

UNIVERSITY OF KWAZULU-NATAL

A STUDY OF BUSINESS MANAGEMENT SKILLS OF OPTOMETRISTS IN KWAZULU-NATAL

By

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ABSTRACT

The importance and benefits of business management skills have been documented by numerous authors and scholars across the world. Despite this coverage, the topic of business management has received little attention and appreciation within the profession of optometry. Furthermore this topic does not enjoy literature coverage within this profession. This deficiency in literature and interest questions the business skills optometrists have to manage their practices. The aim of this study was to determine whether Optometrists possessed the necessary business skills to efficiently and effectively manage their practices. This study was conducted on Optometrists in private practice in the province of KwaZulu-Natal. Data was collected through a web based questionnaire developed by the researcher. A Cronbach's alpha value of more than 0.7 was consistently obtained from this research instrument. A sample of 175 optometrists was randomly drawn from a sample frame with a total target population of 300 optometrists. Following a low response rate (2%) a non-probability sampling approach which involved electronic and manual distribution of the questionnaire to all 300 elements in the sampling frame was used to maximize the response rate. A total number of 102 responses were received which constituted a response rate of 34%. Majority (58.42%) of the respondents were females and 41.58% were males. Of those who responded, 37% were optometrists for 1-5 years and were in private practice for the same period. The results indicated that optometrists had average business management skills. The results further indicated that majority of the respondents (64) acquired their business management skills by learning on the job. The results also showed that the common challenges optometrists faced were: managing accounts receivables (34.62%), generating sales (33.33%) and practice location (22.22%). Respondents were also asked to rate the Quality of Undergraduate Optometry Practice Management course the results of which were overwhelmingly negative. The findings of this study were that optometrists do not have the necessary business management skills to manage, grow and sustain their practices. This study can benefit all stakeholders in optometry by identifying the management gaps and challenges that need to be addressed. This study recommends that these gaps and challenges can be addressed through a review of the continuous professional development system, an introduction of short courses in practice management, stakeholder meetings focusing on the review of undergraduate practice management modules, and the development of postgraduate courses in practice management.

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CHAPTER 1

OVERVIEW OF THE STUDY

1.1. INTRODUCTION

The importance and benefits of business management skills have been documented by different authors and scholars across the globe. Despite this coverage, the topic of business management has received little attention and appreciation within the profession of optometry. This is despite the fact that majority of optometrists in South Africa practice their profession in the private sector using the traditional small business model. This lack of interest and literature in business management has translated to undocumented business management challenges for optometrists in the private sector and questions the business management skills of optometrists. The need was therefore indicated to not only document through this study, the challenges experienced in optometry but most importantly to understand and document the business management skills optometrists have. This chapter which serves as the introduction to this study will outline the motivation and benefits of this study. It will outline the focus of this study, the problem statement that led to this study, the research question this study aims to answer and the objectives of this study.

1.2. MOTIVATION FOR THE STUDY

As already indicated the lack of interest and literature in business management within the profession of optometry questions the quality and relevance of the practice management module offered as part of the undergraduate optometric training. Furthermore this deficiency in literature and interest questions the business skills optometrists possess to manage their practices. The results of this study will therefore benefit the optometric profession as a whole in the following ways:

- Optometry Schools- by providing a framework and the basis for improving the practice management modules in their respective programs.
- Optometry students- by positively contributing towards the practice management modules thereby improving the quality of training they receive.

- Optometrists- by indicating the business skills gaps they need to address in order to manage their practices successfully.
- Government- by contributing towards the success, growth and sustainability of optometry practices thus contributing positively towards efforts of reducing unemployment and also the country's Gross Domestic Product.

1.3. FOCUS OF THE STUDY

Majority of optometrists in South Africa are in the private sector running their own practices. These optometrists have to manage their practice in some way or another. For them to do so they have to possess basic business management skills in order to successfully manage, grow and sustain this practices. The focus of this study is therefore to determine whether or not optometrists in KwaZulu-Natal have the necessary business management skills to manage, grow and sustain their practices. Due to the type of information to be solicited from participants which involves amongst other things challenges faced in private practice, only optometrists in private practice will be included in this study. Optometrists in the public sector will be excluded because they are not exposed to the same business environment and will therefore not be suitable to answer some of the questions.

South Africa is divided into nine provinces (Lehohla, Manuel, Zuma, 2010). The business landscape and environment in each of the provinces differs in one way or another to the next because of variations in population demographics, economic factors such as availability of natural and other resources, geographical location, etc (Lehohla *et al.*, 2010; Brand SA, 2012; Stats SA, 2012). Although this is not tested it could be assumed that the challenges that are faced by optometrists in KwaZulu-Natal will not be similar to those faced by optometrists in the rest of the country due to the differences in the business environments. Since the determination of the business landscape and environment differences is beyond the scope of this study, it would be difficult to draw conclusions and inferences on the information provided by optometrists in different

provinces. As such, to be able to draw certain conclusion and infer the findings to the target population this study will be limited to only one province which is KwaZulu-Natal.

1.4. PROBLEM STATEMENT

The issue of business management skills has received little or minimal attention in Optometry, both in terms of undergraduate training and peer reviewed literature. The lack of literature in optometry business management within the context of South Africa questions the business skills of practicing optometrists and the relevance of business management modules provided to optometrist students in preparing them for their role as practice managers. The need is therefore indicated to not only document the business skills of optometrists in South Africa; but to also address the gaps in the training of optometrists by comparing the skills they have to the required and documented business skills.

1.5. RESEARCH QUESTIONS

In relation to the problem statement presented above this study seeks to answer the following question: Do Optometrists in KwaZulu-Natal have the required business management skills to successfully manage, grow and sustain their optometric practices?

1.6. OBJECTIVES

- To determine the business skills of optometrists in KwaZulu-Natal
- To determine whether optometrists' business skills were obtained through undergraduate or post graduate studies
- To determine the challenges of managing an optometric practice
- To determine what changes need to be made to the optometry curriculum

1.7. SUMMARY

Considering the need, aims and objectives of this study, the research questions that will be answered by this study, it evident that this study which will focus on business management skills will add significant value to the profession of optometry at large. Although the limitations of this study will make it difficult for the results to be generalized to the entire population of optometrists in South Africa, the findings will contribute positively towards the body of knowledge within the profession and to the success of optometry practices. Chapter 2 will discuss in detail the literature pertaining to this study.

CHAPTER 2

BUSINESS MANAGEMENT SKILLS

2.1 INTRODUCTION

Optometry students spend four year of their studies learning how to be clinicians, yet upon qualifying as Optometrists majority of them spend their lives being business men and women in private practices. Although this is the case, little attention is given to equip these optometric business men and women with the relevant business management skills that will enable them to tackle complex business challenges and problems. The importance of business management skills in addressing business challenges and problems together with the consequences of not having such skills have been documented and are discussed in this literature review. In the optical industry, however, no literature exists highlighting the importance and consequences of business management skills in an optometric practice. Considering the business model of the optical industry it can be argued that the same business challenges and problems that exist in other businesses will to some extent exist in this industry and in optometric practices. This literature review aims to expand on these issues and further highlights the need for optometrists as business men and women to have relevant business management skills to manage, sustain and grow their businesses.

2.2 MANAGERIAL SKILLS IN BUSINESS

The goal of business is to develop products and services that will satisfy the needs of consumers and to maximize profits and create wealth for the owners (Gaspar, Bierman, Kolari, Hise, Murphy Smith, Arreola-Risa, 2006; Hellreigel, Jackson, Slocum, Staude, Amos, Klopper, Louw, Oosthuizen, 2008). In other words the role of business is to generate enough revenue to cover costs and yield attractive profits and return on investments (Hough, Thompson, Strickland, Gamble, 2003). A more precise goal of business can be regarded as to increase the market value of the existing owners' equity (Firer, Ross, Westerfield, Jordan, 2008). Firer et al. (2008), took this definition further in submitting that in essence the goal of business can be broken down into the following

specific goals that all make up the main goal of business; to remain sustainable; beat the competition; avoid financial distress and bankruptcy; maximize sales; minimize costs; maximize profits; maintain steady growth in profits. A closer look at these specific goals highlights three categories of goals. The first one is the profit maximization through maximizing sales, minimizing costs and beating the competition; the second is the avoidance of risk through the avoidance of financial distress and bankruptcy and the third is the promotion of growth through the maintenance of steady growth in profits and remaining sustainable. For a business to achieve all these specific goals and thereby attaining the main goals of business, it must add value to its products and services in order to ensure that those products and services can be sold at a price higher than the cost of producing them (Hellreigel *et al.*, 2008). In adding value to products and services, certain processes and activities must be performed. These activities must be performed in such a way that the inputs required are continuously minimized but the outputs produced are maximized. In other words the processes and activities must be performed effectively and efficiently (Mamun and Mohamad, 2009).

A business, however, cannot perform these activities on its own. Managers are needed to perform these processes and activities on behalf of the business. In other words these managers must continuously ensure that the minimum inputs are utilized to produce maximum output. This view of managers ensuring minimum inputs are used to produce maximum output is supported by the submission by Smit (2007) that a manager is someone who performs the activity of utilizing resources in an efficient and effective way in an effort to ensure that the end product is worth more than the initial resources (Smit, 2007). Schermerhorn (2005), however, differed with this view in submitting that a manager does not physically utilize the resources as per the above definition. According to Schermerhorn (2005) a manager is someone who gets things done through other people. Rees and Porter (2008) alluded to this notion in submitting that management is the process of getting results through others. Taking the above into consideration it can be submitted that a manager is someone who performs the activities or the processes of getting other people to convert resources to end products in an efficient and effective

manner so as to reach the main goal of business (Schermerhorn, 2005; Smit, 2007; David Rees and Porter, 2008). These activities or processes of getting results through other people are regarded as planning, organizing, leading and controlling (Hellreigel *et al.*, 2008). Management can therefore be defined as the process of planning, organizing, leading and controlling the utilization of resources to attain business goals as shown in Figure 2.1.

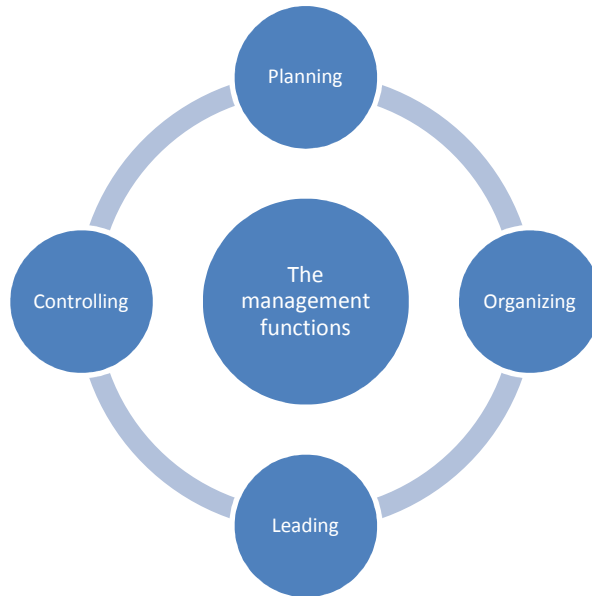


Figure 2.1: The four functions of management.

Source: Adapted from Schermerhorn, J. 2005. *Management*. 8th ed. John Wiley and sons, New York. p. 19

Figure 2.1 shows the process of management which are also regarded as the four functions of management which all managers perform (Schermerhorn, 2005; Pillay, 2008). The planning process involves the setting of business goals and objectives and the determination of ways to achieve them (Schermerhorn, 2005; Pillay, 2008). It involves specifying future resources and actions that a business must attain and implement in order to achieve its goals and objectives. (Smit, 2007). This includes operational, tactical and strategic actions that the business must implement in order to reach its core objective of maximizing profit. The process of organizing follows that of planning. This process involves the assignment of tasks, resources and the coordination of work activities (Schermerhorn, 2005). In other words the process of organizing involves the

implementation of the plans developed in the planning process. Considering that management involves getting results through others, there is a need to inspire and motivate those people to implement the developed plans. The process of leading is central to this notion. Leading is the process igniting people's enthusiasm to perform their jobs in an effort to accomplish objectives (Schermerhorn, 2005; Pillay, 2008). It involves influencing others to perform activities that they otherwise would not do (Smit, 2007; Pillay, 2008). Following the leading process there is a need to ascertain and measure performance of activities. This is done through the controlling process which involves monitoring performance and taking action to influence and ascertain desired results (Schermerhorn, 2005). Figure 2.1 and its subsequent explanation highlights the notion that management is complex and consists of vast numbers of processes, activities and issues. In support of this statement Schermerhorn (2005) submitted that the nature of a manager's job involves amongst other things working at intense pace, fragmented and varied tasks, working with many communication media, putting in long hours and accomplishing activities through interpersonal relationships. Mamun and Mohamad (2009) and Govender and Parumasur (2010) also supported this view by submitting that the rapidly changing business environment dictates that managers have to focus on high operational standards, increasing market share in order to gain and sustain a competitive advantage for his/her organisation whilst at the same time dealing with the challenges presented by globalisation.

According to Mintzberg (1973, cited in Elmuti, 2004), for managers to perform these complex managerial functions they have to assume a variety of roles that can be categorized as follows:

- *Interpersonal roles.* These are roles such as the Figurehead, leader and liason roles that a manager acquires from his status as the authority in an organisation (Elmuti, 2004). In other words interpersonal roles focus on the interaction of a manager with other business stakeholders (Schermerhorn, 2005).
- *Informational roles.* These are roles that involves the collection and dissemination of relevant information to all business stakeholders (Elmuti, 2004) . This role

stems from the fact that a manager has unique access to external and internal information as such he/she is in the best position to pass the information to where it is needed and when it is needed (Elmuti, 2004). These roles focus on the way a manager exchanges and processes information in executing his/her duties (Schermerhorn, 2005).

- *Decisional roles.* These roles according to Elmuti (2004) are the most important in a manager's responsibility and includes resource allocation, disturbance handling, entrepreneur, negotiating roles and similar (Elmuti, 2004). They focus on the ability of a manager to utilize information at his/her disposal to make goal supporting decisions (Schermerhorn, 2005).

Quinn *et al* (2003 cited in Govender and Parumasur, 2010) expanded on these managerial roles by asserting that there are eight roles essential for creating master managers namely: mentor, facilitator, monitor, co-ordinator, director, producer, broker and innovator roles. The mentor role entails understanding other people, communicating with them effectively and also understanding oneself (Govender and Parumasur, 2012). The facilitator role entails building teams that will work efficiently and effectively with each other as individuals and other teams by promoting participative decision-making approaches and resolving conflict (David Rees and Porter, 2008). The monitor role entails using critical thinking to manage information and core business processes (Quinn *et al*, 2003 cited in Govender and Parumasur, 2012). Co-ordinator role involves managing projects, workflow and managing across functions to create organisational processes that interlink with each other to achieve a common goal (David Rees and Porter, 2008). The director role involves developing organisation vision and mission and setting goals and objectives that will steer the organisation towards the vision (Govender and Parumasur, 2012). Producer role entails fostering a conducive and productive work environment by managing time, work related stress and balancing competing demands (Govender and Parumasur, 2012). The broker role entails negotiating agreement and commitments with all organisational stakeholders (David Rees and Porter, 2008). The innovator role involves constantly thinking creatively to keep the organisation abreast constant market changes (Quinn *et al*, 2003 cited in Govender and Parumasur, 2012). According to Govender and Parumasur (2012) these roles are essential in helping managers to face

realities of competitiveness and knowing which strategies to employ and implement in dealing with various situations.

Successful performance of these roles and consequently the managerial responsibilities depends on the managerial competencies and skills of those tasked with performing them. (Smit and Cronje, 2002; Hellreigel *et al.*, 2008). Table 2.1 shows the skills needed by managers in order to successfully execute the different managerial roles indicated above.

Table 2.1: Managerial skills necessary to fulfill the different managerial roles

Managerial role	Management Skills Necessary
Facilitator role	<ul style="list-style-type: none"> • Build teams and link team activity to business strategy • Ensure participative decision making • Manage conflict using collaborative approaches
Director role	<ul style="list-style-type: none"> • Communicate vision, set goals and objectives, design and organize business strategy using vision
Producer role	<ul style="list-style-type: none"> • Work productively to optimize performance • Foster productive work environment-adopt an effort-performance-outcomes-rewards contingency • Manage time and stress
Co-ordinator role	<ul style="list-style-type: none"> • Manage workflow and projects • Design work using effective job design strategies • Manage across functions
Broker role	<ul style="list-style-type: none"> • Build and maintain a power base • Negotiate agreement and commitment • Present and promote ideas enthusiastically
Innovator role	<ul style="list-style-type: none"> • Live with change and unplanned change • Think creatively • Manage change effectively
Mentor role	<ul style="list-style-type: none"> • Manage information effectively

	<ul style="list-style-type: none"> • Think effectively when reacting to arguments of others • Manage information to avoid overload • Reduce the need for problem solving and encouraging decision making • Manage core processes effectively
Monitor role	<ul style="list-style-type: none"> • Understand self and others • Communicate effectively • Develop employees through delegation

Source: Govender, P.,Parumasur, S. 2012. Evaluating the roles and competencies that are critical considerations for management development. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde*. Vol. 36, No. 1, pp.1-11.

Table 2.1 shows specific skills that a manager must possess in order to successfully perform the corresponding role. According to Hellreigel at *al.* (2008) skills are defined as the ability to convert knowledge into a particular action that will produce desired results. This definition is in line with that of Schermerhorn (2005, p.25) which states that: “a skill is the ability to translate knowledge into action that results in desired performance”. In the same context Whetten and Cameron (2002 cited in Mckenna 2004) defined skills as sets of actions that individuals perform which lead to certain outcomes. Putting these definitions by these authors into a business context in can be submitted that business management skills are the ability to convert business knowledge into a particular action that will achieve business goals. As such Table 2.1 indicates that for managers to be successful in executing their roles as facilitators, mentors, monitors, co-ordinators, directors, producers, brokers and innovators they would have to have all the skills shown in the second column. For instance a manager that has the skills to build teams and link team activity to business strategy, ensure participative decision making and manage conflict using collaborative approaches will be successful in his/her role as a facilitator. Similarly a manager who has the skill to communicate vision, set goals and objectives, design and organize business strategy using vision will be successful at his/her role as a business director.

The utilization of skills should be in relation to the context in which the skill is needed because what is critical is not the skill itself but the application of the skill (McKenna, 2004). In consideration of this statement the definition of business skills can be expanded to read as follows: business management skills are the ability to convert context relevant business knowledge into a particular action that will achieve desired outcomes in relation to what the context requires. Considering the complexity of business operations and other functions it can be argued that the skills indicated in Table 2.1 do not encompass all the required skills necessary to manage a business. This is because the context within which situations and challenges will present in business will always vary and as such a manager might need a skill that is not enlisted in Table 2.1 to handle that situation or address that issue. This submission does not seek to discredit Table 2.1 but simply highlights that there are a wide range of skills needed to successfully manage businesses (Govender and Parumasur, 2012). In an effort to include all necessary skills some authors have simply grouped the different skills into categories. Katz (1974, cited in Robbins and Coulter 2007) grouped the management skills required to perform the various management roles together as conceptual, human and technical skills. Pillay (2008) alluded to this notion with his submission that business management skills needed to perform the managerial functions more effectively and efficiently are strategic, people related and task related skills. Strategic skills relate to the conceptual skills, people related skills relate to human skills and task related skills relate to technical skills. These different categories of skills differ in their level of importance depending on the management task and management level (Stoner, Freeman, Gilbert, 1995; Badenhorst-Weiss, Cant, du Toit, Erasmus, Grobler, Kruger, Machado, Marx, Mpofu, Rudansky-Kloppers, Steenkamp, Strydom, 2007; Robbins and Coulter, 2007). Figure 2.2 shows the different categories of skills and their usefulness within the different management levels of management in an organisation.

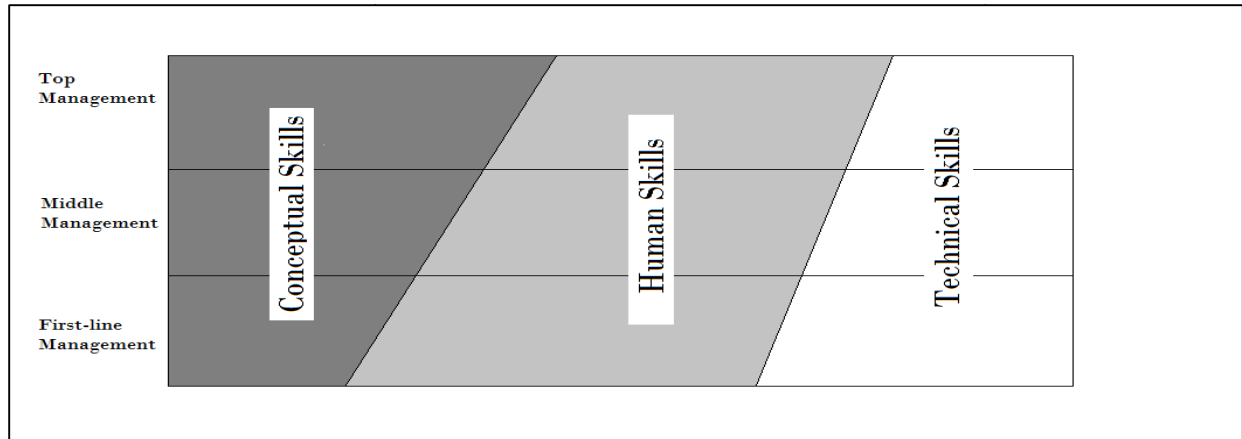


Figure 2.2: The Importance of managerial skills at the different levels of management

Source: Jones, G., George, J. 2009 *Contemporary Management*. 6th edition. McGraw-Hill Irwin, Burr Ridge IL.

Figure 2.2 shows that conceptual skills are more important at the role and level of top management. Human skills are important at all roles and levels of management but slightly more emphasized at the first line and middle management than the top management. The technical skills are more important at the first-line management than at the top management. A discussion into the three categories of skills will further elaborate this aspect.

Conceptual Skills

According to Gaspar *et al.* (2006), conceptual skills are defined as the ability to think about business issues on a broad and abstract scale. Hellreigel *et al.* (2008) defined conceptual skills as the ability to analyze issues and address complex problems. Jones and George (2008) defined conceptual skills as the capability to critically analyze and diagnose problems and differentiate between cause and effect. From the above definitions it can be argued that conceptual skills are the ability to take an aerial view of business operations in their entirety and manage them effectively solving any complex and non-complex problem that may arise. Conceptual skills involve knowing how the different parts or components of a business work together to achieve organisational goals (Kinicki

and Williams, 2006). For managers to develop these conceptual skills they must first understand the fundamentals and functioning of each and every component of business. This is supported by Pillay (2008) that strategic skills relate to setting of objectives on the basis of what is happening inside and outside the business. Formal education and training is therefore vital in developing these sets of skills because it will provide the fundamentals and functioning of all the aspects of business (Jones and George, 2009). Although these skills are most important for top level managers as shown in Figure 2.2, they are generally important for the success of a business as a whole. This is because these skills will enable managers to solve problems as already indicated above, identify opportunities for innovation, recognize problem areas and proactively develop and implement solutions, identify and select critical business information from a plethora of data and also understand their organization's business model (Robbins and Coulter, 2007). In relation to the specific skills presented in Table 2.1, the conceptual skills would include communicating vision, setting goals and objectives, designing and organizing business strategy using the company's vision; fostering productive work environment by adopting an effort-performance-outcomes-rewards contingency; designing work using effective job design strategies; managing across functions; building and maintaining a power base; negotiating agreements and commitments with stakeholders; presenting and promoting ideas enthusiastically; thinking creatively; managing information effectively; managing information in order to avoid overload; reducing the need for problem solving and fostering decision making and living with change and unplanned change. Considering the goal of business as indicated above, it is clear that, for a manager to make relevant and correct decisions in relation to the goals of business he/she will need these set of skills.

Human Skills

According to Gaspar et al (2006), human skills are the ability to get along and handle people effectively. Robbins and Coulter (2007) defined human skills as the ability to work well with others both as individuals and as groups. Pillay (2008) defined this set of skills as the ability to achieve objectives through and hand in hand with others. Jones and George (2009) expanded on these definitions when they submitted that human skills are

“the ability to understand, alter, lead and control the behaviour of other individuals and groups”. The definition by Jones and George (2009) is particularly more relevant to the current social environment which consists of a diverse workforce. This is because it takes into account the need to first understand, then alter lead and control behavior. Human resource management that is based on an understanding of individual strengths and weaknesses has shown to be effective in providing a good working environment that promotes creativity and problem solving amongst employees (Basset-Jones, 2005). This type of management that involves an understanding of different behaviors forms the basis of diversity management which is more relevant in the current environment. Businesses that adopt this type of management and embrace diversity manage to get the best out of their employees (Grobler, 2006). The skills presented in Table 2.1 that would fall under the banner of this category includes: building teams and linking team activity to business strategy; ensuring participative decision making; managing conflict using collaborative approaches; managing change effectively; understanding self and others; communicating effectively; developing employees through delegation; managing time and stress and thinking effectively when reacting to arguments of others. Human skills are therefore vital in a business to enable a manager to understand the issues of diversity and to have the know-how for dealing with people and also getting work done through people. Furthermore, human skills involve self management skills which affords a manager the ability to take responsibility for his/her life within the work related boundaries and outside.

Technical skills

Stoner *et al.* (1995) defined technical skills as the ability to use specialized procedures, techniques and knowledge of a particular field. Kinicki and Williams (2006, p22) defined technical skills as “the job specific knowledge needed to perform well in a specialized field”. Gasper et al (2006) simplified these definitions in their submission that technical skills are the specific skills needed to perform a specialized task. In essence technical skills are the skills needed to carry out certain operational tasks that are directly involved in the production of products and services at an operational level in a business. As such it stands to reason that any business will have certain specialized tasks related to the

production of goods and services that will require technical skills. In relation to Table 2.1 technical skills include the following: working productively to optimize performance; managing core processes effectively and managing workflow and projects. Managers need these skills to not only define the best approach for handling specific tasks given the resources available but to also supervise or oversee fellow professional or technical employees that are performing the skills (Gaspar *et al.*, 2006; Pillay, 2008).

2.3 IMPORTANCE OF MANAGERIAL SKILLS IN BUSINESS

According to Pillay (2008) managers need to develop several managerial competencies in order to be successful at their jobs. These managerial competencies include amongst other things behaviors, attitudes, knowledge and skills. Figure 2.3 shows the various factors that are considered to be important in business performance and subsequently outcomes.

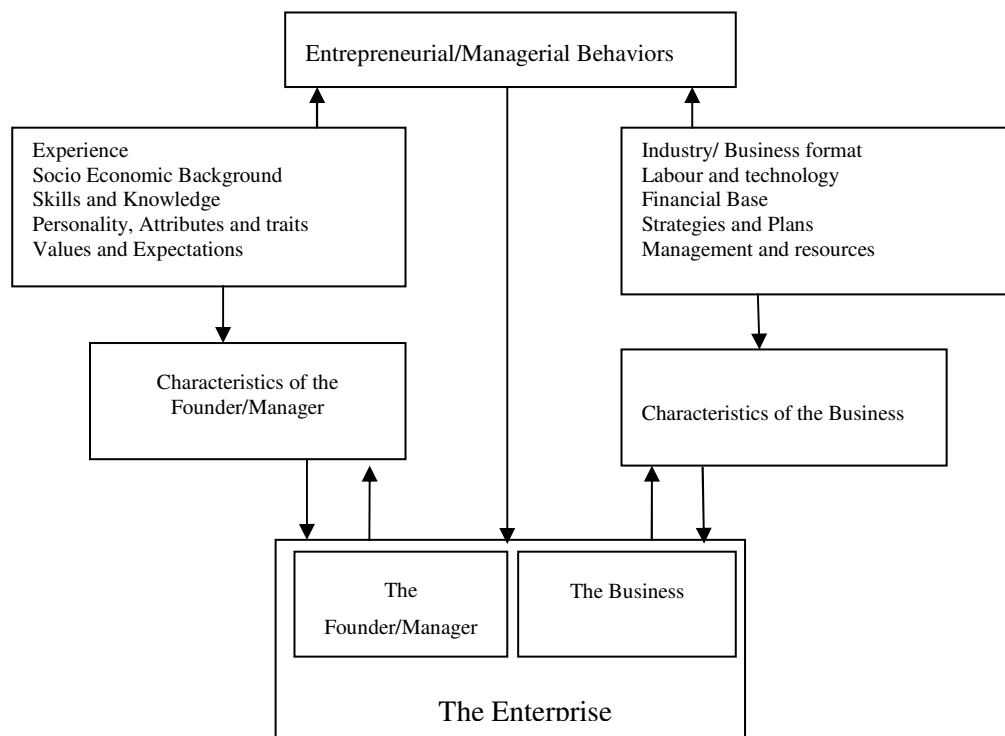


Figure 2.3: Internal factors affecting business outcomes

Source: Watson, K., Hogarth- Scott, S., Wilson, N. 1998. Small business start-ups: success factors and support implications. *International Journal of Entrepreneurial Behaviour and Research*. vol.4, no.3, pp. 217-238.

Figure 2.3 is an analytical framework setting out the factors that affect business performance from a management and the business perspective (Watson, Hogarth- Scott, Wilson, 1998). It is clear from this diagram that both the business founder or manager and the business are interrelated. The manager and the business form one entity called the enterprise which is influenced by both the characteristics of business and the manager. The characteristics of business and the manager are influenced and affected by the manager's personal factors and the business factors which also influences the way the manager will behave. The behaviour of the manager will then influence the enterprise itself. These intertwined relationships clearly indicate that successful business management is a complex phenomenon which consists of complex internal factors and external factors (Watson *et al.*, 1998). Although that is the case what can be drawn from this diagram and its interrelated components is that managerial and business factors influence the decisions and behaviours that a manager will take which will consequently affect the performance of the business. A lack of one of the factors on either side can negatively influence managerial decisions and behavior and be detrimental to business performance (Watson *et al.*, 1998). As business skills and knowledge are part of the individual factors that influence business success, it can be argued that the lack of business skills and knowledge will have adverse effects on business performance. This analytical framework indicates to some extent the importance of business management skills and knowledge amongst others on business performance.

The views presented by Watson *et al.* (1998) through this analytical framework are shared by other authors. According to Hellreigel *et al.* (2008), competence and success in business management is brought about by a combination of amongst other things the business management skills identified by Katz (1974). Smith (1967, as cited in Glancey, Grieg, Pettigrew 1998) also alluded to this view by submitting that business exhibiting high levels of profits and growth are managed by highly educated individuals with certain levels of management experience and skills who utilize a professional management style and strategic practices to take advantage of certain market conditions (Glancey, Greig, Pettigrew, 1998). Watson and Hogarth-Scott (1998) submitted that amongst other

variables, some of the causes of failure to survive and grow in small businesses is the lack of business education and exposure, people management and poor leadership skills (Watson *et al.*, 1998). Scase (1996 cited in Pratten 2004) submitted that knowledge of employee relations in micro business remains limited. Altzman (1996, cited in Pratten 2004) argued that the causes of business failure are; misunderstanding and mismanagement of working capital, retained earnings, profits and sales in relation to the assets used to generate those sales. Absence of financial controls, the inability to offer suitable products to the appropriate market using the necessary service skills have also been cited as some of the causes of business failure (Pratten, 2004). According to Thornhill and Amit (2003) failure amongst small businesses may be attributable to deficiencies in managerial knowledge and abilities (Thornhill and Amit, 2003). The views by these authors clearly indicate that there is a positive relationship between business skills possessed by managers and the success of business.

Some authors have a different understanding of business success and management competence. Osborne (1993) disagreed with the view that business performance is directly proportional to the skills and competence of its manager. According to Osborne (1993) business success depends on the firm's underlying concept and capacity to generate and accumulate capital. He further submits that business founders and managers should avoid markets dominated by one or more companies who have product or price leadership and they should further understand the underlying economics of the industries and sectors within which they operate (Osborne, 1993). Although Osborne clearly articulates his rejection of the aforementioned view on business performance and management skills and competencies, his submissions, however, indirectly agree with this view. For a business founder or manager to identify the issues stated by Osborne he/she will have to possess a certain level of business knowledge, skill and even experience. For instance for a person to understand the underlying economics of an industry and to be able to take a decision based on that understanding a certain level of business knowledge and skills will be mandatory. Osborne (1993) also submitted that for a business to be successful caution should be applied to start it where capital requirement suppresses discretionary cash flow (Osborne, 1993). For a person to satisfy this

requirement, he/she will need some level of financial management knowledge and skill. As such the views by Osborne still highlights that there is some form of relationship between business skills and knowledge and business performance and/or success as shown by Watson *et al.* (1998)'s analytical framework and the views by the authors mentioned above.

According to Kirkwood (2009) for businesses to grow there are certain skills and management characteristics required to enable it to do so (Kirkwood, 2009). Combining the view that business success is related to the skills and knowledge possessed by its management and the view that business growth is reliant on certain skills and management characteristics; it can then be submitted that there is a relationship between amongst other things business skills possessed by managers and the success, survival and growth of business (Watson, Hogarth- Scott, Wilson, 1998).

2.4 OPTOMETRY IN SOUTH AFRICA

According to the American Optometric Association (2012) an optometrist is a primary eye care professional who examines, diagnoses, treats and manages diseases, injuries and disorders of the visual system, the eye and associated structures. Optometrists are also trained to detect critical health issues, such as diabetes and hypertension, while examining the eye (American Optometric Association, 2012). In South Africa the profession of Optometry is regulated under the Health Profession Act of 1974 (Ritcher, 2007). Under this Act the scope of Optometry is somewhat different to what is described by the American Optometric Association. For instance, unlike their American counterparts Optometrists in South Africa are not allowed to treat and manage the majority of eye diseases, their role is more restricted to the detection of eye diseases than the treatment and management thereof (Health Minister, 2001). To be more specific the scope of optometry practice as prescribed by the Health Ministry and enforced by the Health Professions Council of South Africa (HPCSA) indicates that Optometrists are allowed to perform eye examinations with specific intentions of detecting visual errors and/or the correcting those errors and other related factors with spectacles lenses, frames and contact lenses. The scope further indicates that in their performance of visual

examinations Optometrists may use certain scheduled substances approved by the HPCSA for diagnosis purposes only (Health Minister, 2001).

Although this scope of practice as documented by the Health Ministry paints a somewhat different picture to what optometrists do as per the American Optometric Association, the point driven by this practice scope is that optometrists perform a vast number of activities, procedures and techniques within their profession. The provision of optical devices such as spectacles and/or lenses and/or spectacle frames and/or contact lenses and the maintenance thereof is the emphasis of Optometry practice in South Africa mainly because of the significant contribution margins brought in by these devices (Mashige and Naidoo, 2010). The provision and or sale of optical devices or products in pursuit of profits has in a way altered the structure of optometry in South Africa by introducing a retail arm into the profession (Pullman, 1996). According to Fry, Stoner and Hattwick (2001) a business is an entity that strives for profits through the provision of products and services that satisfy certain needs of customers. Considering this submission by Fry *et al* (2001) together with the submission by Pullman (1996) it can be argued that Optometry is a business that consists of both the professional and retail business arms. Ramela (2012) alluded to this notion when he submitted that the current status quo in Optometry is that there is an imbalance between two extremes namely professional and retail Optometry. Furthermore the status quo is that the retail optometry arm is more dominant than the professional arm (Ramela, 2012). According to Ramela (2012) this retail arm will get stronger and stronger over time meaning that there will be more retailing in Optometry in years to come. The submission by Mashige and Naidoo (2010) also proves this notion of more retailing in Optometry by indicating that it is the major income generator in this sector.

An untested view is that the concentration of Optometric practices in the private sector where the pursuits of profits is the order of the day has also driven the focus into the retail arm of the profession. Attempts to prove or disprove this view through literature proved in vain because no literature currently exists in South Africa that talks to issues around

Optometric Practice Management. However the existing literature proves the view that Optometry is indeed a private practice profession. According to Rosen (2004 as cited in Mashige and Naidoo, 2010) the profession of Optometry started in South Africa in 1924. As this was in the apartheid era, this profession and the practice thereof were also influenced by apartheid policies and rules. Due to these policies Optometry was mainly a private practice profession and was hardly found in the public sector such as public hospitals (Oduntan, Louw, Moodley, Richter, Von Poser, 2007). Even post the apartheid era after the apartheid policies and rules were changed, Optometry continued to be mainly a private sector profession. This submission is supported by research conducted by the International Centre for Eye Care Education and by the authors Mashige and Naidoo (2012). According to the International Centre for Eye Care Education in 2007, 95% of all the registered Optometrists in South Africa were practicing in the private sector (Brain, 2007). Currently, there are over 3500 registered Optometrists in South Africa (HPCSA, 2012). Although there is currently no literature similar to the one by Brain (2007) showing the number of Optometrists in the private sector, it can still be assumed that the number of Optometrists in the private sector is significantly larger than those in the public sector. In 2006 there were four hundred (400) optometrists registered in KwaZulu-Natal and of these, two hundred and sixteen (216) owned their own private practices (Mashige and Naidoo, 2010). The research by Mashige and Naidoo (2006) does not show the number of practices these Optometrists owned and the number of Optometrists employed in those practices, however, it does indicate that more than 50% of Optometrists in KwaZulu-Natal were in private practice in 2006. Currently the register of Dispensing Opticians, Optometrists, Orthoptists, Supplementary Optical Dispensers and Optometrists shows that there are 480 registered Optometrists in KwaZulu-Natal. At this point it would be useful to indicate that no literature or records exist showing how many of these 480 Optometrists own their own practices. The HPCSA register only shows the number of Optometrists registered and does not provide details of practice owners and non-owners. The organisation that should have been having such information is the South African Optometric Association; however, their database only shows Optometrists Affiliated with them. Since registration with the council is voluntary the

results of that search could not be deemed accurate as some Optometrists might have elected not to affiliate with the association.

Despite this lack of literature, using the research by Mashige and Naidoo (2010) and the one by Brain (2007) it can be assumed that a significant number of Optometrists in KwaZulu-Natal are in the private sector. Oduntan *et al* (2007) alluded to this notion with the submission that Optometry in South Africa has recently been introduced into the public sector and optometrists have consequently been employed in various hospitals, however, private practice still remains the preferred method of practice and employment for most Optometrists in South Africa (Oduntan *et al.*, 2007 ; Mashige and Naidoo, 2010). The submissions by the various authors as indicated above highlights the view that Optometry is mainly a private practice profession. This sustained preference of the private sector means that Optometry has over the years been exposed to the conditions surrounding private sector businesses.

It was indicated in this text that Optometry is governed by the Health Profession Act of 1974. However over and above this Act and as is the case with other health care professions, the profession of Optometry is guided by a set of ethical rules determined from time to time by the HPCSA. The focus of the optical industry on the retail part of the profession coupled with the ever changing socio economic environment prompted the HPCSA to develop a policy that will reiterate some of the existing ethical rules and make adjustments to the others in relation to the economic environment. According to this policy a health care practitioner (in this case Optometrist) may only practice under the business models of sole proprietor, partnership, association or incorporated practice only (HPCSA, 2005). Other business models outside the ones specified are not allowed and would lead to prosecution by the HPCSA (HPCSA, 2005; Ritcher, 2007). The implications of this part of the policy are that there is no limited liability for health care practitioners meaning that the exposure to risk is high. The policy also regulates relationships between health care practitioners with corporate entities. Corporate ownership which according the HPCSA (2005) means “allowing a person (whether

natural person or a juristic person) who does not otherwise qualify as a partner or shareholder of a professional practice of the Act or the Ethical Rules to directly or indirectly in any manner whatsoever, share in the profits or income of such a professional practice...” is not allowed. Simply put direct or indirect ownership of a professional practice by a person other than a registered health care practitioner is not allowed (HPCSA, 2005). Furthermore corporate involvement which according to the HPCSA (2005) means “allowing corporate entities or other persons to provide services (whether of a financial, investment, administration, rental or similar nature) to a professional practice...” is allowed under certain conditions. These extracts from the HPCSA policy indicates that, although not impossible, it is rather difficult to involve a third non-registered party into this business. The implications of this are that people with the required business skills and experience are restricted to get involved and assist with the management and growth of optometry practices.

The ethical rules of the HPCSA prohibits a health care practitioner to canvass or tout to patients or even allow canvassing and touting to done on his/her behalf by a third party (HPCSA, 2007). The advertising of products and services is also regulated by the same ethical rules. Under these ethical rules, the advertising of products and services may only be done provided the advertisement is not unprofessional, untruthful, deceptive or misleading or causing unwarranted anxiety to consumers that they may be suffering from certain health conditions (HPCSA, 2007). It is because of these ethical rules and others that the HPCSA is not particularly welcoming of franchises into the profession. According to the HPCSA (2005) franchises of health care services transgress the ethical rules on advertising, canvassing and touting, naming of practice, information on professional stationery, fees and commissions, partnership, professional secrecy, consulting rooms, exploitation and performance of professional acts. Health care practitioners who practice under the banner of franchises are not restricted to do so; however, such practitioners must guard against contravening the above-mentioned ethical rules or otherwise they will face prosecution by the HPCSA (HPCSA, 2005). These restrictions coupled with the transgressions stipulated by the HPCSA highlight the kind of pressure Optometrists practice under. On the one hand they have to comply with the

HPCSA's ethical rules yet they have to compete with franchises that are contravening those same rules.

In consideration of the issues raised in the preceding paragraphs it is evident that Optometrists compete in a highly unbalanced, uncertain and unfair market. The practice of Optometry is leaning more towards a retail business model rather than a professional practice, yet at the same time Optometrists are understandably restricted in adopting retail business concepts. To add to this complexity Optometrists are regulated and to some extent restricted to involving non registered parties in their practices who may have otherwise assisted with the management, sustainability and growth of their practices. The participation of franchises in this industry further exacerbates the situation because they transgress the ethical rules of The HPCSA such as advertising, canvassing and touting. This then makes them more competitive and consequently more profitable than the rest of the practices whose registered owners choose to comply with the rules of the HPCSA. This situation in Optometry proves the submission by Martin and Staines (1994), that small businesses are more vulnerable to variations and uncertainty in their economic environment than large ones. Business management skills such as innovative, risk taking and interpersonal skills are essential for managers to make a success out of their businesses in such environments (Martin and Staines, 1994).

2.5 MANAGERIAL SKILLS IN OPTOMETRY

The importance of business managerial skills for the success, survival and growth of businesses has been discussed in this text. However, Martin and Staines (1994) argue it would be a mistake to treat all small business alike. This is because small businesses have limited resources and are more prone to mistakes and variations in their economic performance than larger ones (Martin and Staines, 1994). Furthermore, small businesses are more likely to engage in informal management practices than to adopt sophisticated business techniques (Martin and Staines, 1994). In support of this notion Goss (1991 as cited in Martin and Staines, 1994) argued that small businesses differ in their organisational structure, inter-industrial, economic and social context. In light of the

above views, it can be argued that although there are universal business skills essential for growth, survival and success as suggested by Katz (1974) and other authors; the business setting and context within which they are applied and utilized is also important. In other words, over and above the management skills needed for business, an understanding of the industry in question is key for the successful implementation of those skills (Martin and Staines, 1994).

The complexity of the optical industry has already been indicated and highlighted in this text. Further to this the imbalance towards the retail business has also been discussed in this text. Due to these complexities and preferred business model, over and above their professional roles most Optometrists have to execute entrepreneurial and managerial roles in their day to day practice of the profession (Pullman, 1996; McDaniel, 2006). As per the view by Martin and Staines (1994) that for managers to be successful they need to understand their respective industry; the indications in optometry are that such is the case. Optometrists have a clear understanding of the optical industry and the functioning thereof (McDaniel, 2006). However, despite this there is no evidence to suggest that Optometrists have the required universal business management skills that are also critical for business, survival, growth and success. The views expressed by the authors (Gerber, 2006; Beach and Kanji, 2011) alluded to this notion. Beach *et al* (2011) stated that: “As optometrists, many of us have excellent clinical skills but possess limited business knowledge”.

Gerber (2006) stated that: “There are still some valuable pearls of management wisdom that many practitioners have not yet fully embraced. ... they can be important to the success of an optometric practice, and they can be crucial to the new optometrist attempting to secure a practice or survive those critical first few years”.

It should be noted however that these two authors are American authors; as such their views might be slightly out of context as far as South Africa is concerned. However, going back to the role of an Optometrist as discussed herein and comparing it to the role of an Optometrist as pronounced in the definition by the American Optometric

Association, it becomes evident that although somewhat different Optometrists in South Africa share common roles with those of their American counterparts. It can therefore be argued that the views by the authors Beach *et al* (2011) and Gerber (2006) are to some extent relevant to the South African context. The actual situation in South Africa is that no literature currently exists that proves or disproves the views by these two authors. Ritcher (2007) also found difficulty in getting literature relating to Optometric Practice Management and or business skills in the optical industry in South Africa.

The training of Optometry students in South Africa is provided by four institutions and Optometric Practice Management which attempts to develop business management skills forms part of all undergraduate Optometry courses in these institutions (Ritcher, 2007). These institutions are the University of Johannesburg (UJ) (formed by the merger of the Technikon Witwatersrand and Rand Afrikaans University), the University of Free State (UFS), University of KwaZulu-Natal (UKZN) (formed by the merger of University of Durban Westville and University of Natal) and the University of Limpopo (UL) (formed by the merger of University of the North and Medical University of South Africa) (Mashige, 2010; Mashige and Naidoo, 2010). Optometry is offered as a four year programme at all four institutions (Mashige, 2010). In these four years, practice management or the development of business skills is given little attention as the programmes focus more on the clinical aspects of the course (Ritcher, 2007). For instance, at University of KwaZulu-Natal students spend the first two years studying basic and visual sciences including mathematics, physics, chemistry, biology, microbiology, biochemistry, physiology, psychology, geometrical optics, clinical techniques, ocular anatomy, dispensing and ophthalmic optics (Mashige, 2010). The other two years students study general clinics, pharmacology, diagnosis and management of ocular diseases, physiological optics, paediatric vision, low vision, binocular vision, neurophysiology of vision, contact lenses, public health, research methods and practice management modules (Essack, 2007). The practice management module which is more aligned to business management is only offered in the final year of study.

The contents of the Practice Management modules offered at the different institutions are not based on any particular literature or a set of guidelines (Ritcher, 2007). The HPCSA the body that regulates the profession of Optometry and the training thereof and also accredits institutions that wish to train Optometrists, does not have clear guidelines as to what a Practice Management module should contain (Ritcher, 2007). The closest document the HPCSA has, is a proposed core curriculum on human rights, ethics and medical law for health care (Ritcher, 2007). The contents of this module have thus far been a mixture of entrepreneurship or a superficial mixture of ethics, finance and marketing which also varies from institution to institution (Ritcher, 2007). Further to this module being baseless and superficial, it has failed to some extent to provide Optometry students with the relevant business management skills they need to survive in the market. Schubach (2002, cited in Ritcher, 2007) supported this view through a study that reported that the majority of Optometrists in practice indicated that they had no exposure or preparation to general business management. This shows that there is no literature that is used as the foundation or a framework of this practice management module. Furthermore no literature currently exists that affirms the relevance of these course contents to the requirements of the optical industry.

2.6 SUMMARY

The profession of Optometry consists of both the professional (clinical) and the growing and dominant retail arms. Authors have documented general business management skills needed to sustain, grow and make a success of retail and other businesses. In Optometry however, the issue of business management skills has received little or minimal attention both in terms of undergraduate training and peer reviewed literature. The lack of literature in optometry business management within the context of South Africa questions the business skills amongst practicing optometrists and the relevance of business management modules provided to optometry students in preparing them for their role as practice managers. The need is therefore indicated to not only document the business skills amongst optometrists in South Africa; but to also address the gaps (if any) in the training of optometrists by comparing the skills they have to the required and

documented business skills. This will help in ensuring the, survival, growth and success of optometry practices in South Africa. The methodology adopted to conduct this study is discussed in Chapter 3.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

As indicated in Chapter 1 this study aims to establish whether Optometrists in KwaZulu-Natal have the required business management skills to successfully manage, grow and sustain their optometry practices. In line with the aim of this study, the target population included only optometrists in private practices and excluded those in the public sector. The research design and methodology adopted to conduct this study is outlined in detail in this Chapter.

3.2 AIM OF THE STUDY

The aim of this study was to determine whether Optometrists possessed the necessary business skills to efficiently and effectively manage their practices.

3.3 PARTICIPANTS AND LOCATION OF THE STUDY

The study was conducted on Optometrists practicing in the KwaZulu-Natal Province of South Africa. However based on the objectives of this study not all Optometrists were eligible to participate in this study. This is because the objectives of this study included determining the training needs of Optometrists with regards to practice management and also the challenges encountered by Optometrists in managing practices. As such only Optometrists who were currently running their own practice(s) were eligible to participate because they were most suited to respond to the questions posed by this study.

3.4 RESEARCH APPROACH

Research approach or design is described as a plan adopted by the researcher to conduct the research (Kumar, 2005). It provides a detailed procedure of the plan of action that will be taken to validly, objectively, accurately and efficiently answer the research

questions (Kumar, 2005). The approach chosen to conduct a research study must therefore allow for the above conditions to be met and also have the capability of supporting the research, facilitating the achievement of the aim of the research and completing the research (Quinlan, 2011). To be able to satisfy the above conditions, this study adopted a quantitative and descriptive approach.

3.4.1 Why quantitative

According to Cooper and Schindler (2006), research can be qualitative or quantitative. Qualitative research attempts to “provide detailed description of events, situations and interactions between people and things thus providing depth and detail” (Cooper and Schindler, 2006). It seeks to develop an understanding through detailed description (Hair, Celsi, Money, Samouel, Page, 2011). Quantitative research on the other hand aims to precisely measure variables. It is used to measure variables such as consumer behaviour, knowledge, opinions and attitudes with the aim of answering questions such as how much, how often, how many, when and who (Cooper and Schindler, 2006). Within the context of this study, a qualitative study would attempt to determine the level and extent of business management skills optometrists have whereas a quantitative study would have attempted to determine whether or not optometrists possess business management skills. Since it was not known whether these optometrists have the business management skills, it was irrelevant to determine the extent of the business skills. A quantitative study design was therefore more appropriate and relevant for this study.

3.4.2 Why descriptive

According to Sekaran and Bougie (2009); “studies may be exploratory or descriptive in nature, or they may be conducted to test hypotheses”. Exploratory studies are relevant in cases where a clear idea of the problems to be encountered during the research process does not exist (Cooper and Schindler, 2006). They are also relevant when little information about the research phenomenon and how it has been handled before exists (Sekaran and Bougie, 2009). Descriptive studies on the other hand, are typically

structured with clearly articulated investigative questions (Hair *et al.*, 2011). According to Cooper and Schindler (2006) descriptive studies are more relevant when the following factors are investigated; descriptions of phenomena or characteristics of a subject population; proportions of a population with certain characteristics; associations amongst different variables.

This study aimed to investigate whether or not optometrists presented the relevant business skills needed to effectively and efficiently manage their practice and the proportions of optometrists with such skills. In essence, this study aimed to investigate the characteristics of optometrists in KwaZulu-Natal and to also determine the proportions of optometrists with those particular characteristics. As such this study was descriptive in nature.

3.5 SAMPLING

In research, the term population refers to the total collection of individuals or objects on which the investigation is being made (Hair *et al.*, 2011). These individuals and objects are referred to as elements of a population (Hair *et al.*, 2011). When conducting research on large populations; because of certain constraints such as time, costs, availability of elements, etc a sample is normally drawn from the population elements (Cooper and Schindler, 2006; Sekaran and Bougie, 2009). According to Quinlan (2011) a sample is a small subset of the entire population that is under investigation. The rationale behind sampling is that by selecting some elements in the population under investigation, a conclusion may be drawn about that population (Hair *et al.*, 2011). According to the HPCSA (2012) there are four hundred and eighty (460) optometrists registered in KwaZulu-Natal. Considering the size of this population, the time frame and the limited availability of, and access to the elements, a sample would be drawn.

For a conclusion to be drawn about the population with certain levels of validity, a sample must be selected using some degree of accuracy and precision (Cooper and Schindler, 2006; Sekaran and Bougie, 2009). As such the members of a sample must be

selected using one of the proven sampling procedures. These procedures can either be probability or non-probability procedures. According to Hair et al (2011) probability sampling procedures are based on the principle of random selection where each element has a known non-zero chance of being selected.

The simple random sampling method is one of the probability sampling methods that has the least bias and offers the most generalisability (Sekaran and Bougie, 2009). This method involves selecting a random sample from a particular sampling frame using different methods such as putting all the names in the sampling frame into a hat and randomly selecting a sample from that hat (Quinlan, 2011). Although this method has the least bias as discussed above, Sekaran and Bougie (2009) argue that this method can in some cases be cumbersome, expensive and time consuming. Furthermore these authors argue that in some cases it is not possible to get an updated list of the population thus making it difficult to adopt and use this sampling process.

Non-probability sampling on the other hand is subjective and arbitrary and elements have no known chance of being included in the sample (Cooper and Schindler, 2006). According to Sekaran and Bougie (2009), because the elements have no known chance of inclusion into the sample, non-probability sampling cannot be used if the findings are to be confidently generalized to the population. In some cases however non-probability sampling can be the only sampling that can be used to collect data (Sekaran and Bougie, 2009).

In this study databases consisting of the names and contact details of all optometrists were sought from the Health Professions Council of South Africa and other stakeholders. Using the inclusion criteria of only optometrists in private practice a sample frame of 300 optometrists was drawn from these databases. Using the sampling Table from Sekaran and Bougie (2009, p295) an initial sample of 175 optometrists was selected using the simple random sampling method. An electronic and manual distribution of the questionnaire to this sample yielded a very low response which necessitated the use of a non-probability sampling. The non-probability sampling approach involved the electronic

and manual distribution of the questionnaire to all 300 elements in the sampling frame. From this 102 responses were received which was the final sample for the study.

3.6 DATA COLLECTION

According to Sekaran and Bougie (2009) research data can be collected in various ways each with its own advantages and disadvantages. These different ways include face-to-face interviews, telephone interviews, computer assisted interviews, electronic media interview, administering of questionnaires either through mail or electronic distribution and observations of individuals and events with or without electronic recording (Sekaran and Bougie, 2009). According to Sekaran and Bougie (2009) questionnaires are one of the most efficient data collection tools that can be used when the researcher knows exactly what is required and how to measure the variable of interest. Interviews are most suitable for exploratory research whereas observation is more relevant in situations where information needs to be elicited without getting verbal responses from participants (Sekaran and Bougie, 2009). For the purpose of this study it was obvious that observations would not be suitable due to the nature and objectives of the study. Furthermore since this study was descriptive in nature, interviews were also not suitable to illicit information. In this study, the variable in question was clearly known and the method of measuring that variable of interest was known, as such questionnaires were most suitable for this study than the other two methods of collecting data.

According to Sekaran and Bougie (2009), depending on the area to be covered questionnaires can be distributed in different ways. These include manual distribution, mail and electronic. Although mail distribution of questionnaires has the advantage of a 100% response rate, its limitations are that it is more suitable for a confined local area (Sekaran and Bougie, 2009). Mail and electronic distribution has the advantage of wide geographical coverage in a short period of time, however, the disadvantage of this type of distribution is the low response rate and the fact that respondents must be willing to answer the questionnaire (Sekaran and Bougie, 2009). Considering that this study was

being conducted in the entire province of KwaZulu-Natal in a short time period, a distribution method that could cover a wide area in a short period of time was needed. As such electronic distribution via email was chosen as the most efficient and effective method for its ability to reach a wide geographical area in the shortest period of time amongst the other methods in a cost effective way. For this reason questionnaires were emailed to the subjects of this study. Further to the email, electronic copies of the questionnaire were manually delivered to some of the practitioners' local to the eThekweni municipal area and surrounding areas in order to maximize the response rate.

3.7 DEVELOPMENT OF THE INSTRUMENT

According to Cooper and Schindler (2006) in designing a research instrument it is important to follow the steps outlined below:

1. Use filter questions to screen prospect
2. Establish rapport with buffer questions
3. Build interest with early target questions
4. Sequence questions from general to specific
5. Include skip directions to facilitate sequencing

The research instrument for this study was designed using the above mentioned steps. The first few questions that were used to establish a rapport were also used as filter questions to exclude those who were supposed to participate. For instance, the objectives of this study were limited to optometrists in private practice who also studied in South Africa; as such the question on where the optometry qualification was obtained only provided the four optometry schools as an option without giving an option of adding another school. Furthermore the question asking respondents how long they were in private practice excluded optometrists that were not in private practice.

Although it would have been ideal to group questions according to a particular topic or objective, questions were arranged from general to specific in order to minimize the dropout rate. As such questions were also arranged in such a way that the straight forward, simple questions were asked first and the more sensitive questions such as their failures in practice were asked towards the end. This not only ensured low dropout rates but it also ensured that interest was built in the early stages of the questionnaire as per Cooper and Schindler (2006). Further to this, the use of a web based research administration platform (Questionpro) allowed for accurate electronic facilitation of sequencing.

In terms of the measurement scales; Cooper and Schindler (2006) indicated that several factors must be considered when selecting and constructing a measurement scale. These factors which can influence the reliability, validity and practicality of the scale are research objectives, response types, data properties, number of dimensions, balanced or unbalanced, forced or unforced choices, number of scale points and rater errors (Cooper and Schindler, 2006).

There are generally many objectives for research, however, researchers generally face two types of scaling objectives (Cooper and Schindler, 2006). These are to measure characteristics of the participants and/or to use the participants as judges of the objects or indicants presented to them. In this study the first three objectives were aimed at measuring characteristics of the participants and that of their practices or industry within which they practiced. The last objective was aimed at using the participants as judges of the practice management module. As such the two types of scaling objectives existed in this study.

According to Hair *et al* (2011) measurement scales fall into one of four general types namely: rating, ranking, categorization and sorting. A rating scale is relevant to questions where participants score an object or a variable without having to make a direct

comparison to another whereas a ranking scale on the other hand, is used when a comparison between two or more objects has to be made (Cooper and Schindler, 2006). Categorization asks participants to put themselves or other indicants into groups or categories and sorting requires them to put cards representing concepts or constructs into piles using pre-established criteria (Cooper and Schindler, 2006). The objectives of this study did not require participants to compare any variables or to put cards together into piles therefore the ranking and categorization were not relevant and not used in this study. The research objectives required the use of the rating and categorization scales.

As already indicated above, the choice of measurement scales is often driven by the type of data properties generated by each scale. According to Hair *et al* (2011) scales can be nominal, ordinal, interval or ratio. They further stated that “nominal scales classify data into categories without indicating, order, distance, or origin; ordinal scales show relationships of more than or less than but have no distance or unique origin; interval scales have both order and distance but no unique origin and; ratio scales possess all four properties’ features”. Considering the objectives of this study it was possible to illicit the required information using the nominal and ordinal scales.

The number of dimensions is another important factor to consider when selecting and constructing measurement scales. Measurement scales can either be one-dimensional where only attribute about the participant/ object is investigated or can be multidimensional where several dimensions are investigated (Cooper and Schindler, 2006). It is clear from the objectives of this study that several dimensions of the participant will be investigated per objective thus indicating a multidimensional study.

Another decision has to be taken whether to have balanced or unbalanced scales. Balanced scales are the ones with an equal number of categories above or below or either side of the midpoint whereas an unbalanced scale has an unequal number of categories as the name suggests (Cooper and Schindler, 2006). Unbalanced scales have a tendency to

persuade participants towards one direction and are as such justifiable where the researchers know in advance what direction the responses will take (Cooper and Schindler, 2006). In this study the responses of the participants were not known in advance, as such balanced scales were more appropriate. Also, a balanced scale in this regard meant that responses were not influenced in any particular direction.

Cooper and Schindler (2006) indicated that the issue of forced or unforced choice is another important factor that has to be considered. A forced choice scale requires that a choice be made amongst the offered alternatives whereas the opposite is true for unforced choice (Cooper and Schindler, 2006). A forced choice scale is reasonable in a situation where participants have to be constrained to focus on the alternatives carefully but at the same time it can also introduce bias towards the midpoint where participants have an attitude towards a particular question (Cooper and Schindler, 2006). In this study forced choices were used on questions which were integral to the objectives of the study in order to focus the attention of the participants on the listed objectives.

According to Cooper and Schindler (2006) another issue to consider is the number of scale points. The ideal number of scale points is debatable according to Cooper and Schindler (2006), however, the authors indicate that a simple answer to this debate is that the number should be practical, match the stimulus presented and extract the information appropriate to the complexity of the attitude, object, variable, concept or construct. A simple object, variable, concept or construct would require a 3-point scale but the more complex it gets a 5-11 point scale should be considered. For the purposes of this study a 5 point scale was more appropriate considering the level of complexity of the variables in question. The use of a 5 point scale was not appropriate for the complexity of the variables but it also provided an opportunity to minimize raters' error such the error of central tendencies.

3.8 PRETESTING AND VALIDATION

Reliability refers to the extent to which the measuring instrument consistently measures whatever concept is under measure (Sekaran and Bougie, 2009). In other words if the results of a study can be reproduced under a similar methodology, then the research is considered reliable (Joppe, 2000). To ensure reliability of the research instrument a pilot study was conducted in the study area to check the appropriateness of the questionnaire prior to the main study. The pilot study was conducted by the researcher on experts in questionnaire design and compilation and on small number of the target population. Self administered and careful wording of questions increased participants' reliability. All queries that arose from the pilot study were addressed and the questionnaire was modified accordingly before the study was carried out. Further to this reliability in this study was provided by the inclusion of all practitioners who in private practices thereby making it a fully inclusive sample

Validity refers to the extent to which a research instrument measures the particular concept that it is intended to measure (Sekaran and Bougie, 2009). According to Joppe (2000) "validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are". The validity of the findings in this study was maintained as a result of the population being carefully defined with the samples that represent it. Appropriate techniques of analysis were used; descriptive statistics were applied to analyze data using the Statistical Packages for Social Sciences (SPSS) and statistical software R. Also, expert support was provided to the researcher with design of the questionnaire, data capturing and analysis.

3.9 ANALYSIS OF THE DATA

Following the data collection phase, data was sent to a qualified Statistician for analysis. The data was analyzed using a Statistical Software called R and the Statistical Packages for Social Sciences (SPSS). The analytical methods and tests used in the analysis included the following:

- Cronbach's alpha as a measure of the internal reliability of a scale.
- Pearson's correlation coefficient. This coefficient is a statistic between -1 and 1 which is used to estimate the nature of the relationship between two variables (positive value = positive relationship, negative value = negative relationship, zero value = no relationship). There is an associated hypothesis test which allows researchers to test the null hypothesis that the correlation is zero against the alternative that there is a relationship. If the p-value is less than 0.05 the null hypothesis is rejected and conclusion drawn that there is a relationship between the two variables.
- Multiple linear regression was also used to analyze a linear relationship between a single dependent variable and several independent variables.
- Quantile-quantile plots were used for comparing the data to a standard normal distribution, as a graphical measure of the normality of the data.
- A Shapiro-Wilk test was conducted for normality of the data. This was used to test the null hypothesis that the data came from a normal distribution, and an alternative hypothesis that they did not. A p-value of less than 0.05 from this test means that the null hypothesis should be rejected.

These methods for assessing normality were introduced because some of the other methods used (Pearson's correlation coefficient and multiple linear regression) depended on the assumption that the data was normally distributed.

3.10 SUMMARY

The information presented in this chapter shows that every effort was taken to ensure that scientific research methods were adopted to collect and analyze the data for this study. In line with the nature and objectives of this study, a descriptive quantitative study approach was adopted. Furthermore, scientific yet practical sampling methods were adopted to ensure generalization of the study findings. The study instrument was developed using scientific scaling methods to ensure that it elicited the information it was supposed to. A

Cronbach's alpha value of more than 0.7 was consistently obtained by the study instrument indicating internal reliability of the instrument scales. Reliability and validity of the study instrument was attained by conducting a pilot study and using appropriate analysis tools, tests, methods and support to analyze the results. To maximize responses in the limited time frame, reminders were sent out to optometrists to complete the questionnaire. These reminders were sent out on three separate occasions after the initial questionnaire distribution. Although a 100% response rate was not obtained in this study, the response rate was statistically significant to infer the results (as presented and discussed in Chapter 4 of this study) on the target population.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 INTRODUCTION

As discussed in the preceding chapters, the topic of business management skills has received little attention in Optometry, both in terms of undergraduate training and peer reviewed literature. This minimal attention together with the lack of literature questions the business skills of optometrists and the relevance of business management modules provided to optometry students in preparing them for their role as practice managers. To address these issues, this study aimed to investigate the business skills Optometrists have and the challenges they faced in running their practice. The results obtained from this study will be presented and discussed in this chapter.

4.2 RESPONSE RATE

According to the Health Professions Council of South Africa (HPCSA) database there were 460 optometrists practicing in the private and public sector in KwaZulu-Natal (HPCSA, 2011). This number, however, did not represent the total target population of this study as it included optometrists in the public sector. To determine the total number of optometrists in the private sector various databases were sought and utilized. This included databases from the South African Optometric Association, Medical Aid administrators, online telephone directories and the yellow pages. From these databases it was determined that from the 460 optometrists in KwaZulu-Natal approximately 300 of them were in the private sector. This number constituted the target population for this study. Using the sample size table for a given population size by Sekaran and Bougie (2009, p295), a sample size of 175 was determined.

The different databases utilized were then used to draw a sampling frame consisting of 300 optometrists in private practices. From this sampling frame an initial sample of 175 optometrists was selected using the random sampling method. A questionnaire was then

administered both electronically and manually to the selected optometrists. The response rate from this sample was very low (2%). In an effort to improve the response rate a non-probability sampling approach was adopted. This approach which was used included sending the questionnaire to the entire sampling frame. Following this approach a total number of 102 responses were received from those who were willing to participate constituting a response rate of 34% which was adequate for tolerable confidence intervals around the desired parameters. Although the response was not as high as desired, it was higher than the 14.26% response rate of a similar study conducted nationwide by Ritcher (2007).

4.3 DEMOGRAPHICS

Of the responses received, 58.42% were females and 41.58% were males. The racial distribution of the respondents is shown in Figure 4.1. Asians made up the majority of the respondents followed by Africans. Coloureds were the least of the respondents with only one (1) response received from this group.

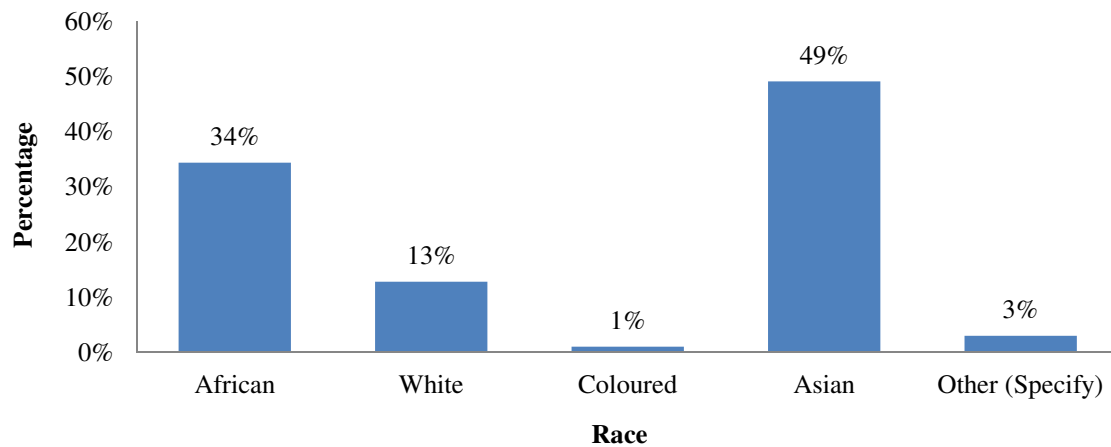


Figure 4.1: Race distribution of respondents

A significant number of respondents were in practice between 1 and five years as seen in Figure 4.2.

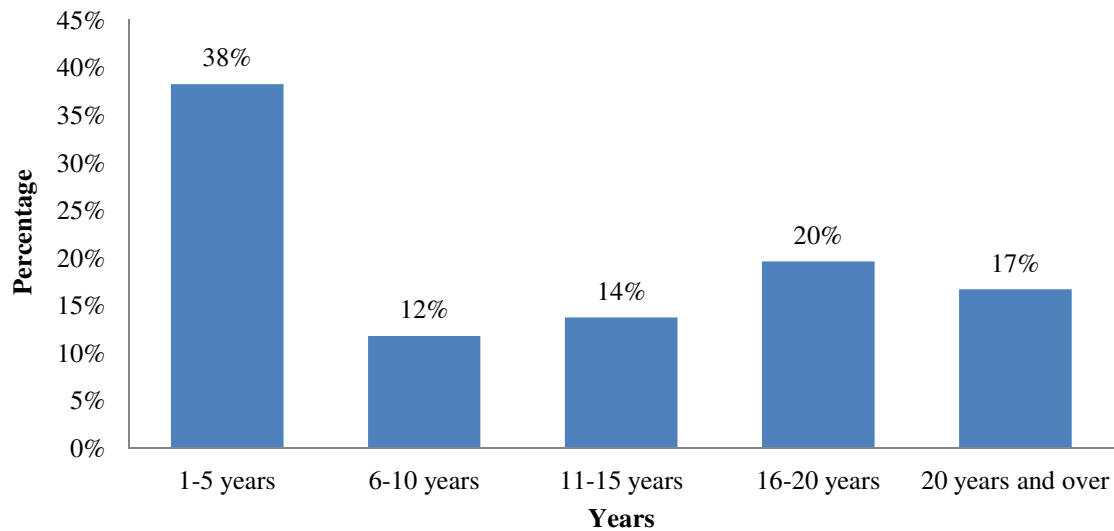


Figure 4.2: Number of years in private practice

The positive aspect of this trend shown in Figure 4.2 is that these optometrists had been in private practice long enough to have encountered some of the management related challenges and at the same time probably still remembered most of the content they covered in their respective undergraduate practice management modules. Since it was possible for one to be an optometrist for more than 1-5 years but be in private practice for only 1-5 years, it was imperative to ascertain this positive aspect mentioned above through a cross tabulation (Table 4.1)

Table 4.1: Cross tabulation of number of years in practice against number of years as an optometrist in percentage (%)

		How long have you had your own practice					Total
		1-5 years	6-10 years	11-15 years	16-20 years	20 years and over	
How many years have you been an Optometrist	1-5 years	37	0	0	0	0	37
	6-10years	9	3	0	0	0	12
	11-15 years	1	7	6	0	0	14
	16-20 years	2	3	6	9	0	20
	20 years and over	1	1	1	3	11	17
Total		50	14	13	12	11	100
n= 102		p=0.00			$\chi^2=159.099$		

As shown in Table 4.1 majority (37%) of those who were optometrists for 1-5 years had been in private practice for the same period, thus confirming the positive trend mentioned above. It was also noted that a reasonable number (11%) of respondents were optometrists and had been in private practice for 20 years or more. This has an advantage to this study in that these respondents have been in practice for a very long time to have experienced most of the challenges encountered in this industry.

Figure 4.3 illustrates that 86.27% studied optometry at the University of KwaZulu-Natal. None of the respondents studied at the University of the Free State. The remaining responses were split almost equally between the University of Johannesburg (7.48%) and University of Limpopo (5.88%).

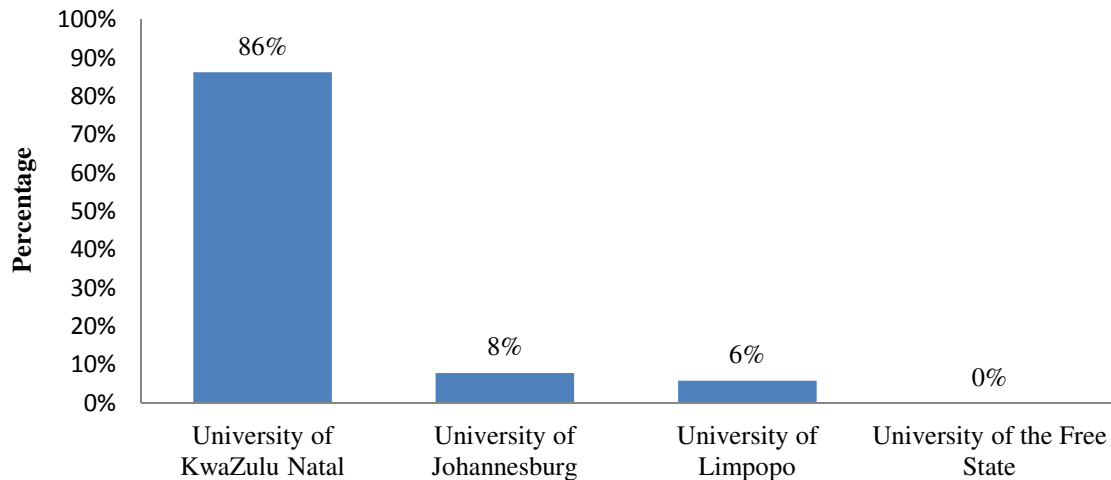


Figure 4.3: Institution where Optometry was studied

4.3.2 Objective 1:

This objective aimed to determine the business management skills of Optometrists. Two questions were tested to establish this information. In the first question the success of the respondents' practices and the cause thereof were established. In line with the theories by Thornhill and Amit (2003), Kirkwood (2003) and Watson *et al* (1998) the idea was to establish which business skills contributed to the respondents' success. In the other question Optometrists were asked to rate themselves against the listed business management skills. These business skills were listed as the ability to: provide business leadership (e.g. development and implementation of goals), to manage human resources (e.g. influencing employees' behavior), carry out financial management functions (e.g. basic bookkeeping and budgeting), carry out marketing functions and manage operational and logistical business functions (e.g. inventory control).

Figure 4.4 illustrates the results with regards to the question where optometrists were asked to rate themselves against the listed business management.

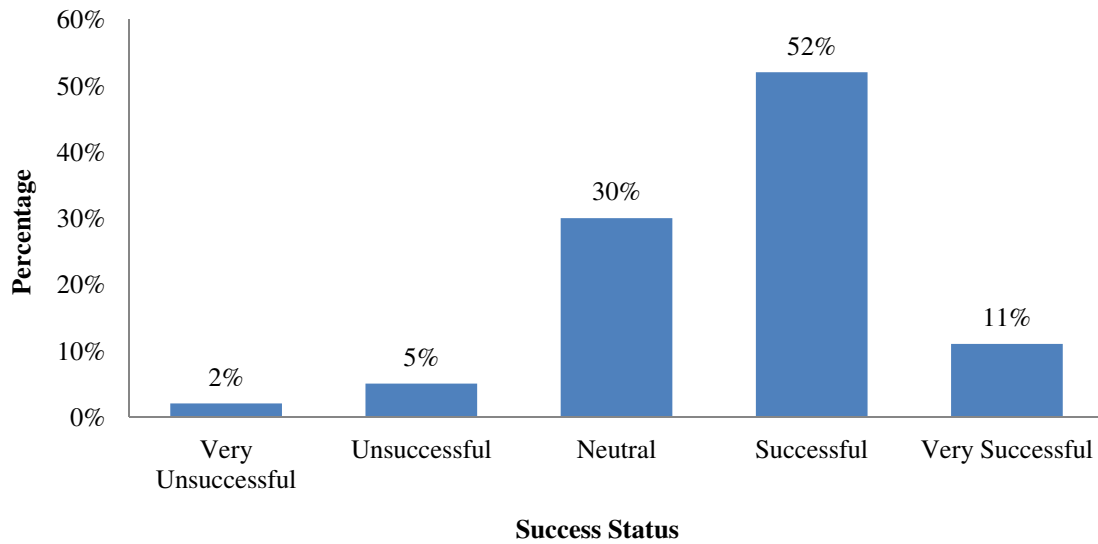


Figure 4.4: Status of Optometrists' practices

As shown in Figure 4.4 majority (63%) of the respondents indicated that their practices were successful and very successful. Almost a third (30%) of the respondents felt that their practices were neither successful nor unsuccessful. The remaining 7% indicated that their practices were successful and very unsuccessful.

Respondents were also asked to indicate which factors contributed towards the success of their practices as discussed above. The respondents, who indicated that their practices were 'very successful' and 'successful', rated service excellence as the highest contributing factor to their practice success at 18.8% and 24% respectively as shown in Figure 4.5.



Figure 4.5: Factors that contributed to the success

Figure 4.5 shows that ‘strict control of finances’ together with ‘practice location’ and ‘staff dedication’ were all rated equally as the second highest at 16.36% by those who rated their practices as very successful. Personal business skills were rated as the third contributing factor by those who rated their practices as very successful at 12.73%. The responses from those who rated their practices as successful were similar to those who rated their practices as very successful. Like the very successful group, the successful respondents also rated strict control of finances, practice location and staff dedication levels as significant contributors to their practice success. However, unlike the other group these three factors were not rated equally. Strict control of finances was rated as the second highest at 17.51% followed by staff dedication levels at 15.25% and practice location at 14.69% as shown in Figure 4.5. The respondents who rated their practices as very successful and successful showed little appreciation for the role of advertising and very little appreciation for the value that hiring a consultant could add to the success of the practice.

It is evident from the above discussion that respondents rated ‘service excellence’, strict control of finances’ and ‘dedicated staff’ as the main contributors towards their practices success. Considering the submission by Smit (2007) that managers are responsible for the

performance of their businesses, it can be suggested that these factors are a reflection of the type of skills the respondents possessed. This is further supported by the view by Schermehorn (2005) that a manager is someone who performs business activities through others. For a manager to achieve service excellence and dedicated staff it suggests that he/she has the necessary skills to motivate his/her staff to that effect. Similarly strict control of finances suggests that he/she has the necessary skills to manage and control such finances. In line with the theory by Katz (1974, cited in Robbins and Coulter, 2007) and Gaspar *et al* (2006), it can be suggested that the respondents had some level of human and technical business skills.

As indicated above over and above the factors that contributed to their practices success; respondents were asked to rate themselves in the different business management skills listed. The responses to this question are shown in Table 4.2.

Table 4.2: Level of competency and the percentage of respondents in each

	Not competent	Moderately competent	Neutral	Competent	Very competent
Ability to provide business leadership	5.88%	19.61%	24.51%	44.12%	5.88%
Ability manage human resources	0.98%	16.67	25.49%	45.10%	11.76%
Ability to carry out financial management functions	11.76%	24.51%	26.47%	26.47%	10.78%
Ability to carry out marketing functions	14.71%	21.57%	35.29%	21.57%	6.86%
Ability to manage operational and logistical business functions	6.86%	19.61%	30.39%	36.27%	6.86%

As shown in Table 4.2, a significant number of respondents (44.12%) indicated that they had the management skills to provide business leadership. Less than a fifth (19.61%) of the respondents indicated that they were moderately competent whilst 24.51% were

neutral on the issue of business leadership. In terms of human resources management skills majority (45.10%) of the respondents indicated that they were competent and 16.67% indicated that they were moderately competent. Almost similar to the results in business leadership skills, 25.49% of the respondents remained neutral. The trend was different with regards to the ability to carry out financial management functions. The responses were almost equally distributed amongst competent, neutral and moderately competent. More than a quarter (26.47%) of the respondents indicated that they had the skills to competently carry out this task and another 26.47% remained neutral on this issue. An almost equal number of respondents (25) indicated that they were moderately competent to carry out this task whereas 11.76% of the respondents indicated that they did not have the skills to carry out this task. The results were different from the rest of the results in this question with regards to the ability to carry out marketing functions as shown in Table 4.2. More than a third (35.29%) of the respondents remained neutral on their marketing skills with an equal split of responses between competent (21.57%) and moderately competent (21.57%). A significant number of respondents (14.71%) indicated that they were not competent to carry out such functions. In terms of operations and logistical business functions, 36.27% of the respondents indicated that they were competent to carry out these functions (Table 4.2). Less than a third (13.72%) of the respondents were equally split between being very competent and incompetent.

Although the results give an indication as to the level of business skills optometrists possess; the way they are distributed across the different competencies makes it complex to analyze and understand. As such, in order to make sense of the above results a composite metric for optometry practice management abilities was developed by aggregating the different aspects (business leadership, human resources, financial management, marketing, and logistical/operational functions) of the question on the self rating on business management skills. As already indicated the respondents' abilities in these areas were self-assessed and ranged from not competent (0) to very competent (4). By summing the values of all five responses a Practice Management Abilities (PMA) Score between 0 and 20 was obtained as shown in Figure 4.6. The estimated Cronbach's alpha value for this PMA Scale is 0.82, suggesting a high degree of internal reliability.

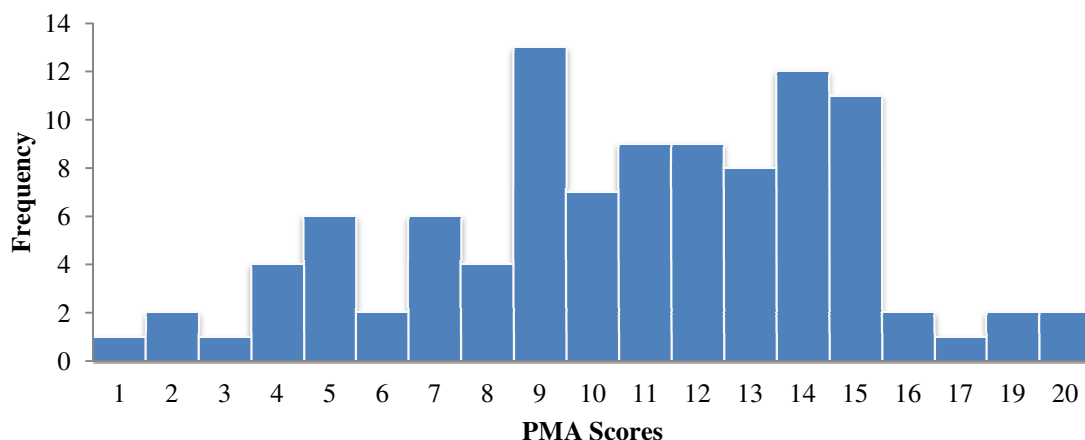


Figure 4.6: Practice Management Abilities Scale

The realized scores cover the entire possible range from 0 to 20, with a mean score of 10.8, a median score of 11 and a standard deviation of 4. This suggests that the average optometrist in the sample perceives him/herself to have neutral practice management abilities, although there is a lot of variation. Considering that optometrists had undergone some form of business management training during their undergraduate training, for an optometrist to rate him/herself as average in terms of business management skills; the quality of the training these optometrists were exposed to in this regard is questionable. This finding therefore supports the views by Schubach (2002, as cited in Richter, 2007) that majority of optometrists have limited exposure or preparation for general business management. It further supports the submission by Gerber *et al* (2011) that optometrists have excellent clinical skills but limited knowledge. Furthermore, this finding supports the assertion by this paper that minimal attention has been given to the issue of business management in optometry.

A quantile-quantile (Q-Q) plot against the standard normal distribution was constructed which provided graphical evidence that the PMA Scores can be reasonably approximated by a normal distribution as much as is possible for discrete data with fixed lower and upper bounds. A Shapiro-Wilk normality test was performed on the PMA scores data and yielded a p-value of 0.12, suggesting again that a normal approximation is reasonable.

This assumption of normality allowed the use of the Pearson's correlation test as well as linear regression to analyze the relationship between PMA scores and other factors.

4.3.2.1 Relationship between PMA Score and Indicators of Business Success

A Pearson's correlation test was conducted to investigate whether a relationship existed between Practice Management Abilities (as measured by the PMA Score) and whether the respondent ever had to close down a practice. The estimated correlation coefficient was -0.019 and was not statistically significant ($p\text{-value} = 0.85$). As such it can be submitted that there is no relationship between these two variables. However, it is noteworthy that 19% of those who had closed down a practice in the past cited "Poor business skills" as a reason thus supporting the views by Thornhill and Amit (2003) that small business failure is attributable to deficiencies in managerial knowledge and abilities.

A Pearson's correlation test was also conducted to investigate whether a relationship existed between PMA Score and self-rated current success status of one's optometry practice, on a five-point Likert type scale from 'Very unsuccessful' to 'Very successful.' In this case, the estimated correlation coefficient was 0.23 which is statistically significant ($p\text{-value} = 0.02$). It can therefore be concluded from this that better practice management abilities are associated with higher success levels of one's optometry practice. This confirms the PMA Score as a good indicator of actual business skills, since it is correlated with real-world business success. This finding supports the views by Kirkwood (2009) that business success is related to the skills and knowledge possessed by its management.

4.3.2.2 Relationship between PMA Score and Demographic Details

A linear regression model was used to analyze how PMA scores may be related to demographic details (race, gender, years of experience as optometrist, years having an optometry practice, and university attended). Since 'University attended' is a nominal

variable with more than two levels, two binary variables were defined as ‘Attended University of Johannesburg vs. did not attend University of Johannesburg,’ and ‘Attended University of Limpopo vs. did not attend University of Limpopo’. None of the model coefficients were statistically significant except for the University of Limpopo binary variable ($p\text{-value} = 0.01$). This suggests that there is little difference in practice management skills between optometrists of different race groups, genders or levels of experience. The positive coefficient for the University of Limpopo binary variable suggests that graduates of the University of Limpopo had greater practice management skills than graduates of University of KwaZulu-Natal or Johannesburg. However, the small sample size (only 6 respondents from University of Limpopo, 8 from University of Johannesburg, and the other 88 from University of KwaZulu-Natal), makes it impossible to read too much into this result.

4.3.3 Objective 2:

Literature from Richter (2007), Schubach (2002, cited in Richter, 2007) and Mashige (2010) has shown that the issue of business management skills is given very little attention in the Optometry curriculum. The practice management module which is aimed at addressing business management skills is allocated limited time in the academic programme. Further to this, Richter (2007) argued that this module is not based on any particular literature and its contents differ from institution to institution. This according to Richter (2007) has resulted in a baseless and superficial module which has failed to provide Optometry students with relevant business management skills needed in industry. The aim of this objective was therefore to test these submissions by determining how Optometrists acquired the business management skills they had. Due to the nature of this objective only one question with sub questions was used.

Respondents were asked to indicate where they acquired their business management skills as illustrated in Table 4.3. Respondents were allowed to select more than one medium they used to acquire their business management skills.

Table 4.3: Medium used to acquire business management skills in percentage (%)

	Postgraduate Business management courses	Undergraduate Business management courses	Undergraduate Optometry courses	Learned on the job	Self study
Ability to provide business leadership	6.09	2.61	20.87	58.26	12.17
Ability manage human resources	5.26	4.39	14.04	60.53	15.79
Ability to carry out financial management functions	6.09	4.35	17.39	50.43	21.74
Ability to carry out marketing functions	3.81	3.81	20	54.29	18.10
Ability to manage operational and logistical business functions	4.55	4.55	16.36	60.91	13.64

With regards to the ability to provide business leadership, of the different mediums listed, learning on the job scored highest with 58.26% as illustrated in Table 4.3. Undergraduate Optometry training was selected as the second most common (20.87%) of the channels respondents acquired their business management skills. With regards to the ability to manage human resources as shown in Table 4.3, respondents selected “learned on the job” as the most common way they acquired whatever human management skills they had. The results showed a similar pattern with the financial management, marketing and operational and logistics management where “learned on the job” was selected as the most common way the skills were acquired as shown in Table 4.3.

It is evident from Table 4.3 that the results were very similar across the different business skills, therefore an analysis of the average for each medium was calculated which showed that on average 6 people obtained business skills through postgraduate business courses, 4 through undergraduate business courses, 20 through the optometry undergraduate

course, 64 through on the job experience, and 18 through self-study. The fact that optometrists are overwhelmingly obtaining their business skills from on-the-job experience and self-study suggests that the undergraduate optometry course is inadequately preparing optometrists for the challenges of practice management. This finding supports the submissions by Richter (2007) that the practice management module which is aimed at equipping optometry students with the relevant business management skills to manage their business is baseless, superficial and has failed to some extent in its goals to provide relevant business management skills needed for survival in the optical industry. Furthermore, the fact that most of the optometrists did not get their business management skills through formal training means that they lacked the understanding of the fundamentals and functioning of all the aspects of business as indicated by Jones and George (2009).

4.3.4 Objective 3:

Thornhill and Amit (2003), Pratten (2004) and Watson *et al* (1998) all asserted that business failure is attributable to deficiencies in managerial knowledge and skills. In order to confirm these assertions this objective sought to establish the reasons behind the failure and lack of success of optometry practices by determining the causes thereof and the main challenges thereto. The responses of those who selected neutral, unsuccessful and very unsuccessful when rating the success of their practices in the first objective (Figure 4.7) were considered for this objective. Further to this, respondents were asked to indicate whether or not they had closed down their practices and the reason for the closure.

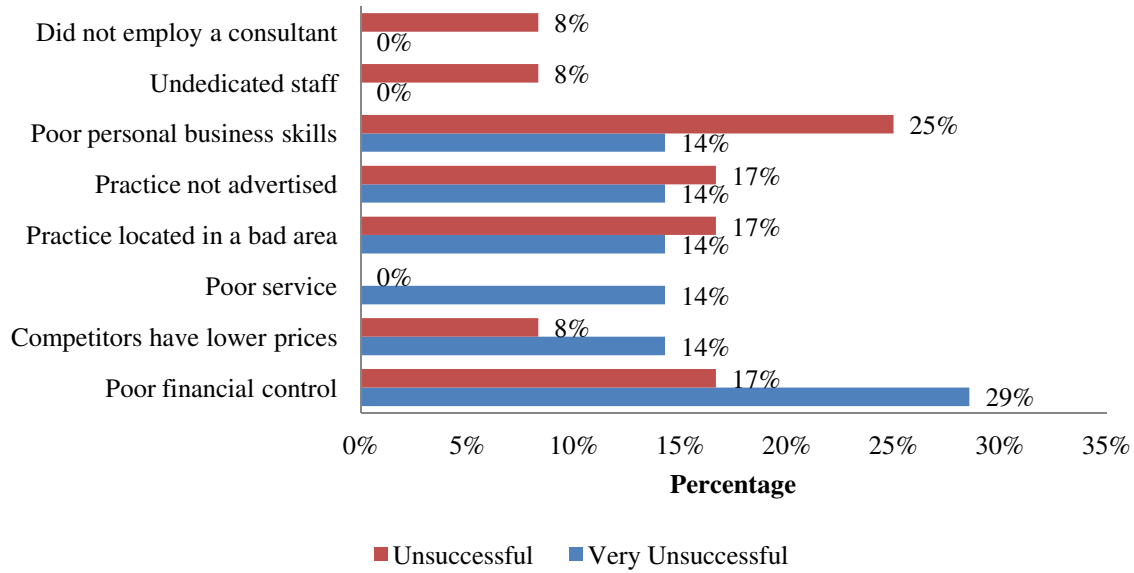


Figure 4.7: Factors that contributed to the success

In analyzing the success of the respondents' practices, the 7% who selected unsuccessful and very unsuccessful indicated that poor personal business skills and poor financial control were the most significant contributors at 25% and 28.57% respectively as shown in Figure 4.7. For both the unsuccessful and very unsuccessful respondents, staff dedication and the services of consultants played an insignificant role in the success of their practices.

Figure 4.8 shows the responses of those who selected 'neutral' when rating the success of their practices.

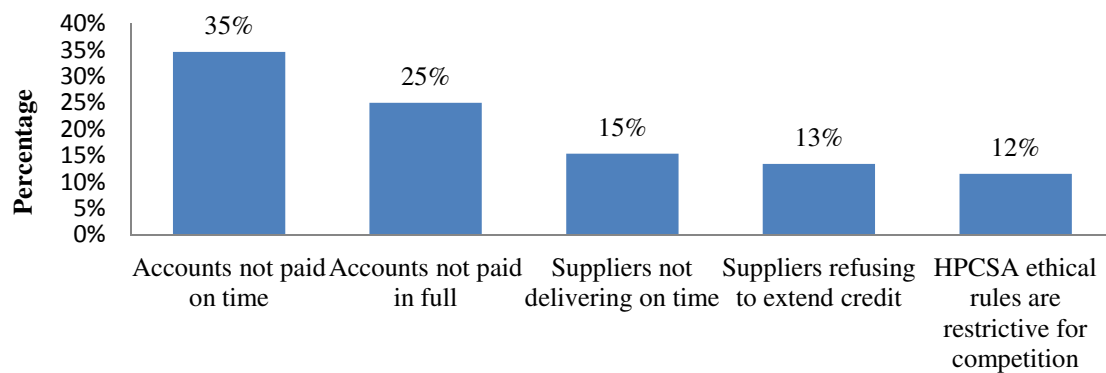


Figure 4.8: Challenges faced by those who selected neutral

As illustrated in Figure 4.8 the respondents (30%) who selected neutral in the question on the status of their practices selected “accounts not paid on time” as the main challenge at 34.62%. “Accounts not paid in full” was selected as the second challenge at 25%.

Table 4.4 shows the results of the question of whether or not respondents had closed down a practice.

Table 4.4: Cross tabulation of number of years owning a practice against the closure of a practice in percentage (%)

		Since owning a practices have you ever had to close down a practice		Total
		Yes	No	
How long have you had your own practice	1-5 years	6	44	50
	6-10 years	2	12	14
	11-15 years	6	7	13
	16-20 years	5	7	12
	20 years and over	7	4	11
Total		26	74	100
n= 102		p=0.01		$\chi^2=18.466$

As illustrated by Table 4.4, an overwhelming majority (74%) of the respondents claimed that they had closed down a practice. This could be explained by the fact that majority (44%) of this 74% were in private practice for a period of 1-5 years.

The respondents (25%) who reported that they had closed down their practices selected “sales were not enough to sustain their practice” as the highest cause of their closure at 33.33% as shown in Figure 4.9. Practice location was cited as the second highest cause of closure (22.22%). Competitor’s prices and lease terminations by the landlords were selected as the lowest causes of closure (3% each).

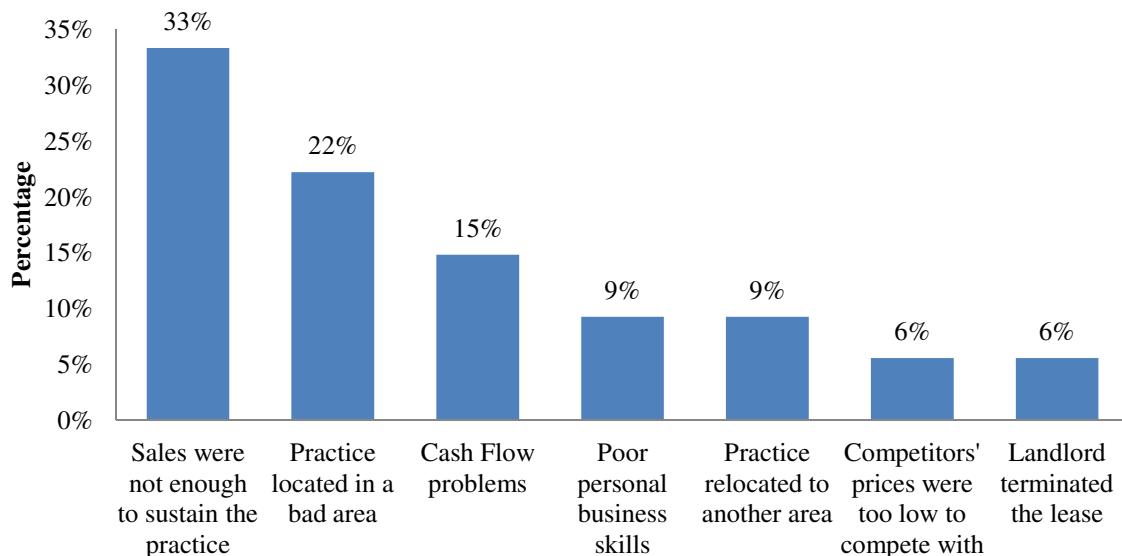


Figure 4.9: Causes of practice closures

It is evident that poor business skills and poor financial control were the most common challenges facing failed optometric practices. This finding is in line with the findings of Altzman (1996, cited in Pratten 2004) that causes of small business failure are misunderstanding and mismanagement of working capital, retained earnings, profits and sales which are all components of financial management and financial skills. This finding also supports Watson and Hogarth-Scott (1998) that amongst other variables, some of the

causes of business failure to survive and grow in small business are lack of business education and exposure, and poor leadership skills.

The above results show that bad location and poor advertising form part of the common challenges faced by optometrists in managing their practices. The results further reveal that late or partial payments of accounts and inadequate sales were also amongst the most commonly cited challenges. This could be attributed to some of the challenges cited in unsuccessful practices such as poor business skills and financial management or control. For instance the reason of inadequate sales cited as the main cause of business failure could suggest lack of financial management skills to calculate markup, breakeven point, etc. It could also suggest the lack of marketing skills to increase market share and maximize sales. All these findings reaffirm the importance of business management skills in managing a practice. As noted in the first objective, practitioners who reported to be having some amount of financial management skills also reported that their practices were successful. Also, the estimated correlation coefficient of 0.23 discussed in the first objective confirms that business management skills are an integral part of business success. These results therefore suggest strongly that better business skills, financial management and marketing skills could help save these businesses from failure. The fact that the other three challenges, which depend less on the practitioner and more on external parties (suppliers and the HCPSA), were less prevalent confirms this finding.

4.3.5 Objective 4:

According to Richter (2007) and Schubach (2002 as cited in Richter, 2007), the practice management module offered to optometry students during their undergraduate training does very little to prepare them for the challenges of running a practice. Richter (2007) further indicated that this module is not based on any framework or set of guidelines and has thus far been a superficial mixture of ethics, finance and marketing. This objective sought to ascertain whether optometrists shared the views by Richter (2007). Furthermore this objective aimed to establish the management content that should be covered by a practice management module in order to make it relevant to the challenges experienced in practice.

The majority of the respondents indicated that the practice management module did not address the issues listed in Table 4.5.

Table 4.5: Responses on whether the practice management module addresses these listed issues

	Yes	No
Provided relevant skills needed in practice management	27.45	72.55
Provided a good overview of business management	30.39	69.61
Addressed the challenges experienced in optometric practices	20.59	79.41
Was practical	18.63	81.37

A significant number (79%) of the respondents indicated that the module did not address the challenges they experienced in their practices and an overwhelming majority (81%) of the respondents indicated that the module was not practical (Table 4.5).

Almost all (96%) of the respondents indicated that they would support a curriculum change in optometry to include more content on practice management. Figure 4.10 illustrates what topics should be included in a practice management module.

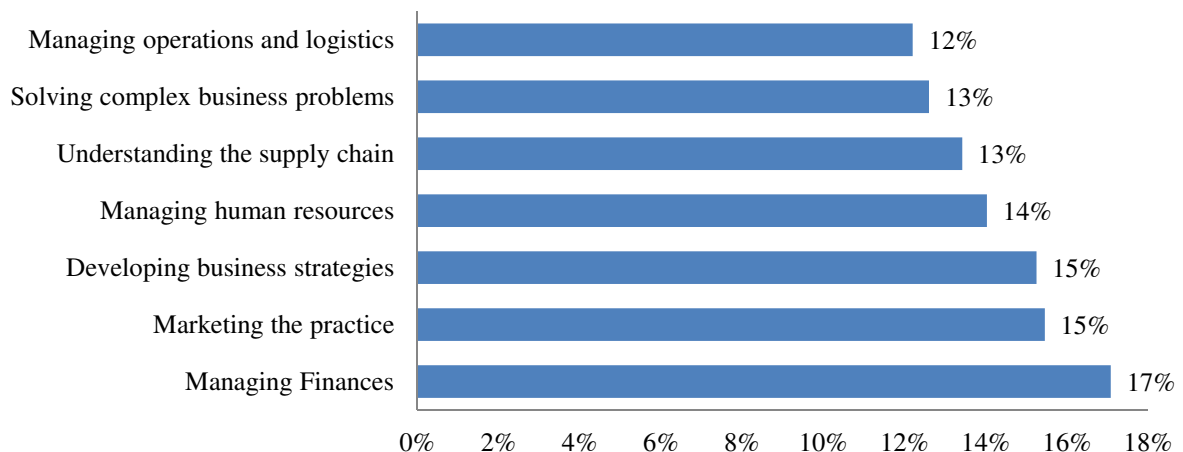


Figure 4.10: Topics to be included in a practice management module

These respondents selected financial management as one of the major topics (17.7%) that should be included in the practice management module as shown in Figure 4.10. Marketing management was selected as the second (14.45%) major topic that had to be included and business strategy selected as the third (15.24%).

To understand the results illustrated in Table 4.3 and Figure 4.10 a score was calculated using the multi-item scale question that measured the quality of undergraduate optometry practice management training. This scale consisted of four yes-or-no questions about one's opinion of the practice management module that one studied in the undergraduate optometry programme. The responses were summed (Yes = 1, No = 0) to obtain a score from 0 to 4, with 4 representing a perceived high quality practice management training, and 0 representing a perceived low quality of practice management training. For ease of reference these scores were called Quality of Undergraduate Optometry Practice Management Training (QUOPMT) Scores.

The QUOPMT Scores results are displayed in Figure 4.11. It can be seen that overall opinions of the undergraduate practice management module were overwhelmingly negative, with more than half giving a score of 0 out of 4. The mean score was 1 out of 4. The Cronbach's alpha measure of internal reliability for this scale was 0.80 which is more than adequate. Correlation analysis did not produce any associations between QUOPMT Scores and the university binary variables defined above, which suggests that the negative viewpoint exists equally in all three universities represented in the sample.

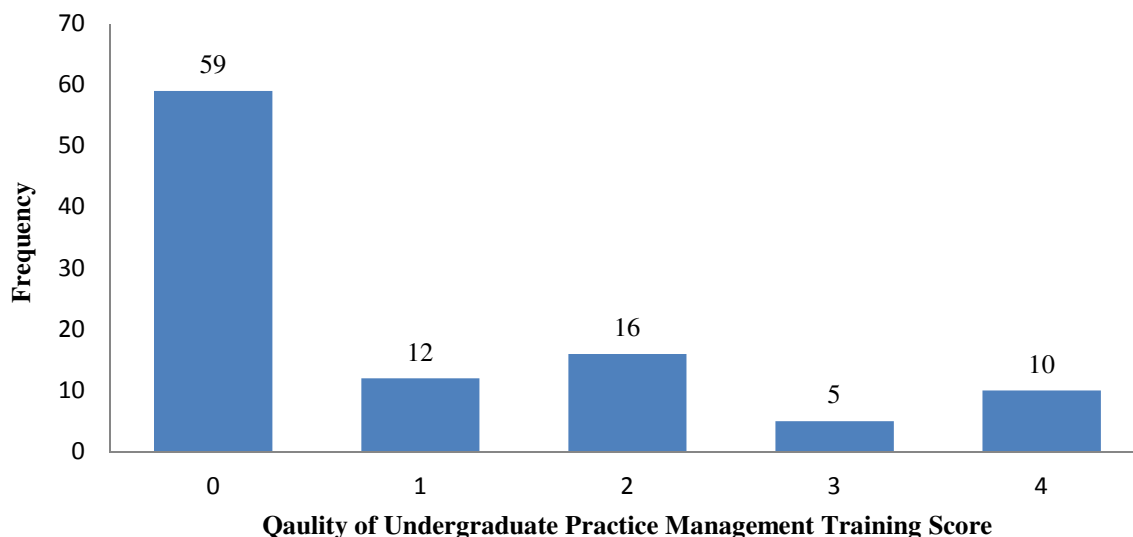


Figure 4.11 Quality of undergraduate practice management training scores

The idea that improvements are needed to the practice management module in undergraduate optometry programmes in South Africa is supported more explicitly by the fact that 96% of optometrists surveyed were in favour of such a change. All the changes suggested enjoy a healthy majority of support among optometrists. Improvements in financial management training were the highest priority (supported by 82% of respondents), followed by marketing skills (75%) and business strategy skills (74%). Human resources, supply chain, complex problem solving and logistics/operations skills all had the support of between 59% and 68% of respondents. This is proof that the practice management module does not cover the topics that are deemed necessary to survive in private practice and make a success of one's business. This therefore confirms the theory by Richter (2007) regarding the inadequacies of the practice management module offered to optometry students at the institutions offering optometry degrees.

4.4 SUMMARY

The results of this study indicated that optometrists have average business management skills. The results further indicated that optometrists acquired these skills mainly through their job experience thus questioning the quality of the undergraduate practice

management module offered to optometry students. The challenges and factors responsible for practice closures reported by optometrists suggest that they did not have the relevant business management skills to deal with those issues. For instance, the fact that optometrists reported to have closed down their practices mainly because sales were not enough to sustain the practice suggest that they did not have the skills required to market the practice and maximize sales. This could also suggest that optometrists lacked the financial management skills to handle such challenges. The results further revealed that optometrists did not consider the practice management module relevant to the business management issues and challenges they faced in private practice. Not only does this reaffirm the doubts about the quality of the practice management module, it also confirms that optometrists do not possess the required business management skills provided by formal education. This confirms the findings that optometrists do not have the necessary business management skills to manage, grow and sustain their practices.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1. INTRODUCTION

This chapter will discuss the conclusions derived from the results of this study. It will further outline the recommendations made and the factors that have limited this study. It will also make recommendations for future studies in this topic.

5.2. HAS THE DATA ANSWERED THE QUESTIONS?

The question that this study sought to answer was whether optometrists in KwaZulu-Natal have the required business management skills to successfully manage, grow and sustain their optometry practices. The results of this study indicated that the research question was answered by the data obtained from this study. A brief overview of these results will serve as evidence to this statement.

With regards to Objective 1 which focused on the business management skills of optometrists it was established through the PMA score that optometrists have average business management skills. Also, the factors that influenced the respondents' practice success suggested that the skills that optometrists had, were more inclined towards the human and technical business skills.

Objective 2 which focused on the channel used to acquire the business management skills. The results indicated that 'learning on the job' was the most common means used by respondents to acquire their skills. The fact that majority of the respondents acquired their skills by learning on the job, meant that they lacked the understanding of the fundamentals and functioning of all aspects of business thus indicating the lack of adequate business skills.

The results pertaining to Objective 3 which focused on the challenges faced by optometrists revealed that optometrists were struggling and finding challenges with basic business management issues. This suggested a deficiency in their business management skills thus indicating that they didn't have adequate and necessary skills to successfully manage, grow and sustain their optometric practices.

With regards to Objective 4, the results showed that an overwhelming majority of the respondents felt that the practice management module in undergraduate optometry training did not provide them with the necessary skills needed in industry. The respondents indicated that they supported an introduction of more relevant business management topics in that module. This further showed that the respondents did not have the required business management skills relevant and necessary for practice.

The conclusion drawn from the results of this study was that optometrists in KwaZulu-Natal did not have the required business management skills to successfully manage, grow and sustain their practice. It is therefore evident that the results obtained pertaining to all the four objectives contributed significantly to answering the research question. It can therefore be submitted that the results that the data obtained in this study answered the research question.

5.3. RECOMMENDATION TO SOLVE THE BUSINESS PROBLEM

In order to address this deficiency of business management skills of optometrists the following recommendations were made:

5.3.1 The current compulsory Continuous Professional Development (CPD) point system should be reviewed by the HPCSA.

In South Africa, optometrists must earn 30 CPD (25 clinical and 5 ethical) points per CPD cycle. In order to improve the management, success and growth of the

optometric practices and the industry at large, optometrists should also be compelled to earn a minimum number of management points. This will compel them to seek courses, training programs, workshops focusing on business management. Also this will compel them to attend such programs on an annual basis thus ensuring the development and improvement of their business management skills. It is therefore recommended that the current system should be reviewed such that it is compulsory for practitioners to get a fixed minimum number of management points per CPD cycle.

5.3.2 Compulsory Continuous Professional Development (CPD) activities focusing specifically on business management should be organized.

CPD points are generally acquired through the attendance of annually organized CPD activities. All current activities, however, focus only on clinical topics and challenges. It is therefore recommended that future events should be structured in such a way that half (50%) of the CPD programs are specific to practice management. This would ensure that practitioners already in practice get an opportunity to improve their skills. Stakeholders in optometry should collaborate with business schools and consultants in identifying appropriate programs to be offered each year.

5.3.3 Short courses on business management for optometric practices should be developed.

The results of this study have shown that very little optometrists obtained their business skills through post graduate business management courses. This can be attributed to the fact that there are no business management courses post-graduation, that are specific to optometric practice management. It is therefore recommended that such courses be developed to make business management more interesting, relevant and practical for optometrists. To ensure maximum quality and high standards, such courses should be developed through a partnership between business schools and schools of optometry.

5.3.4 A stakeholders meeting be held to review the scope of the optometry practice management module.

It has been shown that the current undergraduate optometric practice management module does not adequately prepare optometry students for the challenges of running practices. To address this issue, it is recommended that a meeting between relevant stakeholders such as the HPCSA, institutions offering optometry and the South African Optometric Association (SAOA) be held to review the scope of this module and include more relevant topics as indicated by the results. This module should be taught by specialist teachers with qualifications and experience in business management.

5.3.5 A post graduate certificate /diploma with specific emphasis on practice management should be developed

Although many aspects of business management would have been covered by a reviewed undergraduate practice management module, some aspects of business management may be more complex than others. Also some aspects may require in depth discussions that will not be practically possible in an undergraduate programme. As such it is recommended that a post graduate certificate or diploma in practice management be developed to provide in-depth understanding of business management.

5.3.6 Proactive action should be taken by the SAOA

The SAOA should be at the forefront of efforts to promote practice management and development. It is therefore recommended that the SAOA should include in their annual practitioner development programs, topics that emphasize business management and development. For instance the annual optometry conference should comprise of business management topics that will in one way or another improve optometrists' business management skills.

5.3.7 Optometrists should partner and associate with business management consultants.

As shown by Mashige (2010), the current training of optometrists focuses more on clinical issues than on management issues. Optometrists should therefore partner, associate and align themselves and their practices with people who have had more training in business management in order to benefit from their business skills. It is therefore recommended that the optical industry with the leadership of SAOA create a mentorship programme where business consultants together with successful and retired optometrists could guide new optometrists in practice establishment and management.

5.4. LIMITATIONS OF THIS STUDY

The lack of available information with regards to business/practice management in the optometric profession in South Africa impacted negatively on the literature review and background research relating to this study. The reviewed literature in relation to business/practice management in optometry was limited and only consisted of a few authors. Also, the lack of an updated database of practicing optometrists in South Africa categorized according to provinces, cities, towns, etc meant that the total number of optometrists practicing in the private sector in KwaZulu-Natal could not be verified.

The low (34%) response rate presents a limitation of this study in terms of generalizing the results to all optometrists in South Africa or KwaZulu-Natal. Efforts were made to improve the response rate but they were in vain. These efforts included sending electronic reminders (4 times) to all optometrists in the sample frame, calling some of the optometrists asking them to complete the questionnaire and even visiting some of the optometrists at their practices and asking them to respond to the questionnaire. Furthermore, an extra week was added to the data collection stage in an effort to maximize the response rate. Despite reminders being sent at the beginning of the extra week; only one response was received for the entire week.

The non-probability sampling method employed to maximize the response rate could introduce bias. This is because the respondents who responded to the survey may have displayed different characteristics than those who did not respond (such as regular access to internet, or a stronger interest in the subject of the survey). As such, whilst the results are useful, they can't be generalized to KwaZulu-Natal nor can they be generalized to the South African population of optometrists.

5.5. RECOMMENDATIONS TO OVERCOME THE LIMITATIONS

In terms of the literature, there is a need for the South African Optometrists Journal to encourage research into the area of practice management. Furthermore the South African Optometric Association should collect and publish some financial and management information from its members. This will not only contribute to the body of knowledge in this industry but it will also make for easy comparison amongst peers in this industry.

Considering the difficulty encountered to get optometrists to answer the questionnaire, for future research to obtain a better response rate, different data collection methods such as interviews and focus groups should be employed. This would not only help with the response rate but it will also negate the need for non-random methods of sampling.

5.6. SUMMARY

This study which has shown that optometrists lack the required business management skills needed to manage, grow and sustain their practices should not be used to discredit optometrists in KwaZulu-Natal. It should rather be used to highlight the business management challenges faced by the optometry profession both at undergraduate and post graduate level. This study should also be used to stimulate debate amongst relevant stakeholders in this industry on the possible solutions to these practice management challenges.

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APPENDIX 1

QUESTIONNAIRE

**UNIVERSITY OF KWAZULU-NATAL
GRADUATE SCHOOL OF BUSINESS & LEADERSHIP**

MBA Research Project

Researcher: Maemo Kobe (031-8250898)

Supervisor: Professor Anesh Singh (031-2607061)

Research Office: Ms P Ximba 031-2603587

A study of business management skills of Optometrists in KwaZulu-Natal

The purpose of this survey is to solicit information from optometrists in private practice regarding the business management skills they have. The information and ratings you provide us will go a long way in helping us identify whether optometrists have the necessary business skills needed to manage their practice or whether more should be done by the schools of optometry to equip optometry students with such skills. The questionnaire group should only take **10-15** minutes to complete. In this questionnaire, you are asked to indicate what is true for you, so there are no “right” or “wrong” answers to any question. Work as rapidly as you can. If you wish to make a comment please write it directly on the booklet itself. Make sure not to skip any questions. Thank you for participating.

1. Race

African	
White	
Coloured	
Asian	
Other (specify)	

2. Gender

Male	
Female	

3. How many years have you been an Optometrist?

1-5	
6-10	
11-15	
16-20	
20 and over	

4. Where did you study Optometry

University of KwaZulu Natal	
University of Johannesburg	
University of the North	
University of Free State	

5. How long have you had your own practice?

1-5	
6-10	
11-15	
16-20	
20 and over	

6. How would you describe the current status of your practice?

Very Unsuccessful		Unsuccessful		Neutral		Successful		Very Successful	
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7. If you selected successful or very successful in question 6 above, select which factors have led to the success of your practice

Strict control of finances	
Managed to keep prices low	
Service excellence	
Practice located in a good area	
Practice adequately advertised	
Personal business skills	
Dedicated staff	
Employed a consultant	

8. If you selected unsuccessful or very unsuccessful in question 6 above, select which factors have had a negative impact on your practice

Poor financial control	
Competitors have lower prices	
Poor service	
Practice located in a bad area	
Practice not advertised	
Poor personal business skills	
Undedicated staff	
Did not employ the use of a consultant	

9. If you selected neutral in question 6 above, select the challenges has experienced

Accounts not paid on time	
Accounts not paid in full	
Suppliers refusing to extend credit	
Suppliers not delivering on time	
HPCSA ethical rules are restrictive for competition	

10. Rate yourself on each of the following business skills using the scale below, by ticking the appropriate scale on each item

	Not Competent	Moderately Competent	Neutral	Competent	Very Competent
Ability to provide business leadership (e.g. development and implementation of business goals)					
Ability to manage human resources(e.g. influencing employees behaviour)					
Ability to carry out financial management functions (e.g. basic bookkeeping, budgeting)					
Ability to carry out marketing functions (e.g. drawing a marketing plan)					
Ability to manage operational and logistical business functions (e.g. inventory control)					

11. Indicate by means of tick in the appropriate box how you acquired the business management skills that you have?

	Post graduate business management courses/training	Undergraduate business management courses/training	Undergraduate optometry courses/training	Learned on the job	Self study
Ability to provide business leadership (e.g. development and implementation of business goals)					
Ability to manage human resources(e.g. influencing employees behaviour)					
Ability to carry out financial management functions (e.g. basic bookkeeping, budgeting)					
Ability to carry out marketing functions (e.g. drawing a marketing plan)					
Ability to manage operational and logistical business functions (e.g. inventory control)					

12. Please answer the following question by putting a tick in the appropriate box.

Do you feel the practice management module offered in the undergraduate Optometry programme:

	Yes	No
Provided relevant skills needed in practice management		
Provided a good overview of business management		
Addressed challenges experienced in optometric practices		
Was practical		

13. Would you support a curriculum change in the Optometry programme to include more practice management content?

Yes	
No	

14. If you answered Yes in question 13 above, which of the following business management topics would you like to see added in the practice management module?

Managing finances	
Marketing the practice	
Managing human resources	
Understanding the supply chain	
Developing business strategies	
Managing operations and logistics	
Solving complex business problems	

15. If you answered No in question 13 above, why would you not support such a change?

There is nothing wrong with the current curriculum	
Current programme too full to accommodate additional content	

16. Since owning your practice/s, have you ever had to close down a practice?

Yes	
No	

17. If you answered Yes in question 16 above, what was the reason that caused you to close down?

Cash Flow problems	
Competitors prices were too low to compete with	
Sales were not enough to sustain the practice	
Practice located in a bad area	
Practice relocated to another area	
Landlord terminated the lease	
Poor personal business skills	

End of the Questionnaire

Thank you for taking the time to complete the questionnaire.

APPENDIX 2

ETHICAL CLEARANCE



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30 March 2012

Mr Maemo Raynold Kobe (209540534)
Graduate School of Business and Leadership

Dear Mr Kobe

PROTOCOL REFERENCE NUMBER: HSS/0097/012M
PROJECT TITLE: A study of business management skills of Optometrists in KwaZulu-Natal.

In response to your application dated 27 March 2012, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the school/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully


.....
Professor Steven Collings (Chair)
Humanities & Social Science Research Ethics Committee

cc Supervisor Professor Anesh Singh
cc Mrs Wendy Clarke

APPENDIX 3

TURNITIN REPORT

Turnitin Originality Report

MBA3 Dissertation by Maemo Kobe
From Final Submission (Dissertation 2012)



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Mr Maemo Raynold Kobe (209540534)
Graduate School of Business and Leadership

Dear Mr Kobe

PROTOCOL REFERENCE NUMBER: HSS/0097/012M
PROJECT TITLE: A study of business management skills of Optometrists in KwaZulu-Natal.

In response to your application dated 27 March 2012, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the school/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

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Professor Steven Collings (Chair)
Humanities & Social Science Research Ethics Committee

cc Supervisor Professor Anesh Singh
cc Mrs Wendy Clarke



100 YEARS OF ACADEMIC EXCELLENCE

Founding Campuses: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville

Oil

Microwave Sample Preparation Note: XprOP-1
Category: Oils

Rev. Date: 6/04

Sample Type: Oil
Application Type: Acid Digestion
Vessel Type: 55 mL
Number of Vessels: 12
Reagents: Nitric Acid (70%)
Method Sample Type: Organic
Sample Weight: 0.5 gram

Step 1:

<u>Acid Type</u>	<u>Volume</u>
Nitric	10 mL

Heating Program: Ramp to Temperature Control

Stage	Max. Power	% Power	Ramp (min.)	Pressure (psi)	Temperature (°C)	Hold (min.)
(1)	1200 W	75	15:00	-	200	15:00

NOTE A: This procedure is a reference point for sample digestion using the CEM Microwave Sample Preparation System and may need to be modified or changed to obtain the required results on your sample.

NOTE B: Manual venting of CEM closed vessels should only be performed when wearing hand, eye and body protection and only when the vessel contents are at or below room temperature to avoid the potential for chemical burns. Always point the vent hole away from the operator and toward the back of a fume hood.

NOTE C: Power should be adjusted up or down with respect to the number of vessels. General guidelines are as follows: 8-12 vessels (50% power), 13-20 vessels (75% power), >20 vessels (100% power).

NOTE D: "Organic Method Sample Type" should be used for most sample types. Choose "Inorganic" for samples with more than 1 gram of solid material remaining at the bottom of the vessel at the end of the digest (ex. leach methods). Choose "Water" for samples that are largely aqueous prior to digestion.