CORPORATE SOCIAL RESPONSIBILITY IN THE DENTAL TECHNOLOGY INDUSTRY IN KWAZULU-NATAL

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A dissertation submitted in full compliance with the requirements of the degree of Master of Technology: Dental Technology in the Faculty of Health Sciences at the Durban University of Technology.

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DECLARATION

This dissertation is my own work and has not been submitted in part, or in full, to any other university for any purpose. I have not plagiarised the work of anyone else in completing the requirements for this task. The research was conducted in KwaZulu-Natal in fulfilment of the requirements of the degree of Master of Technology: Dental Technology in the Faculty of Health Sciences at the Durban University of Technology under the supervision of Mr. G H Bass and Prof. A H A Ross and the late Dr. J E Harrison.

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This study investigated how corporate social responsibility (CSR) is understood within the KwaZulu-Natal dental technology industry, as an indication of the position of the industry nationally. The objectives of this study were to provide clarity regarding how the members of the dental technology industry in KwaZulu-Natal perceive CSR, to determine what is being practised in terms of CSR, and to provide possible insights into how the dental technology industry in KwaZulu-Natal might understand and consider CSR principles going into the future.

This is a qualitative study conducted in the interpretive paradigm. The conceptual framework utilised for the study was Carroll's CSR pyramid (1991) which was reviewed by Ferrell et al. (2010). For the purpose of this study CSR was understood to encompass the economic, legal and ethical aspects of running a business. It further extended into an understanding of philanthropy that goes beyond the primary purpose of a business. Simple random sampling was used to select participants for individual semi-structured interviews. The data collected was analysed using thematic content analysis.

This study found that CSR is an unfamiliar term amongst dental laboratory owners and dental technicians. Dental laboratory owners and technicians failed to understand that CSR involves not only the basic aspects of running a business which are economic advancement but also compliance with legislation and ethics considerations.

This study found that the poor understanding of CSR by dental laboratory owners and dental technicians stems from a poor understanding of basic business principles as was revealed in reported practices of the industry participants that lacked business ethical consideration. The perceived lack of participation in the industry by the South African Dental Technicians Council was seen to be a contributing factor to unethical behaviour within the industry. A degree of localised philanthropy was found to be practised by some in the industry. However, such practice was not generally accepted as a norm and that the industry should necessarily take cognisance of.
The results generated by this study indicate that the dental technology industry’s lack of knowledge and understanding of CSR are such that industry should be informed and educated in CSR practices and that a coordinated approach to CSR practice by the industry is needed.
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<tr>
<td>BBBEE</td>
<td>Broad-Based Black Economic Empowerment</td>
</tr>
<tr>
<td>B.Tech</td>
<td>Bachelor's Degree in Technology</td>
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<td>CEUs</td>
<td>Continuing Education Units</td>
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<td>CPD</td>
<td>Continuing Professional Development</td>
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<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<td>DENTASA</td>
<td>Dental Technology Association of South Africa</td>
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<td>HPSCA</td>
<td>Health Professions Council of South Africa</td>
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<td>SA</td>
<td>South Africa</td>
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<td>SADTC</td>
<td>South African Dental Technicians Council</td>
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<tr>
<td>SASCE</td>
<td>Southern African Society for Cooperative Education</td>
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<td>UK</td>
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CHAPTER ONE

INTRODUCTION

1.1 Introduction

As a dental technician and new academic at the Durban University of Technology (DUT) the researcher is concerned with the role that the dental technology industry plays in South African society. Anecdotally, it would appear that the main objective of a dental laboratory is to generate money, which in turn makes the individuals in the industry appear to have no interest beyond the competition within the industry. Furthermore, the dental literature is silent on this matter and does not explore the role of business in depth, particularly the role of business in society. A case study by Nielsen and Thomsen (2009) reveals that some small to medium businesses (into which the dental technology industry can be classified) primarily associate the idea of reputation with that of being a good workplace.

It is appropriate to present, at the outset, the categories of businesses that exist in order to provide a better understanding of why dental laboratories in South Africa (SA) are classified as small to medium companies.

With respect to small business, the owner and manager are usually the same person (Co, 2006). The company is independently controlled and decisions are made without outside interference (Co, 2006). Businesses that do not exceed fifty employees are classified as small businesses (Co, 2006).

In a small to medium business the entrepreneur is not always the manager (Co, 2006). The management sector may be more complex in the sense that people are specialised.
Thus jobs in this type of company have clearly defined limits (Co, 2006). The maximum number of employees in this classification is two hundred (Co, 2006).

A large business is defined as a company that has grown beyond the limits defining small to medium businesses. Most companies in this group are multi-industry entities owned by the state, shareholders, families or individuals (Colpan et al., 2010). In the South African context large companies are those which have shareholder equity of over R50 million (Mbuya, 2009). Examples of such companies are banks and insurance companies. The majority of dental laboratories in SA have between one and two dental technicians including a dental laboratory owner (Pillay, 2012) and therefore the majority are classified as small businesses.

The survival of a business depends on profitability thereby adding to the wealth of the country’s economy. However, it is argued that survival additionally depends on how the company interacts with the internal social environment and how it relates to social aspects outside the company, with reference to the legal boundaries and ethical behaviour practised by the business (Ferrell et al., 2011). In this respect, ethical behaviour ought to be apparent in employer-employee relations, the delegation and entrustment of tasks, communication with clients, and the degree of social responsibility held by managers towards employees.

Skea (2010) addresses the manner in which ethics is practised within the dental technology industry. It has been noted by Bass (2012 pers. comm. 20 May) that business ethics, including moral value, is loosely regulated by the South African Dental Technicians Council (SADTC) on behalf of the dental technology industry.

Businesses have the financial means and personnel to improve society and address some of the issues with which society struggles. One may argue that it is only large companies that may have the capacity to give back to the community but in a developing country such as SA it is necessary that all businesses, regardless of size, acknowledge and contribute to societal development (Institute of Directors in Southern Africa, 2009). It is concerning that there is a lack of knowledge in dental journals and literature in general
as to how the dental technology industry is working towards being accountable in respect of CSR business practices in SA.

Dental technology is an industry that is almost invisible to the point that dental technicians are not given the deserved acknowledgement for the role they play in the dental team. This is due to the fact that society at large lacks knowledge of the occupation (Skea, 2010; Christensen, 2005). As an educator in dental technology I feel that creating awareness of the dental technology occupation is part of my role and the industry acknowledging its CSR responsibilities is part of their role in developing the industry.

For the purpose of this study CSR is defined as the commitment of a business to contribute to the economy and to behave ethically whilst improving the quality of life for the employees and local community (The World Business Council for Sustainable Development, 2008; Ferrell et al., 2011). This definition echoes Carroll’s CSR pyramid (1991) (to be discussed in detail in Chapter 2) which was reviewed by Ferrell et al. (2011) and is the conceptual framework adopted in this study. Carroll’s CSR pyramid (1991) depicts CSR as having different layers (Ferrell et al., 2011). The CSR pyramid indicates that “businesses have a responsibility to be economically viable so that they can provide a return on investment for their owners, create jobs for the community, and contribute goods and services” (Ferrell et al., 2011:141). Businesses are further required to operate within legal boundaries (Ferrell et al., 2011). Additionally it is expected that businesses will involve themselves in philanthropic activities. For the purpose of this study philanthropy is defined as “a direct contribution by a business to a cause, most often in the form of cash grants, donations and/or in-kind services” (Ferrell et al., 2011: 144).

1.2 Dental Technology in South Africa

It is important to understand the occupation and history of dental technology, as this will give an indication of the progress that the industry has made in order to become known as a corporate socially responsible industry. Dental technology is concerned with the design and manufacture of oral prostheses (Warden, 2002). The training and practice of
dental technicians is regulated by the SADTC. The history of dental technology in SA can be traced back to the early 1900s (Grobler, 1977). At that time dentists manufactured dental restorations themselves or allowed laymen to fabricate prostheses in the practice laboratories (Grobler, 1977). Dental technology comprises four disciplines:

- Prosthetics
- Orthodontics
- Crown and bridge
- Cobalt chrome

The occupation developed from initially being an apprenticeship into a higher education qualification by 1980 (Skea, 2010; Bass, 2008). At this time the Dental Technicians Act was redrafted to accommodate the modern practice and training of dental technicians, which led to South African dental technicians being in high demand internationally for the quality of their training and work ethic (Denturism, 2007). A three year National Diploma allows the holder to be registered as a dental technician. Dental technicians with a National Diploma may proceed to a fourth year in order to be issued with a Bachelor of Technology (B.Tech) degree from any of three Universities of Technology (formerly called technikons), and in more recent times may subsequently progress to a Master’s degree.

In 2007 the Health Professions Council of South Africa (HPCSA) lobbied for a Continuing Professional Development (CPD) in SA (HPCSA, 2013). In a telephone conversation, Mr Steyn, CPD board member of the SADTC, states that this led to the introduction of a CPD point system in dental technology in 2009. The approval of the CPD regulations for the dental technology industry by the Minister of Health was published on the 12th May 2014 (SADTC, 2014). The SADTC had requested co-operation from the dental technology industry to comply with the CPD point system ahead of ministerial approval (pers. comm. Steyn, 2013). Each dental technician is required to obtain 30 Continuing Education Units (CEU) points annually with a minimum of 7 CEUs from professional ethics, human rights, law and business practice (SADTC, 2014). CPD supports the need for dental technology personnel to acquire new and updated levels of knowledge, skills and ethical attitudes that will not only add benefits to the dental technology industry but also enhance...
professional integrity (HPSCA, 2013). The latter refers to the empowerment and sustainability of an industry which echoes the objective of CSR.

1.3 Background to the study

In the South African context, dental technology laboratories, as business entities, are found mainly in the private sector, but State-run dental laboratories do exist. There are currently 654 registered dental laboratories as per the 2013 register obtained from the SADTC. The traditional activity of the business is to produce quality goods and services, earn reasonable profits and provide jobs whilst operating within legal boundaries as determined by the Dental Technicians Act (South Africa, 1979).

Dental technicians work in dental laboratories with dental laboratory assistants and are trained to make appliances on contract for dentists. If the dentist is satisfied with the quality of work that the dental laboratory produces it is likely that a long term relationship will be established. If not, it is common that the dentist would seek another dental laboratory to make his/her dental appliances. It is important to note that it is not only the quality of work that brings sustainability in a relationship with a dentist but the manner in which information and instructions are relayed. Dentists often seek recommendations from dental technicians on resolving complicated cases or about alternative materials or appliance-designs to meet their patients’ expectations (Denturism, 2007). Ethics is an important aspect of this process. It is vital in all businesses that the stakeholders of a business (employees and clients) are treated in an ethical manner as this serves to encourage mutual respect. Such ethical handling would include clear and honest communication and fair pricing.

The concept of CSR emphasises not only profits but also influences on society, as a result of business decisions taken. Pirsch et al. (2007: 126) say that businesses, “by their very existence, can be viewed as entering into a social contract that compels the company to take the interests of society into consideration when making decisions”. Modern businesses realise the value of implementing social responsibility initiatives to further their
relationship with their customers, their employees, and their community (Ferrell et al., 2011). This is especially important in SA, where vulnerabilities of people are exacerbated by poverty and inequality of opportunity (life chances) that continue to manifest along a racial divide (Statistics South Africa, 2010). With the new found freedom the whole country is going through a transformation in an attempt to balance these socioeconomic factors. South Africa’s per capita income places it among the world’s middle-income countries, although the income disparities are among the most extreme in the world (GINI index, 2013). Reducing inequality and poverty and tackling unemployment and underemployment, are some of the key challenges that will help eradicate this inequality (GINI index, 2013). According to the Department of Trade and Industry (2014) “the immediate cause of poverty is a huge inequality of access to basic infrastructure, education and skills”.

KwaZulu-Natal contains many people who are at financial risk (Statistics South Africa, 2010). The theory behind CSR suggests that beyond making profit, it is important that companies care for the well-being of the people in the areas in which they operate. Such care could be offered in response to needs for community development and by supporting projects that benefit previously disadvantaged sectors of society. In the case of the dental technology industry, conversations with academics Bass and Somers (2011, pers.comm.) suggest that dental technology practices are less involved than other health and para-medical professions e.g. optometrists’ participation in the Phelophepa health care train (Makgoba et al., n.d.: 18). This research seeks to determine whether this is indeed the case, and to understand the possible reasons.

1.4 Defining corporate social responsibility

The understanding of CSR differs from country to country owing to the different factors that may encourage or hinder conditions of business. One of the major influences is the progression status of the country. South Africa is classified as a developing country (Morton and Tulloch, 2012; Bhorat and Kanbur, 2006). Difficulty exists in finding a universally accepted definition of a developing country (Schenk, 2012; Morton and
Tulloch, 2012; Machens, 2012). According to the World Bank a developing country’s is characterized by a majority of citizens earning in the low to medium economic bracket (Bourdet et al., 2007). By contrast, a developed country has a well-established economy with a majority of citizens earning a medium to high income. Literature also defines a developing country as a country in which the economic and social development is low compared to those of developed countries (Schenk, 2012; Morton and Tulloch, 2012). For these reasons, SA is defined as a developing country.

Corporate social responsibility can also be looked at in terms of the functions of a business or industry and the roles of the people involved in the business. William et al. (2014: 50) further states that “a business has the technical, financial and managerial resources that are needed to tackle complex business and social issues”. William et al. (2014: 50) feels that “by helping resolve social issues, businesses create a more stable environment for long-term profitability” and sustainability of that particular industry. It is important to note that CSR is not always finance dependent and can be in the form of knowledge transfer, volunteerism for causes, saving energy and setting up policies that may improve employee retention (Ferrell et al., 2011).

Corporate social development is now a prominent feature of business agendas worldwide despite the uncertainty about the societal obligations of business (Smith, 2003). It was one of the leading topics at the 2003 World Economic Forum meetings (Smith, 2003) at which it was argued that companies’ actions should be designed to benefit the employees, customers, business partners, the community and shareholders.

In SA, the Broad-Based Black Economic Empowerment (BBBEE) Act was implemented in 2004 (Beenavigator, 2013). This scorecard system describes the requirements for BBBEE accreditation which comprises seven components requiring an increase in black participation: business ownership; management control; employment equity; skills development practices; procurement (from other BBBEE accredited companies); enterprise development; and socioeconomic development (Beenavigator, 2013). It ensures government procurement managers and buyers favour businesses that are
increasing the black employees’ statistics for employment equity (Levenstein and Parwaringira, 2009).

If we accept, within the South African context, that by helping resolve social issues, as is one of the objectives of BBBEE, businesses create a more stable environment for long-term profitability and sustainability of that society, it is important that the attitudes of the field of dental technology to CSR are determined.

1.5 Rationale for the study

Dental technology is a developing profession (Skea, 2010). This places the occupation somewhere along a continuum extending between a fully-fledged profession at one end and a business at the other (Lautar, 1995 cited by Skea 2010). The general public are believed to be poorly informed about the role of dental technology within the field of dentistry, which is believed to be a contributing factor in the lag in professionalization in the industry (Skea, 2010: 138; Christensen, 2005). The involvement of the dental technology industry in social issues and the improvement of human welfare will further the understanding of dental technology amongst the general public. A request to increase the awareness of dental technology was also made at a liaison committee¹ meeting, held on the 15 May 2012, between the dental technology programme at the DUT and members representing the dental technology industry.

Ethics is one of the attributes of professionalization that Skea (2010) discusses in her study, The perceptions of professionalization of Dental Technology. The commitment of a business to ethical codes is said to retain community confidence as well as to attract high-quality employees (Pirsch et al., 2007). Skea (2010) argues that ethical codes which are enforced by the SADTC are apparent in the dental technology industry as well as in the traditional ethics of business. Examples of traditional ethical codes are the sharing of technical knowledge, self-discipline, mutual interdependence and associations formed to

¹ The practice of liaison is part of DUT’s strategy to ensure the relevance of the curriculum and maintains connections with the industry and future employers of graduates.
represent the dental technology industry. The latter is largely accomplished by the Dental Technicians Association of South Africa (DENTASA). This association was formed in the interests of its members (dental technicians) and therefore safeguards their welfare (Pillay, 2012). It represents the industry in matters which require liaison with regulatory bodies (DENTASA, 2013).

Currently, a difference of opinion exists on whether the dental technology industry operates according to ethical standards. Skea (2010) found that while some dentists felt some sort of ethical behaviour existed in the dental technology industry, others felt that ethical codes set out by the SADTC were poorly enforced and regulated. A perception exists that some dentists work with unregistered dental laboratories who use sub-standard materials (Skea, 2010).

Skea’s (2010) study also examines the discounting of skilled services. Discounting proves to be a way dental laboratory owners attract new clients and retain old ones. A multitude of ethical considerations result from this practice, such as the employment of unqualified persons, the use of cheap sub-standard materials to enable the discounting and the disregard of taking work from colleagues (Skea, 2010). Skea’s (2010) findings suggest that a relationship exists between ethics and legal boundaries. Thus a disregard for ethics may lead to going against legal boundaries. CSR may enhance lawful proceedings in the dental technology industry as it places emphasis on ethical behaviour.

In 2010 an Ethics Indaba course was held by 44 dental technology personnel and the discussions were based on the ethical requirements of dental technologists in the oral team (Southern African Dental Technology Journal, 2010). It was concluded that the following matters needed to be restored;

- education in understanding ethical obligations and procedures for the dental technology profession
- understanding how business principles and a profession can be compatible,
• the conflicts arising between legal and ethical beliefs and the need for dental technology to acquire and listen to professional advice in order to deal with conflicts within the profession.

(Southern African Dental Technology Journal, 2010: 19)

Most academic research in the domains of CSR and business ethics has focused on large corporations (Smith, 2003; Ackers, 2009; Siwar and Harizan, 2009; Fassin et al., 2011). Fassin et al. (2011: 25) states that the "issue of corporate responsibility and ethics in small and medium-sized businesses has received limited attention in the literature". McWilliams et al. (2006: 283) from the University of Illinois state that "there is a strong organizational and community demand for research on CSR-related topics" such as the appropriate management of stakeholders and sustainability. This view is supported by Morgeson et al. (2011) who go on to state that most research that has been done on CSR involves macro level analysis, meaning that researchers have focussed on the relationship of CSR and the financial performance of businesses. An example of such research is that of Carroll and Buchholtz (2012), who concluded that a good business reputation enhances the business’s financial performance, which leads to a further improvement in the business’s social performance (Carroll and Buchholtz, 2012). This view is shared by Nord and Fuller (2009), who say that CSR is usually associated with better financial performance. These findings suggest that CSR contributes positively to business success. For a dental laboratory to be successful it needs to maintain the quality of the work that it produces, which in turn enables it to retain its client base. Furthermore it has to maintain a good relationship with clients, employees and the regulatory body. The maintenance of all these aspects ultimately affects the reputation of the dental laboratory. If the reputation were to be negatively affected this would impact on the financial stability of the business enterprise. As a consequence, the ability of the laboratory to tackle social problems that are outside the business would be minimised.

Carroll and Buchholtz (2012) also suggest that good financial performance in business generates good social performance and builds a good reputation. Preston and O'Bannon (1997 cited in Coldwell 2001), found that financial performance either precedes or occurs
simultaneously with social performance, which supports this perspective. This suggests that even the smallest contribution to social performance may have positive effects on the financial performance of the business. CSR can serve as a benefit to the dental technology industry and in turn serve as a greater benefit to the transformation of SA.

The globalization of business makes CSR an international concern (Ferrell et al., 2011) and research focussing on developing countries is scarce (Muthuri and Gilbert, 2011). Companies of different sizes face different constraints and opportunities with respect to CSR and small to medium businesses play an important role in the South African economy but there has not been much committed research on such enterprises (Hamann et al., 2005).

1.6 Purpose of the study

Corporate social responsibility is still in its infancy in SA and existing literature is scarce (Kuljian, 2005; Everatt et al., 2005; Mahomed, 2008; Hamann et al., 2005). To date, no investigation of the South African dental technology industry’s participation in CSR has been carried out.

1.7 Aim of the study

This research aims to begin an inquiry through investigating how CSR is understood within the KwaZulu-Natal dental technology industry, thereby providing an indication of the possible position of the industry nationally and serving as a basis for future research at a national level towards the improvement of the social consciousness of the dental technology profession. For the purpose of this CSR encompasses the economic, legal and ethical aspects of running a business. It further extends into philanthropy which goes beyond the primary purpose of a business.
1.8 Objectives of the study

- Provide clarity regarding how the members of the dental technology industry in KwaZulu-Natal perceive CSR;
- Determine what is being practised in terms of CSR in the dental technology industry in KwaZulu-Natal;
- Provide possible insights into how the dental technology industry in KwaZulu-Natal might foster CSR principles.

1.9 Key research questions

1. How is CSR understood by dental laboratory owners and dental technicians in KwaZulu-Natal?
2. What forms of CSR does the dental technology industry practise in KwaZulu-Natal?
3. What model of CSR is appropriate for adoption within a co-ordinated industry approach?

1.10 Overview of the dissertation

In this chapter, a brief insight into the South African dental technology industry and the link between it and the need for CSR within the industry has been provided. The research questions arise from a need to understand how the dental technology industry role-players consider their roles in a transforming business environment. The next chapter provides a critical discussion of the literature and a refinement of the conceptual framework outlined above. The different concepts of CSR and how they have been used in the South African context will be discussed. The basis for the methodology adopted will be described.
The methodology of the study will be addressed in Chapter three. Chapter four will outline the results of the study and an in-depth discussion of the findings will follow. The conclusions and recommendations emerging from this study are presented in Chapter five.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, the understanding of and the social benefits of CSR are reviewed. The history of CSR, which dates back to the Victorian era in Britain and the years after the civil war in America is outlined and discussed. The discussion on CSR includes the apartheid era in SA (Bichta, 2003; Skinner and Mersham, 2008; Johnson and Turner, 2010). Furthermore, CSR is explored in the global context and the different interpretations are debated. The existence of CSR in the dental technology industry internationally is discussed and noted. Thereafter the theory of CSR underpinning this study is discussed. The prevalence of CSR in SA and its role is examined. The definition of CSR having to encompass the economic, legal, ethical and philanthropic aspects is unpacked. Importantly, the link between these aspects is established and highlighted.

2.2 The development of corporate social responsibility

The concept of CSR supported by this study was initiated in 1953 when American born Howard Rothman Bowen’s book *Social Responsibility of Businessmen* was published (Berniak-wozny, 2011). This book concentrated on people’s social conscience, rather than the economics of the company (Berniak-wozny, 2011). In 1959, Harvard economist Edward Mason asserted that businesses are the most important economic institutions (Ferrell *et al.*, 2011). His statement implies that “companies most likely affect the community and society as much, or perhaps more, in social terms as in financial terms” (Ferrell *et al.*, 2011: 18).

The early history of CSR in the 1800s reveals that CSR took a dominantly philanthropic form in Britain and America (Bichta, 2003). In the United Kingdom (UK), CSR can be
traced back to the Victorian industrialist era (Bichta, 2003). The industrialist era in the UK falls in the mid-Victorian period (1851-1875) (Kohler, 2007). This is when companies like Cadbury funded a range of welfare activities including hospitals and schools in support of the idea that if the needs of the workers are treated well they would respond well and thus be more productive (Bichta, 2003).

In America, CSR emerged as a social and political reaction to the growth of capitalism after the American civil war (1861-5) (Bichta, 2003). The American government tried to correct the social behaviour of large corporations by passing laws on child labour, labour protection and public utilities in the 1890s (Bichta, 2003). Companies like Ford and Rockefeller centred their CSR on donations to schools and higher education facilities (Bichta, 2003).

After World War II, many large United States firms came to dominate the global economy and their conduct inspired imitation in other nations (Ferrell et al., 2011). The lack of global competition and shareholder input during the 1950s and 1960s led to a restraining of management’s action by formal governance procedures (Ferrell et al., 2011). Nonetheless, this leniency allowed management to focus not just on profit margins but also on charitable giving. Such charitable giving included contributions to the arts, culture and money on research that was more beneficial to society and their particular industries than to the companies’ own profitability (Ferrell et al., 2011).

In the 1970s and 1980s, respected firms that had dominated the economy in the 1950s and 1960s became ineffective as a result of bankruptcy from high energy prices and the arrival of foreign competitors (Ferrell et al., 2011). This economic turmoil almost eliminated the practice of CSR (Ferrell et al., 2011). This brought a new focus on profitability, which meant efficiency and productivity became the primary objectives of a business. Shum and Yam (2011: 551) state that “economically responsible entrepreneurs were focussing on generating and satisfying shareholders’ wealth maximisation even at the expense of fulfilling their legal, ethical, and discretionary responsibilities to society”. The benefits of the corporations prior to 1980 were forgotten in the 1980s, but concern
for corporate responsibilities was renewed in the 1990s (Ferrell et al., 2011). This resulted in increased interest in the installation of business ethics programmes, the development of programmes to promote employee volunteerism in the community, strategic philanthropy efforts and trust in the workplace and a start of a more open dialog between companies and their stakeholders (Ferrell et al., 2011). Stakeholders are understood to be “people and groups who can affect or are affected by the achievement of a business’s objectives including investors and shareholders” (Ferrell et al., 2011: 50). This definition of stakeholders is supported by Pirsch et al. (2007) who adds employees, suppliers, customers and communities to their understanding of stakeholders.

In SA, the debate around the role of corporate social activity dates back to the apartheid era (Skinner and Mersham, 2008). In 1977, Rev. Leon Sullivan, an Africa-American who at the time was a board member of General Motors developed principles that were to be adopted by US companies in SA to promote programs that had positive impact on non-white workers (Johnson and Turner, 2010). The principles included non-segregation in the work place, improving the quality of life for blacks and other non-whites outside the work and working to eliminate laws that hinder social, economic, and political justice (Igbanugo, 2012a). In 1987, many of the US companies withdrew their business from SA as a matter of principle. However, this did not result on an immediate impact on apartheid (Hillman et al., 2002). After the collapse of apartheid, companies in SA preferred the terms Corporate Social Investment and Corporate Citizenship rather than CSR (Fig, 2005; Skinner and Mersham, 2008). Corporate Social Investment suggests a focused outcome for the business and not doing something because it is vaguely ethical or their responsibility (Skinner and Mersham, 2008). “A good corporate citizen is defined as one that has comprehensive policies and practices set up throughout the business to make decisions and conduct operations ethically, meet legal requirements, and shows consideration for society, communities and the environment, while corporate social investment encompasses projects that are external to the business that ensure upliftment of communities” (Fig, 2005: 601).
Businesses at that time felt that engaging in CSR did not mean an admission of guilt for their share of the misery of the deprived nor was it implying the need to take on the socioeconomic welfare responsibility of the country (Skinner and Mersham, 2008). This is why the concept of *investment* rather than *responsibility* may have come to be the favoured nomenclature amongst South African businesses (Skinner and Mersham, 2008).

### 2.3 Exploration of corporate social responsibility in the global context

In the world of business, CSR is interpreted and understood in many different ways. According to Kotler and Lee (2005:3) “CSR is a commitment to improve community well-being through discretionary business practices and contributions of corporate resources”. The understanding that Kotler and Lee (2005) have about CSR is also shared by Ackers (2009). Kotler and Lee (2005: 3) state that “the key element in this definition is the word ‘discretionary’, which refers to the voluntary commitment of a business to CSR”. The latter definition is what European countries tend to adopt and it is vital to understand the factors encouraging this (Baker, 2004; Matten and Moon, 2008). The European Commission, which is composed of 28 representatives from each European country, encourages the notion whereby companies decide voluntarily to incorporate social issues in their business operations (European Commission, 2013; Baker, 2004).

From the late 1970s through to the 1990s the UK suffered major unemployment as well as fiscal stress (Matten and Moon, 2008). This change in the UK brought about unrest and urban decay which lead to a questioning of the legitimacy and capacity of the UK administration system to address these issues (Matten and Moon, 2008). CSR was then encouraged by the government to restore the legitimacy of societal governance, particularly regarding the labour and education systems (Matten and Moon, 2008). Simultaneously the concern of business legitimacy pushed companies into voluntary CSR (Matten and Moon, 2008). A similar drive is the *Big Society* policy which was launched in 2010 in the UK. The aim of this policy is for government to give voluntary and charitable
organisations a greater role in running public service (Ross, 2010). Companies are doing more to address stakeholder expectations rather than relying on welfare state institutions to do so (Matten and Moon, 2008).

Muthuri and Gilbert (201:467) describe CSR as the duty of a company to develop stakeholders, and “the avoidance and correction of any negative consequences caused by business activities”. The overall activities of the business should produce a positive impact on society (Baker, 2004). Baker (2004) challenges companies to evaluate the quality of their management, in terms of the processes and people as well as the nature and quantity of their impact on society.

Leon Louw2 the executive director of Free Market Foundation (Southern Africa)3 says that the name CSR implies that businesses are irresponsible (Laschinger, 2004). He further argues that CSR should only encompass philanthropy. He feels businesses are intended to be ethically run and compliant with the law, therefore businesses cannot be termed irresponsible. Durrant (2005) agrees that CSR does not include the economic and the legal responsibilities as these are required of all businesses. The voluntary aspect of giving back to society (philanthropy) is seen by Leon Louw (cited in Laschinger 2004) and Durrant (2005) as an essential highlight of business accountability to society. The standard business profile of just making money, being ethically run and compliant with the law can be mirrored in the dental technology industry in SA. The vocational nature of the dental technology industry causes dental laboratories to focus mainly on making a profit. This could be a result of the amount of competition that exists in an industry strongly influenced by South African dentist fraternity. The dentists choose with which dental laboratory they prefer to work. History shows that dentists have strongly influenced the formulation of the oral health team as it exists in SA today, including the formation and development of the dental technology industry (Skea, 2010). Until today, dentists are

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2 Leon Louw is a South African author, speaker and policy advisor who has a significant impact on the course of events in South Africa, especially regarding the extensive economic reforms that have taken place during the past two decades (The South African National Energy Association, 2010).

3 The Free Market Foundation (Southern Africa) is an independent public benefit organization promoting an open society, the rule of law, personal liberty, and economic and press freedom (Free Market Foundation, 2013).
hesitant to allow dental laboratory owners and dental technicians to have full control of the profession (Skea, 2010). These sentiments originating in the development of dental technology still prevail today. These trends include dentists seeking dental laboratory work based on cost rather than quality (Skea, 2010). This power has lead dental laboratory owners to concentrate more on delivery of goods to prevent losing the dentist as a client, staying within the SADTC regulations (Skea, 2010; Pillay, 2012). This suggests that dental laboratory owners fail to explore philanthropic ventures in their business. Thus, having a profitable dental laboratory may be as responsible as the business may get.

Leon Louw’s view supports the US concept of CSR, which is essentially based on philanthropy (Laschinger, 2004). United States companies make profit, unhindered except by fulfilling the obligation to pay taxes (Matten and Moon, 2008). They then donate a certain share of their profit to charitable causes that fulfil their CSR obligations (Matten and Moon, 2008). For example, many businesses in the US support local secondary schools (amongst other social structures) as a vehicle to combat issues of economic and social inequality (Matten and Moon, 2008).

In Indonesia, which like SA is classified as a developing country, the understanding of CSR as a concept is poor and is often perceived as a western concept associated with philanthropic acts, cause-related marketing, or public relations (The World Bank, 2013; Waagstein, 2011). Consequently, CSR is treated with suspicion as a form of neo colonialism thus discouraging Indonesian companies from adopting CSR in their corporate policies (Waagstein, 2011). There is evidence that in developing countries CSR is influenced by indigenous traditional philanthropy, business ethics and community surroundings (Visser, 2009). Frynas (2006 cited in Visser 2009:481) notes that “business practices based on moral principles were advocated by the Indian statesman and philosopher Kautilya in the 4th century BC”. Kuljian (2005) says that political boundaries do not influence the extent of moral value in a person, their social responsibility or even their interests in life more than geographical borders contain economic markets or cultural influence. The statement by Kuljian (2005) gives emphasis to the notion that the world is
connected and everyone in the world has the potential to be influenced. A global understanding of CSR has developed.

Waagstein (2011) talks of implicit and explicit CSR. Implicit CSR describes obligatory CSR and explicit is voluntary CSR. Implicit CSR is rooted in various relationships among business, society, and government within the political system, and is represented by strong values and regulations that require corporations to address stakeholder issues (Waagstein, 2011). Explicit CSR refers to voluntary corporate programs and strategies motivated mainly by self-interest, which tackle issues of CSR (Waagstein, 2011). Obligatory CSR is related to the ethical and legal responsibilities of a business. Explicit CSR would speak to the philanthropic responsibility because it is the business entity’s choice as what type of philanthropic initiative the business is to partake in. Matten and Moon (2008 cited in Waagstein 2011:456) state that “CSR is not an isolated concept; it overlaps with some corporate policies”. The statement by Matten and Moon (2008) highlights the possibilities of policy makers including aspects of CSR unconsciously that may not actually be CSR due to the different interpretations of CSR by different societies. Different businesses and countries have their own interpretations and they use their preferred definition in a way that suits their goals (Waagstein, 2011). Irrespective of the definition one adopts, CSR entails a series of voluntary and business led social practices that may not be directly related to the pursuit of profit (Babarinde, 2009).

The question of whether CSR should be mandatory or voluntary is hard to answer. However, many countries have legislated that businesses practise CSR and provide annual reporting of it (Waagstein, 2011; Karnani, 2013). The implementation of such laws represents a legal recognition of the existence of CSR (Waagstein, 2011). An example of such a country is Indonesia. In 2007, a law was passed in Indonesia making CSR compulsory for all businesses (Waagstein, 2011). This law stated that every company was to create relationships that are balanced and suitable to the local community values (Waagstein, 2011). However, passing such legislation does not always bring clarity and stability in practice. In Indonesia, the passing of CSR legislation caused confusion, as there was already a law that stated that all companies who were conducting business in
or related to natural resources had to implement CSR (Waagstein, 2011). Businesses were legislated to set aside money to use in social and environmental initiatives (Waagstein, 2011). The confusion was whether the new law was to be of a voluntary nature or not (Waagstein, 2011). The courts of Indonesia declared that this law was mandatory for all business taking into consideration that it is unfair for only a certain sector of companies, namely those involved in the mining of natural resources, to be involved in CSR (Waagstein, 2011). Waagstein (2011: 10) states that “in reality, all corporations, regardless of size, type, or degree of power, must be equally subject to CSR”. Furthermore, the Indonesian Court stated that CSR is a flexible concept subject to the interpretation of each country and therefore, mandatory CSR was suitable for the social, legal and economic circumstance of Indonesia (Waagstein, 2011).

Another country that is in the process of making CSR mandatory is India, which is also classified as a developing country (The World Bank, 2013; Karnani, 2013). A Companies Bill was passed by the lower house of the Indian parliament, which requires companies above a certain size to ensure that they spend at least two percent of annual profits on CSR (Karnani, 2013). It is anticipated that the higher house of the Indian parliament will pass this into law (Karnani, 2013). Waagstein (2011) points out that the mandatory nature could be found to be discouraging to business growth in the future. In addition companies might just fulfill what the law requires and the voluntary nature would be lost. Notwithstanding the potential discouraging of entrepreneurial flair and/or social responsibility, the mandatory approach is a way of making sure that more companies will ultimately commit to behaving in a manner designed to improve society at large.

Clearly, one notes that businesses acting in a responsible manner may not be acting as such because it is in their commercial interest but rather because that is how society expects them to operate (Moir, 2001). Waagstein (2011) says that the stricter the regulatory controls in a particular country, the less motivation exists for companies to develop voluntary policies. No law has, to date, been passed in SA making CSR obligatory. However, companies listed on the JSE are
required to take cognizance of the *King Report II*\(^4\) whereby companies are obliged to report annually on the extent of their social, ethical, safety and environmental policies as per the second King Report (Nolan, 2006). In 2009, a third *King Report* was published which amended the corporate governance code (Institute of Directors in Southern Africa, 2009). In contrast to the *King I* and II codes, *King III* applies to all business entities regardless of the manner and form of establishment (Institute of Directors in Southern Africa, 2009). The report states that each entity should consider the approach that best suits its size and complexity.

Debates of CSR in SA are around inequality, affirmative action, HIV/AIDS and skills development (Hamann *et al.*, 2005). The small to medium business sector, to which it can be argued that dental technology belongs, faces challenges such as lack of mentorship, skill transfer, communication gaps and lack of knowledge about development opportunities (Hamann *et al.*, 2005). Dr. Blade Nzimande the Minister of Higher Education and Training delivered a speech in 2011 at the launch of the Southern African Society for Cooperative Education (SASCE) that gave emphasis to co-operative education (SASCE newslink, 2011). This was a challenge to people in different industries to assist in the learning processes of students to ensure skills development as it is critical for future employment. The request from Dr. Nzimande can be viewed as motivation for companies, especially in the small to medium sector, to lend not just their financial capacities but also their time towards social development.

Ferrell *et al.* (2011) define CSR as the adoption by a business of a model to fulfill the economic, legal, ethical, and philanthropic responsibilities expected of it by its stakeholders. This definition is to be explored further in this review as it forms the conceptual framework for this study. Dobers and Halme (2009:238) echo the definition by Ferrell *et al.* (2011) of CSR, saying that “CSR is founded on the idea that businesses are in relationship with other interests, including, economic, cultural, environmental and

\(^4\) The king commission requires companies that are listed on the JSE to report annually on how their have positively and negatively affected the economic life of the communities in which they operate during the year. As well as how the company intends to enhance those positive aspects and eliminate the negative aspects on the economic life of the community (Institute of Directors in Southern Africa, 2009).
social systems because business activities affect – and are affected by – such interests in society”. Dobers and Halme (2009:238) state that “these relationships may have a strong economic aspect, but they may also have a primary focus on social and environmental concerns” and businesses have to understand and manage these relationships. Therefore CSR is a commitment for businesses to conduct themselves ethically thereby contributing to economic development while improving the quality of life of the workforce as well as the local community and society at large (Ferrell et al., 2011).

Dobers and Halme (2009) state that it is important to study CSR in the context where it is being practised. A failure to embrace differences in social issues across countries, can lead to failure in the speed and scale of CSR implementation (Visser, 2010). The environment of developing countries presents difficult challenges and hostile environments to CSR policies and practices (Idemudia, 2011). Muthuri and Gilbert (2011) did an institutional analysis of CSR in Kenya and found that CSR is greatly influenced by the social, cultural, economic and political conditions of the country. Idemudia (2011), Matten and Moon (2008) and Visser (2009) agree that the factors found by Muthuri and Gilbert (2011) influence CSR. These constraints include the lack of government regulations, the pressure of social norms depicted by the media, and the economic structure in that particular country (Muthuri and Gilbert, 2011). The discussion now specifically turns to CSR in the South African context, noting that SA is considered to be a developing country.

2.4 The position of corporate social responsibility in South Africa

According to Baskin (2006), SA has the most developed CSR programme of African countries. Skinner and Mersham (2008) reported that ongoing development of CSR on the African continent owes much to developments in SA. An annual report of CSR in the top 100 South African publically listed companies suggested that CSR prevalence is growing (Ackers, 2009). It was found that despite SA’s developing country status, the prevalence of CSR assurance by its companies compared favorably with that of their counterparts in other developed countries outside Africa (Ackers, 2009).
A study by Fig (2005) interrogates the influence of CSR in SA by analyzing the factors that have encouraged CSR compliance. Fig (2005), states that South African companies only use CSR as a way to eliminate or cloud memories of apartheid era experiences. Fig (2005) suggests that the reconciliation of society in SA was a factor in the progression of CSR. However, this view is not widely held. Fig (2005) points out that radical writers postulated that business, rather than contribute to CSR, helped in lessening the effects of economic sanctions aimed at ending apartheid and received subsidies from and paid taxes to the apartheid state, therefore providing services, technologies and, in some instances, weapons directly used for oppression. Moir (2001) gives form to Fig’s (2005) observation about reconciliation in his article *What do we Mean by Corporate Social Responsibility*, when he talks of behavioural theories around corporate social activities. One of these behavioural theories views corporate social activity from a standpoint that examines the political aspects and non-economic influences on managerial behaviour.

Moir (2001) suggests that the exercise of power by managers in business may be influenced by their personal beliefs and not necessarily the objectives of the business. These beliefs may be associated with moral and ethical values that business has the resources to help solve social problems. The examination of personal motivations for corporate social initiatives could be the key for the progress of CSR. However, the voluntary nature of CSR in SA still needs improvement and more regulatory mechanisms may bring improvement to the notion of CSR (Fig, 2005).

South Africa’s past and the resulting socioeconomic challenges influence the characterization of CSR, its motivating forces, and its implementation (Hamann et al, 2005). The call for transformation after 1994 has given South African business a powerful mandate to play a more proactive role in influencing the social role of business than in most other countries through improved corporate governance, social upliftment, black economic empowerment, and business ethics (Hamann *et al.*, 2005; Visser, 2009). Historically the concept of CSR in SA has been in terms of philanthropic initiatives in education, health, or welfare at the national or local level (Hamann *et al.*, 2005). A national survey conducted in 2001 estimated that total annual spending on philanthropy was about
R2 billion and that non-financial contributions involved at least a similar amount (Hamann et al., 2005). Clearly there is evidence that CSR is being practised in SA.

### 2.5 Corporate social responsibility and the global industry of dental technology

The need for CSR programmes within the dental technology industry has been recognized. These range from offering under-privileged children dental care, volunteering to fabricate dentures free for the local community and teaming up with organizations that help victims of domestic violence who may be in need of dental prosthetics (Iverson Dental Laboratories, 2013; New Image Dental Laboratory, 2013). It also extends to organizing disaster relief funds in the United State of America for dental laboratories located in natural disaster prone areas (National Association of Dental Laboratories, 2013).

The acknowledgement of CSR in the international dental technology industry has also encouraged an international dental journal to enquire about the role that the individuals take in support of CSR (Inside Dental Technology, 2012). This enquiry reveals that other than dental laboratories, dental supply companies involve themselves in fundraising for non-profit organizations (Inside Dental Technology, 2012). An example is The Foundation for Dental Laboratory Technology, which provides scholarships to interested candidates for advanced education or certification in dental technology (The Foundation for Dental Laboratory Technology, 2013). They also work closely with many dental schools to donate equipment and supplies to help educate the next generation of technicians (Inside Dental Technology, 2012).

It was noted that articles that relate to business management of dental laboratories encouraged other aspects of CSR in the international dental journal Inside Dental Technology. An example of such an article is Build Lasting Client Relationships (Neil, 2013). This article focuses on customer relationship management (Neil, 2013), which includes ethics and furthering of knowledge. It is argued that by building a lasting relationship with one’s clients there is a better chance to be economically successful.
Boman (2012) in, *Employment Law Basics Labor: lawyer offers practical advice on how to avoid potentially costly legal issues*, gives guidelines on how dental laboratory owners can interact better with their employees within the right legal boundaries. Therefore, the relaying of business concepts may help the dental personnel to establish a stance in terms of ethics and legislature. The literature thus tacitly suggests that a socially responsible approach is encouraged in the global context of dental laboratories.

In trying to evaluate CSR in the context of the global dental technology industry it was concluded that there is a lack of literature on CSR in the dental technology industry in general and in the South African context in particular. It is anticipated that this study will add to the knowledge of CSR in the South African dental technology industry.
2.6 The Corporate Social Responsibility Theory Underpinning this Study

“Businesses today are expected to look beyond self-interest and recognize that they belong to a larger society, which requires responsible participation” (Ferrell et al., 2011: 5).

The concept framework used for this study is derived from Ferrell et al. (2011) who revives the Carroll (1991) model of CSR. The model has a pyramid structure of social engagement (Figure 1) to describe CSR.

Figure 1: Pyramid of Corporate Social Responsibility (adapted from Ferrell et al., 2011)
This model applies what is known as stakeholder\textsuperscript{5} theory (Ferrell \textit{et al.}, 2011). According to Ferrell \textit{et al.} (2011), stakeholder theory advocates that a business’s survival and success is dependent on fulfilling both its economic (e.g. profit maximization) and non-economic (e.g. corporate social performance) objectives by meeting the needs of the company’s various stakeholders. Stakeholder theory assumes that a two-way relationship between a company and a host of stakeholders exists. This model serves as the analytical framework of this study.

A number of perspectives to CSR exist. The normative viewpoint suggests that a company attends to the wellbeing of all its stakeholders equally (Pirsch \textit{et al.}, 2007). This means that the company’s CSR programme design should appeal equally to all stakeholders. The instrumental viewpoint suggests that economic performance is the most essential in a business (Pirsch \textit{et al.}, 2007). Thus only the aspects of CSR which improve the economic performance will be emphasized even at the expense of other stakeholder interests (Pirsch \textit{et al.}, 2007). An example of this strategy would be a company encouraging suppliers to minimize packing material to reduce disposal cost for the company. This in turn would help minimize waste material passed into the environment. The descriptive viewpoint suggests “that the organization’s shareholders, their values and relative influence, and the nature of the situation all predict organizational behavior” (Pirsch \textit{et al.}, 2007: 127). This might, also, include making donations to a foundation that is meaningful to the company’s major investors.

The realisation that issues that CSR deals with are different from industry to industry is vital (Visser, 2010). Most companies have a lot of stakeholders therefore a key to developing a socially responsible agenda is to identify who the stakeholders are. Knowing who the business stakeholders are may prove to be the starting point to seeing better results for CSR. Akpinar \textit{et al.} (2008: 2) state that “trying to satisfy conflicting objectives of different stakeholders might result in inefficient use of resources and might even cause

\textsuperscript{5} \textit{Stakeholders} are understand to be those people and groups who can affect or are affected by the achievement of a business’ objectives including customers, investors, shareholders, employees; suppliers and communities (Ferrell \textit{et al.}, 2011: 50; Pirsch \textit{et al.}, 2007)
deterioration of the financial performance and affect costs incurred from socially responsible actions”. Entrepreneurs and managers should “prioritize stakeholders based on the industry they belong to” (Akpinar et al., 2008: 1). In the dental technology industry stakeholders are the employees, competitors, equipment suppliers and material suppliers, dentists, medical aid sector, students and future employees of dental technology and the community within which the dental laboratories operate.

At the lowest level of the Ferrell et al. (2011) pyramid (Fig. 1), businesses have a responsibility to be economically viable so that they can provide a return on investment for their stakeholders, create jobs for the community, and contribute goods and services (Ferrell et al., 2011). At the next two levels of the pyramid, companies are required to obey laws and regulations that specify the nature of responsible business conduct (Ferrell et al., 2011). At the peak of the CSR pyramid is philanthropy which for the purpose of this study is defined as a direct contribution by a business to a cause, most often in the form of cash grants, donations and or in-kind services (Ferrell et al., 2011). These four aspects of CSR are intimately related (Pirsch et al., 2007; Ferrell et al., 2011). In order for a company to be socially responsible it should strive to make a profit, obey the law, be ethical, and be a good corporate citizen (Ferrell et al., 2011).

It is interesting to consider potential correlations between South African business views, which are prominent in Fig’s (2005) study in Manufacturing amnesia: Corporate Social Responsibility in South Africa, and the pyramid model of CSR. The three lower parts of the pyramid represent corporate social citizenship, defined as an industry that has “comprehensive policies and practices in place throughout the business to make decisions and conduct operations ethically, to meet legal requirements, and to show consideration for society, communities and the environment” (Fig, 2005: 601). The top of the pyramid (business philanthropy) represents corporate social investment, which is defined as “projects that are external to the business for the purpose of uplifting communities” (Fig, 2005: 601).
Durrant (2005) as well as Leon Louw argue\textsuperscript{6} that CSR should not include the economic and the legal responsibilities as these are required of all businesses. This may be true because the primary objective of a business is to be economically viable and most industries have regulations that must be followed to encourage ethical business conduct. However it makes more sense to think that each of the concepts in the pyramid of social responsibility is inter-reliant. Some of the ethics in business is governed by law and in order for a business to be able to donate money, resources and volunteered labour; it needs to be economically viable and capable of creating jobs from which the volunteered help will come. The discussion now turns to the exploration of each level in the CSR pyramid.

2.7 Economic responsibility of a business

The economy influences the way organizations relate to their customers, employees, suppliers, competitors, their community and even the natural environment (Ferrell \textit{et al.}, 2011). Some argue that the only objective of a business is to make a profit and forms the foundation of the Ferrell \textit{et al.} (2011) pyramid of CSR.

Pirsch \textit{et al.} (2007) and, Amato and Amato (2007) note that a company’s past and current economic performance will directly affect the ability to implement a CSR programme in the company. A company with better economic performance is more likely to develop and institute a CSR programme than one that has a lower level of economic performance (Pirsch \textit{et al.}, 2007). However, a study compiled by Shum and Yam (2011) suggests that economic viability alone does not necessarily translate into socially responsible business practices. Their results demonstrate that a business can be directed to engage in more voluntary CSR activities to achieve social good when appropriate legal and ethical controls are in place. Looking back at the mandatory CSR law that was passed in Indonesia, one of the questions that arose was whether CSR increased corporate costs such as planning and distributing resources. On the other hand, saving energy and

\textsuperscript{6} See page 17
setting up policies that are advantageous to the employees as well as the business does not increase corporate cost. Waagstein (2011) asks whether CSR should be a requirement given that it might be a financial burden for some companies. This research will try to determine whether CSR is an investment. The cost of CSR does not depend on legislature but rather on the activities and initiatives taken by the company as well as the degree of commitment by the company. Morrison and Siegel (2006) argue that companies will be expected to engage in CSR if the perceived benefits exceed the cost associated with the procedures to achieve desired CSR status. Some of the benefits associated with CSR are employee retention, reputation enhancement, and sustainability of an industry, which may translate to profit maximization (Carroll and Buchholtz, 2012; Ferrell et al., 2011; Shum and Yum, 2011).

One influential viewpoint argues that “since economic success is a key objective for companies, a firm should place its strongest focus on improving economic performance” (Pirsch et al., 2007: 127). Skinner and Mersham (2008) are concerned that most businesses will have a capitalist analysis of CSR and would ask the question of how CSR will bring in money to the business. Skinner and Mersham (2008) feel that if business people had a clearer understanding of the CSR mindset, it will serve to promote for greater CSR activity. Ablander (2011: 115) states that companies “should not only add to economic interests by providing useful products and services, paying taxes and offering secure workplaces, but they should also engage with society as good corporate citizens by undertaking additional responsibilities”.

It is estimated that about 95 percent of the total business sector (formal and informal) is comprised of small to medium businesses accounting for about 46 percent of total South African economic activity (Hamann et al., 2005). Small to medium business provide about 84 percent of all private sector employment (Hamann et al., 2005). The Extending Service Delivery Project/ Meridian Group International, Inc. (2006) reports that small to medium sized companies perhaps do not give much importance to CSR because they do not have adequate financial and human means to implement it. Whether or not, businesses could
take on CSR as a policy depends upon the economic perspective of the business, that is adopted (Moir, 2001).

### 2.8 Legal responsibility of a business

The rationale usually given for regulating any industry, is to create a fair competitive environment for businesses, consumers and society. The intention of regulations is supposed to be to protect stakeholders from unethical business practices, encourage equality in the workplace as well as give assurance that people are working in a safe environment (Ferrell et al., 2011). Compliance with the law is an important foundation of social responsibility (Ferrell et al., 2011). However being merely legally compliant is not enough for a company to be considered socially responsible (Kakabadse et al., 2005).

Muthuri and Gilbert (2011: 469) state that “ineffective legal systems and uncertain regulatory frameworks allow for different interpretations and varying degrees of compliance”. Carroll (1999) argues that pursuing pure economic responsibility at the cost of legal responsibility can be risky for a business. For the latter reason, legal and regulatory requirements are necessary in the dental technology industry to minimize undesirable side effects such as poor quality products, fines from the SADTC or, worse, having to close down a dental laboratory.

Campbell (2007 cited by Muthuri and Gilbert 2011), notes that businesses are prone to act in socially responsible ways if they have well-enforced state regulations. The SADTC enforces the rules in the dental technology industry. A subject called Jurisprudence is taught at university level which makes every qualified dental technician aware of the rules and regulations that one has to comply with. Each dental technology student is given their own personal copy of the rules and regulations to keep.

Shum and Yam (2011) state that without regulations and common law, progress in responsible corporate social activities would be slow. Shum and Yam (2011) give the example that in New Zealand, regulation is the main driver in containing corporate
environmental impacts. Before the passing of the environmental legislation, business entrepreneurs were not concerned about controlling the environmental effects of releasing pollution to the environment (Shum and Yam, 2011).

2.9 Ethical responsibility of a business

After the fulfilment of their legal responsibilities, businesses are to decide what they consider to be just, fair and right. Business ethics, as related to dentistry, may be defined as professional standards of conduct (Gorman, 1967). Currently dentists believe dental technology ethics are limited largely to collegial relationships as well as business interactions and they believe that dental technology is conducted ethically (Skea, 2010). Ethics are believed to be promoted through the SADTC (Skea, 2010). This is evident in the requirement of the professionals of the dental technology industry to obtain CPD points through ethical participation (SADTC, 2014). Ethics form part of CSR and as such the professional ethics may be enhanced through CSR.

Ethical behaviour relates to choices and judgements about acceptable standards of conduct that guide individuals and groups, whilst business ethics comprise the principles and standards that guide the behaviour of individuals and groups in the world of business (Ferrell et al., 2011). Since there is hardly any contact with patients in the dental technology field, ethics relates to business ethics including the ethical behaviour of the dental laboratory owners towards their staff and their clients (mainly dentists\textsuperscript{7}). Garret and Heal (2004) feel that CSR programs can make industries aware of inconsistencies between profits and social goals as well as fairness issues which may lead to social issues being taken seriously. It is anticipated this may be true of the dental technology industry as well.

Liveris (2011) argues that ethics has three consecutive phases. The first phase is when entrepreneurs realize that they need to reassess their codes of conduct and processes

\textsuperscript{7} Some dental laboratories subcontract to other laboratories. In this case the client of the laboratory owner is another laboratory owner.
(Liveris, 2011). The second phase is considering the economic, environmental and social impact that business has on its stakeholders (Liveris, 2011). The last phase is reached when the human element is integrated into business (Liveris, 2011). The human element can be personal beliefs and moral values of entrepreneurs. These beliefs can be related to the mission and vision of a business.

Nielsen and Thomsen (2009) found that the driving force of CSR in some small to medium companies is the human element, thus supporting Liveris’s (2011) understanding of the phases of ethics. Furthermore Andayani et al. (2008) believe that the strategy for the implementation of CSR should be in line with the mission and vision of the company. The need for the awareness of the triple bottom line implies that social and environmental issues should not be secondary to more obvious business imperatives (Institute of Directors in Southern Africa, 2009).

These phases, if applied to dental technology may improve the current state of the dental technology industry by eliminating the discounting of skilled work, which results in the employment of unqualified persons, and the use of cheap sub-standard materials (Skea, 2010). Windsor (cited in Shum and Yam 2011) states that wealth creation is what dominates an entrepreneur’s mind more than social responsibility. Skea (2010: 106) states that “the nature of professions dictates that the professional’s priority is to the service they provide to the community and not to their profit margins”. The statement by Skea (2010) argues how the objectives of CSR speak to professionalism. By fulfilling what CSR suggests as a way forward, it can be clearer that the objective of a business must be more than just to make profits. A lack of responsibility to the business’s best interest could be the cause of unethical proceedings in an industry especially if there is a lack of stringent regulations and rules. It is only when legal responsibility is taken seriously as a basic norm, that ethical responsibility will be triggered and reinforced (Shum and Yam, 2011). Shum and Yam (2011: 556) state that “business ethics are important to guide entrepreneurs to prevent unethical behavior and stay within the legal boundaries so as not to suffer from financial risk and fraud”. Crook (2005 cited in Durrant 2005) says that entrepreneurs and managers, in general, ought to think much harder about ethics than they appear to do.
The way colleagues treat each other, treat customers, suppliers and communities is at the core of ethical business behaviour (Liveris, 2011). When colleagues in a company do not embrace the same set of values there is always a possibility of ethical conflict. South Africa is a country that has diversity in culture and religion. Pratt (cited in Idemudia 2011) suggests that practical and situational ethics be formulated and implemented in African countries. Regardless of the diversity of the work place, personal integrity and humility may be important tools in building an environment where ethical behaviour is at the forefront (MacKillop, 2011). By being more productive and content, the business maintains better relationships with its clients (Ferrell et al., 2011). The same can probably be said for the dental technology community.

2.10 Philanthropy

Success does not come only from increasing profit but from conducting business in a manner that will benefit the customer, suppliers and community. MacKillop (2010:143) states “with great privilege comes great responsibility and finding success in a business is one of the greatest privileges of the current generation and one should be making a difference in their community by giving back”. A study conducted in Australia found that part of the reason why businesses were involved in the community is the goal of long-term business sustainability, the maintenance of trust, support and legitimacy with the community, governments and employees (Moir, 2001). This suggests that the practice of philanthropy by businesses ensures sustainability of the community which then serves the primary business objectives of profit.

The model used as framework in this study indicates that many companies consider philanthropy only after they have met their financial, legal, and ethical obligations (Ferrell et al., 2011). However, philanthropy has not always been linked to profits or business ethics (Ferrell et al., 2011). Traditional philanthropy disconnects giving from the business performance as it does little to help make the profit, but is nevertheless linked with improving the business’ bottom line (Ferrell et al., 2011; Siwar and Harizan, 2009).
There has been plenty of criticism of efforts to enforce models of organized philanthropy on African businesses, by mostly US-style community foundations (Trust Africa, 2011). However, the global debate has moved on to a question of the relevancy of philanthropy (Trust Africa, 2011). Traditionally, South African policymakers, and other stakeholders such as academics have ignored the philanthropic value (Everatt et al, 2005). This gap in literature allows business to feel that they are being socially responsible by just fulfilling the other three layers of Carroll’s CSR pyramid (Kuljian, 2005).

There is a poor understanding of business responsibilities towards philanthropy, not just in SA but globally (Payton and Moody, 2008; Everatt et al., 2005). When Kuljian (2005) conducted a study, Philanthropy and Equity: A South African case study, the term philanthropy was not a familiar one amongst businesses and organizations. Most businesses viewed philanthropy in the same light that they viewed charity, both with negative connotations. Even the Corporate Social Investment handbook of SA reflects on philanthropy as patronizing (Kuljian, 2005). For the purpose of this study, corporate philanthropy is defined as a direct contribution by a company to a charity or a cause, most often in the form of cash grants, donations and or in-kind services (Ferrell et al, 2011). It is both a financial and a non-financial initiative. This definition echoes what South African businesses term corporate social investment, defined as “projects that are external to the business for uplifting communities” (Fig, 2005: 106). By making voluntary donations such as money, time, and other resources, companies can contribute to their communities and society and improve the quality of life.

The term philanthropy is derived from Greek, which means the love for humankind (Gaist, 2009). Philanthropic activities promote human welfare and goodwill. Philanthropy provides four major benefits to society. Firstly, ‘it improves the quality of life of the community thus attracting and retaining employees and customers’ (Ferrell et al., 2011: 343). Carroll and Buchholtz (2012) suggest that good corporate social performance generates good corporate financial performance, which in turn generates a good corporate reputation. Secondly, philanthropy “reduces government involvement by providing assistance for stakeholders” (Ferrell et al., 2011: 343), for example being
involved in charity organizations and donating to programs that empower society. Thirdly, it “develops employee leadership skills” (Ferrell et al., 2011: 343). Lastly, it “helps create an ethical culture and values that can act as a buffer to organizational misconduct” (Ferrell et al., 2011: 343).

Most research on philanthropy is on organizations and institutions in developed market economics, in particular Western countries (Helmut and Siobhan, 2006). Helmut and Siobhan (2006: 3) state that “philanthropic foundations vary in form, meaning and operations from one country to another”. One of the insights that is drawn from comparative research by Helmut and Siobhan (2006: 3) is that “the foundations are different in a number of critical aspects once the cultural and legal boundaries of the western-style developed market economics are eliminated”. Private sector philanthropic funding accounted for 25 percent in SA compared to an average of 11 percent in 28 other countries (Swilling and Russell, 2002). In spite of the significant support that they provide, companies are still hesitant to work with the most marginalized and to support greater advocacy campaigns (Kuljian, 2005).

Babarinde (2009: 356) states that “white South Africans continue to control the corporate environment in terms of ownership and management.” This remains true of the dental technology industry in SA (pers. comm. Bass, 2013). Consequently, Babarinde (2009) requests the private sector to explore how it could contribute to the bridging of the economic divide in SA. This echoes Kuljian (2005) who brings to attention that enormous wealth in SA is in private hands. The South African Minister of Finance passed the exemption tax law in the year 2000, which came into effect in the year 2001. The previous law allowed donors to deduct from their taxable income only contributions to universities, colleges and educational funds (Kuljian, 2005). The new law has expanded the activities for which donations are deductible (Kuljian, 2005). This should be recognized as a way that the government is trying to encourage more businesses in SA to be involved in philanthropic activities.

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8 The attempt to find more recent statistics was unsuccessful.
2.10.1 The role of philanthropy in South Africa

Philanthropy, in theory, “has a fundamental role to play in advancing global equity, acting beyond the broader concerns of government and the narrower interests of business” (Kuljian, 2005: 1). According to Burkeman (2002 cited by Kuljian 2005: 12) “there is no reason for philanthropic resources to be spent on things that the government can do better”. On the other hand Ferrell et al. (2011), Skinner and Mersham (2008), and Elias (2004) argue that there are many social problems today and there is no way that the government can effectively solve them without a great deal of outside support. Both points are relevant when reviewing the need and position of philanthropy in SA. The South African statistics between 2002 and 2009 reveal that an estimated 3.6 million children are either maternal, paternal or double orphans and in need of financial and other support (Statistics South Africa, 2010). Between 2002 and 2009 social grants in South Africa had increased from 15 percent to more than 25 percent (Statistics South Africa, 2010). An estimated 3.3 million youth aged 15 to 24 were found not attending any educational institutions and the reason behind this, as cited by 36 percent of those surveyed, is a lack of money (Statistics South Africa, 2010). According to the GINI coefficient, which is the measure of inequality distribution SA is number 28 out of 199 countries in the world rankings in terms of unemployment and it is number 24 in terms of population below the poverty line (Business dictionary, 2011; Indexmundi, 2012 GINI Index, 2013). Unemployment remains high and overwhelming economic problems remain, especially poverty and lack of economic empowerment among disadvantaged groups. Currently more than one-quarter of SA’s population receives social grants (CIA, 2011). The latter statistics about the situation in SA should emphasise the need for CSR initiatives.

Payton and Moody (2008) are concerned by the lack of perceived importance of philanthropy by entrepreneurs, as they strongly believe that it permeates stakeholders lives, whether businesses and stakeholders are conscious of it or not. They further state that philanthropy is an essential tool in the collective attempts to solve public problems as well as the survival of democratic societies because when crafting plans and policies to
solve social problems, people often turn to private giving as an alternative yet there is too little or only ill-informed consideration of philanthropy in public conversations.

2.11 Remarks from research in developing countries based on the corporate social responsibility theory underpinning this study

Visser (2005) suggests a remodeling of Carroll’s (1991) notion of CSR with what he views as better suited to a developing country. Economic responsibility is still at the forefront of a business. Philanthropy becomes the second objective to business followed by legal and then ethical responsibilities. Visser’s (2005) reshuffle of Carroll’s (1991) CSR is based on surveys that were conducted whereby the different layers of the pyramid were rated according to importance. It is therefore important to highlight that the objective of this study is not to reshuffle the CSR pyramid. The objective, rather, is to uncover how each layer is understood and how it affects the dental technology industry. Visser (2009) further emphasises the importance of philanthropy, as it is the most direct way to improve society and business opportunities. Businesses realize that they cannot succeed in communities that fail in economic terms.

Legal responsibilities generally have a lower priority in developing countries due to poorly developed legal infrastructures and administrative efficiency (Visser, 2009). Visser (2010) feels that ethics are an exception rather than a rule in developing countries. This is true in SA despite the encouraging efforts of the King Commission. The essence of CSR has been shown to have a positive contribution to society. It is not a marginal after thought, but a way of business (Visser, 2010). Visser (2010) further suggests that the acronym CSR rather stand for Corporate Sustainability and Responsibility.

Muthuri and Gilbert (2011) formed a similar pyramid of activities in conclusion to their study on CSR in Kenya, which placed ethics before legal responsibilities. Muthuri and Gilbert (2011) collected their data from company websites. They also utilized a survey. On the company’s website, they analyzed what companies reported as CSR. The shortfall of this data collection method was that not all companies have websites.
2.12 Conclusion

The development of CSR was outlined and discussed. The theory of CSR was discussed to assist in a better understanding of the definition of CSR as understood in this study. It is apparent how each layer of the CSR pyramid links to the other. Some of the layers are interdependent. By examining the literature, it is evident that CSR may have a valuable role in the dental technology industry. Research based on CSR in developing countries is scarce (Dobers and Halme, 2009; Visser, 2009). In order to develop a CSR concept that is conducive to the South African context and the dental technology industry it is important to understand its characteristics and what drives it.

The research report now moves to a discussion on the methodology used in this study.
3.1 Introduction

This is a qualitative study conducted in the interpretive paradigm. In this chapter the method used for data collection and analysis is described in detail. The construction of the research instrument is discussed. The sampling method used for the purpose of this study is identified and described, and the motivation for it is discussed. The exclusion criteria of the sampling process are explained. Ethical considerations arising out of this study are also explained and discussed.

Key research questions

1. How is CSR understood by dental laboratory owners and dental technicians in KwaZulu-Natal?
2. What forms of CSR does the dental technology industry practise in KwaZulu-Natal?
3. What model of CSR is appropriate for adoption within a co-ordinated industry approach?

3.2 The research paradigms

Researchers achieve coherent designs by ensuring that the research purposes and techniques are arranged logically within the research framework provided by a certain paradigm (Terre Blanche et al., 2006). Paradigms are systems that help define for researchers the nature of their enquiry along three dimensions, namely, ontology, epistemology and methodology (Terre Blanche et al., 2006). Ontology is defined as indicating “the nature of reality that is to be studied and what can be known about it” (Terre
Blanche et al., 2006: 6). Ontologically this study is based on CSR and what can be known about it is revealed in the data collected. Dental laboratories are of different sizes and with differing numbers of staff. One-man dental laboratories with one speciality are different from dental laboratories that have multiple capacities. It was therefore necessary to design the research to uncover the differences that this positioning makes in participation and opinions of CSR, despite legislative framework in which South African business operates.

Epistemology indicates “the nature of the relationship between the researcher and what can be known” (Terre Blanche et al., 2006: 6). The researcher is aware that multiple interpretations of what constitutes CSR are available and seeks to discover what meanings dental technicians and dental laboratory owners in KwaZulu-Natal attribute to CSR.

Paradigms described by Terre Blanche et al. (2006) include positivist, interpretive and constructionist. The positivist paradigm is adopted when what is to be studied is stable and unchanging which enables the methodology to manipulate reality (Terre Blanche et al., 2006). The interpretive paradigm is adopted when people’s subjective experiences are to be studied enabling interviews or participation observation to be used to explain meanings behind social action (Terre Blanche et al., 2006). The constructionist paradigm is adopted when there are variable sets of social constructions and a methodology that will deconstruct the versions of reality is used to explain why certain social actions are more possible than others (Terre Blanche et al., 2006). This research is located in the interpretivist paradigm, where it seeks to uncover as many meanings/understandings of CSR as possible rather than seeking one particular ‘truth’ and therefore generalizable definition of CSR for the entire industry, which would require an adaptation of the positivist paradigm. To aim for a single definition for the industry would be premature before an exploration of possibilities has been made. The interpretive stance allows for the explanation of the subjective reasons and meanings that lay behind social actions of dental laboratory owners and dental technicians (Terre Blanche et al., 1999). This
construct is enabled for the discovery of why dental technology businesses are not more active in CSR.

### 3.3 Sampling

Lohr (1999) states that a perfect sample would be one that mirrors every characteristic of a whole population scaled down. However, no such sample is possible and if it was, one would not know unless they measure the whole population. A good sample is one that will reproduce the characteristics of interest in the population in the sense that each sample unit represents the characteristics of a known number of units in the population (Lohr, 1999). This view is echoed by Terre Blanche et al. (2006) who state the objective of a sample is for it to be large enough to allow the researcher to make deductions representative of the population about which the researcher aims to draw conclusions.

Dental laboratory owners and dental technicians who were practising in a dental laboratory and with accredited experience needed to be sought for this study. Therefore dental laboratory owners and dental technicians with four or more years of experience were sampled. A list of dental laboratories and dental technicians in KwaZulu-Natal, registered with the SADTC, was obtained. There were 83 registered dental laboratories and 147 registered dental technicians in KwaZulu-Natal at the time (2011) the sampling process was undertaken. Only dental laboratory owners and dental technicians were sampled so as to demarcate the study’s interest, which is exclusively on the dental technology industry and the experts who experience its operations every day and form its foundation.

Random sampling was utilised for the study and therefore participants had an equal and independent chance of being picked for the study. A random number generator was designed (Terre Blanche et al., 2006). A list of numbers from 1 to 230 was generated; one number was allocated to each dental laboratory and each dental technician. All the generated numbers were written down on a piece of paper and the papers were then folded. The folded papers were separated according to designations. Ten dental
laboratories were randomly selected. The dental laboratory owners of these ten dental laboratories were then identified and invited telephonically to participate in the study provided that they had at least four years working experience in the industry. The four years of experience was checked by asking respondents as to their years of experience at the time of inviting them to be part of the research process. Ten dental technician employees were also randomly selected from the list of dental technicians. The dental technicians were telephonically invited for the study if they had had at least four years of industry experience. This, too, was checked at the time that these technicians were invited to be part of the research process. In cases where either the laboratory owner or a technician employee selected for the study declined to be interviewed the next person as per the random selection list was invited to participate. The willing participant was provided with a letter of information\(^9\) on the nature of the research. This letter included surety of confidentiality and the consequences of taking part in the study as well as the benefits that could accrue from taking part in the study.

With knowledge that the subject matter under investigation could cause discomfort owing to moral issues under discussion, it was important to reflect on choices made during the design of a study and to be observant for the sensitive or critical issues that may arise during interviews. Those persons agreeing to be interviewed were required to complete a consent form\(^{10}\).

The tables to follow show the demographics of the final sample used in this study. The names of the interviewees have been changed to pseudonyms to ensure anonymity. Dental laboratory owners are identified by the acronym DLO (dental laboratory owner) and a number representing the sequence of their interview schedule. Dental technicians are identified by the acronym DT (dental technician) and a number representing the sequence of their interview schedule.

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\(^9\) Annexure 1

\(^{10}\) Annexure 2
Table 3.3.1: Sample of dental laboratory owners

<table>
<thead>
<tr>
<th>Sample size</th>
<th>Males</th>
<th>Females</th>
</tr>
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<tbody>
<tr>
<td>10</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

Work experience

| DLO 1 | 7 years |
| DLO 2 | 15 years |
| DLO 3 | 13 years |
| DLO 4 | 17 years |
| DLO 5 | 4 years  |
| DLO 6 | 18 years |
| DLO 7 | 5 years  |
| DLO 8 | 20 years |
| DLO 9 | 27 years |
| DLO 10| 10 years |

Table 3.3.2 Sample of dental technicians

<table>
<thead>
<tr>
<th>Sample size</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>5</td>
<td>5</td>
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</tbody>
</table>

Work experience

| DT 1 | 12 years |
| DT 2 | 6 years  |
| DT 3 | 6 years  |
| DT 4 | 9 years  |
| DT 5 | 5 years  |
| DT 6 | 4 years  |
| DT 7 | 7 years  |
| DT 8 | 13 years |
| DT 9 | 10 years |
| DT 10| 15 years |
3.4 Delimitations

Only registered dental laboratory owners and registered dental technicians were considered for participation in the study.

Any currently registered dental technician but not working in a laboratory was excluded from the study. This exclusion included any technician currently employed in a dental technology teaching institution. This was to ensure that the information derived from the interviews was current and relevant to persons active in the field.

Dental laboratory owners and registered dental technicians with less than four years working experience were excluded. It was assumed that dental laboratory owners and dental technicians with at least four years of experience would be more informed about the dental technology industry.

Individuals communicated with in connection with this study prior to the start of the study were excluded from being interviewed. This was to exclude any preconceived answers.

3.5 Data collection

In order to obtain creditable data, the most practical, efficient, and ethical methods for collecting data needed to be sought (Marshall and Rossman, 1999). Kvale (2006) suggests talking to people if you want to understand their world, their views and opinions. Consequently, semi-structured interviews were utilised in this study. The use of semi-structured interviews allowed respondents to freely discuss their understanding of the CSR in the dental technology industry. It allowed for deeper probing into responses given by the interviewee (Kvale, 2006). The interviews therefore gave rich and in-depth information that other methods, e.g. structured questionnaires with forced choice responses, may not have uncovered (Miller, 2003).

Kvale (2006) indicates that a mode of understandings takes place during research interviewing. A mode is a manner, in which something occurs, is experienced or
expressed (Oxford English Dictionary, 2012). Thus a mode of understandings refers to the synthesis of the interview by the interviewer as it occurs. The purpose of the semi-structured interview is to enable for the description and comprehension of the central themes in the interviewees’ working lives. The study sought to understand the values that the dental laboratory owner’s and dental technicians live by and, hence, to interpret the meaning of these themes in their lives. Kvale (2006) says when the researcher is interviewing he/she is trying to uncover facts and meaning. The purpose of the interview was to gather enough data to enable the description and understanding of the central themes the subjects experience and lived towards with respect to CSR (Kvale, 2006). The main task was then to understand the meaning of what the interviewees were saying and obtain descriptions that had relevant and precise material from which to draw interpretation (Kvale, 2006). Data was recorded using a digital tape recorder. The interviews were approximately 15 to 20 minutes in length and consisted of questions that were used to guide the discussion. The interviews took place in the selected dental laboratories in a space where no distractions could occur. Such distractions would be telephones ringing, people walking in during the interview and having the interviewee work during the interview. It was however difficult to find such a space as most of the laboratories did not have secluded areas that were away from the working stations of other staff. Most of the dental laboratories did not have patient waiting rooms or private office areas. In these situations the interviewee was asked to hold the recorder in their hand so as to aid in a clear recording.

Before the actual interviews, two pilot interviews were conducted in order to test the value of the semi-structured interview protocol that was developed (Annexure 3). Following the pilot interviews the interview questions were restructured (Annexure 4). The restructuring of the interview questions was a consequence of the interviewee’s responses being too broad and general to be useful, as the primary objective of the research was to obtain descriptions which were relevant and from which precise interpretations could be drawn (Kvale, 2006). The design of the questions related directly to the different aspects of this research, namely, the economic, legal, ethical, and philanthropy aspects, drawing from the theoretical framework of CSR used for this research (see Chapter 2).
3.6 Transcription

All interviews were transcribed. An immediate disadvantage of transcribing recordings is the excessive time it takes (Clausen, 2012). Transcribing can also be a sensitive technique as one should be able to follow certain conventions, such as the use of symbols and signs for any sound or break (Clausen, 2012). However, Bucholtz (2007) brings to attention that the use of symbols and signs is most important where discourses are to be analysed. This study utilised thematic content analysis which enables an uncluttered transcription of just the words spoken by the interviewee. To ensure credibility of the data, the researcher transcribed all the recordings and verified the transcripts whilst listening to the recordings multiple times.

3.7 Analysis

For the purpose of this study, thematic content analysis was used. It involved the identification, analysis and reporting of patterns within data collected (Braun and Clarke, 2006). Braun and Clarke (2006) say it minimally organises and describes data.

Three parallel activities were involved in the analysis of the study; data reduction, data display and conclusion drawing/verification (Miles and Huberman 1994). Data reduction refers to the simplification of transcriptions by formulating codes and themes (Lewins and Silver, 2007). Nvivo (10) was utilised for coding of the data and identification of themes. The layers of the CSR pyramid as suggested by Ferrell et al. (2011), namely, economic, legal, ethics and philanthropy were used as codes. A sample of the coding to record the themes can be seen in Annexure 5. This ensured that an interpretive mode relevant to the critical questions of this study was pursued. Linking of similar ideas and central issues and differences within the different levels of the CSR pyramid was sought. Data display involves the manner in which a researcher designs and assembles large amounts of information to organised and accessible text for drawing justifiable conclusions (Lewins and Silver, 2007). Nvivo (10) enabled for the display and interpretation of patterns and themes that emerged from the data. It also ensured that the analytical process is clear.
and accountable. From the different codes, central issues and patterns were sought resulting in themes and sub-themes which are contained in chapter four of this study. Conclusions and verification entails the researcher coming to a decision as to what the data suggests which is contained in Chapter five of this study (Lewins and Silver, 2007).

### 3.8 Validity and trustworthiness of the study

Validity refers to the degree to which the research conclusions are sound (Terre Blanche et al., 2006). It is important to eliminate any factors that may question the credibility and reliability of the research.

Measures for validity contain strategies used by researchers to establish the credibility of their study (Creswell and Miller, 2000). The trustworthiness in this research is ensured by verisimilitude, i.e. utilising what is known as members’ checks (Creswell and Miller, 2000; Miles and Huberman, 1994). Verisimilitude as described by Denzin (1989 cited in Ponterotto 2006) refers to “truth like statements” that produce for a reader the feeling that they have experienced, or could experience, the events being described. Lincoln and Guba (1985 cited in Creswell and Miller 2000) describe member checks as the most crucial technique for establishing credibility in a study. It consists of taking the transcripts and interpretations back to the participants in the study so that they can confirm the credibility of the information and narrative account. The participants verified the transcripts and then the emerging themes were shared with the participant. In rare occasions, participants’ responses to the themes formed new data. The new data was taken into consideration and it was established that the new data did not affect the data collected through the initial interviews. In this way, the participants added credibility to the qualitative study by having a chance to react to the final narrative.

The trustworthiness of the study was verified following the semi structured interview process. Being open-minded to all responses during the interview process was sought. Analytical bias was curbed, though possibly not eliminated, through comparing the analysis with that of other researchers. This ensured that the researcher was aware of
potential differences in interpretation. Trustworthiness was further ensured by thorough checking of transcripts and accurate representation.

Data Triangulation was utilised in this study for validity. Data triangulation entails the use of different samples and the gathering of data at different times (Bryman, 2011). It is when a researcher uses different sources of data to triangulate rather than different methods (Flick, 2008). Triangulation was pursued by looking at the themes that were similar from the data analysis of the dental laboratory owners and that of the dental technicians. It was accomplished by comparing the comments made during the member checking process. Identifying themes that the dental laboratory owners and dental technicians agreed upon, plus verification from the member checks, served as a weight of evidence suggesting that if every dental laboratory owner and dental technician, who is looking at CSR from different points of view, sees it in a particular way, then it is likely that that view is worth considering in policy making and action.

### 3.9 Ethics

Ethical decisions do not belong to a separate stage of an investigation, but arise throughout the entire process of research (Kvale, 2006). At the design stage an informed consent sheet was created which assured the participants of confidentiality, anonymity and informed them about the consequences of participating in the study. At every interview situation a briefing of the purpose, rationale and design of the study was given to all participants. Furthermore confidentiality and possible consequences of the interview interaction were further explained to each participant. Accuracy of the data and transcription was insured by verifying the written text while listening to the recording. At the analysis stage participants were afforded a chance to look at the results and comment on the way that their views were interpreted. Furthermore bias was eliminated from the study by letting other researchers look at the data and themes that emerged.
Ethical clearance from the ethics committee of the Faculty of Health Sciences was obtained on 16 April 2012. An ethics clearance certificate was thereafter issued. A copy of the ethics clearance certificate is included (Annexure 6).

3.10 Limitations

The design of the study can be viewed as a limitation. It is restricted to the views of dental technology personnel residing in KwaZulu-Natal. Thus this study is only relevant to its setting.

It was noted that statements made by dental laboratory owners and dental technicians may sometimes be ambiguous. It then became the researcher’s task to clarify whether the ambiguities and contradictory statements are due to failure of communications in the interview situation or a reflection of objective contradictions in the world in which the interviewees live (Kvale, 2006). The dental laboratory owners and dental technicians might have been influenced by prestige bias, according to Kruse (1996 cited in Clausen 2012). This is when an interviewee responds in a socially desirable way rather than being fully honest.

3.11 Conclusion

This chapter followed Kvale’s (2006) research design, it looked at the methodology and established the paradigm for the study. The sample size and method was discussed and explained. It was argued that semi-structured interviews would generate sufficient data. The delimitations of the study were established. The need for informed consent and other ethical considerations that arise throughout the whole research process were discussed. It was argued that the data generated would be trustworthy and creditable through the use of triangulation. The discussion now turns to Chapter four which outlines, describes and discusses the findings generated by this study.
CHAPTER FOUR

FINDINGS AND ANALYSIS

4.1 Introduction

This chapter describes the results that emerged from analysis of the data collected for the study. The data generated in this study answer the three research questions\(^{11}\) that guided this study.

Interview data was transcribed verbatim and analysis of the data generated in this study resulted in the identification of themes and sub-themes, which are listed in Table 1. The themes are then individually discussed in detail. Themes were identified from the conceptual framework chosen for this study. Subjects that were raised in the review of literature were also considered in the identification of themes. The themes were identified by the researcher after interrogation of the data. Relevant quotes are used to support the discussion where appropriate. The names of the interviewees have been changed to pseudonyms to ensure anonymity.

\(^{11}\) See Chapter one page 12
### Table 4.1: Themes and Sub-Themes

The following themes and sub-themes were identified in this study

<table>
<thead>
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<th>Main theme</th>
<th>Sub-theme</th>
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<td>4.2.1.1 The understanding of philanthropy by dental laboratory owners in KwaZulu-Natal. 4.2.1.2 The understanding of ethical behaviour by dental laboratory owners in KwaZulu-Natal. 4.2.1.3 The understanding of the role of a business by dental laboratory owners in KwaZulu-Natal.</td>
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4.2 Analysis of findings

4.2.1 Theme 1: The Understanding of corporate social responsibility by dental laboratory owners in KwaZulu-Natal.

The interviews conducted for this study revealed that the terminology CSR, is poorly understood amongst dental laboratory owners. The majority of dental laboratory owners interviewed thought that they practised CSR in their dental laboratories. However, their understanding failed to match that of Ferrell et al.’s (2010) definition of CSR, which was used as the conceptual framework for this study. Corporate social responsibility is defined as the commitment of a business to contributing to the economy and behaving ethically whilst improving the quality of life for the employees and local community (Ferrell et al, 2010). Dental laboratory owners understood elements of this definition, but failed to appreciate the meaning of CSR in its entirety.

The majority of laboratory owners, indicated that their understanding of CSR entailed giving to philanthropic causes in their private capacities, and they saw philanthropy as financial contributions to charities.

*I must be on list for donating to about six charities and there is not a month that goes by where about two if not three don’t phone me at a time, every single time… that (is) a personal choice, because I want to, I have a social conscious.*

[DLO 1]

Some dental laboratory owners expressed philanthropy as in-kind services to their local communities.

*I am involved in the ……12 foundation; it’s similar to the Gift of the Givers. I am involved with an institute, where I am a trustee of the institute; it’s a school where

12 Name withheld to ensure anonymity
they got 300 kids... You know when the xenophobic attacks took place; I was one of the co-founders of the initiatives. I work hand in hand with the Red Cross and the Department of Social Welfare of eThekwini.

[DLO 9]

One dental laboratory owner, representing a minority view, indicated an understanding of CSR in having the laboratory providing philanthropic support to underprivileged persons. This type of financial philanthropic contribution was not typical of the financial contributions of other dental laboratory owners interviewed, as the dental laboratory owner involved the employees of the dental laboratory in their philanthropic initiatives.

We [our dental laboratory] have a feeding scheme. Every month we do feeding so we feed homes.

[DLO 2]

Providing time for prospective students who want to know more about the industry was expressed as a way of giving back to the community by some dental laboratory owners. This may be categorized as in-kind services from the dental technology industry to the community.

The only thing that I do is [when] we [are] inundated\(^\text{13}\) with students, we take the time to show them around.

[DLO 4]

Consequently, it is noted that philanthropy, as expressed by some dental laboratory owners, shows greater conformity to Ferrell et al.’s definition of philanthropy (2010).

\(^{13}\) Prospective students wanting to study dental technology at the Durban University of Technology are required to show proof of having visited a commercial laboratory before their applications are considered. Consequently there are times where large number of students visit laboratories to support their applications to study Dental Technology.
One dental laboratory owner highlighted the need for compliance to legislation in their understanding of CSR. However, they suggested that such compliance was not solely due to legislation, but was a natural consequence of good professional business practice.

We try to do everything the way it should be done, we meet all the requirements with regard to council legislature, not because we have to because we socially want to.

[DLO 1]

However, one dental laboratory owner surprisingly indicated that the dental technology rules and regulations were not necessarily being followed and hence confirmed, albeit tacitly, that the SADTC was failing to enforce its regulations whilst they themselves were displaying unethical behaviour in providing a facility and service which they are not legally permitted to do.

We don’t go follow the Council; we give you that one year guarantee. We not allowed to go and give guarantees…. If you look we have a complete surgery here outside. What we do is we bring the patient here. [If] there is a problem that dentist can’t do it; we sort it out for the dentist.

[DLO 2]

Some dental laboratory owners indicated their understanding of CSR in ethical terms.

It’s very important to behave ethically because if you don’t, at the end of the day it’s the patients who suffers, it’s not the laboratory, staff or anything. It’s the person who is at the end of the line. So it’s very important for us to be correct and straight otherwise it’s the patient who suffers.

[DLO 10]

This statement by DLO 10 highlights the desire for dental laboratories to offer a good health service. The statement also suggests that the quality of the service that is delivered
is influenced by a person’s ethics. It is evident that DLO 10 has not considered how unethical behaviour can affect a dental laboratory and this shows a lack of understanding of CSR. Corporate social responsibility as described in Chapter two shows how the different aspects that make up CSR are inter-reliant. Therefore it is unlikely that a dental laboratory and its staff are not affected by an unhappy patient. When a patient is not happy with an appliance that is manufactured by a dental laboratory this may affect the dentist’s perception of the quality of work that a dental laboratory produces. If the dentist is not satisfied, it is common in the dental technology industry that the dentist would seek another dental laboratory to make him/her dental appliances. This, in turn, would affect the economic aspect of the dental laboratory owner at the expense of another.

Dental laboratory owners’ understanding and knowledge of CSR, with reference to the sub-themes, will now be discussed in greater detail.

4.2.1.1 The understanding of philanthropy by dental laboratory owners in KwaZulu-Natal

The need for dental laboratories to give back to their communities and dental technology industry was identified by most dental laboratory owners. However, they failed in practice to comply with what they stated. The majority of dental laboratory owners felt that giving back to the community by financial means, as stated earlier, was a private initiative and was not necessarily the responsibility of the dental laboratory. Most dental laboratory owners perceived being engaged in philanthropic initiatives as voluntary and not part of standard CSR business practices.

*We do need to give back… I don’t think laboratories as such but I think everybody has an individual capacity where they can donate either they time or money.*

[DLO 7]
A minority of dental laboratory owners interviewed recognised the need for philanthropy to be practised by dental laboratories but admitted that they were not actively engaged in CSR programmes nor did they indicate why they were not involved in any philanthropy.

*All companies should have some sort of social responsibility programme going.*

[DLO 2]

It was found that the majority of dental laboratory owners were not aware of anyone in the dental technology industry who gave back to the local community or the industry in any way. It was established that a small group of laboratory owners were not involved in any philanthropic initiative of any kind. Some dental laboratory owners gave the impression that other dental laboratory owners would never be interested in philanthropic initiatives, leading credence to the notion that the practice of philanthropic initiatives was not widely practised in the industry.

*A lot of them are just there, they work earn money and for themselves and giving absolutely nothing back.*

[DLO 3]

*I know hundreds of labs that won’t contribute anything.*

[DLO 2]

Nobody is interested in uplifting the community here besides myself.

[DLO 9]

In conclusion, it was found that dental laboratory owners were aware of the necessity of philanthropy. However, their practice of philanthropy was limited and they believed philanthropy was a personal matter and not one of industry concern.
4.2.1.2 The understanding of ethical behaviour by dental laboratory owners in Kwa-Zulu Natal.

Ferrell et al. (2010) state that ethical behaviour relates to choices and judgements about acceptable standards of conduct that guide individuals and groups, whilst business ethics comprise the principles and standards that guide the behaviour of individuals and groups in the world of business. Liveris (2011) and Nielsen and Thomsen (2009) found that the human element, which is personal beliefs and morals, drive the fundamentals of ethical behaviour. Liveris (2011), Nielsen and Thomsen’s (2009) view was echoed in the responses of most dental laboratory owners.

> There are a lot of people reliant on us; you know what I am saying. I want to go home and sleep. I got kids they got kids. At the end of the day it is not just about money you have to be socially responsible as well and a lot of people rely on, you know what I am saying. So you know what, if you don’t have a conscious then…conscious…everyone does. You want your conscious to be clear at the end of the day.

[DLO 4]

All dental laboratory owners felt that ethical behaviour was related to the business relationships they keep. Communication with clients, employees and colleagues was expressed as an important factor in the success of a dental laboratory. Dental laboratory owners felt that the manner in which information was relayed between clients and colleagues should be ethical. Having business ethics was expressed as a bridge where colleagues could meet and where collaborative work could be facilitated.

> In order for the final product to be one hundred per cent these guys have to click and work together.

[DL O2]
If there is no communication there is no business, communication is key.

[DLO 1]

Ethical behavior is often reflected in a business’s mission and vision statement (Liveris, 2011). When dental laboratory owners were asked to share their dental laboratory vision and mission they were unable to come up with any concrete statements other than that some felt that the standard of work produced as well as the choice of material used reflects ethical behaviour.

If we are doing sub-standard work, using sub-standard materials then we are not fulfilling our obligation at all.

[DLO 8]

If it’s my exclusive clients or my cheaper clients, I try and maintain the same standard.

[DLO 7]

None of the dental laboratory owners expressed self- and skill-development as being part of business ethics. However, they did indicate that the SADTC legislation for participation in CPD was of benefit to the dental technology industry and in some way addressed their growth in the industry.

These CPD points that we doing is a good thing… I think hugely with these CPD points and having lectures and so on. I definitely think that is a big plus.

[DLO 4]

You are made aware of all the new developments technology wise with regard to attending seminars and symposiums, AGM… We do the dental journals and the Western Cape dental show; we do that as well because there is new developments happening all the time.

[DLO 1]
However, some dental laboratory owners felt the CPD point system needed better management from the SADTC.

_It works in your favour (CPD points) but it’s this err…but it’s poor from the management perspective. I don’t think it’s been done properly._  

[DLO 7]

_We don’t know what is happening, what points we got, you know._  

[DLO 6]

Ethical behaviour, as part of CSR, was expressed as an individual responsibility by dental laboratory owners. There was an indication that dental laboratory owners appreciated ethical behaviour, however, a part of ethical behaviour includes, as detailed above, self- and skill-development as part of business ethics and none of the laboratory owners had any appreciation of this.

### 4.2.1.3 The understanding of the role of a business by dental laboratory owners in KwaZulu-Natal

Dental laboratory owners agreed that the main objective of running a dental laboratory was to bring profit to the owner. However, this view was expressed with the idea that dental laboratory owners were (pure) capitalists and that they did not see the need or have a desire to practice CSR programmes outside offering employees those benefits required by the Basic Conditions of Employment Act. Consequently laboratory owners demonstrated behaviour typical of capitalists who traditionally are described in the literature as people who initiate production with the motive to maximize profit that they use to their benefit, and not necessarily for benefiting other people (Marx, 1992; Ingham, 2008).
You must remember that no matter what, you must know it’s still a business and the bottom line is to make a profit.

[DLO 7]

The desire to generate money by dental laboratory owners suggested selfishness.

It [the business] provides an income; it provides an income to sustain myself towards myself.

[DLO 10]

I feel sorry for you people, who are coming to the industry. You see the mind-set is, how much money I can make first.

[DLO 9]

A minority of dental laboratory owners acknowledged that running a business was not only about making money for the owner. Business came with pride and the desire to uphold a reputation.

Money is not the main part of it. My pride and my work is my priority. If you do good work, the money comes. If you do crap work the money is not going to come, you know.

[DLO 7]

The study showed that the main business driving force in dental laboratories was the desire to make money. A minority of laboratory owners did, however, recognise that making money was a positive consequence of producing good work, yet the majority were driven to make profit as the primary consideration.
4.2.2 Theme 2: Attitudes towards employment by dental laboratory owners in KwaZulu-Natal.

When dental laboratory owners were asked what the purpose of a business in SA is, they expressed the provision of employment in the South African labour market by dental laboratories as an important aspect of a business.

*To create employment and provide a service to the people of the country.*

[DLO 4]

Some dental laboratory owners identified the need to retain employees as a primary aspect of the employment process, stating that the primary responsibility to an employee was to provide an employee with job security. The failure by dental laboratory owners to recognise that job security, which was found to mean paying staff the legal requirements such as medical aid, is a basic right of any employee served to emphasise their poor understanding of CSR provision that goes beyond what is required of employers by law14.

*Providing employment for people and also looking after those people...Making sure he's got medical aid and stuff like that.*

[DLO 1]

*You have to provide them (employees) with the security of a job and you know for their obligations to their families.*

[DLO 8]

Carroll and Buchholtz (2000), Ferrell *et al.* (2010) and Shum and Yum (2011) state that efforts that are made towards employee retention may translate to profit maximization. Contented workers maximize their services to their employer and thus contribute to profitability. This was affirmed by the statement made by a dental technician below.

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14 The Dental Technicians Act (1979) requires all professional employees to receive a medical aid subsidy as well as for the laboratory to provide a pension contribution.
It is to provide your staff with the best possible conditions for them to work under so that they are now in a situation where they produce the best product.

[DT 10]

The working environment that is set by the dental laboratory owner ultimately determines the attitude that his employees will have towards their work which in turn maximises profit. Without profit CSR programmes cannot be followed.

4.2.2.1 Attitudes towards the employment of newly-qualified dental technicians by dental laboratory owners in KwaZulu-Natal

Most dental laboratory owners interviewed expressed hesitation in employing newly-qualified dental technicians. The dental laboratory owners perceived the time that students take to train as dental technicians as insufficient. This arises from the perception about the limited time that universities require students to spend in in-service training.

You can’t take a technicians give him 2, 3 weeks training in a commercial lab because remember a commercial lab and the environment that you guys are working in is totally different.

[DLO 2]

Comparison of the in-service training was made to earlier times when in-service training was for an extended period. Opinions on the length of in-service training mirrored the time of the training of the interviewee.

I still feel technicians should do a year (of in-service-training). A year teaches you so much, really a lot about the working environment. You got to function under pressure otherwise it does not work. You know it’s like taking a law student and giving him a top case straight away. It does not work that way. He has to be a
sidekick to one of the experienced lawyers first and that how it should be done in our profession.  

[DLO 2]

...those days you come back you do your 2 or 3 years I think and then you go sit for another exam...they will test you again to say right this is what you did in the lab, they will test you to see if you are fully fledged then if I want to employ you the first thing I will ask you is how many experience you have or where you worked because in that 3 years that you work Pam, you can get sufficient, you know what I mean.  

[DLO 6]

The comments made by dental laboratory owners suggest that dental laboratory owners were prepared to invest more into student training and this complements the request by the current Minister of Higher Education & Training, Dr Blade Nzimande’s for industry to assist in the learning processes of students to ensure skills development, as it is critical to future employment (SASCE newslink, 2011).

A concerning outcome of the perception that newly-qualified dental technicians have little work experience and thus are not initially profitable to laboratories manifests itself in the resistance by dental laboratory owners to pay the minimum wage to newly-qualified employees, as stipulated by SADTC.

You have to give them a minimum salary but you not getting the money out of them.  

[DLO 9]

The biggest problem is people (employees) want minimum wage.  

[DLO 10]
The Dental Technician’s council says when you are approached by a new employee, minimum pay is R 8000 a month. If I am going to pay him R8000 a month and he only make 4 crowns, one a week. I am paying him money for nothing because he is not making me any business.

[DLO 2]

The comment made by DLO2 about the number of crowns a newly-qualified dental technician made perhaps stems from the belief that newly-qualified dental technicians cannot manage their time effectively.

It’s about time management and managing your staff but essentially in a dental laboratory it is about time management.

[DLO 3]

The perception in the dental technology industry is that the quicker one works the more profitable the dental laboratory will become.

(The) ideal is to obviously have a sufficient system where your average is up.

[DLO 7]

The perception of time management by dental laboratory owners influences how salaries are determined in the dental technology industry. Salaries are determined by the amount of experience one has as well as the discipline that one chooses to work in within dental technology.

It really depends on what that person has been exposed to as to number one what they expect to earn, number two what quality work they going to do.

[DLO 6]
4.2.3 Theme 3: The understanding of corporate social responsibility by dental technicians in KwaZulu-Natal.

Dental technicians, like the laboratory owners interviewed, indicated that they were unaware of the notion of CSR. After defining CSR for them only a few dental technicians showed a better understanding of CSR.

*I think besides having to be a businessman you have to have a good heart as well to the less fortunate, yah. Apart [from] having business acumen you obviously have to a make a profit in any business but you also have to give back to the community.*

[DT 1]

Even after having had CSR explained to DT 4 he still failed to appreciate the value of CSR programmes.

*As a business you contribute towards paying tax and you feed people outside your business by paying tax.*

[DT 4]

The comment made by DT 4 suggests that since dental laboratories are obligated to pay tax they should not be expected to do more than just that. However, many other dental technicians identified philanthropy as something that they would expect businesses to participate in as a social responsibility. The majority of dental technicians expressed a naïve understanding of philanthropic initiatives as CSR programmes. They saw these initiatives in terms of “in-kind” services. They viewed providing a space and the time for students during in-service as a way that their employers could give back to the industry.

*I would say they [dental laboratories] are uplifting the community because they still take in children for their in-service training and stuff like that.*

[DT 15]
Providing information and the time for potential dental technology students was also seen as a way that dental laboratories give back to the dental technology industry.

*From schools they would come in here and they would want to know about Dental technology because their saw our laboratory. The one that I am working [in] at the moment [is] on the website so I would say, yah, we contribute.*

[DT 6]

Some dental technicians stated that at times the dental laboratory would not charge patients for certain cases and they perceived this as a way that the dental laboratory would give back to their local community. However, these cases were isolated and were not understood to be the norm. Furthermore, it was noted that such case are not advertised as CSR programmes of which the greater public is aware.

*I have a lot of pensioners come. They come through the dentist and they tell the dentist they can’t afford his exorbitant fees. So we just basically charge them for the repair only. We charge them minimum for the materials.*

[DT 9]

*Sometimes you have to do things for free for people who cannot afford certain things.*

[DT 1]
4.2.3.1 The Understanding of ethical behaviour by dental technicians in KwaZulu-Natal.

The comments on ethics from dental technicians reflected their awareness of how personal ethics affected business decisions.

*Different values for different people. In business there are important because they could help you potentially make good and bad decisions.*

[DT 7]

Dental technicians felt that ethics are about setting a good example. Most dental technicians understood the consequences of unethical behaviour and how it could affect internal relationships within the dental laboratory as well as the client base of a dental laboratory.

*You don’t want to go out there having a bad name. It goes around not just to fellow colleagues but to the dentist.*

[DT 4]

*If you not ethical your business is going to suffer.*

[DT 3]

4.2.4 Theme 4: Attitudes towards philanthropy by dental technicians in KwaZulu-Natal.

All dental technicians agreed that giving back to the local community was vital. Some dental technicians emphasised the idea that every little philanthropic initiative counts.

*I know we are smaller business but there is still something that you can do. It doesn’t have to be handing over thousands and thousands of Rands. Helping out*
someone with a denture every now and again you know. Fixing someone’s denture for free you know. Things like that, it doesn’t have to cost a fortune.

[DT 6]

DT 1 agreed, but offered no suggestion as to how business should address CSR programmes, showing a lack of appreciation of what CSR actually entails.

There is no sense for a business to be out there when the country does not benefit from that business.

[DT 1]

A few dental technicians felt that the dental laboratories that they worked in did not participate in any philanthropic initiatives. The perceived reason for the lack of participation was that, since most dental laboratories were private entities and the public was not well informed about their business, it was easy for dental laboratories to shy away from philanthropic initiatives. Furthermore, dental technicians argued that since the public was not informed about dental technology they did not have any social responsibility in terms of CSR expectations for the industry. The argument that CSR should come from the source rather than someone having to ask for it was not addressed.

I don’t think it [dental laboratory] is really giving back to the community. Maybe it is because the community does not really know about it so that is why they are not giving back. But maybe that is where it needs to start. A certain lab or whatever can say we sponsoring students who want to study for this profession. Maybe they will be giving back in that way but so far they are not doing anything.

[DT 6]

The business [dental laboratory] that I work for doesn’t help them [local community] in any kind of way

[DT 7]
4.2.5 Theme 5: Working conditions in the dental technology industry in KwaZulu-Natal as expressed by dental technicians.

The working conditions as described by dental technicians suggested that competition to procure business existed in the dental technology industry. In addition, dental technicians believed that the emphasis was on how many products could be generated and the high level of competency that was needed from dental technicians by dental laboratory owners.

*That is what they [dental laboratory owners] want. Can you make something, can you make it in time? Would it work? That is all the industry is basically. As I was saying the dental lab owners it is about the bottom line. Can you make it and how fast can you make it and how many can you make.*

[DT 7]

In addition to the pressures of high production, technicians were expected to be able to do rush jobs whilst still maintaining high output. This created high stress for the employee.

*I think that, that is the biggest stress that we have. The biggest, biggest stress in the job...My biggest, biggest problem is when people walk in and say can you just do this for me quickly and you got 5 or 6 other jobs on your desk that are waiting to be done.*

[DT 6]

Dental technicians felt that dental laboratory owners should provide for effective planning and adherence to a time plan and thus produce a stress-free environment where dental technicians could be more productive. This was in contradiction to laboratory owners, who felt that technicians, especially new technicians, required more time management skills.

*You set your amount of work out for the day and that is what you got. But I don’t know if any labs exist like that.*

[DT 6]
Not that I want to be comfortable all the time but I mean you do have to work in an environment where you kind of relax sometimes so that you can be more productive.

The conditions of the work environment, as described by dental technicians, suggest that dental technicians were dissatisfied about some of the demands of their work. This was seen to affect the attitude of the dental technician towards the general work environment of the dental laboratory which may affect production.

4.2.6 Theme 6: Relationship between the dental technology industry in KwaZulu-Natal and the South African Dental Technicians Council.

The SADTC is the regulatory body of the South African dental technology industry. The intention of regulations is primarily to protect the public as well as other stakeholders which include laboratory owners and employee technicians from unethical business practices, encourage equality in the workplace as well as give insurance that people enjoy working in a safe environment (Ferrell et al., 2010). Companies are required to obey laws and regulations that specify the nature of responsible business conduct (Ferrell et al., 2010). Campbell (2007 cited by Muthuri and Gilbert 2011), notes that businesses are prone to act in socially responsible ways if they have well-enforced regulations. The findings of this study revealed that the regulatory body of the dental technology industry is perceived to be ineffective, and hence laboratory owners chose not to behave in a socially responsible manner as understood in terms of Campbell’s (2007) statement. Clearly expectations of dental laboratory owners and dental technicians of the SADTC were not being met. They all felt that little is being done to address issues that are raised in the industry.

It (decision making) normally to do with people in council, but you don’t see anything further happening.

[DT 7]

[DLO 1]
Like we now under the dental council (SADTC), they are doing nothing for you.

[DL0 6]

If you going to talk about the council, the council I believe is not hands on.

[DT 5]

I feel the council is failing in their duty. Not much is happening from their side.

[DT 4]

4.2.6.1 The South African Dental Technicians Council is not fulfilling their regulatory mission.

Muthuri and Gilbert (2011) state that ineffective legal systems and uncertain regulatory frameworks allow for different interpretations and varying degrees of compliance. Most dental technicians felt that there is no monitoring of the rules and regulations that were set by the SADTC. Consequently the awareness of this deficiency lead to illegal practices in the dental technology industry.

There is no policing whatsoever. So your dental council is not doing their job properly so filtering all the way down.

[DT 10]

There is a lot of illegal things happening.

[DLO 3]

The majority of dental laboratory owners and dental technicians felt that the lack of stringent monitoring of dental laboratories gave people in the industry the impression that they could do as they pleased, irrespective of the laws.

Because there is no control, basically any one can almost get away with anything. They can basically do what they want and there is no strict rule. So each lab has
their own way of doing things. Even their own rules another lab may find unethical or unreasonable but to that lab it is acceptable.

[DT 7]

This comment made by DT 7 paints the picture of how ineffectively the law is monitored and enforced by the SADTC. This will be discussed further in Chapter five.

Dental technology student are taught the rules and regulations applicable to running a dental laboratory. Unfortunately this knowledge appeared to be not practised in some dental laboratories, making working conditions unhygienic for workers as the laboratory owner ignores his\her responsibility to ensure a conducive work environment for her employees.

I would say we need extraction hoods, those kinds of things. You need those types of things implemented, proper working stations err in terms of that more space.

[DT 1]

Some dental laboratory owners and dental technicians have written to the SADTC and have pointed out dental laboratories that needed to be inspected and potentially prosecuted as not complying with the regulations of the industry. However, there was dissatisfaction with the actions, or the reasons for no action being taken by the SADTC.

I have personally written to them and showed them where these sort of quack technicians work and there have done nothing about it. So they lack, sadly they lack.

[DLO 4]

Yes there has been recommendations to them and I’m one of them that has given it to them, asking them to actually do something about it, sent them letters, had interviews with them and the explanations about certain laboratory’s that I sent them to was that no they are compliant. When I actually pointed out err clauses in
the act that stipulated that it not compliant the inspectors have given me an excuse about why they are compliant and that is bulls**t. 

[DT 10]

Some dental technicians felt that the industry representatives who sat in the SADTC did so for a period that was not sufficient to bring about change within the industry.

Every four years you got a new bunch people that are coming in that don’t know anything about Dental Technology because they are government placed employers, employees. So they don’t understand, it takes them probably two or three years to get to know what the problem (is), by that time they on they on the way out because they will be replaced. So contributing to our society, we need to have somebody that can actually be permanently there, somebody that can actually listen to the problems of the industry.

[DT 10]

4.2.6.2 Communication between the dental technology industry in KwaZulu-Natal and the South African Dental Technician’s Council is not effective.

The majority of the dental laboratory owners and some dental technicians, expressed their dissatisfaction with the lack of communication by the SADTC to the broader Dental Technology industry. It was noted that most people were aware of what was happening regarding the SADTC and its agenda because of their membership with DENTASA.

In order to get the magazines (South African Dental Journal) and download the magazines you need to be a member (of DENTASA).

[DLO 6]

15 The use of language is reported verbatim.
DENTASA keeps us up to date, you know, we get e-mails regularly and being a member of DENTASA, although you’re paying, but it’s worth it.

DENTASA is our only sort of representation of dental technologist.

Dental laboratory owners and dental technicians who were not members of DENTASA were frustrated as they felt not informed about important matters concerning the Dental Technology industry.

Certain amendments get changed and we don’t know about it.

We don’t know we don’t get letters to say what is happening.

We are not very clear about their rules and regulations. I would say the reason it lacks the…or we lack that kind of information is because of the communication between us and those people above us like those people who are, like holding our profession.

4.2.6.3 Conclusion of theme 6

It is evident that both dental laboratory owners and dental technicians shared the same dissatisfaction with the SADTC. Poor communication between the SADTC and the dental technology industry was a contributing factor to ineffective monitoring and regulation of rules. The thesis concludes with a discussion on the research finding in Chapter five.
CHAPTER FIVE

CONCLUDING DISCUSSION AND RECOMMENDATIONS

5.1 Introduction

This study investigated how CSR is understood within the KwaZulu-Natal dental technology industry, as an indication of the position of the industry nationally. Semi-structured interviews were utilised to gather data for the study. The objectives of this study were to provide clarity regarding how the members of the dental technology industry in KwaZulu-Natal perceive CSR, to determine what was being practised in terms of CSR, and to provide possible insights into how the dental technology industry in KwaZulu-Natal might understand and consider CSR principles going into the future.

The conceptual framework utilised for the study, as discussed in Chapter two, was Carroll’s (1991) CSR pyramid which was reviewed by Ferrell et al. (2010). For the purpose of this study, CSR encompasses, as per the conceptual framework, the economic, legal and ethical aspects of running a business. It further extended into an understanding of philanthropy with reference to philanthropy that goes beyond the primary purpose of a business.

The chapter proceeds with a discussion of the findings generated by this research and ends by formulating recommendations for the dental technology industry.
5.2 Discussion of Findings

5.2.1 The understanding of CSR by dental laboratory owners and dental technicians in KwaZulu-Natal

This study found that CSR was an unfamiliar term amongst dental laboratory owners and dental technicians. As a result, their understanding of the concept of CSR was poor. The study revealed that dental laboratory owners and dental technicians failed to understand that CSR involves not only the basic aspects of running a business, which are economic advancement, but also compliance with legislation and ethics. In addition, CSR extends into philanthropic practices which go beyond what might be expected as a norm for a business (Ferrell et al. 2010).

As indicated above dental laboratory owners and dental technicians possessed no in depth understanding of CSR. Consequently, it was necessary to supply them with the definition and an explanation of CSR theory as described by Ferrell et al. (2010). Thereafter the interview continued with participants being more informed on the subject matter under discussion.

It was important to clarify to dental laboratory owners and dental technicians that, in order for a business to claim it was compliant with CSR it had to have all the elements of CSR in place (Ferrell et al. 2010). The majority of the interviewees expressed their understanding of CSR as a business practicing philanthropy, while only very few showed an understanding of any of the other elements of CSR. None of the interviewees understood or appreciated the concept of CSR in its entirety. The failure of the majority of the interviewees to identify the other aspects that constitute CSR revealed that there was a general lack of understanding or appreciation of how CSR relates to business principles. Notwithstanding the initial lack of understanding of CSR, those interviewed, even after having been informed of a common understanding of what CSR, still failed to appreciate a need to incorporate CSR values into their business practices.
5.2.2 Attitudes towards employment by dental laboratory owners and dental technicians in KwaZulu-Natal

Although dental laboratory owners saw that providing in-service training opportunities to students was giving back to the community, they failed to appreciate that newly-qualified technicians should be given employment opportunities. Consequently, this study revealed that dental laboratory owners were hesitant to employ newly-qualified dental technicians. Dental laboratory owners felt that the quality of students being produced by the universities was not up to industry standards and that it therefore would take them time to retrain (or train) employees as productive dental technicians. They argued that students spent too short a time in in-service training. The amount of time spent in in-service training was not legislated, consequently the institutions offering dental technology as a qualification treated the provision of in-service differently. Currently the DUT required a second year student to spend two weeks in a dental laboratory and a third year student to spend four weeks in a dental laboratory. According to Bass\(^{16}\) (2014, pers. Comm. 24 March) the current time spent in in-service training at DUT was established in 2004 when the department of dental technology felt that students needed to spend time in a commercial dental laboratory since they had not been any in-service training between 1998 and 2004.

Many comparisons of in-service training were made to earlier times when in-service training was for an extended period. Dental laboratory owners suggested that they were currently willing to accommodate students for an extended in-service period which might ensure better skills development for future employment. Even though dental laboratory owners indicated that they were willing to accommodate students, anecdotal evidence suggested that dental laboratory owners paid scant attention to students when they were in the dental laboratory often only allowing students to watch and, at times, signing off attendance when students were not present (Bass 2014, pers. Comm. 24 March).

\(^{16}\) Please note that Bass, who is a supervisor of the study, is quoted within his role as Head of Dental Sciences from 1996 to 2008 at the time of the researcher’s personal communication with him.
Nevertheless, the exposure to industry is proposed to increase as when a new 480 credit professional degree programme, currently under review, is implemented in the near future. All dental technology academic staff members, including myself, have been part of the department’s recurruculation and a greater commitment will be required of the dental laboratory owners regarding in-service training of students.

Dental laboratory owners felt that newly-qualified dental technicians took longer to complete cases, which arose from the perceived lack of work experience they had, and the financial aspect of the dental laboratory consequently suffering. Dental laboratory owners also felt that newly-qualified dental technicians failed to manage time effectively. However, dental technicians stated that the emphasis by the dental laboratory owner was on how many units could be generated in the dental laboratory and had little to do with time management. Furthermore, dental technicians were found to be expected to be able to do rush jobs whilst still maintaining high output and consequently slow output could not be attributed to time management. Consequently, this study found that there was a disjunctire between dental laboratory owners and dental technicians when it came to expectations of productivity.

It is important to note that the dental technicians interviewed for this study had four or more years of experience in the dental technology industry and they felt that the demand and high pressure that existed in a dental laboratory was sometimes stressful. It was therefore unreasonable that dental laboratory owners expected newly-qualified dental technicians to perform at the same high rate as dental technicians with years of experience.

This study found that due to the perceived lack of experience, newly-qualified dental technicians ended up being exploited by some dental laboratory owners. Dental laboratory owners showed resistance to paying the minimum wage to newly-qualified dental technicians as recommended by the SADTC. This study found that dental laboratory owners assessed the skill of a newly-qualified dental technician under the same criteria as they would an experienced dental technician which is argued as being
wrong. The resistance to paying the minimum wage suggests that dental laboratory owners invested more money into their business to improve profit margins. The resistance to pay the minimum wage also gave emphasis to a poor understanding of CSR. A business should strive to improve the quality of life of its workers and where this is achieved, productivity of employees improves. Unfortunately, this study found that dental laboratory owners showed little understanding of how to manage employees, especially newly-qualified employees. This resistance of dental laboratory owners to pay minimum wages as legislated by the SADTC shows that dental laboratory owners lacked appreciation of the basic rights of employees and, consequently, the understanding of business ethics.

Dental laboratory owners felt that providing an employee with job security was part of CSR. Comments made by the majority of dental laboratory owners showed that they had a poor understanding of what job security means as they felt that provision of employment directly translated to job security. It is important to note that employing and taking care of your employees are two different things. Providing job security means understanding and identifying the need to retain employees. Only one dental laboratory owner stated that by providing medical aid that was how he retained his employees. The provision of medical aid by dental laboratory owners to dental technicians is stipulated as a basic condition of employment by the SADTC (SADTC, 2014). The fact that this dental laboratory owner associated the provision of medical aid with employee retention showed that he did not consider it to be a basic right but as a benefit for his employees. This study found that there was a lack of understanding of the difference between the basic conditions of employment and benefits to improve the quality of life of employees in the dental technology industry. This study revealed that the understanding and need for employee benefits as a retention tool amongst dental laboratory owners was poor. This further emphasised the poor understanding of what CSR entails as dental laboratory owners are required to improve the wellbeing of their employees (Ferrell et al., 2010).
5.2.3 The understanding of ethical behaviour by dental laboratory owners and dental technicians in KwaZulu-Natal

The poor understanding of business ethics by dental laboratory owners is also reflected in the view that the only important business ethic is ensuring effective communication with clients, employees and colleagues. Nevertheless, dental laboratory owners and dental technicians understood how unethical behaviour could adversely affect relationships within a dental laboratory as well as with dentists. Nielsen and Thomsen (2009), Ferrell et al. (2010) and Liveris (2011) argue that business ethics are informed by personal beliefs and morals. This was evident in the understanding expressed by dental laboratory owners and dental technicians. Liveris (2011) further states that personal beliefs and morals are reflective of a business mission and vision statement. This study found that none of the dental laboratory owners had an actual vision and mission statement. This finding to some measure explains the poor understanding of business ethics shown by dental laboratory owners, as Liveris (2011) states that ethical behaviour is reflected in a business vision and mission statement. The absence of a vision and mission statement suggested that dental laboratory owners opened their dental laboratories without formal company profiles which further suggested that the dental laboratories were opened with little long term planning.

At the DUT, all B.Tech students are required to do a business practice course. However, this module only covers the process of opening a business and the accounting aspect of running a business. The dental technology business practice course teaches students how to compile a company profile to be able to get funding from banks to start up a dental laboratory. It is important to note that there is a possibility that not all dental laboratory owners interviewed graduated at DUT and that the dental laboratory owners interviewed in this study did not have to approach a bank to open a dental laboratory. However, this is not taken as justification for the lack of basic business principles by the dental laboratory owners. Another possibility is that once the dental laboratory is up and running, the industry interviewed did not see the mission and vision statement to be of value, further indicating a poor understanding of the principles of maintaining the vibrancy of a business.
The findings of this study reveal that students at university level are taught skills that they do not practise. The absence of a vision and mission statements indicates that there were no clear objectives that were set for the dental laboratory other than the primary function of a business which the industry saw as making profit.

The prevalence of CSR within the dental technology industry was found to be minimal, one possible reason being that no value was placed on the mission and vision statement which should, according to Andayani et al., (2008), be used as a guideline for strategies to implement CSR.

Business ethics are loosely regulated by the SADTC (Bass, 2013, pers. comm. 20 May). It was noted that the SADTC requested that the dental technology industry comply with the CPD point system ahead of ministerial approval (Steyn, 2013, pers. comm. 05 August). Each dental technician is required to obtain 15 CPD points annually, which is to include at least three CPD points for professional ethics, human rights and law (SADTC, 2009). None of the dental laboratory owners and dental technicians understood self and skill development as part of business/professional ethics. However, dental laboratory owners acknowledged that participation in CPD was of benefit to the industry and was seen as a method of addressing their personal growth in the industry. None of the dental technicians raised their CPD participation in terms of their understanding of ethics.

The reasons for this were varied. One reason could be that the dental technicians interviewed in this study did not attend CPD courses due to the cost attached to attending. Alternatively, it could be that the dental technicians interviewed in this study did not see the value of CPD. It could also be that the dental technicians interviewed in this study were uninformed about CPD. This study found that the communication channel between the SADTC and the wider dental technology industry was ineffective. Dental laboratory owners and dental technicians stated that the only way to be informed about the industry was to be a member of the industry’s professional body, DENTASA. The study found that the SADTC was not making any effort to ensure that important information was relayed in the industry of which CPD is an important vehicle for the industry to stay current in matters such as ethics.
According to the HPCSA (2013) CPD supports the need for dental laboratory owners and dental technicians to acquire new and updated levels of knowledge, skills and ethical attitudes that will not only add benefits to their industry but also enhance professional integrity. This study found that it was only dental laboratory owners who were enhancing their knowledge, skills and ethical attitudes. CSR requires the business to improve the quality of life of its employees (Ferrell et al. 2010). This study found that this was not the attitude that dental laboratory owners adopted toward their employees when it came to professional development.

5.2.4 The relationship between the dental technology industry in KwaZulu-Natal and the South African Dental Technician’s Council

Ferrell et al. (2010) state that the intention of regulations is to protect stakeholders from unethical business practices, encourage equality in the workplace, as well as give assurance that employees enjoy working in a safe environment. This study revealed that the SADTC was perceived by dental laboratory owners and dental technicians to be ineffective in regulating the dental technology industry. According to Muthuri and Gilbert (2011) an ineffective legal system leads for different interpretations and varying degrees of compliance and this was found to be true of the dental technology industry. The lack of CSR participation by the dental technology industry can be understood in terms of Campbell’s (2007 cited by Muthuri and Gilbert 2011) theory that states that businesses are prone to act in a socially responsible ways if they have well-enforced regulations. The awareness of the SADTC deficiency in monitoring and regulating of the dental technology industry has led to illegal practices. Dental technicians have expressed concern that some dental laboratories did not qualify to be operating as they did not have the necessary equipment infrastructures such as extraction hoods for dust particles, sufficient space and proper working stations. A dental laboratory that does not have a proper extraction mechanism for dust places the employees' health in jeopardy.

By law, dental laboratories are supposed to be inspected by the SADTC to see if they comply with the requirements of a dental laboratory before they can be registered to operate. The low standard of dental laboratories that were described by the dental
technicians suggested that dental laboratories were being registered without inspection or that inspections were not being repeated, or worse still, anecdotal evidence, as indicated by some dental laboratory owners and dental technicians, suggested that there were illegal dental laboratories operating without the SADTC prosecuting such dental laboratory owners despite being informed of the existence of the said illegal laboratories. The low level of compliance with the laboratory regulations, as argued by technicians interviewed, suggested that there was a general disregard for the regulations as contained in the Act. Since dental technology law is taught as part of the qualification of a technician, the lack of compliance is seen as problematic and shows as disregard to the underlying ethical reasons for the passing of the regulations.

Dental laboratory owners and dental technicians felt that the SADTC was not acting as a catalyst to improve and sustain the dental technology industry. The interviewees indicated that decisions were made by the SADTC but were never followed through. A probable cause for the lack of radical change in the dental technology, as suggested by dental technicians, was due to the fact that SADTC members may not serve for longer than two five year terms, i.e. ten years (SADTC, 2014). Some dental technicians suggested that SADTC members should hold their positions for an extended time to ensure that continuity and thus change prevailed. Dental laboratory owners did not mention any issues relating to the length of the term served by the ministerial appointed SADTC members.

The assumption by dental technicians interviewed was that the dental technicians serving on Council at the beginning of a term as SADTC members would formulate their objectives and not have enough time to implement them owing to having to vacate office, in their opinion, prematurely. The next SADTC members would start the whole process again which led to a lot of unattended issues and thus a lack of continuity. Change within the SADTC after each term may afford possibilities for new ideas and leadership roles to prosper.
It is noted that councillors external to the dental technology industry were appointed, all at the same time. For example, two contractors\textsuperscript{17} were elected by the laboratory owners to represent them on Council. An election/appointment process takes place every four years. Thus, in order to address the concerns of the industry that subsequent Councils lacked continuity, it may be prudent that Council considered staggering the election of Councillors, namely that one contractor is elected every two years. In this way there would be continuity of service in that the entire Council was not replaced after four years.

5.2.5 Philanthropy in the dental technology industry in KwaZulu-Natal

Both dental laboratory owners and dental technicians expressed the need for, and an understanding of the importance of, philanthropic initiatives not necessarily related to business but did very little about it. They emphasized that every little philanthropic initiative counted. Comments made by dental technicians showed that they felt that every business should have philanthropic initiatives. Dental laboratory owners, however, felt that being involved in philanthropy was a voluntary initiative. It may have been easier for dental technicians to say that philanthropy should be mandatory rather than voluntary because they did not have to deal with the operating cost of a dental laboratory and it is easy to tell others what to do with their money. Dental technicians thus assumed that the philanthropy of the dental laboratories should come at no expense to themselves consequently demonstrating a selfish position on the matter. During interviews, although not specifically asked, no technician offered to contribute to CSR initiatives from their salaries.

Philanthropy in the dental technology industry was expressed in terms of financial contributions to organisations and “in kind” services to the community by dental laboratory owners whilst the majority of dental technicians expressed it as only “in-kind” services from the dental laboratory to the community. A probable cause behind dental technicians expressing philanthropy as only “in-kind” services was that dental laboratory owners felt

\textsuperscript{17} The Act refers to laboratory owners as "contractors".
that philanthropic initiatives of financial contributions were a private matter and were not necessarily the responsibility of the dental laboratory. It was therefore understandable that dental laboratory owners would not discuss their financial contributions to charities with their employees. However, dental technicians’ understandings of their employers practicing “in-kind” services as philanthropic initiatives showed a poor understanding of CSR and what philanthropy entails. Dental technicians revealed that some dental laboratories would give discounts or would not charge pensioners for their services, and this was seen as philanthropy. However, this discounting of services only took place if the patient had expressed that they would not be able to afford the services and not as a result of laboratories actively expressing their willingness to discount services to the indigent population.

None of the dental laboratory owners and dental technicians were aware of any other dental laboratory that gave back to the dental technology industry or the community, given their understanding of philanthropy. Dental laboratory owners felt that other dental laboratory owners would not be interested, even though they themselves were practising some philanthropy, in giving back to the industry or community. The competition that exists in the dental technology industry to get work from dentists, may contribute to dental laboratory owners having capitalist mind-sets which were profit driven and thus diminished the chances of them practising or promoting CSR values.

This study confirmed the findings of Skea (2010) where it was found that dental technicians felt that the lack of philanthropic participation by dental laboratories was because most dental laboratories are private entities. Since the public was poorly informed about the dental technology industry it was possible that dental laboratory owners felt that the public does not have any CSR expectations of the industry.

This study found that the poor understanding of CSR by dental laboratory owners and dental technicians stems from a poor understanding of basic business principles and the distinction between the two. The poor understanding of basic business principles was revealed in matters that lacked business ethics consideration. The SADTC’s perceived
lack of participation in the industry was seen as a contributing factor to unethical behaviour within the industry. Minor philanthropy is practised by the industry, however, dental laboratory owners and dental technicians did not think other dental laboratory owners and dental technicians were practicing philanthropy. A variety of matters need to be addressed in the dental technology industry for the prevalence of CSR. The discussion now turns to the recommendations generated by this study.

5.3 Recommendations

Resulting from this study the following recommendations are made.

1. Dental technicians and technologists should be educated and informed of an understanding of CSR through workshops and seminars.
2. An understanding and appreciation of CSR should be taught in dental technology programmes.
3. The DUT Dental Technology department should review its Bachelor of Technology business practice module to include the principles of CSR and other Universities of Technology should be encouraged to follow suit.
4. The universities offering dental technology should liaise with the dental technology industry to better inform the industry on the practice of student in-service training and the proposed changes to the system.
5. Basic business principles courses which include CSR need to be included in CPD programmes. This would ensure that dental laboratory owners gain better management skills.
6. Dental laboratory owners need to encourage their employees to attend CPD courses that promote better employer employee relationships.
7. The SADTC needs to ensure that dental laboratories are inspected prior to registration, i.e. before a laboratory is allowed to begin production. Follow up inspections should be conducted after a certain period to ensure that the standard of dental laboratories is maintained.
8. The SADTC needs to maintain better communication with the industry. This would result in important information reaching all dental technicians.

9. Dental laboratories’ philanthropic initiatives should be advertised within the confines of the current legislation in advertising permissible in terms of the legislation. By doing this the industry would show that they are willing to address the needs of the indigent population in respect of oral dental appliances.

10. The period allowed to serve on the SADTC should be reviewed with a view to extending the time served or alternatively staggering the periods served by councillors in order to promote continuity after the change of councillors.

5.4 Areas for future study

The study of CSR in this study revealed areas of study which were beyond the scope of this study. This study indicated that CSR was a basic tenant of conducting business, a fact not readily understood and appreciated in the dental technology industry. Running concurrently with the lack of general understanding were other subsidiary issues which arose as a result of the data collected and suggest that further investigation is indicated. These are, but not necessarily limited to, the areas listed below.

- To investigate issues that the SADTC face in regulating the dental technology industry.
- To investigate the management of CPD in the dental technology industry.
- To investigate the management of students by dental laboratories during their in-service training.
- To examine how the basic employment conditions are applied in the dental technology industry.

5.5 Conclusion

The aim of this study was to investigate how CSR is understood within the KwaZulu-Natal dental technology industry and thereby provide an indication of the position of the industry
nationally. By creating awareness of the understanding of CSR in the industry the study aimed at the improvement of the social consciousness of the dental technology profession. This study concluded that dental technicians and dental laboratory owners had a poor understanding of CSR. It was revealed that deficiency of monitoring and enforcement of legislation by the SADTC was a contributing factor to the absence of the basic elements that could act as foundation for CSR in the dental technology industry. This study showed that minor philanthropic initiatives were prevalent in the dental technology industry but did not meet the expected norms of CSR practices in the industry.

This study concludes that the dental technology industry needs to understand and appreciate CSR in its entirety in order for the industry to successfully adopt a co-ordinated approach to CSR.
REFERENCES


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Letter of Information and Consent

Dear Dental laboratory owner/ Dental Technician

I am presently registered at the Durban University of Technology for a Master’s Degree through the Department of Dental Sciences. I am required to complete a research dissertation in order to obtain this qualification. I am doing a study with a sample of dental laboratory owners and dental technicians to find out about the extent of their views about corporate social responsibility (CSR). The title of my research is “Corporate social responsibility of the dental technology industry in Kwa-Zulu Natal”

To date no investigation of the Dental Technology industry’s participation in CSR has been carried out. This research aims to begin this inquiry through finding out how CSR is understood in the KwaZulu Natal industry, providing a basis for future research on a national basis.

I am requesting that you allow me to interview you as part of the research. I will need to interview you once for approximately 45-60 minutes. Interviews will be recorded and recordings will be used for data transcription. At the end of the study the recordings will be kept for the next five years and then disposed of. Participants will remain anonymous at all times and no names will be mentioned in the reports. Your confidentiality is assured. Data collected will be used exclusively for the purpose of this study and will not be rendered to any other person for any reason. If you choose to withdraw from the research at any time, you will be free to do so. Upon your withdrawal, data that may have been gathered through your participation will be destroyed.

Should you require further information concerning this study, you are welcome to contact my supervisors at the Durban University of Technology.

Researcher:
Ms Minenhle P. P Zondi
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Mansfield Campus
Durban University of Technology
P.O. Box 1334, Durban, 4000
Cell: 074 716 4268
DUT Ethics Committee contact:
031 373 2900.

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031 373 2478

Mr. G. Bass
M.Ed (Higher Education), B.Com, NHD: Dental Technology (status)
106
Deputy Dean: Faculty of Health
Statement of Agreement to Participate in the Research Study:

I_____________________________________, ID number____________________, have read this document in its entirety and understand its contents. Where I have had any questions or queries, these have been explained to me by Minenhle P. P. Zondi to my satisfaction. Furthermore, I fully understand that I may withdraw from this study at any stage without any adverse consequences. I, therefore, voluntarily agree to participate in this study.

Signature: ___________________________ Date: ___________________

Researcher’s name: ________________________ Date: ___________________

Signature: _______________________________
ANNEXURE 3

Pilot Interview Schedule

This is only a guideline of the interview questions for registered dental laboratory owners and registered dental technicians.

Registered Dental Laboratory

1. Tell me about your business. (Probes) *What is the mission and vision of your business? How do you run your business? How do you make sure that everything in the dental laboratory is conducted accordingly? How important is the retention of employees?*

Registered dental laboratory owner and registered dental technician.

2. How do you keep up with what is happening in the dental technology industry? In terms of education and technology.

3. How do you see the role of the business sector in South African society? (probe) *How do you feel about the role of businesses in the area that the dental laboratory is located?*

4. What are your thoughts about corporate social responsibility?

5. How important is the business sector’s participation in corporate social responsibility?

6. Is your business/dental laboratory you are working in involved in corporate social responsibility? How? If not, would you like to be? Why?
**Proposed Interview schedule**

This is only a guideline of the interview questions for registered dental laboratory owners and registered dental technicians.

**Registered Dental laboratory owner**

1. How do you see the role of the business sector, specifically, in the South African society?

2. What function/role does your business fulfil in society? *(Probes)* What is the mission and vision of your business?

3. How do you feel about the role of businesses/other dental laboratories in the area that your dental laboratory is located?

4. How do you keep up with what is happening in the dental technology industry? *How do education and research into Dental technology serve you as …?*

5. What are your thoughts about corporate social responsibility? *(I give Definition of corporate social responsibility…)*

6. How important is it to be good citizen in the business world?

7. How important is the business sector’s participation in corporate social responsibility?

8. Do you think your business is involved in CSR? How? If not would you like to be? Why?

9. Apart from your business, are you as an individual giving back to your community in any way?
Registered Dental technician

1. How do you see the role of the business sector, specifically, in the South African society?

2. How do you feel about the role of businesses/other dental laboratories in the area that the dental laboratory is located?

3. How do you keep up with what is happening in the dental technology industry?

4. How do education and research into Dental technology serve you as …?

5. What are your thoughts about corporate social responsibility? (I give the definition of corporate social responsibility…) How important is it to be good citizen in the business world?

6. How important is the business sector’s participation in corporate social responsibility?

7. Do you think the dental laboratory you working in, is involved in CSR? How? If not would you like to be? Why?
16 April 2012

IREC Reference Number: REC 7/11

Ms M P P Zondi
80 Essenwood Drive
Paternost Gardens
Pietermaritzburg
3201

Dear Ms Zondi

Corporate social responsibility in the Dental Technology industry in KwaZulu-Natal

I am pleased to inform you that Full Approval has been granted to your proposal REC 7/11.

The Proposal has been allocated the following Ethical Clearance number IREC 007/12. Please use this number in all communication with this office.

Approval has been granted for a period of one year, before the expiry of which you are required to apply for safety monitoring and annual recertification. Please use the Safety Monitoring and Annual Recertification Report form which can be found in the Standard Operating Procedures [SOP’s] of the IREC. This form must be submitted to the IREC at least 3 months before the ethics approval for the study expires.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC SOP’s. In addition, you will be responsible to ensure gatekeeper permission.

Please note that ANY amendments in the approved proposal require the approval of the IREC as outlined in the IREC SOP’s.

Yours Sincerely,

[Signature]
Prof T Puckree
Chairperson: IREC