)	General worker

##### 1.5. The sector and subsector of the business (mark only one)

Agriculture	
Manufacturing	
Construction	
Retail and repair service	
Wholesale trade and commercial agents	

Catering, accommodation and other trade	
Transport, storage and communications	
Finance and business service	
Other (specified)	

**1.6. Education level ( mark the highest)**

Pre-metric certificate	Metric	Post metric certificate	Diploma	Degree	Higher	Other

**Part two. Please use the following scheme to mark the most appropriate box:1 =strongly disagree, 2=disagree, 3=not agree or disagree, 4=agree, and 5=strongly agree**

Note that there is not right or wrong answer; express your opinion in marking only one number in the appropriate box by X.

	Statements	Strongly disagree	disagree	Not agree or disagree	agree	Strongly agree
1.	The transfer of individual knowledge is increased by ethical behaviour of the employee.	1	2	3	4	5
2.	The ethical behaviour improves the ability of an employee to share his knowledge.	1	2	3	4	5
3.	A talented employee has a good conduct within the business.	1	2	3	4	5

4.	A talented employee is a disciplined employee within the business.	1	2	3	4	5
5.	A talented employee is prepared to share his knowledge freely.	1	2	3	4	5
6.	The manager is aware of individual knowledge in the business.	1	2	3	4	5
7.	The transfer of individual knowledge is one of the priorities of the business.	1	2	3	4	5
8.	The knowledge transferring ability of an employee is one of the criteria for employment.	1	2	3	4	5
9.	The employees transfer their knowledge to one another in the business.	1	2	3	4	5
10.	The manager is aware of individual knowledge transfer in the business.	1	2	3	4	5
11.	The transfer of individual knowledge is important in the business.	1	2	3	4	5
12.	Resentment to transfer knowledge is in the business code of conduct.	1	2	3	4	5
13.	Resentment to transfer knowledge should be stated in the code of conduct.	1	2	3	4	5
14.	The manager may easily	1	2	3	4	5

	identify employee who resents sharing expertise in the business					
15.	The managers prioritise individual knowledge over ethical behaviour.	1	2	3	4	5
16.	The expert employee may lose value in transferring knowledge.	1	2	3	4	5
17.	An employee must use knowledge at workplace, but has the right not to share it.	1	2	3	4	5
18.	The managers prioritise ethical behaviour over individual knowledge.	1	2	3	4	5
19.	It is difficult to suspend or fire a talented employee.	1	2	3	4	5
20.	It is unethical not to transfer the knowledge in the organisation.	1	2	3	4	5
21.	The level of individual knowledge transfer has to be measured by employees who interact in the business.	1	2	3	4	5
22.	The level of individual knowledge transfer has to be measured by managers of the business.	1	2	3	4	5
23.	There is a process followed to share	1	2	3	4	5

	individual knowledge.					
<b>24.</b>	The manager transfers knowledge to employees.	1	2	3	4	5
<b>25.</b>	The manager facilitates knowledge transfer among employees in the business.	1	2	3	4	5