

**Understanding Chinese business ethics: A study on perception of South  
African medical device companies**

**Wessel Christian Brits**

**17386234**

A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

7 November 2018

**ABSTRACT**

South African citizens do not have a positive perception of Chinese companies. The perception of Chinese business ethics in South Africa's industries are unknown and studies regarding this topic are absent in the literature. Good business ethics lead to an increase in trade between companies however, good business ethics are not essential for trade to happen. There is an increase in trade between the South African medical device industry and Chinese businesses; yet the perception of Chinese business ethics by this industry is unknown.

This qualitative study explores the perception South African medical device companies have of Chinese business ethics. Data was collected through fourteen in-depth, semi-structured interviews with owners, executives and senior managers of South African medical device companies. This study found that the medical device industry of South Africa has its own ethical lens used to assess business ethics. The industry's lens is predominantly influenced by Western standards, practices and ethics. This study found that the medical device industry has a negative perception of Chinese business ethics. The negative perception is influenced by many factors, in particular Chinese medical device product attributes and adherence to Western standards.

This research contributes to the literature by exploring the perception of Chinese business ethics in a particular industry of South Africa, this being the medical device industry of South Africa. In addition, this research gives recommendations to Chinese businesses to improve Chinese business conduct in the medical device industry of South Africa which will ultimately improve the perception of Chinese business' ethics in this industry.

**KEYWORDS**

Business ethics, Chinese business ethics, South African medical device industry,  
Ethical profiles, Virtues in business.

**DECLARATION**

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.



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Wessel C. Brits

7 November 2018

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## **1 Chapter 1: Introduction to the Research Problem**

### **1.1 Introduction**

This study explores the perception that the South African medical device industry has of Chinese business ethics. According to SAMED (2013), there is an increase in South African medical device imports from China. China is the medical device industry's 3<sup>rd</sup> largest trade partner. The perception of Chinese business ethics in the medical device industry of South Africa is unknown. Through this exploratory study, the industry's perception including factors influencing the industry's perception of Chinese business ethics can be determined. Virtue ethics has been chosen as a lens to assess Chinese business ethics in the South African medical device industry.

### **1.2 Background**

The Ethics Institute of South Africa conducted a survey on the perception of Chinese businesses in Africa (Rossouw, Geerts & Xinwa, 2014). For South Africa specifically, only 11% of respondents agreed that Chinese businesses had a good reputation indicating that in general, South African citizens did not have a positive perception of Chinese businesses. Respondents to the survey by Rossouw et al. (2014) were ordinary South African citizens and not business people engaging in business transactions with Chinese businesses. During the literature review of this study, no literature was found discussing the perception South African businesses, specifically the medical device industry of South Africa, have of Chinese business ethics. Ordinary citizens and businesses people could have dissimilar perceptions of Chinese businesses including Chinese business ethics. Gift, Gift and Zheng (2013) said that good business ethics leads to an increase in trade. There is an increase in trade between the medical device industry of South African and Chinese businesses. This study will explore the perception South African medical device companies have of Chinese business ethics.

Total imports from China to South Africa equalled R16.7 billion in 2017 (South African Revenue Services, 2017). China is seen as a major trade partner of South Africa and imports from China to South Africa are expected to increase in future (Songtian, 2018). Understanding the perception of Chinese business ethics in South Africa is broad and perceptions should be understood in context (Whetstone, 2001). Chinese companies

engage in business transactions with several industries in South Africa. The industries China conduct business with include steel, mining, healthcare and banking, to name a few. One industry's perception of Chinese business ethics cannot be used to judge Chinese business ethics in another industry; this is due to contextual differences (Whetstone, 2001). This research will focus on the medical device industry of South Africa.

South African imports of medical devices equalled close to R12 billion in 2013; this with the medical device industry having an expected compound annual growth rate (CAGR) of 7.75% (SAMED, 2013). South Africa imported the most significant dollar value of medical devices from the United States of America, Germany and China, China being the 3<sup>rd</sup> largest medical device trade partner of the medical device industry of South Africa. In 2013, Chinese medical device companies captured significant market growth in the South African medical device industry with a growth of 20.86%, this translates to R1.068 billion (SAMED, 2013). It is expected that China's share of the medical devices industry in South Africa will grow in the near future (Trademap, 2018).

There was a general negative perception of Chinese business ethics in the medical device industry of South Africa in the past (R. Agnew, Interview, February 8, 2018). The exact influences and factors contributing to this negative perception of the South African medical device industry is not known. This research will explore the perception South African medical device companies have of Chinese business ethics.

### **1.3 Research Problem**

South African citizens did not have a positive perception of Chinese businesses in 2014 (Rossouw et al., 2014). The survey of Rossouw et al. was done on a sample of the general population of South Africa and it would be ill-advised to use the outcome of this survey as the norm in which Chinese businesses should be perceived by South African medical device industry.

The Chinese government wants to uplift the image of Chinese businesses in South Africa (G.J. Rossouw, Interview, January 15, 2018). Two Chinese business sectors exist in South Africa however, the formal and informal (everyday) business sectors. Rossouw further stated that the Chinese government has less control over the informal business sector than the formal business sector. The Chinese everyday sector is also in direct competition with South African micro- and small-scale entrepreneurs (Spring

& Jiao, 2008). This could further fuel the negative perception of ordinary South African citizens and their view on Chinese businesses. On the contrary, the Chinese government controls the Chinese formal business sector more than the informal sector (G.J. Rossouw, Interview, January 15, 2018). Rossouw stated that China wants to uplift the perception of Chinese businesses in South Africa since negative perceptions of Chinese companies exist amongst South Africans as pointed out in the survey by the survey of Rossouw et al. It could be argued that a negative perception of Chinese businesses in South Africa, formal and informal, may negatively influence the perception of the medical device industry of South Africa. Negative biases, influenced by Chinese business ethics in the formal and informal business sectors of South Africa, could spill over to the medical device industry of South Africa.

Differences in ethical profiles exist between parties from different countries and it is essential to understand these differences to conduct sustainable business (Gift et al., 2013). Different ethical profiles could exist between Chinese businesses and South African businesses. As per Sroka and Lőrinczy (2015), business ethics is crucial if a company wants to be perceived as a reliable business partner. It could be argued that the perception of Chinese businesses in South Africa could be influenced by Chinese business ethics experienced during trade transactions, this also being true for the medical device industry of South Africa.

Medical device imports from China to South Africa increased since 2013 as medical device companies engaging with Chinese companies are on the rise (SAMED, 2013). Gift et al. (2013) stated that companies might engage or avoid potential suppliers depending on their perceived ethicality. It can be argued that if Chinese medical device companies were perceived as unethical, then fewer business transactions were to be expected between China and medical device companies in South Africa. Medical device imports, from China to South Africa, are in fact on the rise while the perception of Chinese business ethics by South African medical device companies is still unknown. Medical device imports from the Chinese are on the rise. Is this due to good Chinese business ethics or are other factors responsible for the rise in medical device imports?

Ferrero and Sison (2014) stated that virtue theory continues to be a valid option to assess business ethics, specifically during cross-cultural global trade. As per Hofstede (2010), South Africa and China have many cultural differences. This study will explore the perceptions South African medical device companies have of Chinese business

ethics; a virtue ethics lens will be used to assess Chinese business ethical conduct in the medical device industry of South Africa.

## **1.4 The Significance of the Research**

### **1.4.1 Business Rational**

China is gaining significant market share in the medical device industry of South Africa (Trademap, 2018). The South African medical device industry imports medical devices in excess of \$1 billion from China yearly. This figure is expected to rise with the National Health Insurance (NHI) bill which was passed in 2018. The perception of Chinese business ethics by medical device companies in South Africa is unknown, yet more medical devices are imported from China on an annual basis.

This study will explore the perceptions South African medical device companies have of Chinese business ethics. South African companies who intend to conduct business with Chinese medical device companies can take note of the perception that exists of Chinese business ethics.

China and Chinese medical device companies can take note of this study and put actions in place to uplift the perception of the medical device industry in South Africa around Chinese business ethics. As per Gift et al. (2013), good business ethics leads to an increase in trade. It could be argued that more South African medical device companies could engage in business with Chinese companies should the perception of Chinese business ethics improve in the medical device industry of South Africa.

### **1.4.2 Academic Rational**

A literature review was done to find academic journals, articles and books discussing the perceptions South African businesses have of Chinese business ethics. Rossouw et al. (2014) conducted a survey focusing on the perception South African citizens have of Chinese companies. This survey did not explore the perceptions South African businesses have of Chinese business ethics nor the perception of the medical device industry of South Africa. Several South African industries engage in business transactions with Chinese businesses. This study will only focus on the medical device industry in South Africa. There is an increase in trade between the medical device

industry of South Africa and Chinese businesses. The market share growth of Chinese medical devices exceed the medical device industry's growth in South Africa. The South African medical device industry was therefore chosen since the literature review indicates a positive relationship between an increase in trade and good business ethics however, the perception of Chinese business ethics in the medical device industry of South Africa is unknown.

This research can form a base for further academic research on Chinese business ethics in other South African industries. The perception of Chinese business ethics in the South African medical device industry may differ from the perception of medical device industries in other countries and this study can be used for comparison purposes.

The literature review will indicate that Eastern and Western ethics could be explored through a virtuous approach. This study will make use of a virtue ethics lens to assess Chinese business ethics in the medical device industry of South Africa.

## **1.5 Research Scope**

The scope of this study is to explore the perceptions owners, executives and senior managers in the medical device industry of South Africa have of Chinese business ethics. As per Rossouw (1997), trends indicate that personal values and virtues should be applied to business ethics. A virtue ethics lens will be used to assess Chinese business ethics in the South African medical device industry.

## **1.6 Research Purpose**

The negative perception Chinese businesses face in South Africa could lead to a decline in trade between the two countries (Gift et al., 2013). As per Trademap (2018) trends of the South African medical device industry, medical device imports from China is on the rise and further growth is expected in the future (SAMED, 2103). There is a negative perception of Chinese businesses among South African citizens as per Rossouw et al. (2014). This research could explore the differences in ethical perceptions between ordinary citizens and South African medical device companies.

The research will explore the perception of Chinese business ethics in the medical device industry of South Africa. The medical device industry is growing in South Africa

with Chinese medical devices annually increasing their market share above the industry's CAGR (Trademap, 2018). More Chinese medical device companies are entering the South African healthcare industry, this even in the private healthcare industry of South Africa (SAMED, 2013). The perception South African medical device companies have of Chinese business ethics is unexplored, yet an increase in medical device imports from China are expected. This research will capture the perceptions of numerous medical device companies in South Africa that conduct business with Chinese businesses.

Once the perception of the medical device industry is known, further research could be conducted on the effects that this perception has on trade between Chinese businesses and the medical device industry of South Africa. This study will only focus on the perception of the South African medical device industry. This study will not include the perceptions other South African industries could have of Chinese business ethics.

## **1.7 Conclusion**

This chapter presented an introduction to the research. The need for this research has been explained as well as the lens that will be used to assess Chinese business ethics in the medical device industry of South Africa.

The research paper proceeds as follows:

Chapter 2 presents an overview of the literature as it relates to business ethics, factors influencing business ethics, business ethics in China, the South African medical device industry, and theories applicable to this study.

Chapter 3 presents the research questions that form the basis of this study.

Chapter 4 presents the research methodology used to collect and analyse the data for this study.

Chapter 5 presents the results of this study.

Chapter 6 presents the discussion of the results.

Chapter 7 discusses the business and academic insights gained from the results of this study. Further research suggestions will be also provided.

## **2 Chapter 2: Literature Review and Theory**

### **2.1 Introduction**

This chapter introduced literature around business ethics, factors influencing the perceptions of business ethics relevant to this study, and business ethics in China. This chapter continues by discussing literature related to competitiveness and its influences on perceptions of business ethics. Examples of unethical behaviour by Chinese companies to improve competitiveness is shared since it affects the global perception of Chinese business ethics. This chapter includes a literature review of the medical device industry of South Africa including the ethical lens needed to assess Chinese business ethics in the medical device industry of South Africa. This chapter concludes with literature around theories applicable to this study with a focus on virtue theory as the lens to assess Chinese business ethics.

### **2.2 Business Ethics**

This section will begin by providing an overview of literature around business ethics. Key influences on business ethics in the context of this study will follow. This section will end with a literature summary discussing business ethics in China.

#### **2.2.1 Overview of Business Ethics**

Goldman and Bounds (2015) stated that ethics could be applied to the context of business ethics. The application of ethics in business has gradually developed into business ethics which is also called management ethics, enterprise ethics and economic ethics. Business ethics is a fit between ethics, economics, and the different people, including their cultures of practicing ethics (Michaelson, 2010). Business ethics is considered a unique field of study in which ethics and business intersects (DeGeorge, 2014). Business ethics involves the moral duties that lead the goals and activities of an organisation. Business ethics is about reaching the goals and objectives of an organisation while abiding by the rules and values of society. Business ethics would seize all theoretical, ethical perspectives to compete in economic and social systems (Khomba & Vermaak, 2012).

Michaelson (2010) asked that when cross-border moral business conducts standards conflict, which country's standards should prevail? With globalisation, business ethics have become a major concern for companies competing globally (Asgary & Mitschow, 2002). Some international businesses want to apply moral values and principles to cultures different to their own when conducting business with foreign companies. It is important to re-evaluate global business ethical norms, otherwise, developed nations, for example, could impose their ethical ideologies on developing countries yet these developing countries have their own ethical ideologies.

It could be argued, as per Gift et al. (2013), that South African companies follow their own business ethical rules during business transactions with foreign businesses. For this study, the South African medical device industry's ethical rules could be different to Chinese business ethical rules. It is important for this study to assess Chinese business ethics through the lens of South African businesses since Chinese companies conduct business with the latter in the South African medical device industry contextual environment.

### **2.2.2 Ethical Profile Differences Influence Business Dealings**

Differences in ethical profiles exist between parties from different countries and it is important to understand these differences to conduct sustainable business as stated by Gift et al. (2013). Robinson and Jonker (2017) mentioned that enterprises will engage in trade transactions differently, depending on how they perceive the other businesses' ethicality. Gift et al. (2013), on the contrary, stated that even though ethical differences are important to understand, it is not crucial for two parties to have identical ethical profiles in order to conduct successful business.

From the above, it could be argued that South African businesses and Chinese businesses have different ethical profiles. South African medical device companies could therefore have a different business ethical stance when engaging in business transactions with Chinese businesses. There was a rise in medical device imports from China into South Africa over the past ten years (SAMED, 2013). This occurred whether perceptions of Chinese business ethics were positive or negative. The perception of Chinese business ethics in the medical device industry of South Africa is unknown, and no literature was available. The profile and characteristics of Chinese business people is also unknown.



### 2.2.3 Cross-cultural Influences on Business Ethics Perceptions

Michaelson (2010) stated that people's "ethical perceptions" are used to indicate the ethical system inferred by a person (or group) concerning another person (or group) whose actions or background is only partially observed and experienced. It could be argued that South African business could form a perception of Chinese businesses when the background of Chinese businesses are unknown.

Christie, Kwon, Stoeberl and Baumhart (2003) found that culture has a strong influence on peoples' attitudes towards ethics. Michaelson (2010) stated that people are less likely to explore cross-cultural economics. This affects how the global market system must change to accommodate cultures that do not share the same ethical tenets about human nature fundamental to others. This leads to the world being divided into "us" and "them", "Western" vs "non-Western" or even "developed" vs "developing". This stereotyping is often used when ethical and economic outcomes differ between countries and cultures.

Hofstede demonstrated, through his cultural dimensions theory, that a society's culture has effects on its values, and these values influence the culture's behaviour (Hofstede, 2010). Hofstede's four cultural dimensions are power distance, individualism versus collectivism, masculinity versus femininity, and uncertainty avoidance. Hofstede added a fifth cultural dimension measuring long-term versus short-term orientation. China scores a high on power distance, a low on individualism, a high on masculinity, a low on uncertainty avoidance, and a high on long-term orientation (Hosted Insight, 2018). South Africa scored moderately on power distance, a high on individualism, a high on masculinity, a medium on uncertainty avoidance, and low long-term orientation (Hosted Insight, 2018).

Hofstede's cultural dimension framework indicates the cultural differences between South Africa and China, and these differences could affect the perception South African businesses have of Chinese business ethics since culture could influence perception (Michaelson, 2010). Cultural differences could exacerbate perceived ethical differences between South African and Chinese companies that could affect trade. Perceived moral differences could encourage or hinder South African companies to engage in business transactions with Chinese businesses, as per Robinson and Jonker (2017). SAMED (2013) indicated an increase in trade between the medical device industry of South Africa and Chinese businesses, this without knowing the perception South African medical device companies have of Chinese business ethics.

#### **2.2.4 How a Company's Products Influence Business Ethics Perceptions**

Gartenstein (n.d) said that a company's culture inspires ethical behaviour in its employees. Employees will produce products and services with ethical values kept in mind should company culture inspire it. Gartenstein (n.d) further said that employees are inspired to act ethically when their company's products are of good quality.

Social forces exert pressure on companies to act honestly and to adhere to good business ethics (What affects business ethics, n.d). Products sold by companies have considerable influences on ethics in business, if a company sells sub-standard products and gets involved in unethical conducts, then this will create a negative perception around that company's business ethics. People and businesses morally condemn companies that deliberately violate regulations or sell inferior products that could cause harm.

This study will focus on the perception of Chinese businesses ethics in the South African medical device industry. Ip (2009) mentioned incidences where Chinese products were considered sub-standard or harmful to people. These products sketched a negative perception of Chinese business ethics (Fum, He, Peng & Zhang, 2014). Incidences of Chinese product scandals include:

- Recall of two million toxic toys in 2007,
- Sub-standard antibiotics that killed 11 people in 2006,
- Tainted-milk scandal, including state-owned dairy company Yili in 2008.

Fum et al. (2014) stated that there are negative perceptions of Chinese companies, in China and globally, due to these unethical product behaviours. All these sub-standard, harmful products negatively affected the global perception of Chinese business ethics. These incidences also tarnished the global image of Chinese factories.

#### **2.2.5 Business Ethics in China**

Ip (2009) stated that China covers a huge landmass with great cultural diversities between its people and provinces. Chinese business ethics developed through a combination of local-, provincial- and organisational cultures. Chinese business ethics is further influenced by Confucianism, Daoist, Buddhism, social principles or a mixture of all (Ip, 2009). Each Chinese company could have its own viewpoint of business ethics different to other Chinese companies. This study will not discuss the cultural

influences on Chinese business ethics however, it should be noted that each Chinese company could have a different ethical profile influenced by cultural and regional differences.

Neveling, Malan and Yortt (2014) stated that ethical decision making is influenced by various factors such as the external environment, organisational factors and society. China and Chinese businesses could therefore have their own interpretation of ethical decision making since China's external environment, cultures and societies are different compared to the rest of the world, including the medical device industry of South Africa.

Globalisation led to economic reforms in China. Economic reforms in turn led to the development of business ethics and ethical decision making in China (Neveling et al., 2014). The development of business ethics in China was driven by four factors. These factors are reflections on economic reform, legacy of traditional Chinese ethics, influence of Marxist philosophy and ethics, and the influences of global business ethics on China. Business ethics in China is heavily influenced by the state and traditional Confucius values. There are however, high expectations on Chinese businesses to ensure good ethical standards to complement the Chinese government's long-term strategy and to compete globally (Irwin, 2012).

Unfortunately, Chinese businesses made regular headlines worldwide with unethical business behaviour since 2004 (Ip, 2009). In 2007 China had to recall two million toxic toys and in 2008 the industrial toxic chemical melamine was found in dairy products exported from China. Melamine was found in one out of every five products from Chinese dairy companies (BBC News, 2010). Fum et al. (2014) stated that there are negative perceptions of Chinese companies and their ethics, in China and globally, due to these unethical behaviours. In addition, for 2018, corruption perception index indicated that China ranked 77 out of 180 countries for perceived public sector corruption. China further scored a low 41 out of a 100 (very clean) for corruption according to experts and business people. Wilhelm (2002) mentioned that poor business ethics in China, driven by rapid modernisation, led to an increase in corruption.

Ip (2009) said that an amended law (amended Company Law of the People's Republic of China) came into effect in 2006. This law requires Chinese companies to abide by social- and business ethics, be honest and trustworthy, as well as fulfil social responsibilities. This is in line with other literature stating that the Chinese government wants to uplift its image globally. The law explicitly emphasises business ethics and

social responsibility for Chinese corporate behaviour. Irwin (2012) mentioned that in 2011 the Chinese government amended a law prohibiting payments of bribes to “foreign officials” or “foreign officials of international public organisations”. This shows the Chinese government’s willingness to combat corruption and to create a positive global image of Chinese companies and Chinese business ethics.

### **2.3 Competitiveness and Ethical Behaviour**

Companies facing competitive pressure could be motivated to take part in dishonest business transactions (Hertz, 2006). Companies could benefit from dishonesty in the short-term however, too little attention is paid to the future due to demands placed on people in current organisations for short-term results. Long-term results are therefore sacrificed for short-term results combined with unethical behaviour. Behaving ethically is vital in business operations and performance (Michaelson, 2010). Focusing on short-run gains, short-term vision, and immediate financial gains could create a breeding ground for unethical behaviour.

Nguyen and De Cremer (2015) stated that the Chinese business sector is perceived as greedy and dishonest. The Chinese government's regulations to ensure ethical business conduct are not abided by. Chinese businesses cut corners in the past with unethical food scandals including infant milk containing traces of melamine and fake rice made with plastic as examples. All these unethical behaviours were done to be more competitive by lowering costs, increasing profits and for buyers to accept Chinese products. Nguyen and De Cremer (2015) further stated that there is distrust of Chinese products globally due to quality issues. Ethical scandals in business conduct are globally still of major concern when dealing with Chinese companies.

The Chinese government has a long-term strategy (Irwin, 2012). Hofstede’s cultural dimension theory also indicated that the Chinese people are long-term orientated. From the above-mentioned literature, it can be argued that some Chinese companies are sacrificing long-term results in favour of short-term results, this driven by competitive behaviours. The medical device industry of South Africa is long-term orientated since medical devices often have a replacement cycle between 5 and 10 years (Andrews Cooper, n.d). Chinese companies that cut corners to become competitive in the short-term will face negative ethical perceptions by the medical device industry of South Africa in the long-term.

## **2.4 Trust and Trade Related to Chinese Businesses and South African Medical Device Companies**

Berger and Herstein (2014) stated that the global economy is characterised by uncertainty. They further stated that studies in international co-operative relationships showed that uncertainty to fulfil obligation, commitments and expectations is a major cause for concern in countries where the legal system is weak. When value has been identified by both business parties, mutual interpretations, constraints with regards to information, communication misinterpretation and ethical behaviour differences can all affect business dealings (Berger & Herstein, 2014). The key to successful foreign business engagements lies in trust and shared values or identities. Both parties should be able to predict each other's behaviour. A mutual commitment is however, required by both parties for successful, mutually beneficial business transactions.

Bews and Rossouw (2002) stated that the relationship between ethics and trust could have several interpretations. Ethics however, play a vital role in facilitating trust. Distrust is often the consequence of unethical behaviour in business. Trust could also be abused which is considered unethical behaviour. As per Gift et al. (2013), ethical profile differences exist between China and South Africa and ethics facilitates trust.

The literature review as discussed in sections 2.2.2 and 2.2.3 indicate that Chinese companies and medical companies in South Africa have ethical profile differences. Section 2.3 mentioned that Chinese companies are not always trusted due to global scandals involving Chinese products. It is important that Chinese businesses and South African medical device companies understand each other's ethical profile in order to improve trust, as trust will increase trade between parties. Mutual beneficial business transactions also ensures trust is gained between South African medical device companies and Chinese businesses. Trade should increase between Chinese businesses and South African medical device companies should there be trust, good business ethics and mutual beneficial trade transactions.

## **2.5 The South African Medical Device Industry**

The sections that follow will give insight into literature of the South African medical device industry that is relevant to this study. Statistics of the medical device industry will give insight around the market size and the major countries which export medical devices to South Africa. Two further sections will discuss the international standards

the South African medical device industry abides by, as well as Chinese companies' abidance to these standards. The last section will discuss the South African medical device industry's ethical lens to assess Chinese business for this study.

### **2.5.1 Statistics on South African Medical Device Imports from China**

South Africa imported medical devices worth R12bn in 2013 from foreign countries; the medical device industry's growth in 2013 was 13% (SAMED, 2013). R1bn of medical devices were imported from China in 2013. Of the top ten countries South Africa imports medical devices from, China captures the highest share of the medical device industry growth (20.86%). As per SAMED (2013), it is estimated that South African imports of Chinese medical devices will increase in the future. This due to bi-lateral trade agreements between the South African and Chinese governments, lower costs of Chinese medical devices, and Chinese medical device quality improving (R. Agnew, Interview, February 8, 2018).

### **2.5.2 Medical Devices Standards in the South African Medical Device Industry**

In the past, there was a lot of uncertainty around the regulation of medical devices in South Africa, this due to gaps and inconsistencies in the South African healthcare legislation (Medico-Legal, 2017). The South African regulatory authority for medical devices is the Medical Control Council (MCC). The MCC acts as the responsible "gate keeper" of the medical device industry of South Africa. The MCC works hand in hand with the South African National Accreditation System (SANAS) that provides the accreditation regulatory framework for the medical device industry. Medical devices imported into South Africa must conform to quality standards issued by a conformity assessment bodies i.e. European Compliance (CE) and Food and Drug Administration (FDA). SANAS is the South African national body that audits conformity assessment bodies for accreditation to identify standards for the South African medical device industry. Conformity assessment bodies recognised by MCC and SANAS include the Food and Drug Administration (FDA) of the United States of America, Therapeutic Goods Administration (TGA) of Australia, Agência Nacional de Vigilância Sanitária (ANVISA) of Brazil, Canada Health of Canada, Marketing Authorization Holder (MAH) of Japan and European compliance (CE).

Another association, representing medical device companies in SA, is called the South African Medical Device Industry Association (SAMED). SAMED represents organisations in the medical device industry of South Africa. These organisations include companies that manufacture, import, sell, market and distribute medical technologies in South Africa. SAMED promotes the harmonisation of standards and regulatory requirements in the sphere of medical technology manufacturing and supply. SAMED promotes ethical principles and practices in the medical device industry by publishing a medical device code of ethical business and marketing practice (MDCEBMP). The MDCEBMP code draws heavily from international ethical codes (Vogt, 2011). SAMED's code of ethics is only binding to SAMED members and is not mandatory for all medical device companies in South Africa.

### **2.5.3 Chinese Medical Devices' Adherence to Standards Followed by the South African Medical Device Industry**

R. Agnew (Interview, February 8, 2018), who is an expert in the medical device industry of Southern Africa, stated that Chinese medical device quality improved drastically over the past ten years. In the past, Chinese medical devices resembled a copy of state-of-the-art European and American medical devices however, the internal electronic components and software were different. Chinese medical devices were of poor quality and clinical measurements did not always meet international standards and guidelines. Agnew stated that in recent years, Chinese medical devices are of similar standards and quality compared to European and American medical devices.

Many hospitals in South Africa did not consider purchasing medical devices made in China in the past (R. Agnew, Interview, February 8, 2018). Some reasons were:

- Many Chinese medical device datasheets were not reflecting the actual specifications of the medical device nor did the device operate according to its claimed specifications.
- Many Chinese medical device companies manufactured counterfeit European and American medical devices.
- Many Chinese medical devices were not up to standard and did not meet the minimum international standards i.e. FDA or CE.
- Chinese medical device companies are not loyal to their South African distributors and dealers.

Many Chinese medical devices no longer cost less than their European and American competition. The South African medical device industry sees an increase in companies importing medical devices from China (SAMED, 2013). Many Chinese medical devices comply with FDA and CE specifications, meet tender requirements of both government and private hospitals that acquire medical devices from Chinese companies. There are however, well-known cases in South Africa where Chinese medical devices failed after limited use; they were perceived as unsafe, sub-standard and unreliable (Low & Thom, 2018).

This literature review stated that positive perceptions led to an increase in trade transactions. Chinese medical device companies are gaining market share in the medical device industry of South Africa. This could be due to good Chinese business ethics or it could be due to Chinese companies' competitiveness.

#### **2.5.4 The Ethical Lens to Assess Chinese Business Ethics in South Africa**

Moral standards conflict across borders, the argument is always whose rules should prevail. Koehn (2013) stated the world does not necessarily have different morals. Hurn (2008) stated that ethical values are relative to a culture or society, it would be considered unethical for an outsider to interfere since the outsider should not impose their standards on others. Gift et al. (2013) stated that typically, each party in a business transaction is only informed on their own ethical standing. Parties do not have a thorough understanding of their trading partner's ethical profile and therefore must form a perception. Thus, both parties to an international business transaction, bring their own ethical profile and perception of the ethical profile of the counter-party to trade dealings.

For this study, it can be argued that both South African and Chinese medical devices companies have their own ethical standing. South African medical device companies could perhaps form a perception of Chinese business ethics since they do not have an understanding of Chinese ethical profiles.

Rossouw (1997) mentioned that Western European countries and Americans have experienced the same business ethical issues faced in South Africa and it could thus be argued that South Africa's business moral system is not too far off from the Western world. Feldman (2013) said that Western cultures rely on formal structures where the rule of law applies and personal relations are not considered to guide



society. The Western legal system reduces uncertainty since firms rely on the courts to resolve any business disputes. As discussed in section 2.5.2, the South African medical industry relies on rules, codes, standards and formal structures to guide the industry.

A normative grounding implies that there are universal standards of absolute values and acceptable behaviours (Hurn, 2008). Normative ethics are concerned with moral rules that guide actions, institutions and ways of life. Business ethics tends to focus primarily on the principles of actions, the actions themselves and the actions' consequences (Solomon, 1999). According to Solomon (1999), the two ethical theories predominantly used, during ethical debate around business ethics, are deontology and utilitarianism theories. Rossouw (1997) mentioned that trends in business ethics indicate that personal values and virtues should rather be used to assess business ethics.

The section below will briefly discuss the theories around perception. The key characteristic of deontology and utilitarianism ethical theories will be discussed thereafter with objections to each theory for this study. The key motivating factors for using a virtue ethics lens for this study will lastly be discussed.

## **2.6 Theories' Discussion for This Study**

### **2.6.1 Perception Theories**

Perception is the ability for a human to take information in from the world, through our senses. Perceptual development or the development of our senses is formed during the early phases of human life (Perceptual development, n.d).

Self-perception theory describes people who lack initial attitudes or emotional responses, develop these attitudes and responses by observing their own behaviour and coming to conclusions as to what attitudes drive that behaviour (Self-perception theory, n.d.). Self-perception theory is however, not easily understood. People would assume that a person's personality and attitude is driven by their own actions but self-perception theory indicates that this is not always true. Self-perception theory states that people interpret their own actions in the same way that they interpret others' actions. People's actions are however, socially influenced and not formed independently.

Constructive perception theory states that the perceiver uses sensory information and other information sources to construct a cognitive understanding of a stimulus.

Constructive perception theory further states that perceptions are formed through combinations of a person's learned experiences fused with current stimulus (Rodarte, 2015). During perception, hypotheses are formed and tested against precepts formed by sensory data, knowledge and high-level cognitive processes. Perception affects the perceiver's experience of people and environments however, people and the environment also affect the perceiver's perception.

It can be argued that by touching on these theories around perception, people's perceptions are influenced by their youth, upbringing, context and actions throughout life. These influences can create biases that affect one's perceptions of people we encounter during personal or business related matters.

### **2.6.2 Deontology Theory**

Deontology theory focuses on universal principles of right and wrong. Deontology theory or "duty" involves the obedience of rules required by that duty. Deontology ethics is based on concepts of duty and rights that can be demonstrated by reason alone and not through experience (Micewski & Troy, 2007). Whetstone (2001) stated that deontology theory is based on moral principles and obligations, an action is in accordance with a moral principle required by God, natural law or rationality. Khomba (2011) stated that with deontology, moral actions cannot be based on a person's needs, experiences or instincts but should be based on rules that the general society sets. Deontological ethics cover ethical standards which all people should respect and abide by, rules distinguish between what is morally right or wrong (Rossouw, 2001).

An agent has a duty to act according to a moral norm, irrespective of potentially beneficial effects of acting differently. With deontology theory, an agent's actions are not justified by the actions' consequences, an agent's motives, and character is of more importance. Hansen (1992) mentioned that with deontology theory, people accept a concept of duty and that an agent's action is not justified by the action's consequences but rather by the underlying motives of this action. This includes the morals and character of the agent. The Seven Pillars Institute (n.d) said that deontology theory focuses on the act rather than the agent, an act is either morally right or wrong regardless of the consequences.

With deontology business ethics, the duty and the natural expectation of a person is to obey moral laws. These moral laws exceed legal requirements of the state (Jones, 2003). When deontology theory is followed in business ethics, there is typically a code of ethics that is expected in a business. This code of ethics sets rules and procedures that needs to be practised by a business. The principle of deontology in business is that everyone in the same situation should take the same action.

There are however, objections to deontology theory. These objections include:

- Moral status is rule-based only. If a person, for example, tells a lie to protect someone from physical harm, then according to deontology theory one would be morally wrong.
- Deontology theory avoids subjectivism and uncertainty, one has to follow a set of rules to be morally right or wrong (Ethicsunwrapped, n.d).
- Deontology theory relies on universal moral law that makes deontology theory too rigid (Taylor & Francis group, n.d).

South Africa and China have different ethical profiles (Gift et al., 2013). Whetstone (2001) mentioned that deontology does not allow for moral reasoning yet South African and Chinese morals could differ. Whetstone (2001) stated that virtue ethics should be used in combination with deontology and consequential teleology since it pays attention to a person's virtues, vices and character. Jones (2003) mentioned that if deontology theory is practised in business ethics, then a code of ethics should exist for the business. Chinese and South African business ethics and cultures differ; the rules of business could be different in China compared to South Africa. It can be argued that a code of ethics cannot be used for South African and Chinese businesses since their contextual business environments differ. Brady and Dunn (1995) also stated that deontology ethics is demonstrated in a society; Chinese and South African societies differ.

From the aforementioned reasons, deontology theory was not used as the lens to assess Chinese businesses ethics in the South African medical device industry.

### **2.6.3 Utilitarian Theory**

Utilitarian theory focuses on the consequences of actions to judge ethical behaviour (Khomba, 2011). Hansen (1992) said that utilitarianism is concerned with the consequences of an actor's action. The action is morally right if it leads to the greater

good for the maximum number of people or the least consequences. The Seven Pillars Institute (n.d) stated that according to utilitarianism theory, actions are morally right if the consequences maximize well-being or minimize suffering. Utilitarianism drive the actors to consider all the possible outcomes of an action and to weigh one action up against the other to determine which action is the best for society (Reidenbach & Robin, 1990). Utilitarianism therefore looks past one's own interest and rather focuses on the interest of others. Rossouw (2001) stated that utilitarian theory focuses on the well-being and happiness of society instead of having individual benefits alone; human beings are by nature social beings.

There are two forms of utilitarianism; these forms are 'rules' and 'act' (Parker, Jones & Ten Bos, 2005). Rules utilitarianism means adherence to rules which guide behaviours that lead to the greater good of the greatest number of people. Act utilitarianism does not place emphasis on rules but instead insists that every situation should be judged as it arises.

Reidenbach and Robin (1990) stated that utilitarianism theory has been readily accepted by businesses. Utilitarianism in business ignores important differences in values by solely comparing all interests with a single measure. The aim of utilitarianism in business is to achieve the greater good for the greatest amount of businesses. This does not mean all businesses have the right to get equal shares of the greater good. Utilitarianism is concerned with the total sum of the greater good however, all businesses might not get equal share. Utilitarian business managers must make decisions on whether the amount of good is better than the amount of bad. This decision making must be made on a case-by-case basis by people who can set their self-interest aside in order to gain the greater good for the business.

Objections to utilitarianism include:

- One cannot always predict the outcome of one's actions accurately (The Seven Pillars Institute, n.d).
- Immoral acts and rules can be justified using utilitarianism, an act is morally right if the majority of people benefit from it.
- Utilitarianism focuses on consequences and results which neglects the significance of motives and intentions (Nu Galway, 2005).
- With utilitarianism in business, rational people should make decisions to ensure self-interest is put aside to ensure the greater good for the business. Irrational people cannot make the right decisions.

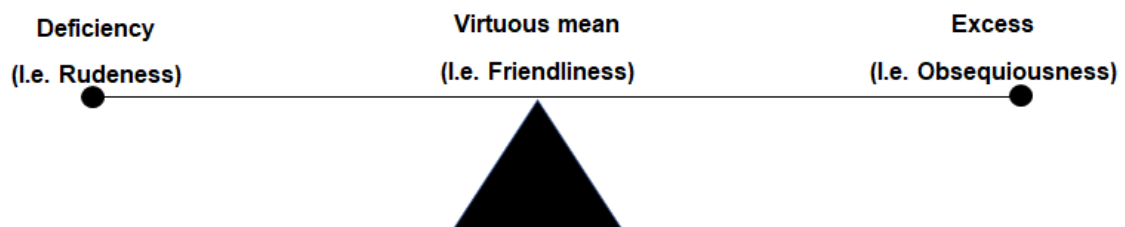
Utilitarian theory ignores motives but rather considers the consequences only; motives could matter ethically. Moral standards between South African and Chinese societies could differ; the consequences of an action (i.e. business transaction) could be beneficial for one society or business while the other suffers. With utilitarianism in business, the greater good for all businesses during trade transactions is the goal. The greater good could be relative depending on the viewpoint of each trade partner.

For the above-mentioned reasons, utilitarian theory would not be used as the lens to assess Chinese business ethics in the medical device industry of South Africa.

#### 2.6.4 Virtue Theory

According to Aristotle, a virtue is a mean between two vices (DeMichelle, 2016). Figure 1 illustrates the virtuous mean with two vices, the two vices are rudeness and obsequiousness while the virtuous mean is friendliness. A virtue is in the middle between two vices.

Figure 1: Explanation of Virtues and Vices



Virtue theory is the oldest normative theory in Western philosophy, its roots stem from Aristotle's Nicomachean ethics which is seen as the most influential of virtue theory. Virtue ethics focuses on specifics and actions of an agent and makes the connection between what actions an agent does and what they become after their actions.

Some cultures, like the Western world, operate on individualistic morality while the Eastern world is more community-centred, yet both are considered ethics of virtue (Christopher, 1999). Slote (2015) stated that virtue ethics may become dominant in Western thinking however, most ethics outside the Western world could arguably also be virtue ethics. Slote (2015) said that Buddhism and Confucianism are also forms of

virtue ethics while various African ethical principles also have deep affinity with virtue ethics.

Aristotle's virtue theory focuses attention on ethical behaviour as the integrity of an individual's character. Virtue theory is based on the assumption that goals can be achieved only when a person loves themselves first (Rossouw, 2001). Morality therefore is reliant on the moral character of a person (Khomba, 2011). Alzola, Romar and Hennig (2017) stated that virtue theory is the most popular normative theory used to assess business ethics in terms of the number of articles published in Business Ethics quarterly.

Whetstone (2001) said the benefits of choosing ethics of virtue are:

- It is personal and focuses on how one should live especially being sensitive to human life. It focuses on moral properties and qualities that are fundamental to a person.
- The focus should be on the actor and the source of the action. There should be harmony among an actor's reasons, values and justifications. Virtues can be changed and corrected, virtues guide and correct behaviour.
- Context and the environment influence the actor and actions. A virtuous character will take the background and context into perspective when an act is done, this specifically during contextual differences in business.
- Virtue ethics compliments other disciplines of theology and philosophy, social sciences do not limit virtue ethics.

Objections to virtue theory include:

- Whetstone (2011) mentions that virtue ethics is criticised for cultural relativism since people of different cultures could have different character traits as virtues or vices.
- A virtuous character could be portrayed when actions are carried out, these actions could however, be seen as immoral. An example could be a courageous murder yet murder is morally wrong.

Virtue ethics has been suggested as an alternative to deontology and utilitarianism for business ethics. Virtue ethics focuses on the agent or on a persons' character trait expressed in their actions instead of the action or consequences of the action. When a virtue ethics perspective is taken, Eastern and Western countries are meeting since their virtues share a natural basis and structure (Christopher, 1999). This understanding is especially relevant to business today since many companies are

operating in a global context (Neveling et al., 2014). Virtue ethics can thus be used to establish reasonable practices while overcoming differences when global companies conduct business. Both the Eastern and Western worlds share a heritage in virtue ethics. With virtue ethics an Eastern or Western business does not need to impose ethical practices on the other.

These attributes of virtue theory make virtue ethics a balanced framework to use for assessing Chinese business ethics in the South African medical device industry.

## **2.7 Virtue Ethics as the Lens to Assess Chinese Business Ethics**

Cambridge Dictionary defines a virtue as “a good moral quality in a person, or the general quality of being morally good”. We develop virtues through habits, and virtues are cultivated by family values and by the community we live in. Virtues form when there is tension between social customs and individual rationality. Rules do not control virtuous judgement; these similarities exist in Eastern and Western cultures (Christopher, 1999).

Aristotle suggested that moral actions should be guided by a mean because morality is a mean. All passions and actions have two opposite vices or extremes (a defect and an excess), the intermediate is the virtue. The mean or intermediate is the core of virtue theory. In a situation, one must react at the right time, in the correct manner, with the justified amount and for good reason. Combativeness, for example, is the mean between cowardice and extremism.

Virtues and vices are character traits that are acquired through practice, the same methods are used to acquire both. A virtuous mean is however, relative to the context and the environment of the actor, it cannot be used as a universal approach. All virtues are context sensitive however, context is subjective, the agent either sees the context as better or worse.

A virtue is a qualitative characteristic that forms part of a person's character (Whetstone, 2001). Aristotle's virtues as per Mintz (1996) are shown in Appendix 1. Morales-Sanchez and Cabello-Medina (2013) stated that an analysis on influential traditions including Christianity, Judaism, Confucianism, Buddhism, and Islam yielded certain core virtues. These six core virtues are wisdom, justice, courage, temperance, humanity and transcendence. Virtues are however, conceptual characteristics, too general and abstract to be measured as per Sanchez and Cabello-Medina (2012).

Virtues that are core to global traditions and religions are: wisdom, justice, courage, temperance, humanity and transcendence (Morales-Sánchez & Cabello-Medina, 2013). Other researchers focused on four moral virtues which are wisdom (prudence), justice, temperance and fortitude. These moral virtues are seen as the four cardinal values addressed in the philosophical history. If one had to look at the influences of each of these virtues, Morales-Sánchez and Cabello-Medina (2013) stated that wisdom influences moral sensitivity, -judgement and -motivation while justice influences ethical decision making focusing on moral motivation and moral character. Temperance assists moral character to engage in ethical behaviour and fortitude underpins ethical conduct in moral character. These moral competencies not only improve ethical decision making, but also assist the process as a whole.

Virtue theory has its foundation of moralities in the evolution of good character traits as virtues, a good person will have virtues (Chakrabarty & Bass, 2015). If an organisation has a virtuous character then it will reflect in their culture and values (Chakrabarty & Bass, 2015). Virtues guide ethical decision making of companies, virtues can also help organisations to increase their reputations and moral standing in the society and country they operate in. Rossouw (1997) stated that trends indicate that personal values and virtues should be applied to business ethics. Ferrero and Sison (2014) stated that although some authors differ on deficiencies of virtue ethics theory, it continues to be a valid option to assess business ethics. Different cultures do not necessarily conduct business with different moral principles (Koehn, 2013).

This research will explore which virtues are perceived as necessary in order to conduct ethical business in the South African medical device industry.

### **2.7.1 Virtues in Business**

Kaptein (2015) stated that virtue ethics focuses on aspired characteristics to be successful. In Greek antiquity, virtues were associated with being successful on the battlefield. Using this approach with competitive organisations, virtues can be identified that will enable organisations and people to be successful in business.

Mintz (1996) stated business is a social activity that includes members of a community and the interaction of the members within the community meet collective goals.

Virtues' role in business is to guide and motivate improved behaviour for all within the



community. Virtues make successful businesses by which individuals exercise virtues in order to achieve a common goal according to Mintz (1996).

Hartman (2017) stated that managing virtuous practices and navigating in an external business environment requires practical wisdom and courage as virtues. Hartman further stated that virtues create the ability to take complexities of an environment, i.e. a business environment, and see it in context. To find the mean between extremes is virtuous, and Hartman (2017) argues that the mean will ensure giving a reaction with the appropriate emotions, this relevant to business. There are however, no principles to handle complex business situations. Strategic management of a situation is more appropriate with a virtuous mean.

The literature is vague on which virtues a business should have to be considered ethical. Mpekansambo (2013) points out the following moral virtues relevant to business according to Solomon: honesty, loyalty, sincerity, prudence, courage, justice, reliability, trustworthiness, benevolence, sensibility, helpfulness, cooperativeness, civility, decency, modesty, openness, cheerfulness, amiability, tolerance, reasonableness, tactfulness, wittiness, gracefulness, liveliness, industriousness magnanimity, persistence, resourcefulness, cool-headedness, warmth and hospitality.

Basic business virtues according to Solomon are honesty, fairness, trust and toughness (Wittmer & O'Brien, 2014). Wittmer and O'Brien further stated that according to Solomon honesty is the first virtue of business as honesty is a virtue that is applicable to all cultures and business. Other ethical experts add transparency, openness, courage and a mix of moral and non-moral excellences (Mpekansambo, 2013). The social congenial virtues (charm, wit, friendliness and a good sense of humour) are also important for business since these virtues build and maintain human relations ensuring harmony, peace and a relaxed atmosphere in a business environment. Mpekansambo (2013) further points out that the virtues applicable to business include the four cardinal virtues and congenial virtues. The combined eight virtues needed for ethical business conduct are: prudence, courage, justice, temperance, friendliness, wit, charm and a good sense of humour.

Klein (2002) said that business virtues are essential for healthy business engagements and that virtues should be based upon feelings, cooperation, friendliness or trust. Nurturing emotions on which business virtues are founded will lead to better trade between businesses.

Virtue ethics will be used to assess Chinese business ethics in the South African medical device industry. Throughout the study, emphasis will be put on the virtues needed for ethical conduct in business as mentioned in the literature.

## **2.8 Conclusion**

This chapter presented a literature review of business ethics, factors influencing business ethics and business ethics in China. Potential ethical theories were discussed for this study and virtue ethics was chosen, through the literature review, as the lens to assess Chinese business ethics in the South African medical device industry.

### **3 Chapter 3: Research Questions**

#### **3.1 Introduction**

South African citizens do not have a positive perception of Chinese businesses as per Rossouw et al. (2014). Chinese medical device imports into South Africa is on the rise, Chinese medical device imports exceed the South African medical device industry's growth (SAMED, 2013). There has been an increase in Chinese businesses in the South African medical device industry, not all Chinese medical devices are perceived as cheap, sub-standard and unreliable. South African medical device companies could have a positive perception of Chinese business ethics or else trade should have declined as per Gift et al. (2013). The South African medical device industry's perception of Chinese business ethics is however unknown. This study will explore the perception South African medical device companies have of Chinese business ethics.

Rossouw (1997) as well as Ferrero and Sison (2014) stated that the virtue theory could be applied to business ethics. Virtue theory continues to be a valid option to assess business ethics. This study will use a virtue ethics lens to assess Chinese business ethics in the medical industry of South Africa.

#### **3.2 Research Questions**

The following research questions will guide the study:

**Research question 1:** What do individuals working in South African medical device companies think of Chinese business ethics?

**Research question 2:** Do Chinese businesses use different ethics when conducting business in the South African medical device industry?

#### **3.3 Conclusion**

This chapter presented the research questions that form the basis of the study. Through providing answers to these research questions, the research is expected to give clarity on the perception South African medical device companies have of Chinese business ethics.

## **4 Chapter 4: Research Methodology and Design**

### **4.1 Introduction**

This chapter outlines the research design used in this study to answer the research questions stated in Chapter 3. The study made use of a qualitative, inductive approach to explore the perception South African medical device companies had of Chinese business ethics within the medical device industry of South Africa. In-depth, semi-structured interviews were conducted for data collection. The data of this study was analysed and categorised, creating emergent themes based on the literature review in Chapter 2. The researcher was aware of potential concerns around reliability, validity, ethical considerations and the limitations of the study, these concerns are addressed in this section.

### **4.2 Research Philosophy**

The purpose of this study was to explore the perception South African medical device companies had of Chinese business ethics. Perceived ethical differences existed between South African medical device companies and Chinese businesses as per the literature review (Gift et al., 2013), perceived views on ethics were however subjective.

Ontology is concerned with the nature of reality (Saunders, Lewis & Thornhill, 2009). Ontology implies assumptions a person makes about his or her reality, business ethics are based on ontology assumptions according to Rossouw (2001). The researcher could have had assumptions on how the world operates, however, this was his view.

Subjectivism is a social phenomenon created from perceptions of actors and their actions. It was crucial for the researcher to explore the subjective meanings that motivate the actors and their activities in order to understand these actions. Having an individual view meant the process of understanding was dynamic, this due to the constant change of different actors in this study (Saunders et al., 2009). The actors were the medical companies in South Africa and the Chinese businesses they engage in business with, the business dealings between Chinese businesses and the medical device industry of South Africa were the actions.

### 4.3 Rationale for Chosen Research Method

Understanding the perceptions South African medical device companies had of Chinese business ethics was an unexplored field, and no literature was found on this specific topic. By broadening the literature review, no literature was found on the perception South African businesses have of Chinese business ethics either. The only literature that was found, measuring the perception of Chinese businesses, was a survey conducted by the Ethics Institute of South Africa (Rossouw et al., 2014). This survey however, focused on the perception African citizens had of Chinese companies, this survey included South African citizens but did not include South African businesses nor the medical device industry of South Africa.

Rossouw (2001) stated that research in business ethics was important to ensure credibility and the expansion of business ethics in the academic field. Rossouw further stated that flexibility should be allowed in respect to the research strategy and research methodologies when studying business ethics. It was however, important that the research strategy and methodology fit the topic of research.

Qualitative research provides rich contextual subjective information about people's feelings, emotions and perceptions (Carrasco & Lucas, 2015). Qualitative methods are useful for understanding complexities and identifying processes. Carrasco and Lucas (2015) further said that qualitative research seeks to understand research problems from the perspective of a local population and that this research method is particularly effective when obtaining cultural specific information regarding values, social context of particular populations. Marino (2012) stated that qualitative research provides someone's perception of a situation that permits people to understand others' behaviour. This study used a qualitative research method to explore the perception of the South African medical device industry.

Robertson (1993) stated that qualitative research is well suited for studying ethical behaviour since it considers the behaviour itself and the way in which an individual views their behaviour. According to Robertson (1993), ethical behaviours are complicated which includes the individual's perception and interpretations of behaviour. Robertson further mentioned that business ethics are sensitive as well as complex, business ethics will benefit from systematic efforts to test and create theory. Crane (1999) argued that a qualitative approach to business ethics could develop more theory, this also allows respondents to express their reactions in their own words

allowing themes to be developed. This study explored the perception of ethical behaviour in the business environment of the South African medical device industry.

Churchill and Wertz (2014) said that to gather deep, insightful information on perceptions, an inductive qualitative method should be used as a research method. A qualitative research approach could give a contextual understanding of Chinese business ethics rather than understanding Chinese business ethics from an objective theoretical stance. Yin and Quazi (2016) stated that business ethics involving China should follow a qualitative, inductive approach to generate and test theory. As an example, a study done by Brand and Slater (2003) used a qualitative approach to gain insights into the business ethics experience of Australian managers in China. Brand and Slater further mentioned that an increased number of articles used a qualitative approach to study business ethics.

Qualitative methods make use of an interpretive approach to social sciences according to Treviño, den Nieuwenboer, Kreiner and Bishop (2014). An interpretivism approach has its origin in an attempt to understand meaning at an individual level (Brand, 2009). Interpretivism, for this reason, takes the stance to assume all meanings are context specific and not unchanged reality.

Liedtka (1992) stated that qualitative methods such as personal interviews were more suitable for understanding perceptions. Qualitative data used semi-structured methods such as in-depth interviews, focus groups or participant observations (Mack, Woodsong, MacQueen, Guest & Namey, 2005). Some aspects of a qualitative study are flexible, these include data collection and research questions which are adjusted to what is learned. For example, qualitative methods ask mostly “open-ended” questions that are not necessarily worded in exactly the same way with each participant.

Open-ended questions allow participants the opportunity to respond in their own words, thus not forcing them to choose from fixed responses as with a survey. Open-ended questions have the ability to evoke responses that are: meaningful and culturally salient to a participant, unexpected by the researcher, rich and exploratory by nature (Mack et al., 2005)

A qualitative research method was used to conduct this study on perceptions South African medical device companies have of Chinese business ethics. The exploratory and inductive nature of this research suggested in-depth interviews would be the most

appropriate data collection method. Open-ended, semi-structured interviews were held with managers and owners of medical devices companies in South Africa.

#### **4.4 Population**

With qualitative research, it was not necessary to collect data from an entire community to achieve valid results, only a sample of populations was selected, (Mack, Woodsong, MacQueen, Guest & Namey, 2005). As per Carrasco and Lucas (2015), qualitative research seeks to understand research problems from the perception of a local population. The population of the study was defined as South African medical device companies that conduct business with Chinese companies in the medical device industry of South Africa. The accessible population was South African medical device businesses based in South Africa.

#### **4.5 Sampling Method and Size**

A mixed method of non-probability sampling techniques was used for this research, these techniques were snowball and purposive sampling. Non-probability sampling techniques are useful when the researcher has limited resources and time (Etikan, Musa & Alkassim, 2016). The purposive sampling technique was chosen since the researcher had knowledge and experience in the medical device industry of South Africa, this helped find medical device companies that were knowledgeable and experienced to participate in this study (Denscombe, 2014). Should time have been a constraint, during the study, then the snowball sampling technique would have been used since identifying participants could have proven difficult and time consuming (Etikan, Alkassim & Abubakar, 2016). The sample gathered purposively could have identified other participants meeting the criteria of this study, more participants could have taken part in this study with this approach.

The sample size was ten to fifteen interviews or until saturation is met. The following profiles were taken into account during the sampling of participants for this study:

Owners of South African medical device companies who conducted business with Chinese businesses in the medical device industry of South Africa.

Executives and senior managers of South African medical device businesses who conducted business with Chinese businesses in the medical device industry of South Africa.

The business conducted, between South African medical device companies and the Chinese businesses, had to be on-going during the research interview.

South African medical device companies who did not participate in businesses dealings with Chinese companies, were not interviewed.

#### **4.6 Unit of Analysis**

The unit of study were executives, managers or owners of South African medical device businesses who conducted business with Chinese companies in the medical device industry of South Africa

**Unit of analysis:** Perception of South African medical device companies.

#### **4.7 Pre-test**

A pre-test of the interview schedule was conducted with a Chief Operating Officer (COO) of a medical device company that met the criteria of the population of this study. The pre-test was conducted to ensure the questions as per the interview schedule were understood correctly by the participants, were not leading participants, and were aligned to collect the required data for this study (Saunders et al., 2009). The pre-test interview found that additional introduction questions had to be asked, to ensure the context of this study was better understood by participants. This aided in keeping interviews aligned with the research topic under exploration.

#### **4.8 Data Collection, Data Management and Data Analysis**

For this study, it was possible to conduct the data collection, data management and data analysis in separate phases, however, it was important that the data collection and data analysis phases overlapped to obtain a deeper level of understanding around the research topic.



#### 4.8.1 Data Collection

Qualitative data uses semi-structured methods such as in-depth interviews, focus groups or participant observations (Qualitative research methods: A data collector's field guide, n.d.). Liedtka (1992) stated that qualitative methods such as personal interviews were more suitable for understanding perceptions. Personal interviews could play a valuable role in exploratory research with regards to ethical conduct and beliefs (Randall & Gibson, 1990). Personal interviews were useful to exploratory research in order to develop and understand business ethics. In-depth interviews were favourable for collecting data of a person's perceptions and experience especially when sensitive topics are explored (Mack et al., 2005). Liedtka (1992) stated that in-depth interviews capture complexities of a respondent's experience, this avoids the temptation to oversimplify the situation researched by qualitative methods.

A free-response format questionnaire could be superior to close-ended questions which were typically used in business ethics (Randall & Gibson, 1990). Direct questions cause vagueness and vulnerability, the respondent could find it difficult to speak freely as well (Randall & Gibson, 1990). With close-ended questions, the respondent had to choose from the pre-defined question presented to them, business ethical questions should not be presented in multiple-choice format according to Randall and Gibson (1990). In a business ethics study done by Brand and Slater (2003), they made use of open-ended questions as well as general background questions for data collection; the general data collection approach was flexible. Open-ended questions allowed participants the opportunity to respond in their own words, thus not forcing them to choose from fixed responses as with a survey. Open-ended questions had the ability to evoke responses that are: meaningful and culturally salient to a participant, unexpected by the researcher, rich and exploratory by nature (Mack, et al., 2005). To understand perceptions of the South African medical device industry from an inductive angle, the interviewer asked open-ended questions on possible factors influencing participants' perception.

Semi-structured interviews, with open-ended questions, as per Appendix 1, were used for data collection. Cohen and Crabtree (2006) stated that the characteristics of semi-structured interviews include:

- The interviewer engaged in a formal discussion,
- An interview guide used with a list of questions and topics,

- The interviewer followed the interview guide however, he/she had the freedom to stray from the conversation if other information gathering was appropriate.

Respondents were provided with the interview schedule as well as information about the study. The interview guide was shared with the respondents some days before the actual interview to allow respondents time to reflect on the questionnaire.

20 to 40 minute interviews were conducted with South African medical device companies who did business with Chinese businesses in the medical device industry of South Africa. The perception South African medical device companies had of Chinese business ethics was a snapshot in time, this was the time of the interview. Only one interview was conducted with each South African medical device company to understand their perception and the time horizon was therefore cross sectional.

Respondents to the interview were provided with a copy of the interview questions one week before the interview took place. The interview questions were based on the medical device industry, Chinese business ethics and Chinese business virtues. The research questions led the interview, however, themes were also used to guide the conversation as per Doody and Noonan (2013).

To understand perceptions from an inductive angle, the interviewer asked open-ended questions on possible factors influencing participant's perception of Chinese business ethics. Towards the end of the interview, open-ended questions were asked to capture information such as feelings, attitudes and the understanding of Chinese business ethics in the South African medical device industry.

Table 1, on the following page, maps the research questions with the questions asked during the interviews of this study.

Table 1: Research question and interview questions mapping

Research Questions from Chapter 3	Interview Questions
<p><b>Research question 1:</b></p> <p>What do individuals working in South African medical device companies think of Chinese business ethics?</p>	<ol style="list-style-type: none"> <li>1. How important are business ethics in South Africa?</li> <li>2. How important are business ethics in the medical device industry of South Africa?</li> <li>3. What ethical lens do you use to assess business ethics?</li> <li>4. How do you perceive Chinese business ethics in the medical device industry of South Africa?</li> <li>5. Do you have perception difference when comparing well-known Chinese companies versus new entrants?</li> </ol>
<p><b>Research question 2:</b></p> <p>Do Chinese businesses use different ethics when conducting business in the South African medical device industry?</p>	<ol style="list-style-type: none"> <li>1. Do you find a difference in ethics between South Africans and Chinese people?</li> <li>2. Can you state some Chinese characteristics?</li> <li>3. Which virtues and vices do Chinese businesses portray?</li> </ol>

#### 4.8.2 Data Management

The interviews were voice recorded and saved in digital electronic format. Notes were made of conversations where the respondent wished not to be recorded. All voice recordings were transcribed into text before any analyses was done. Atlas.ti software assisted with data management to unearth themes that arose from the data.

### 4.8.3 Data Analysis

After the initial interviews, a sense of the data was felt with themes and insights that stood out. The researcher developed an increase in detailed knowledge of the topic being studied (Lewis, 2015). Reinecke, Arnold and Palazzo (2016) stated that through deep immersion in the context, and having empathy with the respondents, one could adapt the data gathering in response to how the research study unfolds.

An attempt was made to code the data into thematically categories with the help of Atlas.ti software (Friese, 2014). These themes were used to examine and emphasise patterns within the data. Discovering patterns, trends and themes across the data gave insight into the research questions. As per Brand and Slater (2003), overall themes emerged from the data. Predominant business ethical themes arose from perceptions South African medical device companies had of Chinese business ethics. A description of common kinds of business ethics issues confronted by medical device companies were shown.

Nowell, Norris, White and Moules (2017) as well as Ruggunan (n.d.) suggested the thematic analysis as set out in Appendix 2. The thematic analysis phases used were:

Phase 1: The researcher familiarised himself with the collected data.

Phase 2: The researcher generated initial codes with collation of data relevant to each code.

Phase 3: The researcher searched for themes and connections from the data. Codes became themes or sub-themes during this phase

Phase 4: Themes were reviewed by the researcher to ensure alignment with raw data. Themes without sufficient data were merged or deleted. Themes with large data were separated into individual themes.

Phase 5: Themes were named and defined, this phase also included peer debriefing and consensus.

Phase 6: This phase was the final stage where the report was generated from the data. This process ensured the describing of processes, coding and analysis in detail.

#### **4.9 Data Validity, Researcher Bias and Reliability**

Qualitative data can be considered subjective and can also be affected by biases (Saunders et al., 2009). These biases include interviewer bias, interpreter bias and response bias. The interview questionnaire was sent to all participants in advance to ensure reflection could be done which tone down biases. The researcher himself was conducting business in the medical device industry of South Africa, this potentially created biases towards Chinese businesses.

Life (1994) states deficiencies in qualitative social research could include failure to provide detailed descriptions of the research process, the “telling of examples” could also skew an interview result. The validity and reliability of the interview were cross-checked by experts in the fields of business ethics, Chinese businesses and medical devices. This method ensured another researcher opinion was applied to the results and the overall study.

Brand and Slater (2003) stated that a limitation with in-depth interviews as the respondents' capacity for introspection and recall. Perceptions could be captured inaccurately under stressful conditions rather than some time later. They also stated that perceived social pressure for business to behave ethically could influence a respondent's answer. The questionnaires were distributed to the respondents before the interview to limit this inaccuracy.

A large amount of valuable interview information could never appear on the transcripts as per Liedtka (1992). Facial expressions, physical movement, pauses and other emotional indications may be overlooked and not accurately noted. The researcher did not take notes of participants' body language or pauses.

Randall and Gibson (1990) stated that key constructs in business ethics needed to be clearly defined and explained to participants. A common understanding of ethical beliefs and conduct needed to exist otherwise respondents could define their own terms unknown to the researcher. The ethical lens, virtue theory, was explained to the respondents before the interview, this made the respondents more familiar with the ethical lens which was used to assess Chinese business ethics in the medical device industry of South Africa.

#### **4.10 Potential Research Limitations**

The reliability of the study could have been impacted by the small sample size chosen, this being ten to fifteen businesses from the total population of South African medical device companies that conducted business with Chinese companies. The participants who took part in these interviews were based mainly in Gauteng and Cape Town. Increasing the sample size to include companies based in other geographic locations could have potentially eliminated sampling- and systematic errors.

Interviews were well structured and stayed within the limits of the designed protocol. The interviewer was knowledgeable, transparent, sensitive and open to the subject being discussed. The interviewer was critical and interpreted some questions that were not clear. The interviewer was sensitive to ethical profiles during the interview.

## **5 Chapter 5: Results**

### **5.1 Introduction**

In this chapter, the key findings from the fourteen interviews with manager, directors and owners of medical device firms in South Africa will be presented. The findings are revealed as they relate to the research questions stated in chapter three. The findings are presented based on themes that arose from the qualitative analysis of the interview data. The themes will provide insights into the exploration of perceptions South African medical devices companies have of Chinese business ethics.

This chapter begins by presenting a description of the sample in the study, followed by the presentation of the results from the qualitative analysis.

### **5.2 Description of the Sample**

A list of the interviewees, including a short description of the medical device firms they are employed at, is presented in Table 2. Purposive sampling and snowball sampling techniques were used to select the fifteen individuals from the medical device industry of South Africa. At the stage of the interviews, all participants engaged in business with Chinese businesses.

A total of fifteen interviews were conducted, one interview was removed from the sample due to recording issues resulting in data loss, this resulted in fourteen interviews in the sample. Participant numbers were used since participants' names were kept confidential and anonymous. Participants with different roles, company structures, company geographical locations and business operating areas were chosen to give a wide variety and richness of participants in the sample.

Five participants were owners of medical device firms based in South Africa. Participants who are employees of medical device firms include four directors, one sales manager, one operations manager and one business manager. Two participants are employed by private hospital groups in South Africa, one participant holds the position of head buyer while the other holds the position of director.

Of the fourteen interviews, eleven were conducted in-person while three were conducted telephonically. The majority of participants were based in Gauteng with three participants residing in the Western Cape of South Africa. Personal interviews

were predominantly conducted in a private area at the participant's place of work, and two interviews were conducted at private tables in a coffee shop. Interview questions were sent to each participant in advance via email. Sharing the interview questions with the participants beforehand gave participants insight into the study and participants could prepare for the interview.

**Table 2: Participants and Context of the Companies**

<u>Interviewee number</u>	<u>Position held in their organisation</u>	<u>Type of medical device organisation</u>	<u>No of years conducting business with Chinese companies</u>	<u>City based in</u>
1	Owner	Medical device firm conducting business in Western Cape	25	Cape Town
2	Owner	Medical device firm conducting business in South Africa	6	Pretoria
3	Managing Director	Medical device firm conducting business in South Africa	13	Johannesburg
4	Head Buyer	South African private hospital group	6	Johannesburg
5	Owner	Medical device firm conducting business in South Africa	18	Johannesburg
6	Director	Medical device firm conducting business in South Africa	10	Pretoria
7	Director	South African private hospital group	10	Stellenbosch



8	Operations Manager	South African private hospital group	2.5	Stellenbosch
9	Sales Manager	Medical device firm conducting business in South Africa	5	Johannesburg
10	Director	Medical device firm conducting business in South Africa	11	Pretoria
11	Owner	Medical device firm conducting business in Gauteng	5	Pretoria
12	Business Manager	Global medical device firm with a subsidiary in South Africa	7	Johannesburg
13	Owner	Medical device consulting firm in South Africa	11	Pretoria
14	Operation Manager	Medical device firm conducting business in South Africa	5	Johannesburg

### 5.3 Presentation of Results

The results are presented as per the research questions mentioned in Chapter 3 and the interview questions as tabled in Table 1 in the data collection section.

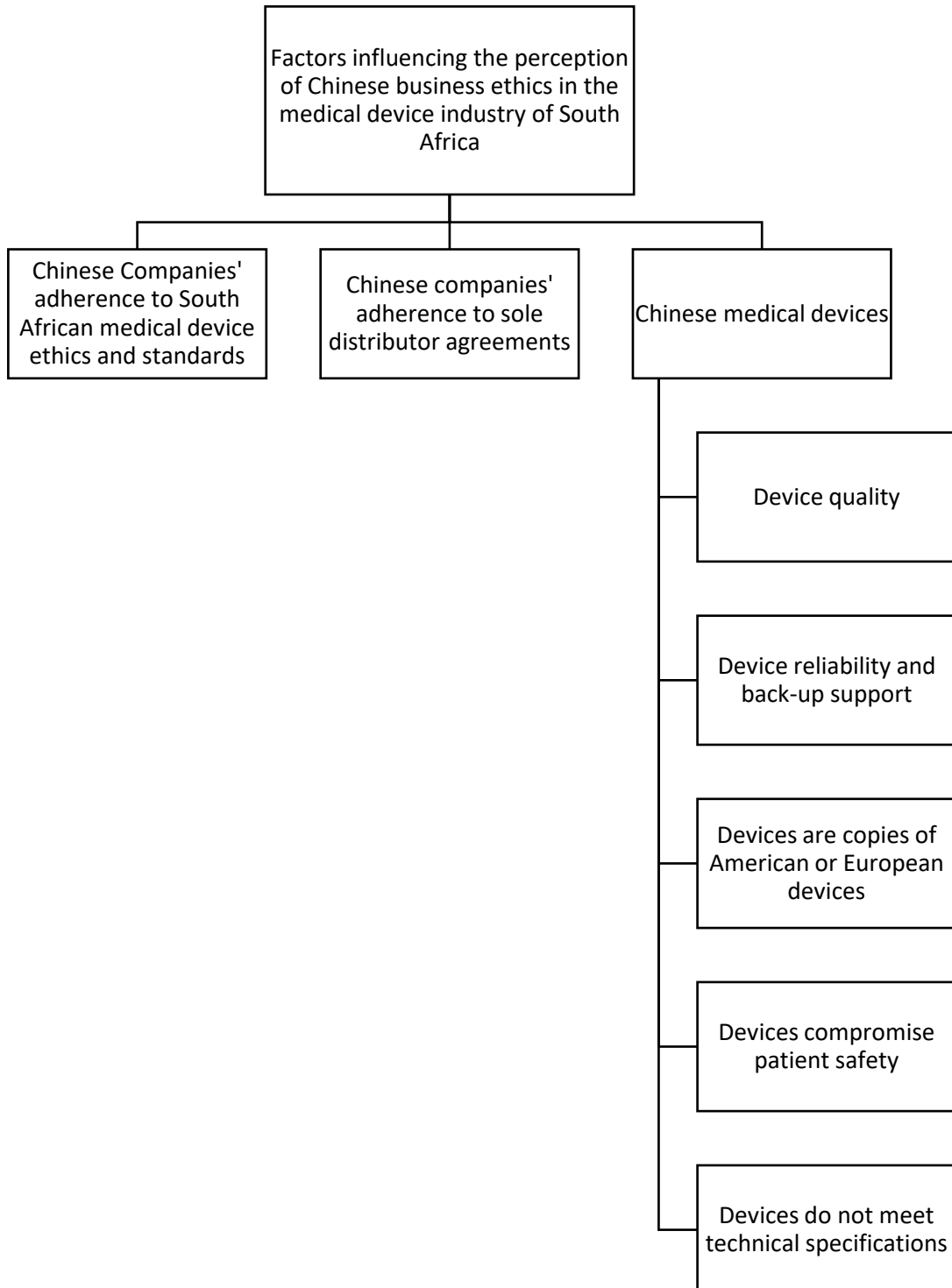
### 5.4 Results: Research Question 1

#### **Research Question 1: What do individuals working in South African medical device companies think of Chinese business ethics?**

The aim of research question 1 was to understand what the perception of Chinese business ethics are in the medical device industry of South Africa. It emerged from the

interview data that the perception of Chinese business ethics is affected by many factors, these factors are illustrated as in Figure 2:

**Figure 2: Factors influencing the perception of Chinese business ethics in the medical device industry of South Africa**



The interview data further indicated that the lens, which South African medical device companies use to assess business ethics, is vague to the participants themselves yet this lens is still used to assess business ethics in the medical device industry. The sections below start by discussing the ethical lens that South African medical device companies use to assess business ethics. The sections that follow discuss the different ethical factors influencing the perception of Chinese business ethics.

#### **5.4.1 The Ethical Lens South African Medical Device Companies use to Assess Business Ethics**

Most participants of this study stated that their upbringing formed their ethical lens. In addition, the majority of participants said that religion (predominantly Christianity) also shaped their ethical lens, one participant echoed, "It is the fact that somebody's watching and you better need to do the right thing, you know what the right thing is and you better do the right thing". Ethics of duty (Whetstone, 2001) surfaced strongly from the interview data with most participants perceiving good ethical conduct by making the right decision now since it is their duty, as one participant mentioned, "Making the right decision now".

Participants were asked about their ethical lens used to assess business ethics, many participants stated that the ethical lens, which the South African medical device industry use, is influenced by the CE and FDA standards. CE and FDA standards form the medical device industry's lens to view business ethics related to medical devices. Medical device companies that do not abide by FDA or at least CE standards are considered unethical in the medical device industry of South Africa.

Several participants said that their ethical lens was shaped through experiences and that the company these participants worked for during their career influenced their ethical lens in some way. Most of these participants had worked for European firms in the past and these European firms helped form their ethical lens, which they use to assess business ethics. It can be argued that the lens, which many South African medical device companies use to assess business ethics, is influenced by European ethics and standards.

Many participants stated that they follow a strict code of ethics in the South African medical device companies they work for, each company defines and sets their own ethical code. It could be argued that a company's code of ethics is influenced by ethics

of duty as previously discussed. This is due to most participants stating that ethics of duty guides their ethical conduct. A few participants mentioned that their ethical lens is all about the patient, if any action affects the patient negatively then it is unethical. This also links with ethics of duty since the action is more important than the consequences of the action (Whetstone, 2001).

Most participants stated that good business ethics is a priority in their companies and that good business ethics is essential in the medical device industry of South Africa. The majority of participants felt that the medical device industry of South Africa follows good business ethics. One participant however, stated that the medical device industry does not care about good business ethics, this mainly due to fraudulent tenders. All participants however, stated that they act ethically all the time with one participant saying: "We are 100% ethical at all times" while another said "any unethical behaviour won't be tolerated". One participant distributing Chinese medical devices stated that he would rather lose business than deal with someone with poor business ethics.

#### **5.4.2 South African Medical Device Industry Ethics and Standards**

All participants stated that business ethics is of utmost importance in the medical device industry of South Africa, even more so than in other business industries in South Africa. Participants mentioned that the South African medical device industry is regulated by the MCC of South Africa. The MCC is only one of many governing bodies regulating the industry. One participant stated, "I think if you look at the medical device industry, ethics is of utmost importance. There are a lot of governing bodies controlling ethics regarding what medical companies can and cannot do". Another participant said, "where we are moving to in terms of covenants with MCC or SAPHRA or whatever it is now. I think the medical industry in South Africa is now more regulated than it ever was".

Although the South African medical device industry is regulated by the MCC, participants pointed out that South African hospitals only buy products which comply to CE or the FDA standards. One participant expressed, "your accreditation, it either comes from the West or Europe, so CE for example". Most participants felt that although MCC controls the industry, FDA and CE standards regulate the industry. The results indicate that any company that sells medical devices that do not conform to CE nor FDA standards, are conducting business in an unethical manner. CE and FDA

standards influence perceptions of business ethics in the South African medical device industry.

Most respondents said that there is a high level of ethics and standards in the medical device industry with the majority of South African companies adhering to these ethical standards. Participants mentioned that a minority group of companies do not follow the same standards and ethics set out by the industry and these companies are perceived as being unethical.

#### **5.4.3 Chinese Firms' Adherence to Industry Standards and How it Affects the South African Medical Device Industry's Perception**

Many participants stated that Chinese medical device firms do not conform to international standards which the South African medical device industry abide by. This behaviour is seen as unethical by many respondents. The international standards participants mentioned are CE and FDA standards. There were however, a few participants that said Chinese companies recently aligned their standards to Western and European medical device firms. One participant said that Chinese companies follow their own rules, standards and accreditation that are different to the standards used in the South African medical device industry. The respondent further said that Chinese companies do not adhere to CE and ISO (International Organization for Standardization) regulation unless they absolutely have to. One respondent answered, "No, absolutely not" when he was asked if Chinese firms adhere to the rules and standards of the South African medical device industry. One respondent stated, "I think their ISO or CE is poor" while another said, "So you get a lot of Chinese or Eastern products coming in with no FDA, no CE verification". The results indicate that Chinese firms, conducting business in the medical device industry of South Africa should adhere to CE or FDA standards. Participants of this study felt it is unethical if these standards are not abided by.

With regards to tenders, one respondent said, "with tenders, some Chinese companies state they do not comply to the standards however, later they will change and state they do comply, this is unethical". Another participant said that when tenders are awarded, many Chinese equipment enters the medical device industry which do not conform to FDA or CE standards, some of this equipment is not even traceable since it is nameless and without any indication that it conforms to CE or FDA standards.

A medical device company owner that distributes Chinese medical equipment stated that the Chinese company his company represents only conforms to standards if it is mandatory in a country. This respondent also said, “not all of their products are FDA approved. So they have got obviously multiple products for multiple markets”.

Chinese standards are influenced by price according to some respondents. One respondent said, “Because there is a series of equipment that you can buy for a tenth of the price of European products. And you know for sure that the quality, the safety standards and stuff is not there”. Another participant said that Chinese equipment prices increase once the equipment conforms to standards, in his words, “as soon as they start to conform to the ethical standards from their European products, their [Chinese] price do increase”. The result indicated that Chinese medical device cost more once Chinese medical devices conform to FDA or CE standards.

#### **5.4.4 Sole Distributorship and Ethical Perception in the South African Medical Device Industry**

Most participants of this study stated that Chinese companies in general do not sign sole distributor agreements with any South African medical device company. Some Chinese companies do sign sole distributor agreements however, Chinese companies do not abide by these agreements as per most participant responses. This behaviour was seen as unethical by most respondents. Below are participant responses when asked about Chinese companies’ ethics related to sole distributor agreements with South African medical device companies:

- “A contract does not mean much for Chinese companies, Chinese companies will sign supplier agreements however, their engagement stops when things go bad.”
- “When it comes to signing documentation, saying that I will be the sole supplier in South Africa and then I find they will actually supply anybody else as well. So in those terms, I don’t find them to be that ethical.”
- “I will sign a deal to be an exclusive agent for them for a little finger tip pulse oximeter and then on the internet I find that there are another four companies that are actually importing from the same manufacturer in China.”
- “I think a lot of Chinese companies still work like that. It is for them multiple distributors; you know? Spray and pray almost type of philosophy that they worked on.”

- “The biggest thing about the ethics when they say we have an exclusive agreement to distribute products and then they sell it through another company. To someone else in South Africa. I would say that is the one area where they are unethical because we have an exclusive agreement arrangement.”
- “Our hospital group is called by Chinese companies to engage directly in business with them yet these Chinese companies already have sole distributor agreements with agents in South Africa.”
- “It is unethical. But that’s their [Chinese] business model. They are not sticking, you know they are saying they are giving exclusive rights to sole suppliers, but they do not. You come to them with a big order, and I can mention a few, you can come to them with a big order, you can order it.”
- “They had two different distributors, for the same equipment in to different geographical areas. Which to me is unethical.”
- “They seem to think that there are no such requirements, so you buy the products from X today, tomorrow you buy it from Y and a week later you’ll buy it from Z. And if you asked them they will say: no this is my distributor but the concept of a sole distributor doesn’t exist.”

The majority of respondents mentioned that Chinese companies do not abide and honour sole distributor agreements which were signed with South African medical device companies. Chinese companies would sell to medical device companies in South Africa although they already signed a sole distributor agreement with another company. Chinese companies that do not abide by sole distributor agreements are perceived as being unethical. This negative ethical perception labels all Chinese companies as being unethical with regards to sole distributor agreements.

#### **5.4.5 How Chinese Medical Device Products Affect Ethical Perception in the South African Medical Device Industry**

Participants were asked how Chinese medical device products affect the perception of Chinese business ethics in the medical device industry of South Africa. Participants mentioned that several product attributes affect the perception of business ethics. Participants mentioned product key attributes affecting perception of business ethics as: product quality, product reliability, and product back-up support. Each product attribute mentioned during the study, and how it specifically influences the perception

of Chinese business ethics, will be discussed in a separate sub-section. The product attribute sub-sections are:

- Chinese medical device quality,
- Chinese medical device reliability and back-up support,
- Chinese products are perceived as copies of European and American medical devices,
- Chinese medical devices and patient safety,
- Chinese medical device performance versus technical datasheets.

#### **5.4.5.1 Chinese Medical Device Quality**

Most participants said that Chinese medical devices are perceived as poor quality and sub-standard compared to medical devices manufactured in Europe or America, thus indicating European and American influences on how the medical device industry of South Africa perceive quality. A national sales manager working for a leading South African medical device company stated that there is a negative stigma attached to Chinese medical devices. He further stated, "There is a massive, massive perception out there that even if you want to step out of the medical industry but let's stay in the medical industry, that anything from China is cheap, nasty and of poor quality. That's the perception in the market". A consultant in the medical device industry stated the following about Chinese medical devices, "Artificial and sub-quality. I mean I've seen for instance, my favourite is mobile x-ray machines. I mean they look as if they come out of the ark. They look horrible and they often are horrible."

Another participant said that Chinese ethics gives the perception that Chinese companies do not care about product quality and that Chinese companies will never do more than expected. One participant stated, "you get what you pay for in China, nothing more, nothing less". Another participant said that Chinese medical devices are considered cheap quality but pricewise, Chinese equipment is no longer perceived as being cheap. The results indicate a mixed view related to Chinese product price versus quality.

Many participants said that Chinese medical device quality deteriorated after the first order was received from a South African medical device company. Respondents perceived this as unethical business conduct. When a South African medical device company places a second order with the same Chinese company, the quality is always



inferior compared to the first order and the quality deteriorates with future orders. A few participants mentioned that all shipment quality needs to be checked when recurring orders are placed with Chinese companies. Chinese companies do not inform their customers in South Africa when medical devices of inferior quality are shipped to South Africa. An example from respondents is given, “we brought in a batch of plasters and the initial product was good and the second batch wasn’t the same. So you get the standards where they [Chinese companies] will perceive to have a good standard, but the next time they [Chinese companies] ship it, the standard is not that great”. Another participant mentioned the following with regards to service delivery and product quality, “once service is signed then service delivery goes backwards, their products’ quality always needs to be checked”. Another participant said that once an order is placed with the Chinese company then it becomes difficult to get hold of the Chinese company after the order was shipped to South Africa and this is perceived as poor business ethics. The results of this study indicate that Chinese product quality deteriorates with recurring orders and Chinese companies avoid communication once an order has been placed.

Many participants said that Chinese medical equipment do not comply with equipment datasheets when tested on medical device test equipment. This is seen as unethical business conduct. The quality of the physical product is inferior to the specifications listed on the product’s datasheet. A technical manager of one of the largest medical device companies in South Africa said, “The values when you test in on the Fluke test equipment is not the same as that the specification sheet gives you”. Another participant said the following with regards to Chinese business ethics and discrepancies between equipment and datasheets of the equipment, “when we get Chinese equipment in for repairs you can see that it doesn’t conform to standards. . . So, unethical, because if it is on paper [specifications] [then] it should produce the goods”. Another respondent said that Chinese equipment is perceived as unsafe, non-functional and sub-standard and that Chinese companies are unethical with regards to Chinese medical device quality. The results indicate that Chinese medical devices do not always comply with product datasheets which were compiled for the medical devices. These discrepancies are perceived as unethical conduct by Chinese companies.

Several participants said that well-known Chinese brands have grown in the recent years and many well-known Chinese brands and their products are no longer perceived as low quality nor low cost. The participant however, said that Chinese medical device pricing increased once their equipment conforms to European and

American medical device standards and ethics, which is followed by the medical device industry of South Africa. Another respondent said, “Quality wise I think it [Chinese medical equipment] has got better over the years. There is still the cheap Chinese stuff that we all know, that nobody wants. But I think they are standing hand in hand with the international stuff from the States and from Europe. I think the quality has definitely improved over the years. And we don’t have to stand back for the Chinese stuff anymore.” Another participant stated, “We always judge Chinese products to be very cheap and not up to standard or that it did not last that long. But it changed over the past couple of years.” The results show that a perception in the medical device industry of South Africa exists where Chinese medical devices cost more should it meet European and American standards. The results also indicate that Chinese medical devices are no longer perceived as inferior quality although the price might be lower, this compared to similar medical devices in the industry.

Specifically regarding the robustness and electronic components used in Chinese medical devices, many participants indicated that Chinese medical devices are perceived as being of low quality. Participants replied, “The quality of the casings. The quality of the screws. The quality of the equipment in general is low. And if it falls once, it will break” and, “The quality is not there. Outside it looks good but inside it is a mess”. The results indicated that the electronic components used to produce Chinese medical devices were sub-standard and were of lower quality than experienced in the medical device industry of South Africa, this is perceived as unethical business conduct.

The results indicate that the majority of participants perceive Chinese medical device quality as inferior compared to similar European and American medical devices. Chinese medical device quality is measured against European or American medical device quality. Participants perceived poor quality medical devices as a reflection of poor business ethics.

#### **5.4.5.2 Chinese Medical Device Reliability and Back-up Support**

Most participants said that Chinese medical devices were not long lasting, had a shorter life compared to European and American medical devices, are mediocre, and not reliable. All these products’ reliability factors negatively influenced the perception of Chinese business ethics in the South African medical devices industry. Negative responses to Chinese equipment reliability included:

- “They [Chinese companies] will sell medical equipment that is not very reliable or sturdy with bad warranties. And they [Chinese companies] will charge the same amount of money or a little bit less than quality equipment.”
- “They [Chinese companies] might be able to make the specs when you do the acceptance test, but they [Chinese companies] definitely seem to have a much shorter life expectancy. That is something that definitely comes through.”
- “We always judge Chinese products to be very cheap and not up to standard or that it didn’t last that long.”
- “You [South African medical device company] cannot get parts. To maintain the [Chinese companies] equipment is very difficult. So, I do not like to do business with them [Chinese companies], because of such issues.”

Positive responses towards Chinese equipment reliability include:

- “So I think they [Chinese companies] work very hard to move away from that image. They want to establish themselves as a reliable country or company or suppliers as well.”
- “They [Chinese companies] tend to be far more accommodating in terms of warranty replacements that they give you warranty parts of consignment. So for me, generally speaking, they are more service orientated.”

A few respondents stated that there is definitely a difference in reliability when comparing well-known Chinese medical device companies versus the smaller companies. A technical manager at a medical device company stated the following about Chinese equipment reliability when purchased from a small versus a large Chinese company, “I think again it depends on the company, you know when you [South African medical device company] are going for your cheaper smaller companies [Chinese companies], you might have a difference”. The results indicate that medical devices produced by well-known Chinese companies are more reliable than medical devices produced by less well-known Chinese companies.

When participants were asked about Chinese companies’ back-up support, the majority of respondents had a negative view of Chinese business ethics which is influenced by poor back-up support. A participant said that Chinese companies do not offer good back-up support. He feels it is deception and therefore unethical while another respondent said, “No good back-up support [from Chinese companies], I see all these things as unethical”. Many respondents said that Chinese companies are not supportive when back-up support and service is required. Chinese companies ignore

South African medical device companies when there are technical problems with the medical equipment.

One respondent stated that small South African medical devices firms are the culprits of poor back-up service because South African companies import cheap Chinese products without supporting the equipment, in his words “small businesses in South Africa that bring in cheap equipment from China and simply import it and then walk away”. It is therefore not the Chinese company that cannot support the medical equipment, but rather the South African medical device firm that cannot provide back-up support. Unfortunately, poor back-up support from the South African medical device company creates a negative perception of Chinese business ethics.

There were however, three respondents that praised Chinese companies for their excellent back-up service. Chinese companies were perceived as having better back-up service than many European medical firms represented in South Africa. Chinese companies backed up their warranties according to a limited number of respondents, one stating, “Their [Chinese companies] back-up in warranties, there are no questions asked.” One of the largest medical devices companies in South Africa representing a well-known Chinese medical device company said, “It comes back to the smaller [Chinese] companies that can’t support you as you like, but a bigger company, has got brilliant support. You know you can pick up a phone and you speak to an engineer and help you on the spot”. The positive responses indicate that well-known Chinese medical device firms offer better back-up support compared to less well-known Chinese medical device firms.

Many participants linked back-up support with patient safety and remarked that poor back-up support, low quality and deception portrayed Chinese companies as unethical.

#### **5.4.5.3 Chinese Medical Devices are Copies of European and America Devices**

Most respondents mentioned that Chinese companies are unethical by copying medical devices from other global medical device companies. The perception of the medical device industry of South Africa is that very little innovation is being done by Chinese medical device companies. However, according to some respondents the well-known Chinese brands are investing in research and developments.

Respondents who stated that Chinese companies copy medical devices from other global medical device companies, said the following:

- “I sign an exclusive agreement that they [Chinese companies] cannot manufacture that bag for anybody else and then you go to their [Chinese companies] website and I send them an anonymous email from another email address and asked them [Chinese companies] about the bags to give me a quote. So I do not find them loyal in that sense.”
- “There is not much thought into it [Chinese devices]. They [Chinese companies] will even copy other devices.”
- “That they [Chinese companies] build equipment to look like better brands.”
- “I feel it’s a bit unethical to take someone else’s technology and go and copy it. I think it’s unethical to do that.”
- “Then the next minute they [Chinese companies] can buy the same product, but through another company, or they [Chinese companies] just rebrand it.”
- “Chinese medical device companies copy and paste.”
- “If you look at their [Chinese companies] various products, you might see some similarities and then you start thinking; was this product perhaps copied.”

The results indicate that a perception exists that many Chinese medical devices are copies of well-known, global medical device companies. Chinese companies copying other medical devices are labelled as being unethical by most of the respondents from the medical devices industry of South Africa. There are however, many respondents who see Chinese medical device companies investing in the research and design of their own medical equipment. One respondent stated, “I think what really moved me was the progress they [Chinese] have made in technology advancement in a very short period of time. We always judge Chinese products to be very cheap and not up to standard or that it did not last that long. But it changed over the past couple of years.”

#### **5.4.5.4 Chinese Medical Devices and Patient Safety**

Medical devices and adherence to patient safety are very important factors in the medical device industry of South Africa. One respondent said, “So some people need to sell, some need to invoice, mine is to ensure patient safety”. Many respondents indicated that their perception of a company’s business ethics is influenced by how a

company's products adhere to patient safety standards. Many respondents said that Chinese companies do not care much about patient safety. Participant responses include:

- "They [Chinese companies] just build the device or a hospital bed to make it work. They do not really care if it falls apart while the patient is on it."
- "So you get a lot of Chinese or Eastern products coming in with no FDA, no CE verification. People go into a practice and they're assuming that the person that is giving them the treatment has proper equipment."
- "But on this tender there was patient monitoring, anaesthesia machines and if you go and read the article, it is all poor quality. How can I say? Non-functional, unsafe. That was in the end user's words itself. And it was labelled Chinese suppliers providing sub-standard products. So ja, extremely unethical."

The results indicate that most respondents are of the opinion that CE and FDA standards set the standards for patient safety. If products do not abide by these standards then patient safety is at risk. There are however, incidences where Chinese products compromised patient safety. The results indicate that a perception exists in the medical device industry of South Africa that some Chinese medical devices compromise patient safety. Compromising patient safety leads to poor business ethical perception in the medical device industry.

#### **5.4.5.5 Chinese Medical Device Performance Versus Product Datasheets**

Respondents were asked if Chinese medical devices perform according to their specification as stated in the user manual, datasheet and brochure of the products. The majority of respondents said that Chinese companies either lie on their specifications sheets or their medical devices do not perform as per the specifications. This is perceived as unethical business conduct. A respondent who works as a sales manager for a large medical device company in South Africa said, "Perception I think there are [Chinese] companies, I mean any person who's got a BC can go and cook a brochure if you want to in terms of what it says. I think, again it, depends on the company [Chinese] you deal with. If it is an ethical company. But my perception is that you do have [Chinese] companies that will change, manipulate, edit, brochure specifications to meet the requirements". The response from a technical manager, "when our technical people do repairs on some of the [Chinese] products that come into the country. The values when you test it on the Fluke test equipment is not the

same as the specification sheet given to you. And just based on specs and performance, what it should technically be doing and what were my findings, it didn't match up. It is unethical". There was however, one respondent who indicated that he never had a Chinese company supply him a product that does not operate within its set specifications. The results indicate that Chinese medical devices do not meet the product datasheet that was issued for the product. This behaviour is perceived as being unethical business conduct.

Two respondents said that some Chinese medical devices companies are unethical when participating in tender processes. One respondent said that Chinese companies would state "comply" to all tender specifications issued for the purchase of a medical device. When the tender committee asks for proof of compliance to tender specifications, Chinese companies would fabricate false product specification sheets in order to comply with tender specifications yet the medical device cannot perform in line with the fabricated specifications. Another respondent stated the following about Chinese medical device companies participating in tenders, "when you fill in specifications and you ask them, ok fine, the requirements are X, Y, Z. When I have gone over their technical data sheets, I can't find Z. But they [Chinese company] will give it back to you, in writing, saying: yes, it complies to Z. Yet it does not".

The results indicate that a perception exists in the medical device industry of South Africa that Chinese medical devices do not always perform according to the technical datasheets issued for medical devices. The fabrication or non-performance to medical device datasheets are perceived as unethical business conduct.

#### **5.4.6 Ethical Perception of Established Chinese Firms Versus New Entrants**

The results indicate a mixed ethical perception when South African medical devices companies were asked about the ethical business conduct of big, well-known Chinese companies versus new, small Chinese business entrants. The results indicate that the medical device industry of South Africa considers well-known Chinese firms to have better business ethics conduct compared to smaller, less well-known Chinese companies. There are however, participants that stated that all Chinese business are perceived as being unethical, irrespective whether the company is well-known or not.

Positive business ethical conduct responses related to well-known Chinese companies include:

- “The ones [Chinese businesses] that we deal with, which tend to be the bigger Chinese companies [are ethical]. We’ve certainly had bad experiences with some of the smaller ones [Chinese companies], some that we didn’t know so well.”
- “If I did not have experience with [A large Chinese medical device firm], I would have a negative perception.”
- “It’s a shame that there is a company like [large Chinese medical devices company] that gets painted with the same negative brush with the other companies.”
- You cannot become a listed company without being certified on various components. These small companies, they operate within their own set of rules and policies and regulations.”
- “Young Chinese companies are more unethical than the better established brands.”

Positive business ethical conduct responses related to all Chinese companies (well-known or new entrants) include:

- “Truthfully speaking, I would say, most of them [Chinese Business] are pretty ethical.”
- “I would say 95% of our dealings with Chinese have been very ethical.”

Negative business ethical conduct responses related to all Chinese companies (well-known or new entrants) include:

- “I would say the majority of Chinese companies are unethical.”
- “But majority I would have to say, the perception [of Chinese business ethics] is that of a negative one.”
- “I say the majority [Chinese business] is unethical.”
- “I think there is probably only one or two Chinese brands that are probably a little bit more ethical.”
- “But that is more with the smaller guys, smaller companies [That are unethical].”

The results indicate that an overall negative perception exists in the South African medical device industry around Chinese business ethics, irrespective if a Chinese company is well-known or a new entrant in the industry. Only a few positive responses,



towards well-known Chinese companies and good business ethics, came from South African medical device firms representing well-known Chinese medical device companies in South Africa. These participants also mentioned that if they had not worked with well-known Chinese companies, then their perception of Chinese business ethics would be negative.

#### **5.4.7 Summary of the Findings of Research Question 1**

The South African medical device industry uses its own ethical lens to assess Chinese business ethics, this lens is predominantly influenced by European and American standards, which include CE and FDA certification. There is a general view by the South African medical device industry that most Chinese medical device companies do not abide by its standards. South African medical device companies consider Chinese companies that do not abide nor sign sole distributor agreements, as unethical.

Chinese medical devices significantly affect the perception of the South African medical device industry. Chinese medical device attributes influencing the industry's negative perception of Chinese business ethics include:

- Chinese medical devices are of poor quality,
- Chinese medical devices are unreliable,
- Chinese medical devices are seen as copies of European and American medical devices,
- Chinese medical devices do not perform as per the product specifications sheet.

Chinese medical devices companies' ethical conduct is perceived no different irrespective if the Chinese company is well-known or a new entrant in the South African medical device industry.

## 5.5 Results: Research Question 2

### **Research Question 2: Do Chinese businesses and the medical device industry of South Africa use different ethics when conducting business?**

The aim of research question 2 was to understand if a perception exists in the medical device industry of South Africa that Chinese businesses use different business ethics compared to business ethics used in the medical device industry of South Africa. The results indicated that the South African medical device industry is heavily influenced by European and American (Western) business ethics standards. CE and FDA certifications, used in the Western world, is largely used to judge ethical behaviour in the South African medical device industry.

Alzola et al. (2017) stated that virtue ethics is a suitable lens to assess business ethics while Christopher (1999) said that Eastern and Western cultures' virtues share a natural basis and structure. It emerged from the results that the virtuous perception South African medical device companies have, of Chinese businesses, are influenced by how the industry perceive Chinese characteristics, culture and business conduct in general. The results on the perception of Chinese culture, Chinese characteristics and portrayed Chinese business virtues and vices will be discussed in the sections below. This section will end with results on how the medical device industry of South Africa perceive differences in businesses ethics compared to Chinese businesses.

#### **5.5.1 Perceived Culture and Language Barriers when Dealing with Chinese Medical Device Firms**

Many participants stated that Chinese businesses do not always understand the needs of the medical device industry of South Africa. The industry also finds communication with Chinese companies difficult with participants stating that a communication difference between Chinese and South African medical device businesses exists. Some participants mentioned that Chinese businesses intentionally act as if they do not understand South African businesses, in one participant's words, "But I have had in several cases, especially with China, that they act like they don't know". Another participant stated that Chinese businesses use of the English language is difficult to understand and that Chinese companies intentionally pretend as if they do not understand English when support is needed.

Participants said that there are major cultural and language barriers between South African medical device firms and Chinese businesses. Respondents said the following:

- “One problem we [Chinese and South African medical device companies] still have is the language barrier; it’s still an issue a little bit.”
- “But when you go and see South African customers with the Chinese, it’s still a difficult one for us to overcome sometimes. I think that language barrier is still a bit of a problem.”
- “It looks like in the small Chinese companies there is one person that can speak English. However, if he is not there, forget it, you cannot get parts.”
- “There is one thing about the Chinese, what I’ve experienced; there is definitely a language barrier. Absolutely, some of the information I request for, comes in Chinese.”
- “I remember in the beginning it was a challenge deciphering an email and deciphering the verbal communication when we [Chinese and South African medical device companies] had face time.”
- “There are a few aspects that are currently still missing from a communication point of view [When asked about communication between Chinese and South African medical device companies].”

A participant from a private hospital group stated that culture plays an important role when conducting business in the South African medical device industry. The participant said that Chinese culture is different to South African culture and that Chinese businesses will never fit into South African business culture. This participant mentioned that although he attends personal social gatherings with Chinese business people, he will never trust Chinese businesses due to cultural differences.

Participants stated that there is a cultural mismatch between South African medical device companies and Chinese businesses. A participant said that he does not think Chinese businesses are intentionally unethical however, it is in Chinese culture to be careless. Respondents said the following about cultural differences between South African businesses and Chinese businesses:

- “And I think there is a cultural mismatch. I think in the Chinese culture there is a different understanding of ethics.”
- “Yes there are major differences [cultural and language differences between Chinese and South African medical device companies].”
- “I think that is the problem and I know nothing of their [Chinese] culture.”
- “It is in their [Chinese] culture that they do not care.”

Two respondents mentioned that some Chinese people, working in the medical device industry of South Africa, were schooled in South Africa. These Chinese people try to embrace the South African culture especially the culture existing in the medical device industry of South Africa. The respondents mentioned that Chinese people schooled in South Africa understood the South African culture better compared to Chinese people who never lived nor studied in South Africa.

Two participants specifically mentioned that Chinese companies westernised to adapt to the medical device industry culture in South Africa, they said:

- “So I think, if I go back to where we started doing business with [Chinese business] and where we are today, it [doing business with Chinese businesses] is a lot more westernised than what it used to be”
- “Making their [Chinese companies] business a little bit more Western in their approach. So I think their approach have changed a little bit. I think in general, Chinese companies are still difficult to deal with, more difficult to deal with than other European [companies]”

The results indicated cultural and language differences that often act as barriers between South African medical device firms and Chinese businesses. These cultural and language differences exacerbate the experienced business ethics differences that South African medical device companies and Chinese business have. South African and Chinese language and cultural differences create a perception that Chinese businesses are conducting business unethically at times as showed in the results.

### **5.5.2 Perceived Characteristics, Virtues and Vices of Chinese Business People Conducting Business in the South African Medical Device Industry**

During the interviews, participants were asked questions around Chinese and Chinese business characteristics that South African medical device companies experience when conducting business with Chinese businesses. Respondents said the following concerning Chinese and Chinese business characteristics:

- “China is a communist country; I would assume they [Chinese people] treat each other the same.”
- “They [Chinese people] are very professional, they are very hard workers, and I think ethical they are quite strong. I think they are standing very strong for their ethical beliefs.”

- “[With the Chinese] It is black or white, there is no grey area.”
- “Aggressive in terms of performance and they [Chinese] are quite strict.”
- “Chinese characteristics. They [Chinese] are hardworking, intelligent, educated and good sales support.”

Respondents were also asked about virtues and vices that Chinese businesses portray when conducting business in the South African medical device industry. The respondents had mixed feedback around Chinese virtues and vices. Respondents stated the following virtues which Chinese businesses and Chinese people portray:

- “They [Chinese] are very professional, they are very hard workers and I think ethical they are quite strong.”
- “I find the Chinese very reliable.”
- “Stick to their [Chinese companies] delivery dates and never lie about anything.”
- “They [Chinese] are very friendly and very approachable.”
- “I find them [Chinese people] very respectful among each other.”
- “I find them [Chinese people] to be honest.”
- “Their [Chinese] willingness to go the extra mile.”
- “They [Chinese] are very professional and they are very hard workers.”
- “They [Chinese] get back to you, they are persistent.”
- “Honorable and proud, they [Chinese] are proud of what they are doing.”

Respondents stated the following vices which Chinese businesses and Chinese people portray in the medical device industry of South Africa:

- “[The Chinese] has no loyalty.”
- “[Finding Chinese people] deceitful.”
- “Aggressive in terms of performance and they [Chinese] are quite strict.”
- “Dump a thing in the world and walk away. That is the feeling a person gets, they [Chinese] are not committed to anything.”
- “You can never trust them [Chinese], no loyalty, once service is signed then service delivery goes backwards.”
- “Their [Chinese] culture is so that they do not actually care.”
- “There is a perception that they [Chinese] are not trustworthy.”
- “Chinese companies always want to do one in, I do not trust any Chinese company or national.”

There were mixed responses around perceptions the medical device industry has of Chinese and Chinese business people relating to Chinese characteristics, virtues and vices. Many participants pointed out Chinese virtues while other participants pointed out Chinese vices as the general perception of the medical device industry of South Africa. The list of Chinese virtues and vices perceived by the medical device industry of South Africa are as follows:

**Virtues:** Professional, hardworking, reliable, truthful, friendly, openness, respectful, honest, willingness to help, intelligent, persistent, honourable and proud.

**Vices:** Disloyal, deceitful, aggressive, strict, uncommitted, distrust and uncaring.

### **5.5.3 South African Medical Companies Business Ethics Compared to Perceived Chinese Business Ethics**

The result indicated that the South African medical device industry perceives differences in business ethics between South African and Chinese companies in the medical device industry. Participants mentioned that South African medical device companies' business ethics are influenced by the Western world (European and American business ethics). In particular the industry follows European and American medical device standards and certifications. Participants further stated that many Chinese companies westernised to adapt to the medical device industry's business ethics in South Africa however, there are still Chinese companies that do not understand South African business ethics. Respondents said:

- “[Chinese] are completely opposite to the Western ways of doing business.”
- “But Western ethics might be different from Eastern ethics.”
- “I think in the Chinese culture there is a different understanding of ethics.”
- “If I go back to where we started doing business with [Chinese medical device company] and where we are today, [Chinese business] is a lot more westernised than what it used to be.”
- “Wherever they [Chinese businesses] are and whoever they [Chinese people] are, that this is the way that South Africa works.”
- “Therefore I think their [Chinese companies] ISO or CE is poor.”
- “Then some of the standards we work according to in South Africa are not available in all Chinese equipment.”

- “He [Chinese businessman living in South Africa] has become more South African I think than Chinese. And he is the bridge between the South African market and between the Chinese business methods.”
- “I think that some of the companies are getting on to the ethic part, to try and do business more ethical.”
- “Certification either comes from the West or Europe. So CE for example, they [Chinese companies] had to align themselves with that type of accreditation.”

From the results, it should be noted that South African medical device companies perceive that Chinese businesses follow different business ethics compared to business ethics in the medical device industry of South Africa. Western business ethics influences the South African medical device industry's business ethics. The results also indicated a strong stance on using European and American standards to judge business ethics related to medical devices. South African medical device companies are however, stating that some Chinese companies are starting to follow Western business ethics. This approach ensures that South African business ethics and Chinese business ethics are aligned.

#### **5.5.4 Summary of Findings of Research Question 2**

The results of research question 2 indicated that the South African medical device industry perceived differences in culture, language and business ethics when engaging in business with Chinese businesses.

South African medical device companies said that Chinese companies intentionally create cultural and language barriers during product related issues. This behaviour creates a negative perception of Chinese business ethics.

Chinese nationals living in South Africa have a better understanding of South African culture, especially in the medical device industry of South Africa. South African medical device companies find it easier to conduct business with these Chinese nationals since they are considered to be westernised.

The South African medical device industry is heavily influenced by Western business ethics. FDA and CE standards are often used to judge good ethical business behaviour in the industry. The medical device industry of South Africa perceives business ethics differences between Chinese business and South African medical device companies.

## 5.6 Conclusion

This chapter presented the research findings based on the two research questions proposed in Chapter 3. The results showed that the South African medical device industry uses its own lenses to assess Chinese business ethics. These lenses are influenced by the Western world business ethics and standards. Chinese medical device companies do not always abide by the standards adopted by the medical device industry of South Africa and documents would often be fabricated to ensure compliance to standards.

The results further indicated that Chinese product attributes affect the perception of Chinese business ethics. The key negative product attributes affecting the perception of Chinese business ethics include: product quality, product reliability and back-up support, the copying of medical devices, product patient safety, and product performance versus technical datasheets.

Well-known Chinese firms are perceived as having better business ethical conduct while new-entrant Chinese companies are perceived as being unethical. All Chinese companies do not honour sole distributor agreements with South African medical device companies, this is seen as unethical business conduct.

The results further revealed that cultural differences exist between South African medical device companies and Chinese businesses. Apart from cultural differences, language barriers make communication with Chinese companies difficult. Difficult communication is often intentionally created by Chinese companies when support is needed by South African medical device companies. This is seen as unethical conduct.

The results indicated characteristics, virtues and vices that Chinese people and Chinese businesses portray in the medical device industry of South Africa. South African business ethics are heavily influenced by Western business ethics. The results revealed that South African medical device firms perceive that Chinese firms use different business ethics during business conduct.



## **6 Chapter 6: Discussion**

### **6.1 Introduction**

This chapter discusses the research findings in detail, in the context of this study, as well as the literature reviews of Chapter 2. The insights gained from the interviews are provided in this chapter and are compared to the literature review in order to answer the research questions of Chapter 3. The results are discussed as they relate to each research question and as a whole to provide insights into the perception medical devices companies in South Africa have of Chinese business ethics.

### **6.2 Discussion of Results for Research Question 1**

#### **Research Question 1: What do individuals working in South African medical device companies think of Chinese business ethics?**

Gift et al. (2013) stated that differences in ethical profiles exist between parties from different countries and sustainable business can only be conducted if each party understands the other party's ethical profile. When value has been identified by both parties, constraints with regards to information, communication misinterpretation and ethical behaviour differences can affect business conduct (Berger & Herstein, 2014).

Michaelson (2010) asked that when cross-border moral standards conflict during business transactions, which country's standards should prevail? Chinese companies conduct business in the South African medical device industry. This study specifically explored the perception of South African medical device companies. The perception South African medical device companies have of Chinese business ethics is influenced by many ethical factors. These ethical factors, and how they influence the South African medical industry's perception of Chinese business ethics, will be discussed as themes in the sections below.

### **6.2.1 The Ethical Lens South African Medical Device Companies Use to Assess Business Ethics**

Neveling et al. (2014) stated that ethical perception is influenced by many factors such as the external environment, organisational factors and the society.

Gift et al. (2013) stated that generally, each party in a business transaction is only informed about their own ethical standing. Parties do not have a thorough understanding of the other party's ethical profile and therefore must form their own perception. As per Gift et al. (2013), South African companies follow their own business ethical rules in the medical device industry of South Africa. South African medical device companies therefore use their own ethical lens to assess business ethics.

As per the qualitative data results, people working for South African medical device companies have their own ethical lens which they use to assess business ethics. These peoples' ethical lenses are predominantly shaped by their upbringing and religion. People in the medical device industry's ethical lenses are further shaped by ethics of duty since most participants stated that they have a duty to make the correct ethical decisions about what is right at present irrespective of future consequences (Whetstone, 2001). The medical device industry of South Africa is controlled by rules and regulations set by the MCC of South Africa, this further indicating ethics of duty influence on the industry's ethical lens.

As per Rossouw (1997), Western European countries and North America have experienced the same business ethical issues faced in South Africa and that South Africa's business moral system is influenced by the Western world. The aggregated interview data indicated that the South African medical device industry adopted Western standards and ethics to assess business ethics. Medical device companies selling products into the South African medical device industry, without Western certification (CE and FDA), are perceived as being unethical. CE and FDA certification heavily influences South African medical device companies' assessment of business ethics.

Participants further stated that their ethical lens was influenced during their employment at European and American medical device companies, thus further indicating the ethical influence of Western business ethics on the South African medical device industry.

### **6.2.2 South African Medical Device Industry Ethics and Standards**

The results of this study indicated that good business ethics are essential in the South African medical device industry. The results indicated that the MCC and other governing bodies regulate the South African medical device industry standards and ethics. These bodies implement a code of ethics and standards that are followed by the majority of medical device companies in South Africa.

The MCC of South Africa regulates the medical device industry of South Africa. Medical device companies and products registered with the MCC are allowed to be sold into the South African medical device industry. Global regulatory authority bodies recognised by MCC and SANAS include FDA (United States of America), TGA (Australia), ANVISA (Brazil), Canada Health (Canada), MAH (Japan) and Europe (CE). The results from the interviews however, showed that the medical device industry of South Africa assess all medical devices against FDA and CE conformity standards, irrespective if other regulatory authority bodies are recognised by the MCC and SANAS. The MCC might be the medical device regulatory authority in South Africa but ethical perceptions are influenced by CE or FDA medical device conformity standards only. All medical devices should have CE or FDA accreditation or else these medical devices are perceived as nonconforming to standards. South African medical device companies that sell products, which do not conform to CE or FDA standards, are perceived as being unethical.

SAMED promotes the harmonisation of standards and regulatory requirements in the medical device industry of South Africa. SAMED also promotes ethical principles and practices in the medical device industry by publishing a medical device code of ethical business and marketing practice. SAMED's code of ethics is only binding to SAMED members and is not mandatory for all medical device companies in South Africa. The results indicated that SAMED's code of practice does not influence the medical device industry's standards nor ethics, this could be due to participants in this study not being members of SAMED. The results of this study indicate that European and American business ethics and standards influence the South African medical device industry's ethics and standards and not the code of practices set by SAMED.

### **6.2.3 Chinese Firms' Adherence to Industry Standards and How it Affects the South African Medical Device Industry's Perception**

As discussed in section 6.2.2, the MCC is the regulatory body for the South African medical device industry. Several international regulatory bodies are recognised by the MCC and SANAS however, CE and FDA certification are the dominant certifications used in the medical device industry. As per the results, many participants stated that Chinese medical device companies do not conform to international standards (CE and FDA standards) which the South African medical device industry abides by. Chinese companies that do not abide by these international standards are perceived as unethical. Participants stated that Chinese medical device companies do not always conform to CE nor FDA certification. The nonconformity to CE and FDA certification created a negative ethical perception of Chinese businesses ethics in the medical device industry of South Africa. One of the interviewees stated that Chinese companies only conform to international medical device standards if it is mandatory. Chinese equipment does not always conform to the standards expected by the medical device industry of South Africa and the points below discuss ethical factors that negatively affect the perception of Chinese business ethics in the South African medical device industry:

- Chinese medical device firms follow their own rules and standards.
- Chinese medical device firms do not adhere to CE nor FDA certification unless it is mandatory, many Chinese products do not have CE nor FDA certification for their products.
- Many Chinese medical device companies do not abide by the rules and standards expected by the medical device industry of South Africa.
- Many Chinese medical device companies lie about conforming to CE and FDA medical device standards.
- Chinese equipment pricing influences conformity to standards, expensive equipment will conform to standards however, cheaper Chinese equipment do not often meet standards expected by the medical device industry of South Africa.

As per Sroka and Lórinçzy (2015), business ethics is crucial if a company wants to be perceived as a reliable business partner. Chinese companies will have to abide and conform to standards expected by the medical device industry of South Africa or else a negative perception of Chinese business ethics will persist. Hertz (2006) stated that companies facing competitive pressure could be motivated to take part in dishonest

business transactions. The results indicate that Chinese firms lie about equipment conformity in order to qualify for business transactions within the medical device industry of South Africa. This behaviour by Chinese businesses adds to the negative perception of Chinese business ethics in the South African medical device industry.

#### **6.2.4 Sole Distributorship and Ethical Perception in the South African Medical Device Industry**

Sroka and Lőrinczy (2015) stated that business ethics is crucial if a company wants to be perceived as a reliable business partner. One of the key findings in the results of this study was that the medical device industry of South African considers most Chinese companies unethical with regards to sole distributor agreements. Thus Chinese companies would have multiple business partners instead of a sole partner in the medical device industry. Most Chinese medical device companies would not enter into sole distribution agreements with a single South African medical device company. There are however, some Chinese companies that sign sole distributor agreements with South African companies but these Chinese companies never abide by these sole distribution agreements according to the results of this study. Key factors forming the unethical perception that South African companies have around sole distributorship with Chinese companies include:

- Chinese medical device companies do not abide by sole distribution contracts and agreements.
- Chinese medical device companies will sell to any medical device company in South Africa that places an order with them irrespective if they already have a sole distributor agreement with another company in South Africa.
- Chinese medical device companies will contact customers of their sole distributors in South Africa, to try to persuade the customer to buy from the Chinese company directly, thus bypassing the sole distributor in South Africa.

All these factors contribute to the perception that Chinese medical device companies are unethical with regards to sole distributorship agreements and contracts. These factors also hinder positive business ethics between South African medical device companies and Chinese businesses.

### **6.2.5 How Chinese Products Affect Ethical Perception in the South African Medical Device Industry**

The results indicated that medical equipment imported from China affected the perception South African medical device companies have of Chinese business ethics. Chinese medical devices have many product attributes; all these attributes have effects on perceptions of Chinese business ethics. Chinese medical devices is one theme in this study however, there are several sub-categories within this theme that will be discussed including the different medical device attributes and their influences on the perception of Chinese business ethics.

#### **6.2.5.1 Chinese Medical Device Quality**

Nguyen and De Cremer (2015) stated that Chinese products are often considered to be of inferior quality. Chinese business are known for cutting corners to lower costs and in order for customers to accept their products, the result of this behaviour is often poor quality products. Chinese products often have quality issues and there is a distrust in Chinese products globally (Nguyen & De Cremer, 2015).

In the South African medical device industry, Chinese medical devices are still considered to be of poor quality and sub-standard versus European and American medical devices, this as per the results of this study. Several participants indicated that Chinese medical device quality has improved over the past couple of years but Chinese medical device quality correlates with price, the lower the price of the medical device, the lower the quality. Chinese medical device companies might lower their price to be more competitive however, their low pricing strategy creates a perception in the market that Chinese product quality is inferior due to the low pricing.

It also became apparent through the study that Chinese medical devices are labelled with other products manufactured in China i.e. Chinese toys may be of inferior quality but it is still made in China. The negative perception of Chinese toy quality is therefore often transferred to medical devices manufactured in China.

Michaelson (2010) stated that long-term results are often sacrificed for short-term results. Focusing on short-run gains, short-term vision, and immediate financial gains could create a breeding ground for unethical behaviour. Many participants of this study stated that Chinese medical product quality decreases after the first order from a South African medical device company. Chinese companies supply quality products

on the first order however, the quality deteriorates from the second order onwards. It can be argued that Chinese medical device companies are driven for short-term financial results instead of long-term results. This behaviour contradicts what Irwin (2012) stated, that the Chinese government has a long-term strategy to compete globally while Hofstede (2010) also stated Chinese people are low long-term orientated. Chinese product quality that deteriorates on subsequent orders creates a negative perception of Chinese business ethics in the medical device industry of South Africa.

All medical devices have a data specification sheet indicating the specifications, as well as the technical and clinical capabilities of the medical device i.e. a medical device specification sheet will state an input voltage of 240V which the machine requires to operate on. The results of this study found that many Chinese medical devices do not meet the specification sheet issued for the Chinese medical device. This was confirmed when Chinese medical devices were tested on medical device analysers as per the results of this study. Many Chinese companies fabricate products' datasheets, falsely claiming that their equipment meets high technical standards. This behaviour is perceived as being unethical. The fabrication of data sheets and nonconformity of Chinese equipment to device datasheets influence the perception of Chinese business ethics negatively.

It should however, be noted that the medical device industry of South Africa is slowly changing its negative perception of Chinese medical device quality. Many participants stated that Chinese product quality improved over the past years and Chinese medical device quality is catching up with European and American products.

#### **6.2.5.2 Chinese Medical Device Reliability and Back-up Support**

The results of this study indicated that Chinese medical device reliability negatively affects the perception of Chinese business ethics in the South African medical device industry. The dominant perception is that Chinese medical devices are perceived as being unreliable. Chinese companies do not give warranties on their medical devices as expected and that Chinese medical equipment is difficult to maintain. These equipment reliability factors fuel a negative perception of Chinese businesses ethics in the medical device industry of South Africa. Some South African medical device firms do not want to engage in business with Chinese businesses due to their poor product reliability perception. There are however, two South African medical device companies

that mentioned that Chinese firms are more accommodating in terms of warranty agreements. It can be argued that some Chinese companies place reliability high on their agenda and support their distributors in South Africa better than other Chinese medical firms. This argument was confirmed by a few respondents who stated that well-known Chinese brands are more reliable than new-entrant Chinese companies. Concerning back-up technical support, the results indicated that many Chinese businesses are labelled as being unethical in terms of back-up support on their products.

Another finding of this study was that most Chinese companies will conduct business with any South African medical device company, irrespective if the Chinese company has a sole distributor agreement with another medical device company in South Africa. Due to this, Chinese products are sold to South African medical device companies that cannot maintain and repair these Chinese medical equipment. Chinese medical equipment are labelled as unreliable yet it is the South African medical device company that often cannot maintain the equipment properly. Because of this, Chinese equipment reliability and back-up support is often questioned which adds to the negative perception of Chinese business ethics in the medical device industry of South Africa

Rossouw (G.J. Rossouw, Interview, January 15, 2018) said that two Chinese business sectors exists in South Africa, the formal and informal business sectors. The informal business sector is classified as hawkers or marketers of which the Chinese government has little control over. The results of this study showed that well-known Chinese companies and their products are perceived as more reliable and these Chinese companies provide better back-up support compared to new-entrant Chinese companies. It could be argued that the larger, more well-known Chinese companies are influenced by the Chinese government to ensure a positive image of Chinese businesses and their products.

#### **6.2.5.3 Chinese Medical Devices are Copies of European and American Devices**

There is still a perception in the medical device industry of South Africa that Chinese medical devices are copies of European and American medical devices. This perception negatively influences the perception of Chinese business ethics in the medical device industry. There are however, some Chinese firms that invest in their



own research and development, innovation, and technologies in the medical device field. The medical device industry of South Africa is taking notice of this research and development investment made by some Chinese businesses. These Chinese businesses enjoy a more favourable outlook on Chinese business ethics in the medical device industry of South Africa.

#### **6.2.5.4 Chinese Medical Devices and Patient Safety**

Chinese companies made headlines in the past for unethical behaviour related to consumer safety of their products. One well-known scandal was infant milk produced in China that contained traces of melamine and another example mentioned fake rice made with plastic (Nguyen & De Cremer, 2015). The medical device industry of South Africa pays special attention to patient safety. The industry's perception of business ethics is influenced by how a company's products abide by patient safety standards, more specifically CE or FDA standards.

This study found that there are incidences in the medical device industry of South Africa where Chinese medical devices compromised patient safety. One serious patient safety example given in the results mentioned Chinese theatre tables that would perform out of its technical specification, compromising patient safety. Patient safety in the medical device industry of South Africa is measured against CE and FDA certification; if a product does not have CE nor FDA certification then the company is perceived as having poor business ethics. As per the results, many Chinese medical devices do not conform to CE nor FDA certification. These certifications are however, not mandatory by the MCC but the medical device industry insists in conformity to CE or FDA standards. Many Chinese companies are therefore perceived as being unethical because they sell medical devices which are nonconforming to CE or FDA which are seen as the patient safety standards for medical devices in South Africa

#### **6.2.5.5 Chinese Medical Device Performance Versus Product Datasheets**

The medical device industry of South Africa has a general perception that Chinese products do not always conform to product technical data sheets. Chinese companies would often fabricate product technical datasheets to satisfy tender requirements, however, on further investigation these products would not perform according to their

technical datasheets. In some instances, Chinese companies would adapt or change their product's technical datasheets during a tender process. Tender boards would be approached during a tender review with updated technical datasheets yet the product has not changed. This behaviour negatively affects the perception that the South African medical device industry has on Chinese business ethics. Due to this behaviour, Chinese products are not trusted to operate according to the product specification sheers further affecting the perception of Chinese product reliability and quality negatively.

### **6.2.6 Ethical Perception of Established Chinese Firms Versus New Entrants**

The Chinese government and Chinese businesses have made positive strides in recent years to uplift the image of Chinese businesses in South Africa (G.J. Rossouw, Interview, January 15, 2018). Two Chinese business sectors exist in South Africa, the formal and informal (everyday) business sectors. The informal business sector is classified as hawkers or marketers of which the Chinese government has little control over.

The results of this study indicated that informal and formal Chinese medical device companies conduct business in the South African medical device industry. This study however, did not specifically include perception differences between formal and informal Chinese businesses but focused rather on perception differences between well-known and new Chinese business entrants. The medical device industry of South Africa perceives an improvement in Chinese business ethics from larger, well-known Chinese businesses compared to a deterioration in good business ethics from small, new-entrant Chinese businesses.

### **6.2.7 Conclusive Findings for Research Question 1**

Gift et al. (2013) stated that good business ethics between two countries leads to an increase in trade. Medical device imports from China to South Africa increased since 2013 and medical device companies engaging with Chinese companies are on the rise (SAMED, 2013). More Chinese medical device companies are entering the South African healthcare industry, this even in the private healthcare industry (SAMED, 2013).

The South African medical device industry is heavily influenced by European and American standards, practices and regulatory bodies. The ethical lens that the medical device industry uses to assess business ethics is shaped by CE and FDA regulations. The South African medical device industry has a mixed view on Chinese business ethics. There are many factors shaping the medical device industry's perception of Chinese business. Chinese medical product attributes influence the industry's perception significantly.

Although there is a rise in Chinese medical device imports, this study found a predominant negative perception of Chinese business ethics in the medical device industry of South Africa. This study however, found that well-known Chinese companies are perceived as being more ethical than less known Chinese companies.

### **6.3 Discussion of Results for Research Question 2**

#### **Research Question 2: Do Chinese businesses and the medical device industry of South Africa use different ethics when conducting business?**

Michaelson (2010) asked that when cross-border moral business conducts standards conflict, which country's standards should prevail? During cross-border business transactions, constraints concerning information, communication misinterpretation and ethical behaviour differences can all affect business conduct between two countries (Berger & Herstein, 2014). Chinese companies conduct business in the medical device industry of South Africa while Chinese medical device imports are on the rise in South Africa. As per Gift et al. (2013), good business ethics leads to an increase in trade. Perceived ethical differences between South African medical device companies and Chinese businesses were answered with research question 2.

The results of this study mentioned that South African medical device companies' business ethics are influenced by European and American ethics, standards and practices. The same European and American standards, ethics and practices are used as the lens that South African companies use to assess business in the medical device industry. The results indicated that Chinese business culture and ethics are perceived as being different compared to the culture and ethics of the medical device industry of South Africa.

Research question 2 will be discussed as three themes that emerged from the research results.

### **6.3.1 Perceived Culture and Language Barriers when Dealing with Chinese Medical Device Firms**

Culture has a strong influence on peoples' attitudes towards business ethics (Christie et al., 2003). Michaelson (2010) stated that people less often explore cross-cultural economics, specifically how the global market system itself must change to accommodate different cultures that do not share the same ethical principles. Hofstede (2010) demonstrated, through his cultural dimensions theory, that a society's culture affect its values, and these values influence a culture's behaviour. China scores a high on power distance, a low on individualism, a high on masculinity, a low on uncertainty avoidance and a high on long-term orientation. South Africa scored moderately on power distance, a high on individualism, a high on masculinity, a medium on uncertainty avoidance and low long-term orientation (Hofstede Insight, 2018). As per Hofstede's cultural dimension theory, there are cultural differences that exist between South African medical device companies and Chinese businesses, these differences affect cultural behaviours.

Christie et al. (2003) pointed out that culture has a strong influence on peoples' attitudes towards ethics. The results of this study proved that a perceived cultural differences exist between China and South Africa and that perceived cultural differences exacerbate perceived ethical differences between the South African medical device industry and Chinese companies. Cultural differences between South African medical device companies and Chinese businesses exacerbate the negative experience of Chinese business ethics in the medical device industry of South Africa.

The results of this study also indicated that South African medical device companies find it difficult to communicate effectively with Chinese companies. This due to language and cultural barriers that exist between Chinese companies and South African medical device companies. An interesting finding of this study was the existence of a perception in the medical device industry that some Chinese companies intentionally create ineffective communication especially when it concerns product failures, warranty claims, or back-up support needed from the Chinese company. This intentional ineffective communication fuels the negative perception that exists regarding Chinese business ethics in the medical device industry of South Africa.

There are however, Chinese business people who have spent years in South Africa, learning and adapting to the South African culture yet these Chinese business people are still not trusted by the medical device industry. South African medical device companies are of the opinion that Chinese business people who lived in South Africa for some time understood South African business culture better and they are more westernised.

### **6.3.2 Perceived Virtues, Vices and Other Characteristics of Chinese Business People Conducting Business in the South African Medical Device Industry**

Western cultures operate on individualistic morality while Eastern cultures are more community-centred yet both are considered ethics of virtue (Christopher, 1999). Virtue theory continues to be a valid option to assess business ethics (Ferrero & Sison, 2014). Organisations that have a virtuous character will reflect it in their company's culture and values (Chakrabarty & Bass, 2015). South African and Chinese business cultures are however different as pointed out in the results of this study. It is therefore subjective when companies are said to have a virtuous character.

The literature is unclear on which virtues a business should have to be ethical. Virtues are also context sensitive, however context is subjective since the South African medical device industry context is different to the context of Chinese businesses. The research results indicated the South African medical device industry has its own contextual environment predominantly influenced by Western standards and practices.

There are however, virtues relevant to ethical business conducts derived from the literature. These virtues are: honesty, fairness, trust, toughness, transparency, openness, courage, charm, wit, friendliness, a good sense of humour, prudence, courage, justice and temperance.

Klein (2002) stated that business virtues are essential for healthy business engagements and that nurturing emotions on which business virtues are founded will lead to better trade between businesses. There is an increase in trade between Chinese business and the South African medical device industry. As per Klein (2002) Chinese businesses could portray virtues otherwise trade between Chinese and South African medical device companies would have declined.

This study found the following virtues and vices portrayed by Chinese companies and Chinese people according to the medical device industry of South Africa:

**Virtues:** Professional, hardworking, reliable, truthful, friendly, openness, respectful, honest, willingness to help, intelligent, persistent, honourable and proud

**Vices:** Disloyal, deceitful, aggressive, strict, uncommitted, distrust and uncaring.

With regards to other Chinese business characteristics, the medical device industry of South Africa perceives Chinese businesses as being professional, hardworking, strict, intelligent and well educated. Chinese companies are however, quite strict and seldom work outside the framework set for business conduct.

### **6.3.3 South African Medical Companies' Business Ethics Compared to Perceived Chinese Business Ethics**

The Seven Pillars Institute (n.d) mentioned that deontology theory focuses on the act rather than the agent. An act is either morally right or wrong regardless of the consequences. Deontological ethics cover ethical standards which all people should respect and abide by; rules distinguish between what is morally right or wrong (Rossouw, 2001). This study found that the majority of South African medical device companies feel they need to act in accordance with rules and principles regardless of the outcome. It could be argued that this ethics of duty is cemented by the predominantly Christian upbringing of people in the industry. The medical device industry of South Africa follows rules set by the MCC of South Africa. South African medical device companies' business ethics, practices and standards are influenced by the Western world, in particular European and American business ethics and standards.

Ip (2009) said that Chinese business ethics is influenced by Confucianism, Daoist, Buddhism, social principles or a mixture of all. Each Chinese company could have a different ethical profile influenced by cultural and regional differences. It could be argued that Chinese companies conducting business in the medical device industry of South Africa could each have a different stance on business ethics. The results of this study pointed out that smaller Chinese companies have poor business ethics while larger, well-known Chinese companies have better business ethics. Combined however, Chinese businesses could have their own interpretation of ethical decision

making since China's external environment, cultures and societies are different compared to medical device industry of South Africa (Neveling et al., 2014).

This study found that South African medical device companies and Chinese businesses have different business ethics.

#### **6.3.4 Conclusive Findings for Research Question 2**

Cultural differences exist between Chinese businesses and South African medical device companies. Language and communication barriers also exist between South African medical device companies and Chinese businesses. These differences and barriers exacerbate the perceptions on poor Chinese business ethics in the medical device industry of South Africa. Most Chinese businesses show virtuous characteristics although vices are also portrayed in the industry.

The South African medical device industry perceives differences in business ethics between South African and Chinese companies in the medical device industry. The medical device industry in South Africa follows Western business ethics. South African medical device companies were speculative of ethics that Chinese companies follow however, Chinese and South African business ethics as perceived as being different. In the medical device industry of South Africa, all Chinese companies are also perceived to have the same business ethics although the literature indicated potential vast differences in Chinese business ethics between one Chinese company and another.

#### **6.4 Conclusion**

This chapter presented a discussion of the results of this study in light of the literature. This study has shown the South African medical device industry's perception of Chinese business ethics. This study also indicated the factors that drive positive and negative business perception of Chinese companies. Perceived differences in business ethics between South African medical device companies and Chinese businesses has also been discussed.

## **7 Chapter 7: Conclusion and Recommendations**

### **7.1 Introduction**

This study set out to explore the perception South African medical device companies have of Chinese business ethics. The literature review gave insights into businesses ethics, the South African medical device industry and its lens to assess business ethics, business ethics in China, and lastly theories applicable to business ethics. Further insights into the perception South African medical device companies have of Chinese business ethics were gained and explored in Chapter 5 and 6. This chapter presents the conclusions of this research by summarising the research findings, presenting the implications for business, indicating the limitations in this research and lastly suggestions for future research.

### **7.2 Research Findings**

#### **7.2.1 The Ethical Lens Used By the South African Medical Device Industry to Assess Chinese Business Ethics**

The medical device industry of South Africa has its own ethical lens that is used to assess business ethics in the medical device industry. The industry's lens is shaped by the upbringing of the people working in the industry as well as their religion, predominantly Christianity. Ethics of duty is observable in the medical device industry. Employees in the industry have a duty to make the correct ethical decisions about what is right at present. Ethics of duty is further observable in the industry since rules and regulations, set by the MCC of South Africa, are abided by most medical device companies. European and American standards, norms, ethics and practices heavily influence the medical devices industry's ethical lens. Some of these standards include:

- CE certification that indicates conformity to health, safety, and environmental protection standards for products sold within the European Economic Area.
- FDA certification that ensures safety, efficacy, and security of medical devices in the United States of America.

Medical device companies, including medical devices they sell, that do not comply with CE nor FDA regulations, are perceived as being unethical.



SAMED promotes ethical principles and practices in the medical device industry by publishing a medical device code of ethical business and marketing practice. SAMED's code of ethics does however, not have a significant impact on the ethical lens of the medical device industry of South Africa.

The main influences on the ethical lens that the South African medical device industry use to assess business ethics are CE and FDA compliance. Chinese companies, and their products, that do not abide by CE and FDA standards, are considered as unethical.

### **7.2.2 How Do South African Medical Device Companies Perceive Chinese Business Ethics**

Gift et al. (2013) stated that generally, each party in a business transaction is only informed on their own ethical standing. Parties do not have a thorough understanding of the other party's ethical profile and therefore must form their own perception. South African medical device companies form perceptions of Chinese businesses and Chinese people.

The aggregate South African medical device industry perception of Chinese business ethics is negative. Limited companies indicate positive perceptions around Chinese business ethics. The judgement of Chinese business ethics is however complex since many factors affect the ethical perception of Chinese business ethics by the medical device industry of South Africa. A summary of these factors, and how each factor influences ethical perception of Chinese business ethics, are listed below:

- **Adherence to industry standards:** Chinese medical devices that do not abide by the standards adopted by the medical device industry of South Africa are perceived as unethical, this irrespective if the MCC acknowledges regulatory bodies other than CE and FDA.
- **Sole distributorship:** Chinese companies are perceived as unethical since they do not abide by sole distributor agreements signed with South African medical device companies.
- **Medical device quality:** Chinese medical device quality is seen as inferior to European and American medical devices. Chinese medical device quality do not always meet the standards expected by the medical device industry. Chinese companies that sell sub-standard medical devices are perceived as being unethical.

- **Medical device reliably:** Chinese medical devices reliability is often questioned by the medical device industry, back-up support for faulty devices is regularly non-existent. The medical device industry sees poor product reliability, as well as poor back-up support as unethical business conduct.
- **Medical device performance versus product data sheets:** Many Chinese medical devices offered on tenders, or sold into the medical device industry, do not meet the technical specifications sheets that were drafted for the devices. It is considered unethical business conduct when Chinese medical devices do not operate as per their technical data sheets.

### **7.2.3 Ethical Profile Differences Between Chinese Companies and South African Medical Device Companies**

The medical device industry of South Africa perceive that Chinese businesses and South African medical device companies follow different business ethics. South African medical device companies follow Western world ethics while Chinese business follow business ethics unique to China. Chinese business ethics are not similar for all Chinese companies however, the dominant perception of South African medical devices companies is that all Chinese business follow similar business ethics.

Chinese culture, specifically Chinese business culture, is perceived as being different compared to the business culture of the medical device industry of South Africa. Cultural and language differences create barriers between the medical device industry and Chinese businesses. Cultural differences further exacerbate the negative ethical perception that South African medical device companies have of Chinese business ethics.

This study used a virtue ethics lens to assess Chinese business ethics. Chinese businesses and Chinese people portray a virtuous character in the medical device industry. Virtues include: professionalism, hardworking, reliable, truthful, friendly, openness, respectful, honesty, willingness to help, intelligent, persistent, honourable and proud. Chinese vices portrayed include: disloyalty, deceitful, aggressive, strict, uncommitted, distrust and uncaring.

### 7.3 Implications for Businesses

The South African medical device industry imported medical devices worth R12bn in 2013, this industry had a CAGR of 7.75% (SAMED, 2013). In 2013, Chinese businesses, exporting to the medical device industry of South Africa, had average growth rates of 20.85%, thus exceeding industry growth by 13%. Trademap (2018) confirmed the continuing growth of Chinese medical device imports into the South African medical device industry for 2018.

There is an overall negative perception of Chinese business ethics in the medical device industry of South Africa yet more Chinese medical devices are imported into South Africa on an annual basis. This study did not explore the reasons for an increase in Chinese medical device imports but rather Chinese business ethics in the medical device industry of South Africa. As per Gift, Gift and Zhang (2013) good business ethics lead to an increase in trade between companies. Chinese companies could expect a decline in trade with the South African medical device industry should Chinese companies not change the negative perception that South African medical device companies have of Chinese business ethics. Chinese companies can do the following to uplift the perception South African medical device companies have of Chinese business ethics:

- Chinese companies need to understand and take note of the ethical lens that South African medical device companies use to assess business ethics. Business ethics in China and South Africa are different, Chinese companies can adapt and improve their business ethics relative to the ethical lens of the medical device industry.
- Chinese companies need to adhere to standards and practises adopted by the South African medical device industry, this in particular CE and FDA standards and certifications.
- Chinese companies should consider signing sole distributor agreements with South African medical device companies, of more importance is abidance by these sole distributor agreements.
- Chinese businesses have to ensure attributes of their medical devices meet the specifications and expectations of the medical device industry of South Africa. Medical device attributes include quality, reliability, originality and performance as per product specification sheet. Improvements with these medical device attributes could uplift the perception of the medical device industry since these

attributes currently influences the perception of Chinese business ethics negatively.

- Chinese and South African medical device companies have different cultural and ethical profiles. Chinese companies need to understand and act in accordance to South African cultures and business ethics. This will ensure continued business conduct with the medical device industry of South Africa.
- Chinese companies should ensure business conduct is done in proficient English, this in spoken and written form. Language create barriers between Chinese firms and South African businesses.

#### **7.4 Limitations of the Research**

This research was a qualitative study and exploratory in nature as per Saunders et al. (2009). Qualitative data can be considered subjective and qualitative data can be affected by biases. Other limitations include:

- The interviewer was not an expert in interviewing, this could have affected the results collected during the interviews.
- Respondents' capacity for introspection and recall could have been limited due to time constraints (Brand & Slater, 2003).
- Perceptions could have been captured inaccurately under stressful conditions.
- Perceived social pressure for business to behave ethically could influence a respondent's answer (Brand & Slater, 2003).
- Qualitative research is often subjective, the research may have been affected by biases.
- The samples selected only include owners, executives and senior managers in the medical device industry of South Africa. Perceptions of lower level positions in medical device companies were not considered.
- The sample size was small and only represented medical device companies based in the Western Cape and Gauteng. Geographical biases could have taken effect.

## 7.5 Suggestions for Future Research

There is little known, in Africa and South Africa, on the perception of Chinese business ethics and other Chinese business traits. Based on the insights gained from this research, the following future research recommendations would add substantial value to the existing literature:

- Exploring the perception other South African industries have of Chinese business ethics.
- Exploring the perception other African countries, with their different industries, have of Chinese business ethics.
- Quantitative studies on Chinese business ethics in the medical device industry of South Africa. Quantitative studies could measure the significance of the different ethical factors that drive the negative perception of Chinese business ethics.
- A comparative study of Chinese business ethics in developed countries' medical device industries versus Chinese business ethics in South Africa.
- Exploratory studies on how Chinese businesses could conduct business differently, in order for South African and other African countries to have a positive view of Chinese business ethics.

## 7.6 Conclusion

The literature mentions that citizens of South Africa do not have a good perception of Chinese businesses. There is however no known literature available discussing the perception South African businesses have of Chinese businesses ethics. This research set out to contribute by exploring the perception of Chinese business ethics in a particular industry of South Africa. The findings that emerged from the fourteen interviews gave insight into the perceptions medical device companies have of Chinese business ethics, there are however several factors that influence ethical perception of the medical device companies.

This study contributes to the literature through exploratory research to gain insights into the perception South African medical device companies have of Chinese business ethics. In addition, it is hoped that this research contributes to understanding Chinese and South African business ethics in other industries of South Africa.

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## 9 APPENDIXES

### Appendix 1: INTERVIEW SCHEDULE

#### INVITATION TO PARTICIPATE IN RESEARCH

**Title of Research:** Understanding Chinese Business Ethics: A study on perception of South African medical device companies

**Researcher:** Wessel Brits, MBA Candidate, Gordon Institute of Business Science

Dear Sir/Madam,

As discussed, I am a second year MBA student at the Gordon Institute of Business Science and I am in the process of completing my research project which forms part of my degree.

My research explores the perception, medical device companies in South Africa have of Chinese business ethics. Since you engage in businesses transactions with Chinese businesses, in the context of the medical device industry of South Africa, you are in a position to share valuable information on your perception of Chinese business ethics

For my study, I will need to conduct in-depth semi-structured interviews lasting 20 to 40 minutes. I plan on conducting my interviews during the months of July and August. We can make arrangements to find a suitable date and time which is convenient for both you and I.

All information shared will be kept confidential and you will remain anonymous. The title of the research is:

**Understanding Chinese Business Ethics: A study on perception of South African medical device companies**

The research questions I aim to answer during the research project are:

**Research question 1:** What do individuals working in South African medical companies think of Chinese business ethics?

**Research question 2:** Which virtues or vices do Chinese businesses portray when dealing with medical companies in South Africa?

Thank you for your support with my research

Wessel Brits, [17386234@mygibs.co.za](mailto:17386234@mygibs.co.za)

**Appendix 2: INTERVIEW CONSENT FORM**

**Title of Research:** Understanding Chinese Business Ethics: A study on perception of South African medical device companies

**Researcher:** Wessel Brits, MBA Candidate, Gordon Institute of Business Science

I am conducting research on the perception South African medical device companies have of Chinese business ethics. Since you engage in businesses transactions with Chinese businesses, in the context of the medical device industry of South Africa, you are in a position to share valuable information on your perception of Chinese business ethics.

Data will be collected through a, in-depth, semi-structured interview which will last between 20 and 40 minutes. With your permission this information shared will be recorded for analysis however you could choose not to be recorded. Notes could be made during the interview.

Your participation is voluntary, you can withdraw at any time without penalty. Your identity will remain confidential throughout the process and quotations used will be anonymised. If you have any concerns, please contact my supervisor or I. Our details are provided below.

Wessel Brits  
[17386234@mygibs.co.za](mailto:17386234@mygibs.co.za)  
072 447 8230

Matthew E. Birtch  
[birthcm@gibs.co.za](mailto:birthcm@gibs.co.za)  
011 771 4000

Please indicate your consent by signing this consent form:

Participant's Name: Signature: \_\_\_\_\_

Researcher's Name: Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Appendix 3: INTERVIEW SCHEDULE**

**Title of Research:** Understanding Chinese Business Ethics: A study on perception of South African medical device companies

**Researcher:** Wessel Brits, MBA Candidate, Gordon Institute of Business Science

Participant Name: \_\_\_\_\_ Start Time: \_\_\_\_\_

Company: \_\_\_\_\_ End time: \_\_\_\_\_

Job Title: \_\_\_\_\_ Date: \_\_\_\_\_

Thank you for meeting with me today, it is highly appreciated.

The title of my MBA research is to explore the perceptions South African medical device companies have of Chinese business ethics. This research will focus specifically on the perception South African medical device companies have of Chinese business ethics, no other industry or business' perception will be measured in this study. The aim of this study is to explore the perceptions South African medical device companies have of Chinese businesses ethics. This study included virtue theory so questions could be expected around virtues needed for ethical business conduct in the medical device industry of South Africa.

This interview will last between 20 and 40 minutes. All information shared will be kept confidential and you will remain anonymous.

The Key Research questions are:

**Research question 1:** What do individuals working in South African medical companies think of Chinese business ethics?

**Research question 2:** Which virtues or vices do Chinese businesses portray when dealing with medical companies in South Africa?

**Introductory Questions:**

1. For how many years have you been engaging with Chinese businesses?
2. How important are business ethics in South Africa?
3. How important are business ethics in the medical device industry of South Africa?
4. Do you perceive your own Ethical orientation?
5. Which Virtues are needed for ethical behaviour in the medical device industry of South Africa?

**Appendix 4: Aristotelian moral Virtues**

<b>Area</b>	<b>Defect (Vice)</b>	<b>Mean (Virtue)</b>	<b>Excess (Vice)</b>
Fear and confidence	cowardice	courage	recklessness
Pleasure and pain	insensitivity	self-control	self-indulgence
Material goods	stinginess	generosity	extravagance
Expenditures	stingy	magnificence	vulgarity
Deservedness	pettiness	high-mindedness	vanity
Honors	unambitious	unnamed	ambitious
Anger	apathy	gentleness	short temper
Interrelationships	grouchiness	friendliness	obsequiousness
Honesty	self-depreciation	truthfulness	boastfulness
Relaxation and amusement	boorishness	wittiness	buffoonery
Shame	shamelessness	modesty	bashfulness

### Appendix 5: Phases of Thematic analysis

Phases of Thematic Analysis	Means of Establishing Trustworthiness
Phase 1: Familiarizing yourself with your data	<ul style="list-style-type: none"> <li>Prolong engagement with data</li> <li>Triangulate different data collection modes</li> <li>Document theoretical and reflective thoughts</li> <li>Document thoughts about potential codes/themes</li> <li>Store raw data in well-organized archives</li> <li>Keep records of all data field notes, transcripts, and reflexive journals</li> </ul>
Phase 2: Generating initial codes	<ul style="list-style-type: none"> <li>Peer debriefing</li> <li>Researcher triangulation</li> <li>Reflexive journaling</li> <li>Use of a coding framework</li> <li>Audit trail of code generation</li> <li>Documentation of all team meeting and peer debriefings</li> </ul>
Phase 3: Searching for themes	<ul style="list-style-type: none"> <li>Researcher triangulation</li> <li>Diagramming to make sense of theme connections</li> <li>Keep detailed notes about development and hierarchies of concepts and themes</li> </ul>
Phase 4: Reviewing themes	<ul style="list-style-type: none"> <li>Researcher triangulation</li> <li>Themes and subthemes vetted by team members</li> <li>Test for referential adequacy by returning to raw data</li> </ul>
Phase 5: Defining and naming themes	<ul style="list-style-type: none"> <li>Researcher triangulation</li> <li>Peer debriefing</li> <li>Team consensus on themes</li> <li>Documentation of team meetings regarding themes</li> <li>Documentation of theme naming</li> </ul>
Phase 6: Producing the report	<ul style="list-style-type: none"> <li>Member checking</li> <li>Peer debriefing</li> <li>Describing process of coding and analysis in sufficient details</li> <li>Thick descriptions of context</li> <li>Description of the audit trail</li> <li>Report on reasons for theoretical, methodological, and analytical choices throughout the entire study</li> </ul>



**Appendix 6: Codes and Code group**

<b>Code</b>	<b>Grounded</b>	<b>Code Groups</b>
Chinese virtues and characteristics	38	Chinese characteristics Chinese virtues Findings of SA companies' perception of Chinese business ethics
Ethical lenses SA medical companies use	26	SA medical industry's ethical lens
Chinese companies' back-up service	22	Chinese product reliability influence ethics perception
Chinese product quality and influence on ethics	20	Chinese product quality influence ethics perception SA medical industry's ethical lens
Chinese ethics w.r.t sole distributorship	19	Chinese businesses and sole distributorship Chinese virtues SA medical industry's ethical lens
Big vs small Chinese companies' ethics	16	Chinese companies: big vs small, old vs new
Contradictions of experiences with Chinese business ethics	15	Contradictions: Chinese business ethics
Chinese companies conforming to standards	14	Chinese products: patient safety SA medical industry standards Chinese businesses' adherence to SA medical industry standards
SA companies : years doing business with Chinese businesses	14	SA medical industry's ethical lens
South African business ethics importance	13	
Chinese companies lie about specifications	13	Chinese product quality influence ethics perception Chinese product specifications vs actual device Chinese products: technology Chinese products: patient safety Chinese businesses' adherence to SA medical industry standards Chinese characteristics Chinese virtues

<b>Code</b>	<b>Grounded</b>	<b>Code Groups</b>
Are majority or minority Chinese companies perceived as ethical	12	Chinese companies: big vs small, old vs new  Chinese characteristics  Findings of SA companies' perception of Chinese business ethics  Contradictions: Chinese business ethics
South African businesses adherence to ethics	12	
Chinese companies copying Western products	11	Chinese product specifications vs actual device  Chinese businesses copy products from European companies  Chinese products: technology  Chinese characteristics
Chinese - SA cultural differences	11	Cultural and language differences: SA vs Chinese
Chinese product reliability and how it influence ethics perception	10	Chinese product reliability influence ethics perception  SA medical industry's ethical lens
SA companies: adhere to medical device industry ethics	9	SA medical industry's ethical lens
East vs Western business ethics	9	Western ethics - influence SA medical industry ethics  Eastern ethics
Ethics importance in the medical device industry	8	SA medical industry's ethical lens
Chinese firms' ethics: established vs new companies	8	Chinese businesses' adherence to SA medical industry standards  Chinese companies: big vs small, old vs new
SA medical device companies' adherence to ethics	7	SA medical industry's ethical lens
Standards in the SA medical device industry	6	
Importance of ethics in the SA medical device industry	6	SA medical industry's ethical lens
Chinese - SA communication differences	6	Cultural and language differences: SA vs Chinese

<b>Code</b>	<b>Grounded</b>	<b>Code Groups</b>
Importance of business ethics in the SA medical industry	5	SA medical industry's ethical lens
Chinese ethics influenced by warranty	5	SA medical industry's ethical lens
Chinese becoming Westernized	5	Cultural and language differences: SA vs Chinese  Western ethics - influence SA medical industry ethics  Eastern ethics
Language differences SA - Chinese	5	Cultural and language differences: SA vs Chinese
Chinese business ethics improving	4	Chinese businesses' adherence to SA medical industry standards Findings of SA companies' perception of Chinese business ethics
Ethics which SA medical companies follow	4	SA medical industry's ethical lens
Chinese products sub-standard and cheap	4	Chinese product quality influence ethics perception  Chinese product specifications vs actual device  Chinese businesses copy products from European companies  Western ethics - influence SA medical industry ethics
Chinese equipment improving	3	Chinese product quality influence ethics perception
Medical device companies' own ethical perception	3	SA medical industry's ethical lens
Chinese product reliability and influence on ethics	3	Chinese product reliability influence ethics perception  Findings of SA companies' perception of Chinese business ethics  SA medical industry's ethical lens
SA companies: prejudices of Chinese	3	Cultural and language differences: SA vs Chinese  Chinese companies: big vs small, old vs new  SA medical industry's ethical lens
Chinese product warranties	3	Chinese product reliability influence ethics perception

<b>Code</b>	<b>Grounded</b>	<b>Code Groups</b>
Chinese companies: pressure on SA companies for sales	3	Pressure by Chinese companies on SA companies
Incidences of unethical behavior by Chinese companies	3	Chinese businesses' adherence to SA medical industry standards  Chinese characteristics  Chinese virtues  Findings of SA companies' perception of Chinese business ethics
Perception influence: SA medical firms not Chinese businesses	3	Government vs private hospitals' perception of Chinese business ethics
Chinese product quality declines	3	Chinese product quality influence ethics perception  Chinese product reliability influence ethics perception  Chinese products: patient safety
Good Chinese ethics	3	Chinese product quality influence ethics perception  Chinese product reliability influence ethics perception  Chinese businesses' adherence to SA medical industry standards  Findings of SA companies' perception of Chinese business ethics  SA medical industry's ethical lens
Patient safety and ethics	3	Chinese product quality influence ethics perception  Chinese products: patient safety  SA medical industry standards
Chinese ethics in SA government vs private hospitals	3	Government vs private hospitals' perception of Chinese business ethics
Chinese companies and adherence to contracts	3	Chinese businesses and sole distributorship  Chinese characteristics  Contradictions: Chinese business ethics

<b>Code</b>	<b>Grounded</b>	<b>Code Groups</b>
Chinese product quality vs European products	3	Chinese product quality influence ethics perception  Chinese businesses copy products from European companies  SA medical industry standards  Western ethics - influence SA medical industry ethics
Examples of unethical behavior by Chinese	3	Chinese characteristics  Findings of SA companies' perception of Chinese business ethics
Chinese companies are not trusted	3	Chinese characteristics  Chinese virtues
SA companies' ethical lenses	2	SA medical industry's ethical lens
Incidences of unethical behavior from SA companies	2	
Chinese companies only give what you pay for	2	Chinese product specifications vs actual device  Chinese characteristics
Pressure on SA medical companies by Chinese businesses	2	Pressure by Chinese companies on SA companies  Chinese characteristics
Code of ethics in SA medical firms	2	SA medical industry's ethical lens
Private hospital group: Chinese business dealings and ethics perception	2	Government vs private hospitals' perception of Chinese business ethics
Concept of Chinese: not perceived good	2	Chinese companies: big vs small, old vs new  Chinese characteristics  Chinese virtues  Findings of SA companies' perception of Chinese business ethics
Pricing and how it influence perceived Chinese business ethics	2	Chinese characteristics
European business ethics	2	SA medical industry's ethical lens
Western ethics influence SA medical companies' ethical stance	2	Cultural and language differences: SA vs Chinese  Western ethics - influence SA medical industry ethics

<b>Code</b>	<b>Grounded</b>	<b>Code Groups</b>
Chinese companies good technology	2	Chinese products: technology
International medical device standards	2	SA medical industry standards Chinese businesses' adherence to SA medical industry standards
Chinese medical devices' specifications contradicting actual product specifications	2	Chinese product quality influence ethics perception Chinese product specifications vs actual device Chinese businesses copy products from European companies Chinese products: patient safety Chinese businesses' adherence to SA medical industry standards Contradictions: Chinese business ethics SA medical industry's ethical lens
Are SA medical companies adhering to any ethics	2	SA medical industry's ethical lens
Chinese product quality improves	2	Chinese product quality influence ethics perception
With Chinese it is all about volumes and sales	2	Pressure by Chinese companies on SA companies Chinese characteristics
Chinese companies and loyalty	2	Chinese characteristics Chinese virtues
Chinese companies acting ethical	2	Chinese businesses' adherence to SA medical industry standards Chinese characteristics Findings of SA companies' perception of Chinese business ethics
Chinese products are cheap and nasty	2	Chinese product quality influence ethics perception Chinese characteristics Chinese virtues
SA companies : ethics are influenced by European ethics	2	Cultural and language differences: SA vs Chinese SA medical industry's ethical lens

<b>Code</b>	<b>Grounded</b>	<b>Code Groups</b>
Chinese are very direct: black or white	2	Chinese characteristics Chinese virtues Contradictions: Chinese business ethics
Chinese giving gifts seen as unethical	1	Chinese characteristics Eastern ethics
China: Get what you pay for	1	Chinese product quality influence ethics perception Chinese products: technology Chinese characteristics
Chinese ethics improving	1	Chinese businesses' adherence to SA medical industry standards Chinese characteristics Findings of SA companies' perception of Chinese business ethics
Influences on Chinese medical businesses ethics	1	
Perception difference: Chinese company vs Chinese employee	1	Chinese companies: big vs small, old vs new Findings of SA companies' perception of Chinese business ethics Eastern ethics
Chinese vs European standards	1	Chinese businesses copy products from European companies SA medical industry standards Western ethics - influence SA medical industry ethics Eastern ethics SA medical industry's ethical lens
History of Chinese business ethics in SA	1	Eastern ethics SA medical industry's ethical lens
Chinese investment in Africa - corruption	1	
SA companies afraid of doing business with Chinese businesses	1	SA medical industry's ethical lens

<b>Code</b>	<b>Grounded</b>	<b>Code Groups</b>
Chinese have strong ethical beliefs	1	Chinese characteristics Chinese virtues Findings of SA companies' perception of Chinese business ethics Eastern ethics
Stigma attached to Chinese products	1	Cultural and language differences: SA vs Chinese Chinese product quality influence ethics perception Chinese characteristics Findings of SA companies' perception of Chinese business ethics
Chinese products not associated with quality	1	Chinese product quality influence ethics perception Chinese characteristics Chinese virtues
Chinese ethics and price	1	Findings of SA companies' perception of Chinese business ethics SA medical industry's ethical lens
Chinese person not seen as bad, Chinese business ethics bad though	1	Chinese companies: big vs small, old vs new Chinese characteristics
Chinese product quality worse on second order	1	Chinese product reliability influence ethics perception Chinese product specifications vs actual device Chinese businesses' adherence to SA medical industry standards
Chinese companies poor quality products	1	Chinese product quality influence ethics perception
Chinese are professional	1	Chinese characteristics Chinese virtues
Nameless Chinese products and how it affects SA medical firms perception	1	Chinese product quality influence ethics perception Chinese companies: big vs small, old vs new



<b>Code</b>	<b>Grounded</b>	<b>Code Groups</b>
Other Chinese products affecting Chinese medical device perception	1	Chinese product reliability influence ethics perception  Chinese companies: big vs small, old vs new  Findings of SA companies' perception of Chinese business ethics
SA distributor ethics first line, not Chinese ethics	1	Government vs private hospitals' perception of Chinese business ethics

**Appendix 7: Ethical Clearance letter**



04 July 2018

Brits Wessel

Dear Wessel

*Please be advised that your application for Ethical Clearance has been approved.*

*You are therefore allowed to continue collecting your data.*

*Please note that approval is granted based on the methodology and research instruments provided in the application. If there is any deviation change or addition to the research method or tools, a supplementary application for approval must be obtained*

*We wish you everything of the best for the rest of the project.*

*Kind Regards*

GIBS MBA Research Ethical Clearance Committee