

# **The Perceptions of South African Chiropractors, Regarding Their Professional Identity.**

A dissertation submitted in partial compliance with the requirements for a  
Masters Degree in Technology, in the Department of Chiropractic at the Durban  
University of Technology.

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**2010**

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## **DEDICATION**

To my parents, Cathy and John Keyter,  
I love you more than you know.

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- To my Mom, for always believing in me and loving me unconditionally.
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## ABSTRACT

**Background:** It is well documented that the chiropractic profession has been searching for a unified professional identity. Acknowledging this need for a professional identity relevant to the public, the World Federation of Chiropractic (WFC) attempted to address these concerns by conducting an international questionnaire based Identity Consultation. However, of the 3689 chiropractors who responded, only 34 were from South Africa. Therefore this study aimed to determine the perception of South African chiropractors regarding their public identity and to compare the results with those from international studies.

**Objectives:** To determine the demographic profile of South African chiropractors, and how they perceived their professional identity relative to their own opinions, those of the public and those of medical doctors. This study investigated how South African chiropractors saw their profession relative to physiotherapy and South African chiropractor's knowledge of the WFC Identity Consultation.

**Method:** The study was a population based demographic study making use of a descriptive, observational, cross sectional design. It was a quantitative self-administered questionnaire distributed to those South African chiropractors meeting the inclusion criteria (n=398). The WFC Identity Consultation questionnaire was modified and developed by the researcher to suit a South African audience after permission was obtained from the chairperson of the WFC.

**Results:** A response rate of 30.15% was obtained. Ninety percent of South African chiropractors felt that it was important for their profession to have a clear identity. However, only 1.7% agreed that it did have a clear identity. When asked how the public viewed chiropractic, 45% felt that the public had no clear perception of the profession, with 92.5% viewing it as Complementary and

Alternative Medicine (CAM). However, 89.2% of South African chiropractors would like the public to perceive chiropractic as mainstream medicine. When asked how chiropractic was viewed by South African chiropractors relative to physiotherapy, it was agreed that they were two separate professions each with their own identity (74.2%). The chiropractic adjustment was seen as a strong brand advantage over physiotherapy. When asked how they thought medical doctors viewed chiropractic, 73.3% felt that they did not have a clear perception of the profession, with 96.7% considering medical doctors to view chiropractic as CAM. Medical doctors' perceptions were considered to be very important with respect to inter-professional relations. Just over half (54.2%) of South African chiropractors knew about the WFC identity, less than half of whom (47.5%) agreed with it.

**Conclusions:** The study revealed that there was a significant difference between how South African chiropractors thought the public and medical doctors currently perceived chiropractic and how they would like to be perceived. It revealed that like their international counterparts chiropractors in South Africa are striving for a unified identity that is different to the way they are currently perceived by the health care stakeholders.

**Key words:** Perceptions, chiropractors, South Africa, identity, public, medical doctors.

## **DEFINITION OF TERMS**

### **Complementary and Alternative Medicine (CAM)**

According to Chapman-Smith and Cleveland III (2005), CAM includes a broad realm of healing practices that encompasses all health systems, modalities, and practices and their associated theories and beliefs. These disciplines are not commonly taught in medical schools (Chapman-Smith and Cleveland III, 2005) and according to the World Federation of Chiropractic (WFC) Identity Consultation questionnaire (WFC, 2005), CAM includes health care services that are accepted by many of the public but are not part of the core health care delivery system. In South Africa this generally includes disciplines which are required to register with the Allied Health Professions Council of South Africa (2007).

### **Chiropractic**

According to the WFC (2005), chiropractic is a health profession which includes the diagnosis, treatment and prevention of mechanical disorders of the musculoskeletal system, and the effects of these disorders on the nervous system and general health. Manual treatment is emphasized and includes spinal adjustment and other joint and soft-tissue manipulation (WFC, 2005).

### **Evidence Based Chiropractor**

According to Keating (2005a), an evidence based chiropractor makes use of the best available scientific literature, accumulated clinical knowledge and expertise to formulate a diagnosis and communicate different treatment plans to the patient, the aim of which is to alleviate pain and other symptoms. Evidence based chiropractors would like to be incorporated into main stream health care and employ a broad scope of practice (Keating, 2005a).

## **Identity**

Epstein (1978) explains identity as a process by which a person seeks to integrate his various statuses, roles and diverse experiences, into a coherent image or self'. Similarly, Wehmeier (2006) agreed that a person's characteristics, beliefs and feelings differentiate groups of people from others who do not have the same characteristics, beliefs and feelings. Painter (2007) suggested that the term 'public identity' could be used interchangeably with 'the perceived image of a profession'.

## **Mainstream Medicine**

According to the WFC Identity Consultation questionnaire (WFC, 2005), mainstream medicine includes services which are already integrated into the core health delivery system. In South Africa, this generally includes disciplines that are required to register with the Health Professions Council of South Africa (Health Professions Council of South Africa, 2009).

## **Mixer Chiropractor**

According to Kaptchuk and Eisenberg (1998), a mixer chiropractor believes that a vertebral subluxation is one of many causes of disease and they incorporate diagnostic and treatment methods from osteopathic, medical and chiropractic viewpoints. Mootz and Phillips (1997) confer that the mixer chiropractor tends to be broad in their scope of practice and they generally want to be integrated into mainstream medicine. They also state that mixers tend to adopt a patient centered practice attitude.

## **Perception**

Kehoe (2002) explains perception as a process by which reality is understood. He continues by saying that what is assumed, is what is perceived as taking place, but in reality perception is only a personal view of the things around the person which is derived from the persons own experiences, expectations and beliefs. Bergh and Theron (1999) highlight that perception helps a person to recognize objects and scenes from their environment, interpret that information and extract meaning from

it. However, Chaffe (1997) asserts that a person is forced to examine the reasons for their perception only when they find their own perception of the same event differing from that of others.

### **Primary Health Care: Broad Scope**

According to the WFC Identity Consultation questionnaire (WFC, 2005) , the public has direct access to these health care providers, who are responsible for overall patient care as they generally have a broad scope of practice. An example of such a health care provider would be a General Practitioner.

### **Primary Health Care: Focused Scope**

According to the WFC Identity Consultation questionnaire (WFC, 2005), the public has direct access to these health care providers who may be responsible for overall patient care within their focused scope of practice. Examples of such health care providers would include; Dentists and Optometrists.

### **Profession**

According to Haldeman (2005), a profession constitutes a social group of people who have acquired specific knowledge and skills and therefore have exclusive powers, rights and authority. The social group has controlled entry, is self-governing and is regulated by the government (Haldeman, 2005).

### **Specialist Care**

According to the WFC Identity Consultation questionnaire (WFC, 2005), the public do not have direct access to these health care providers, patients are obtained by referrals. They have a focused scope of practice and have acquired specialist training. Examples of such health care providers include: Orthopedic surgeons and Radiologists.



### **Straight Chiropractor**

According to Keating, Cleveland III and Menke (2005), the straight chiropractor believes that a vertebral subluxation leads to interference with the innate intelligence within the nervous system and is a primary underlying risk factor for almost any disease. Their treatment follows the traditional chiropractic lexicon: spinal analysis, detect vertebral subluxation and correct it with an adjustment. Mootz and Phillips (1997) stated that straight chiropractors prefer to remain separate and distinct from mainstream health care, have a narrow scope of practice and a doctor model-centered practice attitude.

### **Technikon Natal/ Durban Institute of Technology**

Previous names of the now Durban University of Technology. Also known as DUT.

### **World Federation of Chiropractic/ WFC**

The WFC has national associations of chiropractors in 88 countries as members, it functions to represent them and the chiropractic profession internationally. The WFC is a non-governmental organization and has been in official relations with the World Health Organization since 1997. The WFC collaborates with many similar associations representing other healthcare professions (WFC, 2005).

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## **CHAPTER ONE: INTRODUCTION**

### **1.1 INTRODUCTION**

According to Kehoe (1994), perception is a process by which a person understands reality. He continues to say that they would normally assume what they perceive is what is actually taking place, but in reality, their perception is only a personal view on the things around them, which is derived from their own experiences, expectations and beliefs. Chaffe (1997) suggests that a person may be forced to examine the reasons for their perceptions only when they find their own perception of the same event differing from that of others.

From the beginning of chiropractic over 100 years ago, there has been a continual debate over the conflicting views of the perceived role of chiropractic (Chapman-Smith, 2000). As a result, chiropractic has failed to define its role in the health care system in an understandable, credible and scientifically coherent way (Coulter, 2006). The perceived image or "public identity" of chiropractic has long been debated within the profession, and outside consultants have repeatedly advised the profession to clearly define their image (Painter, 2007).

Carter (1998) stated that chiropractors have found themselves lost between mainstream and alternative health care. Due to the profession being unsure of its identity, the public are even more unaware of the role of chiropractic. Chapman-Smith (2000) stated "Quite simply, a product or profession not understood is not used". As cited in Chapman-Smith (2000), the historian Moore stated that the current position of chiropractic was "a somewhat curious mix of professional spine specialists still geared towards holistic systemic logic". Mootz, Coulter and Schultz (2005) indicated that in the past, the chiropractic profession was described as being a 'marginal profession' and was thought to be both professionally and socially stigmatized.

Acknowledging the need for a universal identity for the chiropractic profession, the World Federation of Chiropractic (WFC) ran an extensive questionnaire based Identity Consultation in 2004. However, only 34 South African chiropractors participated in the study. The WFC Identity Consultation revealed that there was a significant discrepancy in the way chiropractors believed the general public and medical practitioners should perceive the profession and the way it is actually perceived (Identity Consultation: Report and Recommendations, 2005). Most chiropractors believed that both the general public and medical practitioners had no clear perception of the profession (Identity Consultation: Report and Recommendations, 2005).

The Chiropractic Association of South Africa (CASA) has subsequently adopted the WFC identity - '*the experts in spinal health care within the health care system*'- for the practice of chiropractic in South Africa (CASA, 2008). However, no study has been conducted to determine whether South African chiropractors agree with the WFC identity statement.

A quantitative exploratory study carried out in South Africa by Myburgh and Mouton (2007) to determine the developmental issues facing the chiropractic profession from a patient and practitioner perspective in South Africa found that: patients were uncertain about the professional and educational status of a chiropractor and were confused by the lack of integration of chiropractic into the health care system. Practitioners claimed that they could not come to agreement on important issues such as:

- The identity of the chiropractic profession,
- The professions integration with main stream healthcare stakeholders and
- A marketable model for the practice of chiropractic.

Amongst others these issues were also raised by the WFC (Identity Consultation: Report and Recommendations, 2005).



It was concluded that the international discourse regarding professionalism, philosophy and education and their effect on the practice of chiropractic had been reflected in South Africa (Myburgh and Mouton, 2007).

Therefore, this study aimed to investigate the perceptions of South African chiropractors regarding their professional identity.

## **1.2 THE PROBLEM STATEMENT**

To investigate the perceptions of South African chiropractors regarding their professional identity and compare the findings with other studies.

## **1.3 RESEARCH OBJECTIVES**

1. To determine the demographics of South African chiropractors.
2. To determine South African chiropractors' perceptions of the identity of the chiropractic profession.
3. To determine how South African chiropractors' perceive the public view of the identity of the chiropractic profession.
4. To determine how South African chiropractors' see chiropractic relative to physiotherapy.
5. To determine how South African chiropractors' perceive how medical doctors view the identity of the chiropractic profession.
6. To determine South African chiropractors' knowledge of the WFC Identity Consultation.
7. To compare these results with other studies.

## **1.4 RATIONALE FOR THE STUDY**

The conflicting views of the role of chiropractic over the past decade have resulted in the profession failing to define its role in the healthcare system. The public identity of the profession has provided a topic of contention within the profession (Chapman-Smith, 2000), and it has been advised that the profession needs to clearly define their image in an understandable, scientifically coherent way (Coulter, 2006). Wardwell (1992a) asserts that it is inevitable that a distinct minority of any type will persistently be faced with the predicament of defining itself for the dominant majority.

Formulating an identity will not limit the profession but rather give the public and the profession a common grounding to define the function and values of chiropractors (Briggance, 2005) in South Africa. According to Coulter (2006), a unified identity will help the profession to establish its cultural authority over any specific domain of health care, and ensure the survival of the profession.

South African chiropractors were not significantly represented in the WFC Identity Consultation. Only 0.92% of the WFC Identity Consultation respondents were South African chiropractors (WFC, 2005). Subsequently, the CASA has adopted the identity formulated by the WFC (CASA, 2008). However, it has not been established whether chiropractors in South Africa are in agreement with this identity. The study conducted by Myburgh and Mouton (2007) concluded that the international discourse in the chiropractic profession had had an effect on the practice of chiropractic in South Africa.

Understanding public and medical practitioners' perceptions of chiropractic would facilitate the formation of a clear identity for the profession in South Africa, which CASA could employ to facilitate greater interaction with the public and the medical fraternity. Therefore, this study aimed to administer the questionnaire to all chiropractors in South Africa in order to determine a more comprehensive representation of how chiropractors in South Africa perceive their profession.

## **1.5 DELIMITATIONS**

In a study of this nature, the researcher relies on the respondents to have answered the questionnaire openly and honestly, therefore allowing the research to be the best approximation of the knowledge and perceptions held by the respondents (Dyer, 1997).

## **1.6 CONCLUSION**

The aim of this study was to assess the perceptions of South African chiropractors, regarding their professional identity and to determine whether it is in keeping with international developments.

With the research title having been introduced in Chapter One, Chapter Two will discuss the related literature. Chapter Three will analyze the materials and methods used in obtaining the information required in order to meet the aims and objectives of the study. The achieved results are presented in Chapter Four. Chapter Five presents the discussion of the results. Chapter Six concludes this study and presents the recommendations.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 BACKGROUND TO THE STUDY – THE CHIROPRACTIC IDENTITY CRISIS**

Since chiropractic was founded in the 1890's by Daniel David Palmer (Chapman-Smith, 2005), there has been considerable controversy and criticism surrounding the profession (Nelson, Lawrence, Triano, Bronfort, Perle, Metz, Hegetschweiler, and LaBrot, 2005). The controversy stemmed from the founding principles of chiropractic which were in opposition to traditional medical tenets (Baer, 1987). These early chiropractors believed that all disease was caused by an interruption of the life force that flows through man (Martin, 1993). Chiropractic was described as; an 'unscientific cult' (Johnson, Baird and Dougherty, 2008) and a 'marginal profession', and was stigmatized in a professional and social context (Mootz, Coulter and Schultz, 2005).

Highly influential groups, such as sociologists and the medical profession have questioned various tenets of the chiropractic profession (Wardwell, 1994a). Medical doctors in particular have viewed chiropractic with profound suspicion and concern (Wardwell, 1994a). These were based on doubts about the validity of the manipulation and the training, particularly the possibility of 'missing' a serious disease (Curtis and Bove, 1992). Legitimate research to test the validity of chiropractic hypotheses only began in the mid 1970's and continued to be hampered by medical professionals characterizing the research as antiscientific or pseudoscientific (Keating, Cleveland III and Menke, 2005).

In the past, medical practitioners in South Africa were forbidden by law to have anything to do with chiropractic (Hupkes, 1990). Chiropractic was condemned particularly because it lacked the scientific evidence to substantiate its claims (Sanchez, 1991). However, Coulter (1992) found that over the past 30 years, chiropractic has become more accepted, particularly as all aspects of the profession are under continuous social evaluation, with particular reference to research and the practice of evidence based medicine (Wardwell, 1992). Similarly, Cooper and

Mckee (2003) found that in recent decades, chiropractic has gained greater acceptance and legitimacy by the medical fraternity and the public. As a method of remedying the perceived lack of evidence based medicine and reinforcing this practice, chiropractors could increase their number of peer reviewed publications (Naidoo, 2008). However, negative perceptions may still exist due to scientific publications not being read by the general public, misinformation, misinterpretation of the information or a limited understanding of the same information (Louw and Myburgh, 2005 and Van As, 2005).

Chiropractors find themselves lost between mainstream and alternative health care (Carter, 1998). Cooper and Mckee (2003) agreed with this as they found that, as the profession grew and gained acceptance, evidence based medicine guidelines insisted on treatment with a scientific basis, and competition grew from other health professionals. Chiropractors attempted to remedy this by marketing natural products and devices more aggressively, thus further fulfilling the criteria of Complementary and Alternative Medicine (CAM). Due to the profession being unsure of its identity, the public are even more unaware of the role of chiropractic. Chapman-Smith (2000) said *“Quite simply, a product or profession not understood is not used”*. Chiropractic is constantly striving to attain higher levels of cultural authority, respect and influence, not only to ensure survival of the profession, but as a matter of professional growth consistent with its goals and ideals. However, some chiropractors fear that integration with other health care professionals could lead to dilution and eventual dissolution of the profession’s unique approach to healthcare (Meeker and Mootz, 2005).

## **2.2 WORLD FEDERATION OF CHIROPRACTIC – IDENTITY CONSULTATION**

The WFC, a non-governmental association which represents 88 national chiropractic associations, recognized the need for a universal identity for the chiropractic profession and conducted an international Identity Consultation to assess the perceptions of chiropractors with respect to the public identity of the profession (Carey, Clum and Dixon, 2005).

The WFC Identity Consultation was a questionnaire based study. Twenty nine thousand and ninety four chiropractors from 54 different countries were invited to participate in the study, of which 3 689 complete responses were returned, obtaining a response rate of 12.7% (Carey, Clum and Dixon, 2005). A response rate over 10% is considered as acceptable for a voluntary survey without reward (Carey, Clum and Dixon, 2005). Of the 3 689 responses, 2 511 of the participants were from USA and Canada (68%), 309 from Australia (8%), 270 from United Kingdom (7%) and 34 were from South Africa (0.92%) (WFC, 2005). Therefore, it was felt necessary to survey the whole population of chiropractors in South Africa to determine if the results were congruent with the WFC results.

Key findings of the WFC Identity Consultation were that: chiropractors agreed that the chiropractic profession did not have a clear public identity and position within today's health care system; there was found to be a considerable discrepancy in the way chiropractors believed the general public and medical doctors should perceive the profession and the way they think the profession is actually perceived. It was found to be very important, in terms of public perception, that chiropractic was positioned as a non-drug, non-surgical profession (Northstar Research Partners, 2004).

The final result of the Identity Consultation was that the vision for the identity of the chiropractic profession was as follows:

*“A world where people understand that chiropractic answers their need for the most expert and conservative spinal care and the impact of this on general health because of the relationship between the spine and the nervous system”* (Identity Consultation: Report and Recommendations, 2005). The consultation resulted in the identity of chiropractic being defined as: *“The spinal health care experts in the health care system”* (Identity Consultation: Report and Recommendations, 2005). Carey, Clum and Dixon (2005) stated that the identity of the chiropractic profession should be similar in all countries. Thus, it was felt necessary to conduct similar research in South Africa.

### 2.3 PHILOSOPHICAL ORIENTATION AND EDUCATION

Historically, chiropractors divided themselves into two groups; the straights and mixers. However, in the past decade, this has grown to include evidence based chiropractic. According to Keating (2005b), the varied philosophical orientation of chiropractors defies comprehensive evaluation and explanation. He inferred that the differences among these schools of thought formed the basis for intra-professional disputes, and failure of the profession to unite around a shared set of principles. This resulted in the delayed formation of a united identity to communicate to the public and to increase inter-professional relations and integration. There is an unfortunate truth in the observation by the late Stanley Martin that '*for every chiropractor there is an equal and opposite chiropractor*' (Keating, 2005a).

This straight-mixer division has caused numerous problems for chiropractic, which collectively divide the profession, such as; competing associations that are unable to unite, licensing laws and scopes of practice which vary from country to country, international colleges who are still ideologically and philosophically divided and the public who are confused by inconsistent advertising, stating what chiropractors are, what conditions they treat and how they treat them, some of these messages even attack and criticize other chiropractors for the way they practice (Wardwell, 1992).

Chiropractors themselves may be considered a barrier to the advancement of chiropractic as they are often defensive and lack real confidence and a sense of leadership in promoting chiropractic, thus there is far too much internal discord for the profession to advance as it should (Caplan and Associates, 1994). Negative stereotypes remain a critical problem facing the profession (Wardwell, 1992). According to Myburgh and Mouton (2007), South African chiropractors could not claim congruence on the identity of the chiropractic profession, and they felt that there was an absence of a marketable model for the practice of chiropractic. Thus the international discord was found to be evident in South Africa.

Different terminology could even confer different philosophical orientations. The medical profession is more accepting of the term 'manipulation', as this implies that the objective of the treatment is to restore function of the articulation of the joint. Whereas the term 'adjustment' implies that the aim of treatment is to restore the functional capacity of the nervous system and the body as a whole (Prescott, 2001).

The subluxation based versus medically orientated controversy has also divided chiropractors for the past decade (Prescott, 2001). The term subluxation has also caused confusion with the medical profession, as they define it differently to how chiropractors define it. The medical definition of subluxation according to the World Health Organization (2005) is, 'a significant structural displacement that can be viewed on an x-ray'. However, the chiropractic subluxation was defined by the World Health Organization (2005) as, 'a dysfunction in a joint which may influence neural integrity and therefore physiological function'. Chapman-Smith (2005) stated that it may not be detected on x-ray.

Straight chiropractors believe that a vertebral subluxation leads to interference with a nerve and thus the life force of the body, and is an underlying factor for almost any disease (Keating, Cleveland III and Menke, 2005). This theory is in contradiction to the tenets of the mainstream medical fraternity. However, the mixer and evidence based chiropractors believe that the vertebral subluxation may be one of many causes of dysfunction and limit their treatment to alleviation of pain and symptoms, incorporating mainstream medical diagnostics and evidence based medicine guidelines (Keating, Cleveland III and Menke, 2005). The inability to reach agreement on terms is still a continuing debate among the straights and mixers/evidence-based chiropractors which has resulted in further confusion within the chiropractic profession (Rose and Adams, 2000).

The philosophical split within the profession is primarily due to the different colleges and associations (Wardwell, 1992), although chiropractic colleges now teach from a standard core curriculum as advised by the Councils on Chiropractic Education



International (2009), who continue to differ in their philosophical emphasis (Wardwell, 1992). This is particularly true of the superstraight colleges, which are accredited by the Straight Chiropractic Academic Standards Association, which minimize diagnostic techniques. This is unlike the mixer colleges which emphasize diagnostic ability and what Gibbons (1980) calls broad scope chiropractic. Similarly, the more “straight” chiropractic colleges tend to only teach spinal manipulation, compared to the mixer colleges that tend to incorporate spinal and extremity manipulations with modality use (Keating, 2005b). From these different philosophical orientations which have led to different ideals and identities within the profession (Carey, Clum and Dixon, 2005), it is important to determine how South African chiropractors see themselves in order to create a unified identity and practice ethic.

In South Africa there are two teaching institutions, the Durban University of Technology (DUT) and the University of Johannesburg (UJ), which teach from the same curriculum (DUT Chiropractic Handbook, 2009; UJ Chiropractic Handbook, 2009). Students are schooled in a broad based curriculum adhering to the norms and standards of chiropractic education as set by the Council on Chiropractic Education International (2009). Students graduate with a Masters Degree in Chiropractic after completing six years of education and training. However, many chiropractors practicing chiropractic in South Africa hold overseas qualifications or have worked overseas where they have been exposed to the different philosophical orientations. The first chiropractic educational programme was started by DUT in 1989 (DUT Chiropractic Handbook, 2009), so many of the older members of the South African chiropractic population had no option but to study overseas.

Keating and Mootz (1989) argued that chiropractic education developed its basic science training at the expense of the applied clinical science. They recommended that a way for the profession to escape its unproven dogma was to provide better appreciation and training in clinical research. Some schools (including DUT and UJ) have taken this advice and incorporated a research component into the course requirements, thus introducing the evidence based chiropractor. There is much confusion about the extent and quality of chiropractic education (Chapman-Smith

and Cleveland III, 2005). Focus groups held in Canada and the United States of America found that many members of the public thought that chiropractic education was of about two years duration and was significantly inferior to medical education (Chapman-Smith and Cleveland III, 2005). Other studies in the United States of America (Cherkin and Mootz, 1997), New Zealand (Inglis, Fraser and Penfold, 1979), Sweden (Commission on Alternative Medicine, Social Departementete, 1987) and South Africa (Hupkes, 1990) have concluded that chiropractic education is the equivalent of medical education in all of the basic sciences. At the University of Southern Denmark, chiropractic and medical students take a basic science programme in the same department for three years (Chapman-Smith and Cleveland III, 2005).

## **2.4 ORGANIZATIONAL PROBLEMS**

Much of the internal conflict in chiropractic is accredited to fights over territory or egos of the leaders (Keating, 2005a). The diversity of views about the nature of chiropractic continues to keep a number of national societies running, none of which can claim a majority of chiropractors as members (Keating, 2005a). The mixer and straight divisions in the United States of America have failed at several attempts to unite (in 1930, 1963, 1974, 1989 and 1991). Thus, the division was widened further and more organizations were formed in addition to the International Chiropractors Association and the American Chiropractic Association, ranging from the super straight Federation of Straight Chiropractic Organizations which lies at the extreme traditionalist pole, to the National Association of Chiropractic Medicine which lies at the opposite pole, thereby accepting the notion that chiropractic is a part of the practice of medicine where it should find its niche and collaborate with medical practitioners (Wardwell, 1992). Although it is recognized that the self defeating character of speaking with many voices has been a persistent problem in the history of the profession, it has yet to be overcome (Keating, 2005a). Due to the failed attempts at uniting, organizations remain divided, to the extent that in several states in America there are as many as four rival associations.

Wardwell (1992) stated that a critical cause of chiropractic organizational weakness was that chiropractors can function perfectly well without belonging to any association, unlike medical practitioners in which membership to an internal medical society is essential for maintaining hospital privileges. Consequently, approximately half of all practicing chiropractors abroad did not belong to a chiropractic association. However, Wardwell (1992) also stated that on the international organizational level, there has been some success with the formation of the WFC in 1988, which has national associations of chiropractors in 88 countries as members and functions to represent them and the chiropractic profession internationally (WFC, 2005).

In South Africa, all chiropractors are required by law to register with a statutory body. This is the Allied Health Professions Council of South Africa (AHPCSA) (Chiropractic Association of South Africa, 2005) and there is only one association that members can join, the Chiropractic Association of South Africa (CASA). CASA has aligned itself with the WFC identity (CASA, 2008) and has been successful in having approximately 73% (n=368) (CASA, 2009) of the chiropractors registered with the AHPCSA as its members (AHPCSA, 2008). It could be assumed that due to the small chiropractic community in South Africa, and the fact that there is only one association representing the majority of chiropractors, that there may be more congruence between chiropractors in South Africa in terms of their identity. This study aimed to determine this.

## **2.5 HISTORY OF CHIROPRACTIC IN SOUTH AFRICA**

Chiropractic came to South Africa in 1920 when five American trained chiropractors settled in the country. By 1928, conflict with the medical fraternity began and lasted approximately forty years (Myburgh and Mouton, 2007). The development of the profession was delayed in South Africa due to legal barriers. In 1971, a bill was passed in parliament that closed the register to chiropractors and chiropractic learners, thus effectively ending any growth of the profession that there could have been in South Africa (Brantingham and Snyder, 1999). Chiropractic in South Africa was a dying profession (Hupkes, 1990), and the profession remained in danger of

becoming redundant (Brantingham and Snyder, 1999). The total number of chiropractic practitioners dropped from approximately 176 in 1971 to about 100 in 1982 when the registers were reopened (Till, 1997).

The Associated Health Service Professions Act No. 63 of 1982 was established by the Allied Health Professions Act of South Africa (South Africa, 2001). It was formerly known as the South African Associated Health Services Professions Board (Brantingham and Snyder, 1999), a statutory body that wrote chiropractic into law. The reopening of the chiropractic registry allowed the registration for licensure of new chiropractors and the establishment of an educational programme within South Africa (Brantingham and Snyder, 1999). Between 1984 and 1988 a six year professional qualification was developed and implemented. The first chiropractic students were accepted into Technikon Natal (now known as the Durban University of Technology) in 1989 and graduated in 1994 (Myburgh and Mouton, 2007). The AHPCSA is South Africa's statutory body with whom all chiropractors are required to register (CASA, 2008). Chiropractic was granted full professional status and was recognized as satisfying the definition of a 'profession' (Myburgh and Mouton, 2007). In 2008, 506 chiropractors were registered with the AHPCSA (2008) indicating the growth of the profession within the last 27 years.

## **2.6 THE POSITION OF CHIROPRACTIC IN THE HEALTH CARE SYSTEM AND SCOPE OF PRACTICE**

Coulter (2006) stated that for the chiropractic profession to survive it needs to establish its cultural authority over a specific domain of health care. Although the medical fraternity has not fully accepted chiropractic as a mainstream form of health care, the next ten years should determine whether the chiropractic profession maintains the trappings of an alternative health care profession or whether it becomes fully integrated into mainstream health care systems (Haldeman, 2000). Since this study was done 10 years before the current study, it would be expected that with time, there would have been further integration and acceptance of chiropractic into mainstream health care.

According to the WFC Identity Consultation, most chiropractors (88%) believed that the profession should be perceived as mainstream (or core to the health care delivery system). However, most agreed that the profession is not viewed this way by the general public or by the medical fraternity. Instead, it was seen as being CAM (Identity Consultation: Report and Recommendations, 2005).

Organizations in the world of health care, such as the United States National Institute of Health, the European Parliament and the World Health Organization, have labeled chiropractic as CAM. Chiropractic opinion on the matter is divided (Chapman-Smith and Cleveland III, 2005). Arguments that chiropractic services are not CAM but rather mainstream include; that chiropractic is based on the same anatomical, physiological, and scientific principles of western medicine, employs treatment methods with proven effectiveness and with respect to neuromusculoskeletal conditions is a service that represents a first line of treatment (Chapman-Smith and Cleveland III, 2005).

Arguments that chiropractic is CAM, stem from the traditional model of chiropractic care, which is different from medical practice in that the basic focus is on healing from (life force) within and influencing general health through the correction of subluxation to restore the normal function of the nervous system (Chapman-Smith and Cleveland III, 2005). Spinal adjustments or manipulation administered to relieve pain and restore joint and muscle function (musculoskeletal disorders) are now considered mainstream, but the same treatment methods to allow the body to regulate visceral functions such as respiration and digestion and to improve overall health and wellness are considered to be CAM (Chapman-Smith and Cleveland III, 2005). There is evidence that shows the efficacy of chiropractic in the treatment of certain musculoskeletal disorders (Bronfort, Haas and Evans, 2005). However, insufficient evidence is available for the treatment of non-musculoskeletal disorders and general health (Vernon, 2005).

Beyond the professions borders, the questions of whether chiropractic should be considered 'mainstream' or 'alternative care' is complicated by a variety of opinions from within the profession itself. In South Africa the professional board for chiropractic falls under the Allied Health Professions Council which encompasses mainly CAM services (AHPCSA, 2008), and until such time that it can move to the Health Professions Council of South Africa which is considered to be the organization for mainstream services, it will remain CAM in the eyes of the South African public and other medical professionals.

The following studies have shown that perceptions of the position of chiropractic in the health care system are inconsistent. In the United Kingdom, chiropractic is listed as an example of complementary therapy (British Chiropractic Association, 2003). Whereas, a study carried out in New Zealand showed that, in public interest chiropractors should be accepted as partners in the general health care system and not seen as alternative health care (Inglis, Fraser and Penfold, 1979). A study in the United States of America showed that with respect to public image, 'chiropractors tended to be regarded by the public as specialists within a narrow range of clinical practice' related to neuromusculoskeletal disorders; it was also found that chiropractors could become recognized as primary care providers (Hurwitz, Coulter, Adams, Genovese and Shekelle 1998). In Canada, the public confidence in chiropractic seemed to be restricted to back and neck problems, but even so when treatment was sought, chiropractic was a second alternative (Caplan and Associates, 1994).

Not all chiropractors in South Africa perceive themselves as actual or potential primary health care providers as directed by the AHPCSA Act 63 of 1982 (South Africa, 2001). To further confuse the role of the chiropractor, there is a contradiction: the chiropractor is simultaneously a primary care provider and a specialist at the same time (Sanchez, 1991). Some prefer to limit their scope of practice only to neuromusculoskeletal conditions because of their lack of hospital privileges (Gaumer, Koren and Gemmen, 2002). Duenas, Carucci, Funk and Gurney (2003)

found that 84% of chiropractors in Connecticut in the United States of America agreed that a chiropractor was a primary contact practitioner, with 83% not seeing themselves as neuromusculoskeletal specialists. Similarly, Pollentier and Langworthy (2007) found that 98% of chiropractors in the United Kingdom considered themselves to be primary contact practitioners, with 69% not seeing themselves as a neuromusculoskeletal specialist. In South Africa this dichotomy (i.e. primary care practitioners versus neuromusculoskeletal practitioners) could result in inconsistent general public perception of chiropractors (AHPCSA, 2008).

The following treatments are defined within the scope of chiropractic practice in South Africa (South Africa, 2001);

- Manipulation or adjustments,
- Electrotherapy,
- Exercise therapy,
- Hydrotherapy,
- Traction therapy,
- Thermal therapy,
- Vibration therapy,
- Immobilization therapy,
- Neuro-muscular reflex therapy,
- Massage therapy,
- Acupuncture and acupressure therapy and remedies and
- Dietary advice or dietary supplementation.

From the above it can be seen that there is a broad scope of practice where the use of several modalities can be included. As mentioned previously, the CASA (2008) has adopted the following WFC definition for the practice of chiropractic in South Africa which is:

*“Chiropractic is a health profession specializing in the diagnosis, treatment and prevention of mechanical disorders of the musculoskeletal system and the effects of*

*these disorders on the function of the nervous system and general health. Chiropractic is a system of specific manipulation/adjustment of the articulations and tissues of the human body, particularly the spinal column, for the correction of neural and functional integrity and includes the use of accepted diagnostic and treatment methods as taught in accredited chiropractic institutes. Registered chiropractors may diagnose and treat the human body by the application of manipulative, manual, mechanical and dietetic or nutritional methods, including the use of therapeutic modalities, orthotics, supportive appliances and diagnostic x-ray. Chiropractic practitioners essentially rely upon non-invasive treatment methods and will refer patients to medical practitioners should medication or surgery be indicated. This approach is further reinforced by chiropractors in their promotion of healthy lifestyles such as the avoidance of smoking and excess stress, proper diet and exercise”.*

## **2.7 THE SOCIOECONOMIC SITUATION OF THE HEALTH CARE SYSTEM IN SOUTH AFRICA**

It was estimated that in South Africa, only 1% of the Black population and 10% of the White population knew what chiropractic was (Van As, 2005). In this respect, Louw and Myburgh (2005) found that General Practitioners felt that less than 15% of their patients and less than 15% of the population regularly sought chiropractic care. This indicates that chiropractic is poorly utilized by the majority of South Africans. South Africa's health care system consists of a large public sector and a smaller, fast growing private sector (Van As, 2005). Health care is varied from basic primary health care offered free by the state, to highly technological specialized services available to those in the private sector who can afford them (Van As, 2005).

Several studies have shown that the average South African chiropractor is a White male between 25 and 38 years of age, working in full time private practice in an urban health care setting (De Gouveia, 2009; Bunge, 2007; Mathews, 2006 and Fletcher, 2005). This demographic profile shows an under representation of the Black population in the profession. Myburgh and Mouton (2007) found that chiropractic was underappreciated and underutilized by the Black population in



South Africa, 71% of whom reside in rural areas (Van As, 2005). Females were generally less represented than males (De Gouveia, 2009; Bunge, 2007; Mathews, 2006 and Fletcher, 2005). This is in spite of females (Tatalias, 2006; National Center for Complementary and Alternative Medicine, 2004 and MacLennan and Wilson, 1996) and older individuals (Tatalias, 2006; Menniti-Ippolito, Gargiulo, Bologna, Forcella, and Raschetti, 2002; Reid, 2002 and Kayne, Beattie and Reeves, 1999) being more attracted to CAM therapies, and that females are also more likely to graduate from higher educational institutions than their male counterparts (Morgan, Isaac and Sansone, 2001).

The Chiropractic Association of South Africa (2005) indicated that chiropractic in South Africa is covered by most medical aids (98%). However, Van As (2005) stated that these only tend to serve the middle to high income earners. With the high levels of poverty and unemployment in South Africa, the majority of people cannot afford to belong to a medical aid scheme (Van As, 2005). Therefore, Kew (2006) asserts that most people are denied access to chiropractic as it would be unaffordable for the majority of the population. However, there is governmental recognition of chiropractic as it is included in the Compensation for Occupational Injuries and Disease Act no. 30 of 1993 (CASA, 2008). This means that employees injured on duty can consult a chiropractor if they so wish without a referral (CASA, 2008). This would increase public acceptance of chiropractic (Meeker and Mootz, 2007).

## **2.8 PUBLIC'S VIEW OF CHIROPRACTIC**

Consumer preferences are a primary driving force in the demand for chiropractic services and the potential for chiropractors to serve in primary care roles (Gaumer, Koren and Gemmen, 2002). Studies in Australia (Straton, Sweeney and Grandage, 1990), Canada (Kapsalis, 2000; Criterion Research Corporation, 1999; Papadopoulos, 1997 and Caplan and Associates, 1994), Italy (Vinci and Peterson, 2003), Netherlands (Assendelft, Pfeifle and Bouter, 1995), New Zealand (New Zealand Consumers' Institute, 1997 and Inglis, Fraser and Penfold, 1979), United Kingdom (British Chiropractic Association, 2003 and Wilson, 2003) and the United

States of America (McDonald, Durkin and Pfefer, 2004, Cooper and Mckee, 2003 and Hurwitz *et al.*, 1998), show that the most common reason for seeking chiropractic care was low back pain and neck pain followed by headaches. Vinci and Peterson (2003) estimated that 1% of patients sought chiropractic care for visceral problems. Similarly, Hurwitz et al (1998) found that less than 1% of chiropractic patients were given diagnoses for non musculoskeletal conditions such as asthma and otitis media. Curtis and Bove (1992) found there was significantly greater satisfaction with chiropractic care than the family physician in the treatment of low back pain. Patients believed chiropractors were more confident and showed more interest and understanding of their problems.

Therefore most patients of chiropractic and members of the public view chiropractors as back specialists (Gaumer, Koren and Gemmen, 2002; Wardwell, 1992). However, if chiropractors are to fulfill their role as primary care practitioners and alter existing behaviors of consumers, chiropractors must overcome impressions that they primarily treat low back pain (Gaumer, koren and Gemmen, 2002). In a qualitative study by Myburgh and Mouton (2007), it was found that patients were confused by the lack of health care system integration of chiropractic, and were uncertain of the professional and educational status of chiropractors.

Caplan and Associates (1994) found that the public and chiropractors have very different perspectives of the profession and what it can offer; chiropractors think they have a major role to play in prevention whilst the public, including chiropractic patients do not understand this and have very little understanding about chiropractic education, qualifications and scope of practice. In a study carried out on School Guidance Councilors (SGC's) in South Africa, it was found that over half (57.6%) of the SGC's thought that chiropractic was a Diploma, National Diploma or Bachelors level of qualification, thus underestimating chiropractic education which is a Masters degree in South Africa (Van As, 2005).

Wardwell (1992) stated that great efforts had been made to educate the public about chiropractic. Needless to say that the profession would benefit more from an institutional public education program than by individual chiropractors promoting their own brand of chiropractic and claiming superiority over other chiropractors (Wardwell, 1992).

## **2.9 MEDICAL DOCTORS' VIEWS OF CHIROPRACTIC**

The confusion with regards to the chiropractic profession is, however, not limited to chiropractors and the public. It has been found that in North America, Europe and South Africa that General Practitioner's (GP's) and chiropractors generally do not tend to communicate effectively (Brussee, Assendelft and Breen, 2001; Breen, Carrington, Collier and Vogel, 2000; Rubens, 1996 and Verhoef and Page, 1996), particularly because of the lack of scientific evidence to substantiate its claims (Sanchez, 1991). However, in certain European countries there has been some progression with respect to communication between GP's and chiropractors, with GP's in Norway and the Netherlands expressing high intent on future communication with chiropractors (Brussee, Assendelft and Breen, 2001; Langworthy and Birkelid, 2001). Of particular interest is that contrary to the importance of scientific evidence, GP's who receive information by informal means such as through patients or being a patient themselves, are more knowledgeable and accepting of the profession (Langworthy and Birkelid, 2001; Brussee, Assendelft and Breen, 2001; Langworthy and Smink, 2000).

In South Africa, Louw and Myburgh (2005) found that GP's were lacking knowledge about the scope of practice of chiropractic and there was a significant relationship between the GP's lack of knowledge of chiropractic and a positive perception of the chiropractic profession. The chiropractors' role in South Africa was seen by GP's as secondary to mainstream medical practices and chiropractic's preventative and primary roles were seen as less important than chiropractic's preventative and rehabilitation role (Louw and Myburgh, 2005). This confirmed findings from The United States of America but contradicted results found in the Netherlands and

Norway (Langworthy and Birkelid, 2001; Langworthy and Smink, 2000). In the United States of America, Mainous, Gill, Zoller, and Wolman (2000) found that family physicians viewed chiropractors more as specialists than primary care practitioners. The New Zealand Consumers' Institute (1997) found that consumers most commonly thought of chiropractors as being more knowledgeable about the spine than GP's and felt they were able to help where the GP or physiotherapist could not.

The WFC Identity Consultation (Identity Consultation: Results and Recommendations, 2005) showed that there was a significant discrepancy in the way chiropractors believed the general public and medical practitioners should perceive the profession and the way it was actually perceived. Whilst the vast majority of chiropractors believed the profession should be considered primary health care with focused (55%) or broad (36%) scope, in reality, most believed that both the general public and medical practitioners had no clear perception of the profession or perceived the profession as offering specialist care (Identity Consultation: Results and Recommendations, 2005).

## **2.10 CHIROPRACTIC RELATIVE TO PHYSIOTHERAPY**

Confusion between the chiropractic and physiotherapy professions exists because the roles of chiropractors and physiotherapists have some common characteristics (Naidoo and Buhler, 2009). Both are concerned with the holistic treatment of a patient and may work in multidisciplinary teams to achieve common goals, thus a good understanding of each others scope of practice may lead to better working relationships with effective referrals (Naidoo and Buhler, 2009). Ultimately, formulating specific identities for each profession and increasing mutual awareness could assist in developing strategies to correct possible misconceptions and stereotypes of each others professions to enhance patient care. In order to understand where this confusion arises from, the similarities and the differences of the two professions' scope of practices needs to be highlighted. The scope of practice for chiropractic has been defined in section 2.6.

According to the South African Society of Physiotherapy (2009), physiotherapy is concerned with: *'assessing, treating and preventing human movement disorders, restoring normal function or minimizing dysfunction and pain in adults and children with physical impairment, to enable them to achieve the highest possible level of independence in their lives; preventing recurring injuries and disability in the workplace, at home, or during recreational activities and promoting community health for all age groups'*.

The following treatments are defined within the scope of physiotherapy practice in South Africa (South African Society of Physiotherapy, 2009);

- Mobilization and manipulation,
- Electrotherapy,
- Exercise therapy,
- Hydrotherapy,
- Traction therapy,
- Thermal therapy,
- Massage therapy,
- Acupressure,
- Patient education,
- Biofeedback and
- Assistance with walking aids, splints and appliances.

There are many similarities in the scope of practice of chiropractic and physiotherapy. However, there are differences; chiropractors are able to administer acupuncture (or dry needling) and make use of x-rays as a diagnostic tool. Physiotherapists, on the other hand, are granted hospital privileges (South African Society of Physiotherapy, 2009) whereas chiropractors are not (Gaumer, Koren and Gemmen, 2002). Chiropractors are registered with the AHPCSA indicating that they fall into CAM (AHPCSA, 2007) whereas, physiotherapists are required to register with the Health Professions Council of South Africa (2009), thus indicating their mainstream affiliation. Chiropractic education in South Africa extends over a six year

period, whereas physiotherapy education extends over a four year period (Naidoo and Buhler, 2009).

## **2.11 SUMMARY**

The chiropractic profession has struggled since its inception to find a unified identity; several international studies and sociologists have highlighted the discrepancies within the profession and the need for the profession to unite under one clear identity. The unified identity will enable the profession to market itself to the public and other health care practitioners, enabling it to find its niche in the health care market. This study aims to determine how South African chiropractors perceive their profession and how they would like their profession to be perceived by the public and medical practitioners.

## **CHAPTER 3: METHODOLOGY**

### **3.1 INTRODUCTION**

This chapter covers the study design, methodology used, sampling procedures employed, inclusion and exclusion criteria, methods employed and data analysis.

### **3.2 STUDY DESIGN**

This study was a population based demographic study which made use of a descriptive, observational, cross sectional design (where a group is examined at one point in time) (Hulley, Cummings, Browner, Grady and Newman, 2007). This study was used to determine the perceptions of chiropractors regarding the identity of the chiropractic profession in South Africa. It was quantitative in nature (Whisker, 2001) making use of a structured questionnaire (Appendix J) to collect the data.

Questionnaires are generally considered to be an appropriate tool for determining attitudes, opinions and perceptions (Booyesen, 2003) provided that the questionnaire has been demonstrated to be reliable and valid (Mouton, 1996).

Based on the design and methodology as presented in more detail in this chapter, this research was approved by the Faculty of Health Sciences Research Committee and the ethics clearance certificate was issued (Appendix A), indicating that this research fulfilled the requirements of the Declaration of Helsinki (1975).

### **3.3 METHODOLOGY**

Survey research is a method of collecting information from a large and dispersed group of people (Dyer, 1997). The primary data from this research was collected by means of a descriptive questionnaire. The questionnaire was modified and developed by the researcher after obtaining permission from the chairperson of the WFC (Appendix B) (WFC, 2005).

### **3.4 ADVERTISING**

No advertising was used by the researcher as the total population of chiropractors in South Africa were invited to take part in the study. A list was purchased from the AHPCSA, as the respondents were required to be registered with this statutory body.

### **3.5 SAMPLING PROCEDURE**

#### **3.5.1 Participant Sampling**

The list obtained from the AHPCSA (2008), contained all the physical and email addresses of registered chiropractors in South Africa. Chiropractors registered with the AHPCSA but not currently practising in South Africa were excluded from the study.

#### **3.5.2 Sample Size**

Five hundred and six chiropractors (n=506) were registered with the AHPCSA (2008) at the time the research was conducted. After inclusion and exclusion criteria were applied, the total sample size was three hundred and ninety eight (n=398). A minimum return rate of 30% was considered statistically significant (Esterhuizen , 2008).

#### **3.5.3 Allocation**

All respondents were allocated into one group, with subgroups only being necessary during statistical analysis.

#### **3.5.4 Method**

A self-administered questionnaire was distributed to the population (n=398) of chiropractors who met the inclusion criteria, to gather the relevant information. The type of recruitment was total population selection. However, respondents had a choice as to whether they wanted to take part in the study or not, a process Dyer (1997) referred to as self selection. However, Dyer (1997) further stated that this



may lead to error in bias, as the whole population group may not respond and therefore would not be represented (Dyer, 1997). However, it is inevitable in any sampling process, that a sample less than a perfect representation of the population will result (Dyer, 1997).

### **3.6 SAMPLE CHARACTERISTICS**

In order to be accepted for participation in the study, the following criteria had to be met:

#### **3.6.1 Inclusion criteria**

- All participants had to be registered with the AHPCSA.
- All participants had to be either residing in and/or practising within South Africa.

#### **3.6.2 Exclusion criteria**

- Chiropractors who participated in the focus group and pilot study were excluded from the study.

### **3.7 PROCEDURE**

Once the questionnaire was developed in its entirety, the questionnaire was emailed or posted (when there was no email address available) to the sample population of chiropractors (n=398) in South Africa. The questionnaire (Appendix J) was accompanied by a Letter of Information (Appendix C) which introduced the research project. The Letter of Information included the title of the study, the aims of the study and re-assured respondents of confidentiality and anonymity of their responses. It also informed respondents that their participation in the study was voluntary. Informed consent was given by the respondent through the very act of filling in and returning the questionnaire. A time frame of four weeks was allowed for the return of the questionnaires. If the minimum return rate of 30% (n=119) had not been received within this time, non respondents were contacted by telephone and requested to complete the questionnaire. The questionnaire was then re-emailed or re-sent via

post. It has been shown that multiple mailings may increase the diversity of the respondent pool (Lapane, Quillian and Hughes, 2007). The questionnaires returned by email were sent to a neutral third party (charmak@dut.ac.za) at the Department of Chiropractic and Somatology. The name of the respondent was removed and the questionnaire was printed by the receiver and given to the researcher to maintain confidentiality so to restrict access to who had responded. The receiver crossed the names of the respondents off the list of registered chiropractors in South Africa obtained from the AHPCSA, which indicated who had responded. Respondents using the postal service were required to post the completed questionnaire using the enclosed stamped, pre-addressed envelope to:

The Research Co-ordinator  
Department of Chiropractic and Somatology  
Durban University of Technology  
11 Ritson Road  
Berea  
4000

The files containing the returned questionnaires were kept safe and confidential in a locked cabinet. Only the researcher and her supervisors had access to them. The questionnaires and any other paperwork used to analyse the results was stored in the Department of Chiropractic and Somatology and will be shredded after five years.

### **3.8 METHOD OF DISTRIBUTION AND DATA COLLECTION**

A list of registered chiropractors was obtained from the AHPCSA. From this a sample size of 398 chiropractors ( $n=398$ ) was obtained once the inclusion criteria had been met. The questionnaires were emailed to 289 chiropractors, and where email addresses were not available, were posted to 109 chiropractors. Each chiropractor was sent the following;

- A Letter of Information (Appendix K).
- The Questionnaire (Appendix J).

### **3.9 QUESTIONNAIRE BACKGROUND AND DESIGN**

Permission was granted by the chairperson of the WFC to utilise their questionnaire used in the WFC Identity Consultation survey (Appendix B). The validity of the WFC questionnaire was established after it underwent pilot testing (Carey, Clum and Dixon, 2005). The questionnaire was modified in order to suit a South African audience and the research objectives.

The questionnaire included sections on; demographics, how chiropractors believe the general public and medical doctors to perceive chiropractic, how chiropractors see themselves relative to physiotherapists and questions relating to the WFC survey results.

The questionnaire design employed a simple answering system using lickert scales and limited open ended questions. Questionnaires are the tool of choice for a study of this nature as it ensures that bias of the researcher is kept to a minimum and there is less chance of misinterpretation of the results (Mouton, 1996).

An English questionnaire was distributed as the medium of instruction for chiropractic education in South Africa is English.

### **3.10 FOCUS GROUP**

Focus groups complement surveys and are used to aid in the design of a questionnaire; as a result they provide validity by providing additional detail and context for a survey. By providing ethnological data, the focus group can by transcription become very useful when designing the questionnaire. This transcription is created by a focus group discussing the wording of a question or offering advice on how the whole questionnaire would appear to respondents (Bernard, 2000).

In order to adapt the questionnaire to a South African context and ensure that the questionnaire met the minimum requirements as set out by Mouton (1996) and Bernard (2000), a focus group was organised in order to establish the 'face validity' of the adapted pre-focus group questionnaire (Appendix F). 'Face validity' is determined by an agreement between the researcher and those with a stake in the questionnaire, that 'on the face' of it the questionnaire seems valid (Bernard, 2000). The focus group also aimed to develop a questionnaire that limited potential misinterpretation by the respondents (Scollon and Scollon, 1995). Most importantly, it ensured that the questionnaire will be effective in a South African context, with the face validity adapted to suit a South African audience and the 'construct validity' remaining unchanged (Mouton, 1996). 'Construct validity' ensures that the questionnaire accurately measures what is supposed to be measured (Graziano and Raulin, 2004).

According to the requirements set out by Mouton (1996), focus groups use homogenous participants, rely on a relatively structured interview and have six to ten participants per group (Mouton, 1996). The group for this study consisted of six people; the researcher, her supervisor, co-supervisor and three practising chiropractors. The participants were enlisted by word of mouth (Gibbs, 1997; Morgan, 1998) with five participants coming forward and expressing interest in attending the focus group. The group met to discuss the questionnaire and the issues that it covered, thus ruling out any ambiguity and confusion. Relevant questions were included while some irrelevant questions were omitted. This determined face validity and ensured content validity of the questionnaire (Bernard, 2000).

Before commencing, each participant was required to read the Letter of Information and sign the Informed Consent Form (Appendix C). A Confidentiality Statement (Appendix D) and Code of Conduct Statement (Appendix E) was signed by all of the participants. This was to ensure that the members of the focus group would not disclose any information to the rest of the study sample. Each participant was also

given a copy of the Questionnaire (Appendix F) so that they could read it before the discussion began so as to facilitate the process. The participants were asked to comment on how the questionnaire could be modified to accurately record the relevant information required in the study.

The questions were discussed in sequential order, following the procedure by Morgan (1998). The changes effected by the focus group included:

- Grammar changes,
- Reduction of ambiguous questions,
- Sequence of the questions and
- Inclusion of pertinent questions and further instructions.

A detailed list of all the changes made can be found in Appendix H. These changes established the 'face validity' (Bernard, 2000) of the questionnaire, while ensuring that the content of the questionnaire was not altered. If inconsistencies were found or changes proposed, a unanimous vote was required to institute the change. A video of the focus group proceedings was made (Gibbs, 1997) (Appendix L). This acts as evidence of the individuals involved and the content of the discussion. This video was then used to write up the transcripts of the focus group (Appendix G). The post focus group questionnaire was then compiled.

### **3.11 PILOT STUDY**

After the focus group meeting, four chiropractors from the Department of Chiropractic and Somatology completed and critiqued the questionnaire. The purpose of this was to determine how long it would take to complete the questionnaire, to identify problem areas in the questionnaire and ensure the questions were clear and the questionnaire was user friendly. The pilot study participants were excluded from the main study. A detailed list of the changes can be found in Appendix I. Through this exercise, the final questionnaire was developed and printed for use in this study (Appendix J).

### **3.12 COMPONENTS OF THE QUESTIONNAIRE**

The questionnaire included sections on;

- Demographics (questions 1-17),
- How chiropractors perceive the identity of the chiropractic profession, (question 18),
- How chiropractors believe the general public to perceive chiropractic (questions 19-28),
- How chiropractors see themselves relative to physiotherapy (questions 29-30),
- How chiropractors believe medical doctors to perceive chiropractic (questions 31-34) and
- Questions relating to the WFC Identity Consultation results (questions 35-39).

### **3.13 STATISTICAL ANALYSIS OF THE QUESTIONNAIRE**

Once the required sample size of participants had returned the questionnaires and the data had been entered into a Microsoft excel spreadsheet, statistics were analysed by a qualified statistician. SPSS version 15.0 (SPSS Inc., Chicago, Illinois, USA) was used to analyse the data. Categorical variables were described using frequency tables and bar charts (Esterhuizen, 2008).

## CHAPTER FOUR: RESULTS

### 4.1 INTRODUCTION

Results of the statistical analysis of the data are presented in this chapter. Descriptive objectives were analysed with frequency tables and graphs. The results will be presented according to the research objectives:

- **4.3 Objective 1:**  
To determine the demographics of South African chiropractors.
- **4.4 Objective 2:**  
To determine South African chiropractors' perceptions of the identity of the chiropractic profession.
- **4.5 Objective 3:**  
To determine how South African chiropractors' perceive the public view of the identity of the chiropractic profession.
- **4.6 Objective 4:**  
To determine how South African chiropractors' see chiropractic relative to physiotherapy.
- **4.7 Objective 5:**  
To determine how South African chiropractors' perceive medical doctors to view the identity of the chiropractic profession.
- **4.8 Objective 6:**  
To determine South African chiropractors' knowledge of the WFC's Identity Consultation.

## **4.2 RESULTS**

### **4.2.1 Primary Data**

Primary sources included information collected from the respondents of the study in the form of a completed Questionnaire (Appendix J).

### **4.2.2 Secondary Data**

Data from the literature, internet, books and journals was used to construct arguments and hypotheses with which to compare the outcome of the results in this research study.

### **4.2.3 Key abbreviations for this chapter**

<b>n</b>	=	Sample size
<b>%</b>	=	Percentage
<b>Q</b>	=	Question

### **4.2.4 Response Rate**

Of the total sample size of 506 chiropractors registered with the AHPCSA, 398 (n=398) met the inclusion criteria of the study. Three hundred and ninety eight questionnaires were emailed and or posted to chiropractors in the nine provinces of South Africa. After the four week time frame, the required response rate had not been met, the questionnaire was then resent approximately 7 times to the non respondents until the minimum response rate was met. It was felt that the maximum number of respondents had been achieved due to poor response rate. One hundred and twenty questionnaires were ultimately returned for analysis. Thus the overall response rate was 30.15%.



### **4.3 OBJECTIVE 1: TO DETERMINE THE DEMOGRAPHICS OF SOUTH AFRICAN CHIROPRACTORS**

The Tables that follow reflect the number of respondents (Frequency/Count) and percentages for each of the demographic variables.

#### **4.3.1 Gender of Respondents**

*Q1: Gender*

The data in Table 1 reflects that the majority (60.8%) of the respondents were male.

**Table 1: Gender of respondents**

	Frequency	Percent
Male	73	60.8
Female	47	39.2
Total	120	100.0

#### 4.3.2 Age

Q2: *What is your age?*

The data in Table 2 reflects that the majority (45%) of the respondents were between 30-39 years of age. The age range was from 25 to 79 years of age.

**Table 2: Age group categories**

	Frequency	Percent
20-29 years	40	33.3
30-39 years	54	45.0
40 years and older	23	19.2
Not indicated	3	2.5
Total	120	100.0

### 4.3.3 Ethnic Group

Q3: *Ethnic group (statistical purposes only)*

Table 3 reflects that the majority (89.2%) of the respondents were White.

**Table 3: Ethnic group**

	Frequency	Percent
White	107	89.2
Indian	11	9.2
Black	1	0.8
Other	1	0.8
Total	120	100.0

#### 4.3.4 Institution of Graduation

*Q4: Which institution did you graduate from?*

Table 4 reflects that 79.1% of respondents graduated from South African institutions whilst 20% graduated overseas.

**Table 4: Institution of graduation**

	Frequency	Percent
Durban University of Technology, South Africa	64	53.3
University of Johannesburg, South Africa	31	25.8
Palmer College, United States of America	14	11.7
Life University, United States of America	3	2.5
Anglo European College of Chiropractic, United Kingdom	2	1.7
Lincoln Chiropractic College, United States of America	2	1.7
Macquarie University, Australia	1	0.8
National University of Health Sciences, United States of America	1	0.8
Royal Melbourne Institute of Technology, Australia	1	0.8
Not indicated	1	0.8
Total	120	100.0

#### 4.3.5 Chiropractic Qualification

*Q5: What chiropractic qualification do you hold?*

Table 5 reflects that a Masters level qualification in Chiropractic (M.Tech: Chiropractic) was held by the majority of the respondents.

**Table 5: Chiropractic qualification**

	Frequency	Percent
M.Tech: Chiropractic	92	76.7
Doctor of Chiropractic (DC)	28	23.3
Total	120	100.0

#### 4.3.6 Other Qualifications

*Q6: Do you hold any other qualifications?*

Table 6 reflects that less than half (37.5%) of the respondents held qualifications other than the M.Tech: Chiropractic or DC qualification.

**Table 6a: Other qualifications held**

	Frequency	Percent
No	75	62.5
Yes	45	37.5
Total	120	100.0

Table 6a lists the other qualifications that were held. Some participants held more than one qualification.

**Table 6b: Qualifications Specified**

	Frequency		Frequency
Bachelor of Science	11	Diploma in Iridology	1
Master of Science: Sports Medicine	7	Diplomate of the American Academy of Pain Management	1
International Chiropractic Sports Science Diploma	4	Diplomate of the American Board of Chiropractic Orthopedists	1
Certified Chiropractic Extremities Practitioner	3	Emotional Freedom Technique Certificate	1
Pilates qualification	3	Certified Chiropractic Sports Practitioner	1
National Diploma in Marketing	3	Certificate in Pediatric Chiropractic	1
Bachelor of Commerce	2	Diploma in Chiropractic	1
Certified Cash Flow Consultant	2	Diploma in Cranio Sacral Therapy	1
Acupuncture	1	Fédération Internationale de Chiropratique du Sport Diploma	1
Agricultural Diploma	1	Honors in Professional Clinical Counseling	1
Bachelor of Technology: Bio-Medical Technology	1	Massage Diploma	1
Brigade Air Liason Officer	1	Bachelor of Medicine	1
Diploma in Biopuncture	1	Chiropractic Philosophy Degree	1
Diploma in Banking	1	Diploma in Sports Massage	1
Beauty Therapy	1	Diploma in Reflexology	1
Body Alignment	1		
Total respondents with other qualifications			45

#### 4.3.7 Number of Years since Graduating

*Q7: How many years has it been since you graduated?*

Table 7 shows that a large proportion of the respondents (75%) had graduated within the past 10 years, with 25% of the respondents graduating more than 11 years ago.

**Table 7: Number of years since graduating**

	Frequency	Percent
5 or less	52	43.3
6 to 10	38	31.7
11 – 20	13	10.8
More than 20	17	14.2
Total	120	100.0

#### 4.3.8 Role in Chiropractic

*Q8: Which of the following best describes your role in chiropractic? (You may mark more than one box).*

Table 8 reflects that the majority (77.5%) of the respondents were in full time clinical practice. Respondents were able to mark more than one box, thus they could be involved in more than one role.

**Table 8: Role in chiropractic**

*(Multiple response)*

	Frequency	Percent
Clinical practice- Full time	93	77.5
Clinical Practice - Part time	23	19.2
Administration	12	10.0
Research	11	9.2
Academia	8	6.7
Any other role	6	5.0
Retired	1	0.8



#### 4.3.9 Setting of Practice

*Q9: If you are in clinical practice, which best describes the setting of your practice?*

Table 9 reflects that the majority of the respondents (58.3%) worked in a private practice.

**Table 9: Setting of Practice**

	Frequency	Percent
Private Practice	70	58.3
Multidisciplinary Practice	45	37.5
Practice in a hospital setting	4	3.3
Not indicated	1	0.8
Total	120	100.0

#### 4.3.10 Area of Practice

*Q10: In what area is your practice situated?*

Table 10 reflects that most (72.5%) of the respondents practiced in an urban setting.

**Table 10: Area of practice**

	Frequency	Percent
Urban	87	72.5
Sub – urban	29	24.2
Rural	3	2.5
Not indicated	1	0.8
Total	120	100.0

#### 4.3.11 Number of years in active practice

*Q11: How many years have you been in active practice?*

Table 11 reflects that most of the respondents (46.7%) have been in practice for less than 5 years.

**Table 11: Number of years in active practice**

	Frequency	Percent
5 or less	56	46.7
6 to 10	34	28.3
11 – 20	13	10.8
More than 20	16	13.3
Not indicated	1	0.8
Total	120	100.0

#### 4.3.12 Chiropractic Manipulative Techniques used

*Q12: What chiropractic manipulative technique do you use in your practice?*

Respondents were able to mark more than one box, thus many respondents employed a range of techniques in practice. Table 12a demonstrates that the vast majority of the respondents practiced diversified chiropractic (94.2%).

**Table 12a: Chiropractic manipulative techniques used**  
(Multiple response)

	Frequency	Percent
Diversified	113	94.2
SOT	17	14.2
Activator	30	25.0
Best	8	6.7
Gonstead	28	23.3
Other	24	20.0

Table 12b illustrates what 'other' methods were employed by 20% of the respondents.

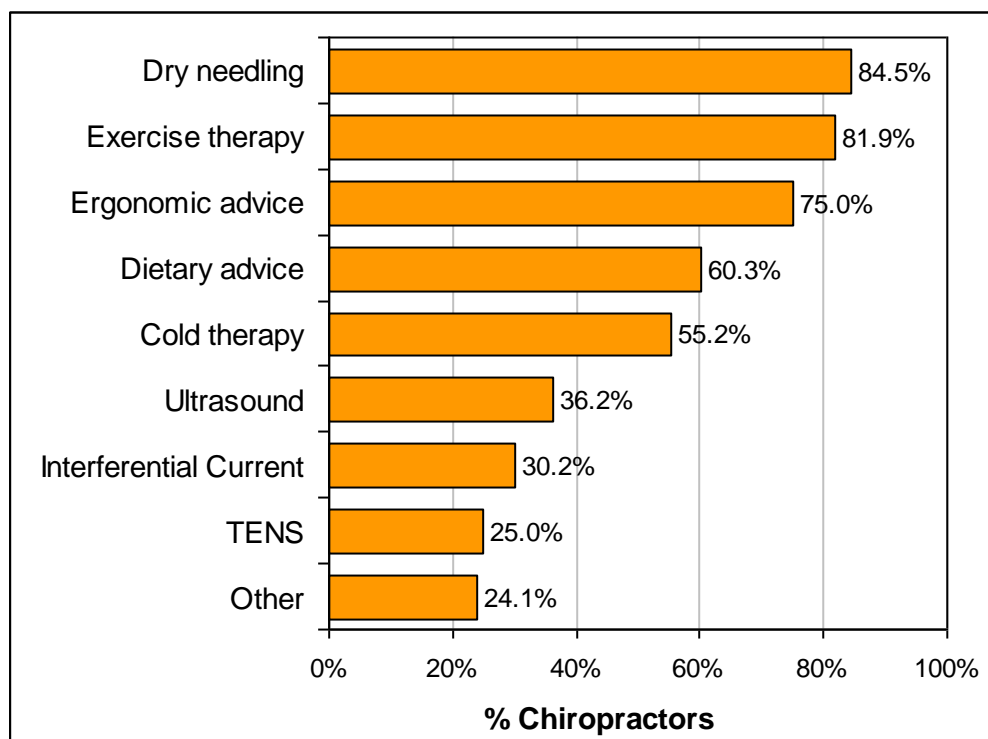
**Table 12b: Other manipulative techniques used**  
(Multiple response)

	Frequency
Thompson technique	7
Toggle recoil	3
Combination of several techniques	2
Palmer specific	2
Pettibon spinal mechanics	2
Advanced Biostructural Correction	1
Alexander technique	1
ART and AK	1
Derefield	1
Flexion distraction	1
Harrisons biophysics	1
Integrator	1
Kinesiology	1
Muscle activation	1
Neuro impulse control	1
Percefield	1
Torque release technique	1
Visceral manipulation	1
Total	24

#### 4.3.13 Modalities used in Practice

Q13: *What modalities do you use in your practice? (You may mark more than one block).*

Respondents were able to mark more than one box, indicating that they made use of a range of modalities in practice. Figure 1 shows that the most popular modality used in practice was dry needling (84.5%).



**Figure 1: Modalities used in practice**

*(Multiple response)*

Table 13 shows what ‘other’ modalities were employed by 24.1% of the chiropractic population in South Africa. Myofascial release and soft tissue therapy were the most utilized.

**Table 13: ‘Other’ modalities used in practice**

	Frequency
Myofascial release and soft tissue therapy	6
Kinesiotape	4
Rehabilitation	4
Biopuncture	3
Ischaemic compression	3
Acupuncture	2
Biofeedback	2
Laser	2
Strapping	2
Traction	2
Postural disciplines	2
Advise on benefits of other health care providers	1
BioElectroMagnetic	1
Infrared	1
Heat	1
Proprioceptive Neuromuscular Facilitation	1
Orthotic advise	1
Cross frictions	1
Cupping	1
TENS	1
Total	29

#### 4.3.14 Common Terminology

*Q14: Which term do you most commonly use?*

Table 14 shows that the majority (72.5%) of the respondents used the term 'adjustment' whilst only 21.7% used the term 'manipulation'.

**Table 14: Common terminology**

	Frequency	Percent
Adjustment	87	72.5
Manipulation	26	21.7
Both	5	4.2
Not indicated	2	1.7
Total	120	100.0

#### 4.3.15 What area of the body is Adjusted/Manipulated in Practice?

Q15: *In your practice, what do you adjust/manipulate?*

Figure 2 shows that the majority (92.5%) of the respondents adjusted the spine and the extremities.

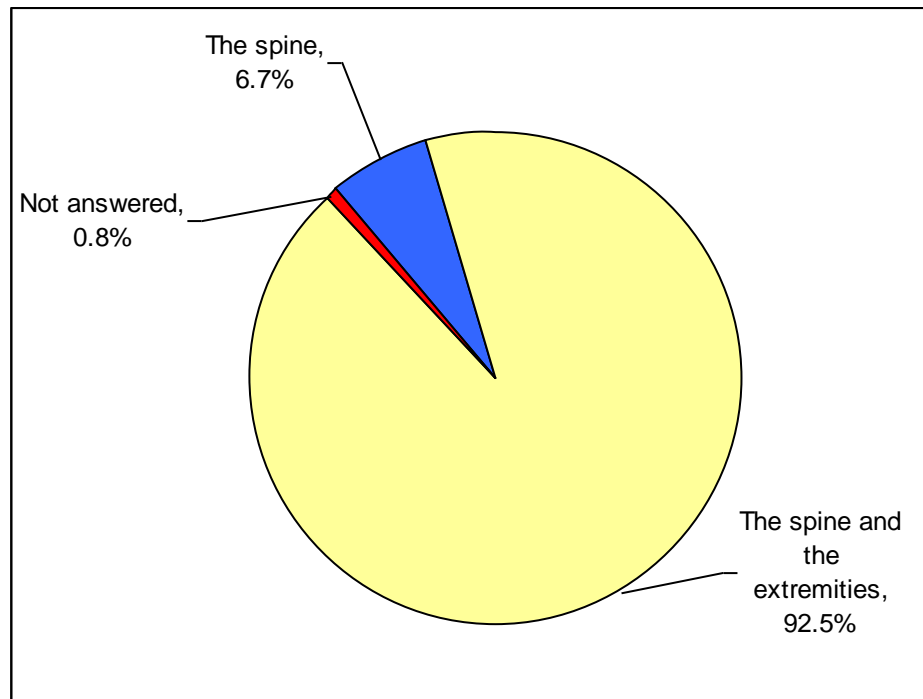


Figure 2: What area of the body is adjusted/manipulated in practice



#### 4.3.16 Philosophical Orientation of Chiropractor

*Q16: Using the following definitions, what kind of chiropractor do you consider yourself to be? Please mark one box per line.*

In accordance with the WFC results, who combined 'strongly agree' and 'agree'/'strongly disagree' and 'disagree' into one category being 'strongly agree'/'strongly disagree', this study will do likewise.

Table 15 demonstrates that the majority of respondents considered themselves to be mixer chiropractors (59.2%), followed closely by those who practised evidence based medicine (59.1%).

**Table 15: Philosophical orientation of chiropractor**

	Straight		Mixer		Evidence based Medicine	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
1 Strongly agree	12	10.0	41	34.2	52	43.3
2 Agree	9	7.5	30	25.0	19	15.8
3 Somewhat agree	10	8.3	9	7.5	19	15.8
4 Undecided	14	11.7	12	10.0	10	8.3
5 Somewhat disagree	24	20.0	10	8.3	13	10.8
6 Disagree	27	22.5	8	6.7	3	2.5
7 Strongly disagree	19	15.8	6	5.0	3	2.5
Not answered	5	4.2	4	3.3	1	0.8
Total	120	100.0	120	100.0	120	100.0

#### 4.3.17 International Exposure

*Q17: Have you practiced overseas?*

Table 16a shows that less than a third (28.3%) of the respondents had practiced overseas.

**Table 16a: International Exposure**

	Frequency	Percent
Yes	34	28.3
No	86	71.7
Total	120	100.0

Table 16b indicates specifically where these chiropractors practiced overseas,

**Table 16b: Where have you practiced overseas**  
(Multiple response)

	Frequency	Percent
UK	14	41.2
USA	10	29.4
Australia	4	11.7
Ireland	4	11.7
Namibia	2	5.8
Malaysia	2	5.8
Hawaii	1	2.9
Kuwait	1	2.9
Italy	1	2.9
Portugal	1	2.9
Netherlands	1	2.9
Caribbean	1	2.9
Czech Republic	1	2.9
Spain	1	2.9
Europe	2	2.9
Total	34	100.0

#### 4.4 OBJECTIVE 2: TO DETERMINE SOUTH AFRICAN CHIROPRACTORS' PERCEPTIONS OF THE IDENTITY OF THE CHIROPRACTIC PROFESSION

##### 4.4.1 Public Identity

*Q18: Please indicate the extent to which you agree or disagree with the following statements:*

*Statement a) it is important for the profession to have a clear public identity,*

*Statement b) the chiropractic profession has a clear public identity.*

Table 17a reflects that the majority (90%) of the respondents 'strongly agreed' that it is important for a profession to have a clear public identity.

**Table 17a: It is important for a profession to have a clear public identity**

	Frequency	Percent
1 Strongly disagree	4	3.3
2 Disagree	3	2.5
3 Somewhat disagree	0	0
4 Undecided	0	0
5 Somewhat agree	5	4.2
6 Agree	20	16.7
7 Strongly agree	88	73.3
Total	120	100.0

Table 17b showed that only 1.7% 'strongly agreed' that the profession has a clear public identity.

**Table 17b: The chiropractic profession has a clear public identity**

	Frequency	Percent
1 Strongly disagree	20	16.7
2 Disagree	25	20.8
3 Somewhat disagree	31	25.8
4 Undecided	29	24.2
5 Somewhat agree	11	9.2
6 Agree	0	0
7 Strongly agree	2	1.7
Not answered	2	1.7
Total	120	100.0

#### 4.5 OBJECTIVE 3: TO DETERMINE HOW SOUTH AFRICAN CHIROPRACTORS' PERCEIVE THE PUBLIC VIEW OF THE IDENTITY OF THE CHIROPRACTIC PROFESSION

##### 4.5.1 Perceived Current Scope of Practice

Q19: Do you think that the chiropractic profession **is currently perceived** by the general public in South Africa as offering; primary health care: focused scope, primary health care: broad scope, or specialist care?

Table 18a and Figure 3; reflect that the majority of the respondents (45%) felt that the general public currently has no clear perception of the chiropractic profession.

**Table 18a: Perceived current scope of practice**

	Frequency	Percent
Primary health care: focused scope	42	35.0
Primary health care: broad scope	7	5.8
Specialist care	17	14.2
No clear perception of the chiropractic profession	54	45.0
Total	120	100.0

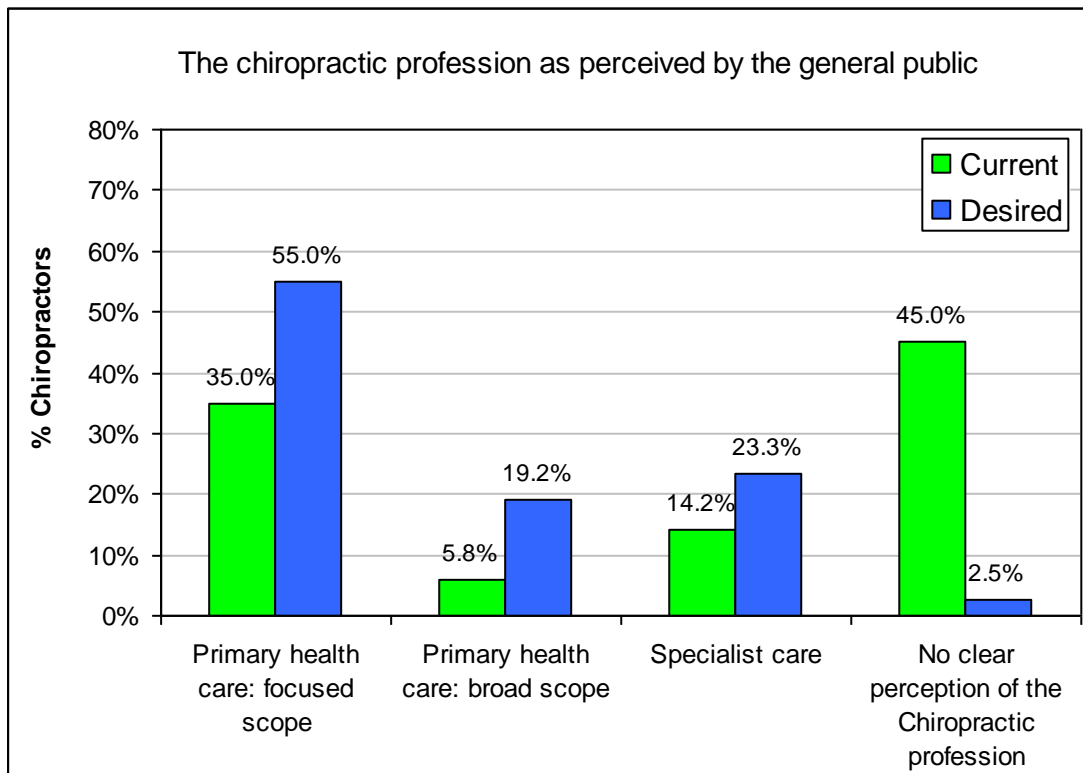
##### 4.5.2 Perceived Desired Scope of Practice

Q20: Again, using the definitions provided, do you think the chiropractic profession **should be perceived** by the general public in South Africa as offering; primary health care: focused scope, primary health care: broad scope, or specialist care?

Table 18b and Figure 3 reflect that the majority (55%) of the respondents would like the general public to perceive the chiropractic profession as offering primary health care: focused scope.

**Table 18b Desired scope of practice**

	Frequency	Percent
Primary health care: focused scope	66	55.0
Primary health care: broad scope	23	19.2
Specialist care	28	23.3
No clear perception of the Chiropractic profession	3	2.5
Total	120	100.0



**Figure 3: Current versus desired scope of practice**

#### 4.5.3 Perceived Current Position in the Health Care System

Q21: *Using the definitions below, do you think the chiropractic profession and its services are **currently perceived** by the general public in South Africa as mainstream or complementary and alternative?*

Table 19a and Figure 4 demonstrate that the majority (92.5%) of the respondents felt that the general public currently perceived chiropractic as offering a complementary and alternative health care service.

**Table 19a: Perceived current position in health care system**

	Frequency	Percent
Mainstream	9	7.5
Complementary & Alternative	111	92.5
Total	120	100.0

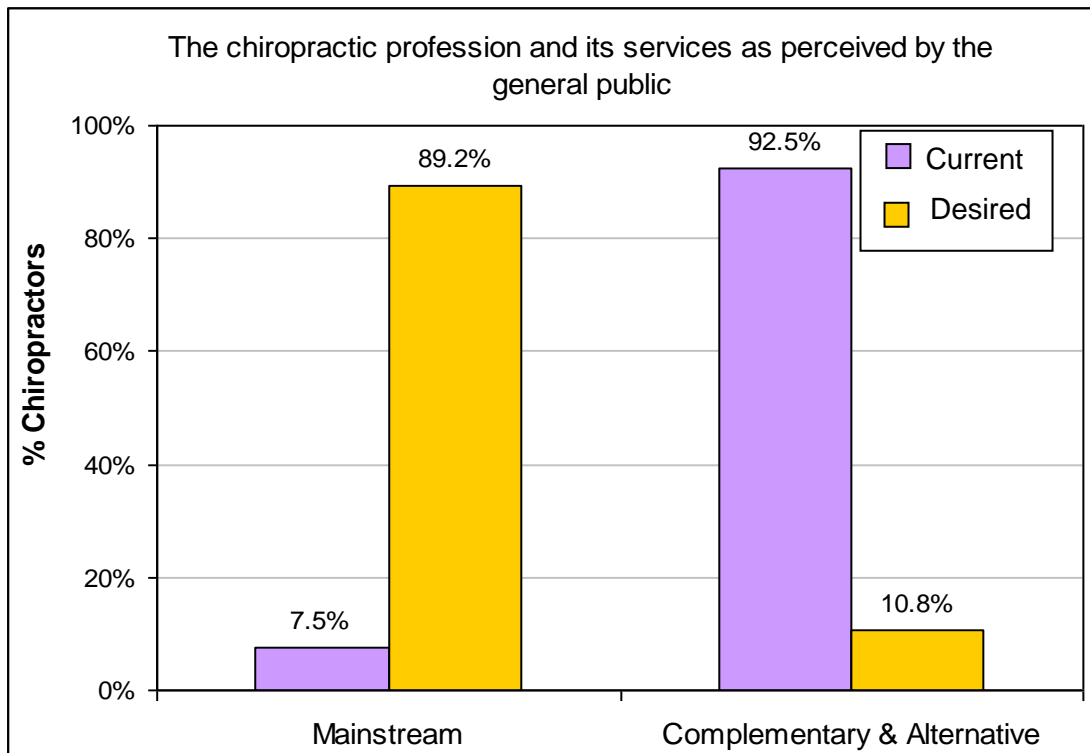
#### 4.5.4 Desired Position in Health Care System

Q22: *Using the above definitions provided, do you think the chiropractic profession and its services **should be perceived** by the general public in South Africa as mainstream or complementary and alternative?*

Table 19b and Figure 4 demonstrate that the majority (89.2%) of the respondents would like the general public to perceive chiropractic as offering mainstream health care.

**Table 19b: Desired position in health care system**

	Frequency	Percent
Mainstream	107	89.2
Complementary & Alternative	13	10.8
Total	120	100.0



**Figure 4: Current versus desired position of chiropractic in the health care system**

#### 4.5.5 Current Perceptions of Chiropractic in South Africa as Determined by Chiropractors

*Q23: Please indicate to what extent you agree with the following statement.*

*From my perspective as a chiropractor, chiropractic health care **is currently** perceived by the general public in South Africa as...*

In the WFC Identity Consultation, the results combined 'does not describe public perception at all' and 'does not satisfactorily describe perception' into one category, being 'does not describe public perception at all', similarly, 'describes their perception satisfactorily' and 'describes their perception perfectly', were combined to be 'describes public perception perfectly'. The results of this were calculated accordingly.

Table 20a shows that the majority of respondents (88.2%) 'strongly agreed' that the public saw chiropractic as offering the management of back and neck pain, however, less than a third (30.9%) 'strongly agreed' that this had any impact on general health.



**Table 20a: Current perceptions of chiropractic in South Africa as determined by chiropractors**

	1 Does not describe public perception at all		2 Does not satisfactorily describe their perception		3 Does not describe their perception to some extent		4 Undecided		5 Describes their perception to some extent		6 Describes their perception satisfactorily		7 Describes public perception perfectly	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Non-drug/non-surgical health care	2	1.7	1	0.8	6	5.0	19	16.0	30	25.2	44	37	17	14.3
Primary health care	13	10.9	16	13.4	40	33.6	32	26.9	11	9.2	5	4.2	2	1.7
Wellness care	7	6.0	8	6.8	26	22.2	26	22.2	34	29.1	13	11.1	3	2.6
The management of back & neck pain	1	0.8	0	0	1	0.8	4	3.3	13	10.8	48	40.0	53	44.2
The management of back & neck pain & their impact on general health	6	5.0	6	5.0	8	6.7	34	28.6	28	23.5	30	25.2	7	5.9
The management of neuromusculoskeletal conditions	4	3.4	1	0.8	7	5.9	17	14.3	41	34.5	32	26.9	17	14.3
The management of neuromusculoskeletal conditions & their impact on general health	7	5.9	8	6.7	20	16.8	43	36.1	23	19.3	13	10.9	5	4.2
The management of spinal problems	1	0.8	0	0	1	0.8	6	5.1	24	20.3	47	39.8	39	33.1
The management of spinal problems & their impact on general health	4	3.4	5	4.2	14	11.9	36	30.5	27	22.9	23	19.0	9	7.6
The management of the vertebral subluxation	15	12.6	17	14.3	16	13.4	17	14.3	12	10.1	16	13.4	26	21.8
The management of the vertebral subluxation & its impact on general health	21	17.6	21	17.6	19	16.0	21	17.6	14	11.8	14	11.8	9	7.6

#### 4.5.6 Desired Perceptions of Chiropractic in South Africa as Determined by Chiropractors

*Q24: Please indicate to what extent you agree with the following statement.*

From my perspective as a chiropractor, **I would like** chiropractic health care to be perceived by the general public in South Africa as...

Table 20b shows that the majority of the respondents would like the public to perceive chiropractic to offer the management of neuromusculoskeletal conditions and their impact on general health (88.2%).

**Table 20b: From my perspective as a chiropractor, I would like chiropractic health care to be perceived by the general public in South Africa as;**

	1 Does not describe public perception at all		2 Does not satisfactorily describe their perception		3 Does not describe their perception to some extent		4 Undecided		5 Describes their perception to some extent		6 Describes their perception satisfactorily		7 Describes public perception perfectly	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Non-drug/non-surgical health care	2	1.7	2	1.7	3	2.5	11	9.2	14	11.8	23	19.3	64	53.8
Primary health care	1	0.8	1	0.8	6	5.0	4	3.4	13	10.9	22	18.5	72	60.5
Wellness care	3	2.5	0	0	2	1.7	5	4.2	9	7.6	18	15.1	82	68.9
The management of back & neck pain	3	2.5	1	0.8	4	3.4	6	5.0	7	5.9	15	12.6	83	69.7
The management of back & neck pain & their impact on general health	2	1.7	1	0.8	2	1.7	5	4.2	6	5.0	19	16.0	84	70.6
The management of neuromusculoskeletal conditions	3	2.5	1	0.8	1	0.8	2	1.7	9	7.6	17	14.3	86	72.3
The management of neuromusculoskeletal conditions & their impact on general health	3	2.5	1	0.8	0	0	3	2.5	7	5.9	13	10.9	92	77.3
The management of spinal problems	2	1.7	2	1.7	1	0.8	4	3.4	9	7.6	15	12.6	86	72.3
The management of spinal problems & their impact on general health	2	1.7	1	0.8	1	0.8	3	2.5	10	8.4	16	13.4	86	72.3
The management of the vertebral subluxation	11	9.2	4	3.4	5	4.2	8	6.7	6	5.0	14	11.8	71	59.7
The management of the vertebral subluxation & its impact on general health	11	9.2	4	3.4	5	4.2	7	5.9	7	5.9	6	5.0	79	66.4

#### 4.5.7 Central Importance of Identity

*Q25: Please indicate the extent to which **you agree or disagree** with the following statements. Please mark one box per line.*

The WFC Identity Consultation results, combined 'strongly disagree' and 'disagree'/'strongly agree' and 'agree' into one category, being 'strongly disagree' and 'strongly agree' respectively, the results of this study have been analysed accordingly.

Table 21 shows that the respondents 'strongly agreed' that the nervous system and the spine were of central importance to the practice of chiropractic as well as the public identity of chiropractic.

**Table 21: Central Importance of identity**

	1 Strongly disagree		2 Disagree		3 Somewhat disagree		4 Undecided		5 Somewhat agree		6 Agree		7 Strongly agree	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
The spine is of central importance to the practice of chiropractic	0	0	2	1.7	2	1.7	3	2.5	17	14.2	28	23.3	68	56.7
The spine is of central importance to the public identity of chiropractic	1	0.8	3	2.5	1	0.8	5	4.2	20	16.7	33	27.5	57	47.5
The nervous system is of central importance to the practice of chiropractic	0	0	1	0.8	2	1.7	6	5.0	12	10	31	25.8	68	56.7
The nervous system is of central importance to the public identity of chiropractic	0	0	0	0	6	5.0	14	11.7	18	15	31	25.8	51	42.5

#### 4.5.8 Importance of Chiropractic Attributes to Patients

*Q26: Patients seek chiropractic care for different reasons. In your opinion, how important are each of the following attributes of chiropractic health care **to patients**? Please mark one box per line.*

The WFC Identity Consultation results, combined 'important' and 'very important' into one category, being 'very important' the results of this study have been calculated accordingly.

Table 22 showed that the most important attributes of chiropractic to patients, according to the respondents were; reputation for effectiveness (92.5%), safety of chiropractic procedures (90.8%) and specialized knowledge and education (90.8%).

**Table 22: Importance of chiropractic attributes to patients**

	1 Not at all important		2 Unimportant		3 Somewhat unimportant		4 Undecided		5 Somewhat important		6 Important		7 Very important	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Specialized Knowledge and education	1	0.8	0	0	1	0.8	0	0	9	7.5	18	15	91	75.8
Diagnostic ability	2	1.7	0	0	0	0	3	2.5	8	6.	27	22.5	80	66.7
Non-drug/non-surgical approach	1	0.8	5	4.2	5	4.2	22	18.5	34	28.6	22	18.5	30	25.2
Manual procedures (adjusting, mobilization, manipulation, soft tissue, etc.)	1	0.8	0	0	1	0.8	4	3.3	10	8.3	28	23.3	76	63.3
Exercise/rehabilitation	1	0.8	1	0.8	6	5.0	25	21	36	30.3	20	16.8	30	25.2
Nutritional support/advice	4	3.4	6	5.0	16	13.4	29	24.4	37	31.1	14	11.8	13	10.9
Lifestyle counseling/advice	4	3.3	8	6.7	11	9.2	28	23.3	33	27.5	16	13.3	20	16.7
Availability of third party funding	4	3.3	5	4.2	12	10.0	28	23.3	30	25	26	21.7	15	12.5
Reputation for effectiveness	0	0	0	0	0	0	2	1.7	7	5.8	25	20.8	86	71.7
Safety of chiropractic procedures	0	0	0	0	0	0	5	4.2	6	5	17	14.3	91	76.5

#### **4.5.9 Attributes Important in Shaping Public Perceptions**

*Q27: In your opinion, how important are each of the following in shaping the general public's perception of the chiropractic profession?*

Table 23 shows that all the qualities/attributes were considered as 'very important' in shaping the general public perception of chiropractic. The highest responses in the 'very important' category were; spinal care expertise (95.8%), the ability to diagnose the cause of symptoms (95%), ability to manage back pain (93.4%), safety of chiropractic procedures (93.3%), hands on care (92.5%) and the ability to get the patient back to work/daily activities (90.9%).



**Table 23: Attributes important in shaping public perceptions**

	1 Not at all important		2 Unimportant		3 Somewhat unimportant		4 Undecided		5 Somewhat important		6 Important		7 Very important	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Ability to diagnose the cause of the symptoms	1	0.8	0	0	0	0	3	2.5	2	1.7	17	14.2	97	80.8
A practice model that does not involve drugs or surgery	2	1.7	2	1.7	5	4.2	18	15.0	27	22.5	16	13.3	50	41.7
Hands-on care	0	0	0	0	0	0	1	0.8	8	6.7	23	19.2	88	73.3
Preventative care	1	0.8	2	1.7	1	0.8	4	3.3	19	15.8	29	24.2	64	53.3
Quick recovery from pain and disability	1	0.8	0	0	1	0.8	5	4.2	8	6.7	22	18.3	83	69.2
Spinal care expertise	0	0	0	0	0	0	3	2.5	2	1.7	12	10	103	85.8
Ability to manage back pain	0	0	0	0	0	0	3	2.5	5	4.2	17	14.2	95	79.2
Ability to manage pain	1	0.8	1	0.8	0	0	3	2.5	10	8.3	27	22.5	78	65.0
Ability to get the patient back to work/daily activities	0	0	0	0	1	0.8	4	3.3	6	5.0	26	21.7	83	69.2
Patient-centered care	0	0	0	0	1	0.8	5	4.2	8	6.7	30	25.0	76	63.3
Level of education/training	0	0	0	0	1	0.8	3	2.5	9	7.5	21	17.5	86	71.7
Attitudes of other health care professionals	1	0.8	1	0.8	1	0.8	5	4.2	21	17.5	19	15.8	72	60.0
Attitudes of the media	1	0.8	2	1.7	2	1.7	10	8.3	16	13.3	26	21.7	63	52.5
Attitudes of government and health authorities	2	1.7	2	1.7	4	3.3	12	10.0	13	10.8	23	19.2	64	53.3
The professions different model of health	0	0	3	2.5	1	0.8	16	13.3	23	19.2	31	25.8	46	38.3
Issues of ethics, professional behavior and trust	0	0	0	0	0	0	3	2.5	11	9.2	21	17.5	85	70.8
Third party funding for care	1	0	7	5.0	8	6.7	20	16.7	18	15.0	32	26.7	34	28.3
Safety of chiropractic procedures	0	0	0	0	1	0.8	0	0	7	5.9	10	8.4	101	84.9

#### 4.5.10 Public levels of Confidence with Respect to Ethics, Education and Quality of Care

*Q28: Public levels of confidence with respect to ethics, education and quality of care*

In keeping with the WFC Identity Consultations results, 'strongly agree' and 'somewhat agree'/'strongly disagree' and 'somewhat disagree' were combined to be 'agree' and 'disagree' respectively.

Table 24 reflects that the majority of the respondents (96.8%) had concerns with respect to the ethics and professional conduct of some members of the profession having a significant impact on the level of public confidence in chiropractic health care.

**Table 24: Please indicate to what extent you agree with the following statements:**

	1 Strongly disagree		2 Somewhat disagree		3 Somewhat agree		4 Strongly agree	
	Count	%	Count	%	Count	%	Count	%
Concerns with respect to the ethics and professional conduct of some members of the profession have a significant impact on the level of public confidence in chiropractic health care	1	0.8	4	3.3	27	22.5	89	73.3
The general public is aware of the level of education of chiropractors	35	29.2	48	40.0	31	25.8	6	5.0
The general public has confidence in the quality of care provided by chiropractors	2	1.7	35	29.2	73	60.8	10	8.3

#### **4.6 OBJECTIVE 4: TO DETERMINE HOW SOUTH AFRICAN CHIROPRACTORS' SEE CHIROPRACTIC RELATIVE TO PHYSIOTHERAPY**

##### **4.6.1 Chiropractic Relative to Physiotherapy in South Africa**

*Q29: In the South African market, how do you see chiropractic relative to physiotherapy?*

Table 25 reflects that most of the respondents (60%) 'strongly agreed' that chiropractic and physiotherapy were two separate professions, they also were in agreement (68.1%) that the two professions should not be combined. The majority of respondents (83.2%) did not think that physiotherapy should be the gatekeeper for chiropractic.

**Table 25: Chiropractic relative to physiotherapy in South Africa**

	1 Strongly disagree		2 Disagree		3 Somewhat disagree		4 Undecided		5 Somewhat agree		6 Agree		7 Strongly agree	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
As two separate professions	0	0	1	0.8	9	7.5	21	17.5	17	14.2	22	18.3	50	41.7
As two similar professions, each with its own identity	8	6.7	6	5.0	10	8.3	20	16.7	24	20.0	23	19.2	29	24.2
Two professions that should be combined	62	52.1	19	16.0	13	10.9	13	10.9	4	3.4	6	5.0	2	1.7
Chiropractic should be the gatekeeper for physiotherapy	36	30.0	10	8.3	10	8.3	16	13.3	18	15.0	15	12.5	15	12.5
Physiotherapy should be the gatekeeper for chiropractic	80	67.2	19	16.0	5	4.2	11	9.2	1	0.8	0	0	3	2.5

#### 4.6.2 Competitive Advantage of Chiropractic over Physiotherapy in South Africa

*Q30: What do you see as the competitive advantage that chiropractors have over physiotherapists in South Africa?*

Table 26 is a summary of the responses of question 30 which demonstrates that the chiropractic adjustment was viewed by the majority of respondents (60.8%) as the main competitive advantage that chiropractic has over physiotherapy in South Africa.

**Table 26: Competitive advantage of chiropractic over physiotherapy in South Africa?**

	Frequency	Percent
Chiropractic adjustment	73	60.8
Chiropractors have a better level of education and training	48	40.0
Chiropractors have the ability to diagnose	47	39.2
Chiropractic treatment offers quicker results	24	20.0
Chiropractors treat neuromusculoskeletal conditions as opposed to just muscular conditions	17	14.2
Chiropractors have better radiological knowledge	10	8.3
Chiropractors are primary care practitioners	9	7.5
Chiropractors treat the cause rather than symptoms	7	5.8
Chiropractic offers more hands on care	6	5.0
Chiropractic has a unique philosophy and approach to health care	6	5.0
Chiropractic treatment is more cost effective	4	3.3
Chiropractors are awarded the title of Doctor	4	3.3
Chiropractic has no competitive advantage	4	3.3
Chiropractors are more confident and passionate	3	2.5
Chiropractic offers preventative care	2	1.7
Chiropractic treatment is less painful	1	0.8
Chiropractors have higher ethics and morals	1	0.8
Not indicated	3	2.5
Total	120	100.0

#### **4.7 OBJECTIVE 5: TO DETERMINE HOW SOUTH AFRICAN CHIROPRACTORS' PERCEIVE HOW MEDICAL DOCTORS VIEW THE IDENTITY OF THE CHIROPRACTIC PROFESSION**

##### **4.7.1 Medical Doctors Perceptions of Chiropractic**

*Q31: Please indicate how well each of the following statements describes how you believe chiropractic health care is **currently perceived by medical doctors**.*

Table 27 reflects that most of the respondents 'strongly agreed' that medical doctors perceived chiropractic to offer non drug/non-surgical healthcare (63.1%) and the management of back and neck pain (62.2%).

**Table 27: Medical Doctors perceptions of chiropractic**

	1 Does not describe public perception at all		2 Does not satisfactorily describe their perception		3 Does not describe their perception to some extent		4 Undecided		5 Describes their perception to some extent		6 Describes their perception satisfactorily		7 Describes public perception perfectly	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Non-drug/non-surgical health care	3	2.5	0	0	4	3.4	15	12.6	22	18.5	46	38.7	29	24.4
Primary health care	31	26.5	18	15.4	29	24.8	21	17.9	12	10.3	4	3.4	2	1.7
Wellness care	19	16.1	17	14.4	31	26.3	33	28	10	8.5	5	4.2	3	2.5
The management of back & neck pain	1	0.8	2	1.7	4	3.4	11	9.2	27	22.7	49	41.2	25	21
The management of back & neck pain & their impact on general health	11	9.3	11	9.3	18	15.3	31	26.3	22	18.6	20	16.9	5	4.2
The management of neuromusculoskeletal conditions	3	2.5	11	9.3	9	7.6	23	19.5	33	28	31	26.3	8	6.8
The management of neuromusculoskeletal conditions & their impact on general health	11	9.3	20	16.9	27	22.9	30	25.4	17	14.4	11	9.3	2	1.7
The management of spinal problems	1	8	3	2.5	6	5.1	19	16.1	32	27.1	27	22.9	30	25.4
The management of spinal problems & their impact on general health	11	9.3	15	12.7	20	16.9	32	27.1	22	18.6	11	9.3	7	5.9
The management of the vertebral subluxation	32	27.1	17	14.4	7	5.9	14	11.9	11	9.3	20	16.9	17	14.4
The management of the vertebral subluxation & its impact on general health	36	30.5	14	11.9	13	11	21	17.8	13	11	15	12.7	6	5.1
A competitor within health care delivery	8	6.8	12	10.2	12	10.2	27	22.9	25	21.2	18	15.3	16	13.6

#### 4.7.2 Scope of Practice - Medical Doctors

*Q32: Using the definitions in question 19, do you think that the chiropractic profession **is currently** perceived by the medical doctors in South Africa as offering primary health care: focused scope, primary health care: broad scope, or specialist care?*

Table 28 shows that the majority of the respondents (73.3%) felt that medical doctors had no clear perception of the chiropractic profession.

**Table 28: Scope of practice as perceived by medical doctors**

	Frequency	Percent
Primary health care: focused scope	20	16.7
Primary health care: broad scope	2	1.7
Specialist care	10	8.3
No clear perception of the chiropractic profession	88	73.3
Total	120	100.0



#### 4.7.3 Current Position in Health Care System

*Q33: Do you think the chiropractic profession and its services are **currently perceived by medical doctors** as mainstream or complementary and alternative?*

Table 29 reflects that the great majority of the respondents (96.7%) thought that chiropractic services are currently perceived by medical doctors as complementary and alternative.

**Table 29: Current position in health care as perceived by medical doctors**

	Frequency	Percent
Mainstream	3	2.5
Complementary & Alternative	116	96.7
Not answered	1	0.8
Total	120	100.0

#### **4.7.4 Inter-professional Relations between Chiropractic and Medical Doctors**

*Q34: Independent studies in various countries have called for greater mutual cooperation and respect between chiropractic and medical doctors in the interest of patients. In your opinion, how important are each of the following with respect to inter-professional relations?*

Table 30 shows that the most important factors with respect to inter-professional relations were: medical doctors perceptions about the safety (93.5%) and effectiveness (92.5%) of chiropractic care, and medical doctors knowledge and understanding of the standards for chiropractic education and practice (92.5%).

**Table 30: Inter-professional relations between chiropractic and medical doctors**

	1 Not at all important		2 Unimportant		3 Somewhat unimportant		4 Undecided		5 Somewhat important		6 Important		7 Very important	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Medical doctors' perceptions about the effectiveness of chiropractic health care	1	0.8	1	0.8	0	0	1	0.8	6	5.0	19	16.0	91	76.5
Medical doctors' perceptions about the safety of chiropractic health care	1	0.8	0	0	2	1.7	1	0.8	4	3.4	16	13.4	95	79.8
Medical doctors' knowledge and understanding of the standards for chiropractic education and practice	1	0.8	2	1.7	0	0	0	0	6	5.0	20	16.8	90	75.6
Attitudes and behaviours of medical doctors	2	1.7	0	0	2	1.7	3	2.5	10	8.4	26	21.8	76	63.9
Attitudes and behaviours of chiropractors	1	0.8	1	0.8	0	0	4	3.4	5	4.2	20	16.8	88	73.9
Influence, attitudes and behaviours of third party payers	2	1.7	7	5.9	4	3.4	11	9.3	18	15.3	28	23.7	48	40.7
Financial barriers to referring patients for chiropractic health care	2	1.7	4	3.4	3	2.5	20	16.8	25	21	23	19.3	42	35.3

#### **4.8 OBJECTIVE 6: TO DETERMINE SOUTH AFRICAN CHIROPRACTORS' KNOWLEDGE OF WFC IDENTITY SURVEY**

##### **4.8.1 Prescription Drug Policy**

*Q35: Since 1999, the World Federation of Chiropractic has had a policy statement opposing any use of prescription drugs in the practice of chiropractic. In that policy the WFC resolves that “for reasons of chiropractic principle, patient welfare and interdisciplinary cooperation, the practice of chiropractic does not include the use of prescription drugs”.*

*To what extent do you agree with this policy?*

Table 31 demonstrates that 62.5% of respondents 'agreed' that chiropractic should not include the use of prescription drugs and 37.5% thought that chiropractic should include the use of prescription drugs.

**Table 31: Use of prescription drugs**

	Frequency	Percent
Strongly agree	38	31.7
Somewhat agree	37	30.8
Somewhat disagree	34	28.3
Strongly disagree	11	9.2
Total	120	100.0

#### 4.8.2 WFC Identity Statement

*Q36: The World Federation of Chiropractic ran an international identity consultation resulting in the following being proposed as an identity with which to market the chiropractic profession:*

*‘The experts in spinal health care within the health care system’.*

*Do you know about the World Federation of Chiropractics identity?*

Table 32 showed that just over half of the respondents (54.2%) knew about the WFC identity.

**Table 32: Do you know about the World Federation of Chiropractics identity?**

	Frequency	Percent
Yes	65	54.2
No	55	45.8
Total	120	100.0

#### 4.8.3 Knowledge of WFC Identity

*Q37: To what extent do you agree with the identity formulated by the World Federation of Chiropractic?*

Table 33 reflected that, of the 54.2 % of the respondents who knew about the identity, less than half (47.5%) agreed with it.

**Table 33: To what extent do you agree with the identity formulated by the World Federation of Chiropractic?**

	Frequency	Percent
Strongly agree	31	25.8
Somewhat agree	36	21.7
Somewhat disagree	12	10.0
Strongly disagree	3	2.5
Not answered	48	40.0
Total	120	100.0

#### 4.8.4 Reasons for Disagreement

*Q38: If you answered 'somewhat' or 'strongly disagree' please comment.*

Table 34 represents the given reasons why chiropractors were not in agreement with the WFC's identity statement.

**Table 34: If you answered 'somewhat' or 'strongly disagree' in question 35, please comment**

	Frequency	Percent
Not indicated	102	84.2
Chiropractors treat the extremities as well as the spine.	5	4.2
This statement is limiting, should include neuromusculoskeletal instead of spinal, there is not enough emphasis on the nervous system.	2	1.6
"Expert" should be used with caution; there are other professions with equal or superior knowledge of spinal mechanics and related pathology. To call us the experts over neurosurgeons and orthopedic surgeons who have studied in far greater detail is quite cheeky. This is certainly not in line with public perception at the moment.	2	1.6
Chiropractic is not limited to the treatment of the spine; all articulations and the neuromuscular system are taken into account too.	1	0.8
Chiropractic is not only confined to spinal care, also ensures a better quality of health, mentally and physically.	1	0.8
Chiropractic should not limit itself to spinal health care, conditions from sports injuries to pediatric development can be managed.	1	0.8
Each country needs to address their identity in relation to the character and frame work of the specific needs of their society. First world countries differ from third world countries. The adjustment procedure must however remain the main portal of entry, this is the identity of the profession.	1	0.8
Grey areas may cause confusion. Misperception and misinterpretation easily occurs.	1	0.8
Health care, diagnostics and adjusting goes a lot further than merely the spine.	1	0.8
If a chiropractor is trained to use drugs, why not? There is a place for all things.	1	0.8
Medics despise extreme attitudes of many chiropractors.	1	0.8
Our training and education is centered around the care of the spine and as such we should be the experts, it always has and should be the focus of our treatment.	1	0.8
This identity is relatively stagnant and the profession needs to evolve with time. Modernization will make integration easier.	1	0.8
Total	120	100.0

#### 4.8.5 Comments

*Q39: And finally, do you have any comments to add?*

Table 35 shows any additional comments that the respondents wished to make.

**Table 35: Additional comments**

	Frequency	Percent
Not indicated	103	85.8
"Straight" chiropractors are an embarrassment to the profession, the sooner we can get past this practice we can advance and take our true position in mainstream professional health care.	1	0.8
A unified identity is needed to create a strong profession recognized and accepted by mainstream players. Chiropractors in SA are not as involved in their profession as they are in the USA. Chiropractors and the governing body need to address the unification of chiropractic and the establishment of a mission statement/goal that we can all buy into in order to take our profession forward.	1	0.8
Chiropractic has no clear identity, scope of practice or perception within our profession Everyone does their own thing as individuals, which differs from country to country, thus the publics perception and the reputation of good chiropractors are negatively influenced.	1	0.8
Chiropractors must busy themselves with their field of expertise and prove that what they do - they do best. A high standard of ethical and moral behaviour, and openness toward other health disciplines is paramount to total acceptance and recognition of our services.	1	0.8
Chiropractors must individually make sincere efforts to promote all these ideals that we talk about to the best of our ability in our practices today.	1	0.8
GP's will always remain the gatekeepers of primary health care since their scope of practice is so huge, if their attitudes change toward chiropractic, this would influence referrals as well as inter professional management of patients.	1	0.8
More radio talks to educate public, more talks at medical pain conferences, more education booklets handed out at sporting events.	1	0.8
Need to educate population about chiropractic. Need a clearly defined statement of what chiropractic is, its benefits and availability.	1	0.8
Public still narrow minded, need to educate population about chiropractic.	1	0.8
South Africa needs a chiropractic organization that is focused on education and research, not on making money for a few.	1	0.8
The public and medical field perception of chiropractic is imperative in the growth and establishment of chiropractic as a health profession.	1	0.8
There is a problem with patients viewing chiropractors as glorified physiotherapists/massage therapists, physiotherapists have been doing 'chiropractic adjustments' thus blurring the boundary between physiotherapy and chiropractic and sometimes injuring the patient, which leaves patients nervous of chiropractic and confused to where we fit in as practitioners. Patients are not aware of the level of education.	1	0.8
There is room for everybody. Do your job properly and keep your focus on serving your patients and you will get more patients to serve.	1	0.8
We need to claim the 'joint adjustment' as only allowed to be done by a qualified chiropractor. We need to be clear in what type of treatment a chiropractor gives and expel chiropractors who do not adhere to the scientific based chiropractic in order to gain respect and form a clear public identity.	1	0.8
We need to make sure we have one identity otherwise it is confusing for the public.	1	0.8
We remove interference from the nervous system.	1	0.8
While examining the identity of a profession it is paramount to emphasize the issues of cultural and social needs of a particular country.	1	0.8
Total	120	100.0





## **CHAPTER FIVE: DISCUSSION**

### **5.1 INTRODUCTION**

This chapter represents the discussion of the results. The data will be discussed according to the research objectives:

- **5.3 Objective 1:**

To determine the demographics of South African chiropractors.

- **5.4 Objective 2:**

To determine South African chiropractors' perception of the identity of the chiropractic profession.

- **5.5 Objective 3:**

To determine how South African chiropractors' perceive the public view of the identity of the chiropractic profession.

- **5.6 Objective 4:**

To determine how South African chiropractors' see chiropractic relative to physiotherapy.

- **5.7 Objective 5:**

To determine how South African chiropractors' perceive how medical doctors view the identity of the chiropractic profession.

- **5.8 Objective 6:**

To determine South African chiropractors' knowledge of the WFC's Identity Consultation.

Question numbers, section details and certain Table numbers have been included in the text for ease of reference to the questionnaire and Chapter 4. For example, Question 6 of the questionnaire as discussed in Section 4.3.6 of Chapter 4 will be referred to as 'Q6; Section 4.3.6; Table 6a' in parenthesis. To further facilitate ease of reference, certain results have been included in the discussion.

## 5.2 RESPONSE RATE

According to the AHPCSA register, there were 506 registered chiropractors in South Africa at the date of proposal approval (AHPCSA, 2008). However, after further investigation it was revealed that 108 registered practitioners were not eligible for this study due to:

- Emigration (84),
- Deceased (2),
- Practitioners no longer working as chiropractors (12),
- Incorrect contact details (3),
- Practitioner being an osteopath (1) and
- Chiropractors being involved in the study (6).

This left a total sample group of 398 chiropractors and questionnaires were distributed to these chiropractors (n=398). One hundred and twenty completed questionnaires were returned and used for analysis, giving a response rate of 30.15%. This is in keeping with the required minimum of 30% (Esterhuizen, 2008). Time constraints and the lack of participation from the majority of the chiropractors prohibited a higher response rate.

Carey, Clum and Dixon (2005) stated that any response rate over 10% was regarded as strong for a voluntary survey without reward. The WFC Identity Consultation response rate was 12.7% (Carey *et al.*, 2005) which was 17.45% less than the response rate received in this study. It is recommended in the literature that a response rate of 20-100% has been shown to be generalisable within the confines of the study criteria, when the respondents are a select group of individuals that conform to those criteria only and to the exclusion of others (Mearns and Reader, 2007). The response rate achieved in this study compared favorably to other studies performed on similar sample groups (Naidoo, 2008; Kew, 2006; Louw and Myburgh, 2005 and Van As, 2005) and therefore it is possible to surmise that the results of this study are generalisable to the whole population even though only a sample returned the questionnaire.

### **5.3 OBJECTIVE 1: TO DETERMINE THE DEMOGRAPHICS OF SOUTH AFRICAN CHIROPRACTORS**

This objective aimed to determine demographics of the typical chiropractor in South Africa.

#### **5.3.1 Gender**

There were more male (60.8%) than female respondents (39.2%) (Q1; Section 4.3.1; Table 1), which is in keeping with the gender ratio of chiropractors registered with the AHPCSA (2008), in which there were 62% male and 38% female. Therefore, the respondents were similar to the total chiropractic population in South Africa with respect to gender. Additionally, this ratio is consistent with previous studies carried out on chiropractors in South Africa (De Gouveia, 2009; Bunge, 2007; Mathews, 2006 and Fletcher, 2005). Similarly, in a census done on chiropractors in New Zealand and Australia in 2006, it was found that 65% of the chiropractic population were male and 35% were female (ANZCO, 2006).

Historically, the chiropractic profession was male dominated. However, it would seem that the ratio of men to women is gradually starting to even out due to an increasing number of women qualifying as chiropractors. This was illustrated in the ANZCO (2006) census where it was shown that in 1996, 75% of chiropractors were male, whereas in 2006, 65% were male. This further illustrates an increased interest by females in CAM professions (National Centre for Complementary and Alternative Medicine, 2004; MacLennan and Wilson, 1996; Tatalias, 2006) and may also reflect the fact that women are more likely to graduate from higher education institutions than men (Morgan, Isaac and Sansone, 2001). However, this is in contrast to the WFC consultation where it was shown that 79% of respondents were male (Northstar Research Partners, 2004).

### 5.3.2 Age

The majority of respondents (45%) were between the ages of 30 and 39, with one third being between the ages of 20 and 29 (Q2; Section 4.3.2; Table 2). The age range of respondents was from 25 to 79 years of age. The average age was 36 years. This is in keeping with previous studies conducted in South Africa where the majority of chiropractors tended to be between the ages of 25 and 38 (Bunge, 2000; Mathews, 2006 and De Gouveia, 2009). A reason for the majority of respondents (78.3%) being younger than 40 years of age, may be due to chiropractic being a relatively new profession in South Africa. The first chiropractic school in South Africa, being situated at the Natal Technikon, only opened its doors in 1989 with the first chiropractors graduating in 1994. Prior to this date, qualifications could only be obtained internationally.

The average age of respondents in the WFC Identity Consultation was 40 years of age (Northstar Research Partners, 2004), indicating a difference of four years. However, it was found in the WFC Identity Consultation that 73% of respondents were older than 35 years of age (Northstar Research Partners, 2004), compared with 78.3% of respondents in South Africa being younger than 40. This shows that respondents from the WFC Identity Consultation were older than respondents in South Africa.

When considering age, 21.7% of South African respondents were over the age of 40. This indicates that these graduates more than likely studied overseas, as the first graduates from a South African institution only graduated in 1994. This means they may have been trained in the straight paradigm, as the majority of the colleges that the respondents attended (Palmer and Life) taught a straight paradigm approximately 20 years ago. This would be contrast to the evidence based paradigm taught in the South African schools. However, it is likely that a graduate may change the paradigm in which they have been taught once in practice.

### **5.3.3. Ethnic Group**

The vast majority of respondents (89.2%) were White with 9.2% being Indian and only 0.8% (n=1) being Black (Q3; Section 4.3.3; Table 3). These results were expected as it was noted by Myburgh and Mouton (2007) that chiropractic is underappreciated and underutilized by the Black population of South Africa.

### **5.3.4 Institution of Graduation and Qualification**

Just over half (53.3%) of the respondents graduated from the Durban University of Technology (DUT), with one quarter (25.8%) graduating from the University of Johannesburg (UJ) (Q4; Section 4.3.4; Table 4). In terms of qualification, 76.7% of respondents held the M.Tech: Chiropractic<sup>1</sup> qualification and 23.3% held the Doctor of Chiropractic qualification (Q5; Section 4.3.5; Table 5). A reason that more respondents graduated from DUT, is because DUT opened for chiropractic training in 1989, whereas UJ opened in 1993 (DUT Chiropractic Handbook, 2009; UJ Chiropractic Handbook, 2009). In total, 79.1% of respondents graduated within South Africa and 20% graduated overseas, the majority of whom (16.7%) graduated from the United States of America. This would correlate with section 5.3.2 where 21.7% of the respondents were over 40 years of age, indicating that they in all likelihood studied abroad.

The two South African Institutions (DUT and UJ) teach from a similar evidence based curriculum. Therefore, it could be assumed that graduates from these institutions would practice in similar ways and have similar philosophical orientations. In contrast to this, in the United States of America there are many different schools that teach different ways of practicing and have many diverse philosophical orientations associations and organizations (Wardwell, 1992) as discussed in sections 2.3 and 2.4 respectively.

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<sup>1</sup> It is noted that the 79.1% of respondents who graduated from South African institutions does not correlate with 76.7% of respondents holding an M.Tech: Chiropractic qualification. It may be assumed that some respondents that had qualified in South Africa opt to designate their qualification as a D.C qualification or that after graduation may have obtained an M.Tech or a D.C qualification.

Therefore, from these results it could be expected that the majority of respondents would be more inclined to follow mixer /evidence based medicine philosophies as is taught in the South African curriculum.

### **5.3.5 Additional Qualifications**

Over a third (37.5%) of respondents in South Africa held additional qualifications, 77.6% of which were health related (Q6; Section 4.3.6; Table 6b). This would seem to suggest that in the relative absence of chiropractic specific qualifications in South Africa, the qualifications obtained pertained to health related matters. This would potentially influence the respondents in terms of their understanding of chiropractic within the health care context, as their orientation would not be based on the philosophical constructs as found routinely in the chiropractic profession, but rather on primary health care or patient-centered constructs (Chapman-Smith and Cleveland III, 2005). These constructs, according to the AHPCSA (2007) are more evidence based and more realistic within the health care spectrum of South Africa which demands the use of a full legislated scope of practice.

### **5.3.6 International Exposure**

When asked if they had practiced overseas (Q17; Section 4.3.17; Table 16a), 28.3% of the respondents had practiced overseas thus obtaining international exposure. The majority of whom (41.2%) had practiced in the United Kingdom, followed by 29.4% in the United States of America (Table 16b). It could be assumed that these practitioners had been exposed to the different philosophical orientations of the overseas colleges as well as there being many associations to which a chiropractor can belong (Wardwell, 1992), and therefore possibly different public and medical perceptions of the profession may exist to those who practiced in South Africa. This is possible for a number of reasons, the most notable being the many different philosophical orientations abroad due to the diverse and numerous chiropractic educational institutions, associations and organizations; followed by the period of time that these different groups had to interact with each other, the public and the

medical fraternity. However, due to the majority of respondents having only practiced in South Africa, the effect of this may be negligible.

### **5.3.7 Philosophical Orientation**

With reference to the philosophical orientation of the respondents (Q16; Section 4.3.16; Table 15), the majority 'strongly agreed' that they practiced as mixers (59.2%) and as evidence based practitioners (59.1%), with just 17.5% who 'strongly agreed' to practicing straight chiropractic. This can be attributed to the large number of chiropractors graduating from the South African colleges (UJ and DUT), where an evidence based curriculum is taught (DUT Handbook, 2009; UJ Handbook, 2009; Act 63 of 1982 (as amended); South African Qualification Authority, 2009). The literature suggests that mixers and evidence based practitioners tend to support incorporation into mainstream health care, and tend to be more broad scope in methods of practice, whereas the straight chiropractors would prefer to remain separate and distinct from mainstream health care and tend to be narrow in their scope of practice (Keating, 2005b). Therefore, in terms of these results, it would be anticipated that respondents would want chiropractic to be integrated into mainstream medicine.

### **5.3.8 Terminology used in Practice**

With regards to terminology used in practice (Q14; Section 4.3.14; Table 14), 72.5% of respondents used the term 'adjustment' whilst 21.7% used the term 'manipulation'. It could be assumed that straight chiropractors would use the term 'adjustment' as they only adjust the spine and the historical connotations of the word indicate significant correlation with the development of chiropractic philosophy outside of the medical paradigm (Keating, 2005b). Conversely, 'manipulation' has been linked with evidence based and mixer chiropractors who have adopted this term to communicate with the medical profession through a term that is mutually understood (Prescott, 2001). These polarized contexts however exist to a larger extent in North America where these terms have been part of the externally imposed



and internally re-enforced isolation of the chiropractic profession, which has not had as great a role in the South African context. These terms could be utilized interchangeably in the chiropractic profession in South Africa, and the appropriate terms applied in communications to the relevant practitioners receiving those communications. Ultimately, the use of the term 'manipulation' would facilitate a greater acceptance of the chiropractic profession by the medical fraternity, and would facilitate greater inter-professional communication.

### **5.3.9 Manipulative Technique**

When asked what manipulative techniques they used in their practice (Q12; Section 4.3.12; Table 12a), nearly all of the respondents (94.9%) practiced Diversified chiropractic techniques. Whilst 25.2% made use of the Activator gun and 23.5% used the Gonstead method, other techniques (Table 12b) were also used in practice by 24 of the respondents, with the majority (n=7) using the Thompson technique. This sequence of findings is in keeping with a study carried out by Papadopoulos (1997) on chiropractors in Canada, where it was found that the most common adjusting technique was Diversified, followed by the Activator gun, Gonstead and the Thompson technique. Furthermore, the high reported percentage of the Diversified technique stands to reason in this study as most respondents qualified in South Africa, where the Diversified technique is taught in the curriculum at both DUT and UJ (DUT Handbook, 2009; UJ Handbook, 2009). A possible reason for the Activator gun and Gonstead methods being relatively low is that these techniques are not taught in the South African institutions; however, they could have been learnt at conferences or seminars. The percentages of these 'other methods' are in keeping with the 23.3% of respondents who graduated overseas, where these techniques are taught. These results could not be compared to the results of the WFC Identity Consultation because this question was not included in the WFC questionnaire.

### **5.3.10 What area of the Body was Adjusted/Manipulated in Practice**

The vast majority of respondents (92.5%) adjusted the spine and the extremities in practice, whilst a mere 6.7% adjusted the spine only (Q15; Section 4.3.15; Figure 2). These results were comparable with the study by De Gouveia (2009), which found that 3.9% of chiropractors in South Africa adjusted the spine only. This is in keeping with the fact that the graduates in the South African context (79.1%) are all taught spinal and extremity manipulation (DUT Chiropractic Handbook, 2008; UJ Chiropractic Handbook, 2008). This trend is in keeping with the number of respondents that practiced evidence based (59.1%) and mixer chiropractic (59.2%) (Q16; Section 4.3.16; Table 15). It could be assumed from this result that a larger percentage of respondents would have 'strongly agreed' to practicing as a mixer or an evidence based chiropractor (Section 5.3.8) as they would be more likely to adjust the spine and the extremities, whereas the straight chiropractor would adjust the spine only (Keating, 2005b). However, when asked their philosophical orientation, 17.5% described themselves as straight chiropractors with only 6.7% saying that they adjusted the spine only. It could be assumed from these results that approximately 10% of straight chiropractors were adjusting the extremities as well as the spine. This is an anomalous finding which requires further research to determine the perceived scope of practice of the different philosophical orientations of chiropractors. This question was not included in the WFC Identity Consultation questionnaire, so a comparison could not be made.

### **5.3.11 Modalities used in Practice**

With respect to what modalities were used in practice (Q13; Section 4.3.13; Figure 1), dry needling was the most utilized technique (84.5%), 81.9% of respondents prescribed exercise therapy, 75% offered ergonomic advice, whilst 60.3% offered advice on diet and 55.2% used cold therapy. With respect to electrotherapies, 36.2% used ultrasound, 30.2% used interferential current and 25% used Transcutaneous Electrical Nerve Stimulation (TENS). Other modalities (Q13; Section 4.3.13; Table 13) commonly used included soft tissue therapy and myofascial release,

rehabilitation, kinesiotaping, ischemic compression and biopuncture. The high usage of adjunctive techniques may be due to DUT and UJ including some of these modalities in their diversified teaching curriculum (DUT Handbook, 2009; UJ Handbook, 2009; South Africa, 2001). It could also be attributed to the majority of chiropractors practicing evidence based chiropractic or reporting to be 'mixer' chiropractors who employ a broader scope of practice (Keating, 2005a). The questionnaire did not include traction, mobilization, massage and heat therapy. A box marked 'no modalities used' should have been added so as to determine the number of chiropractors who did not use modalities, which may have correlated with the number of 'straight' chiropractors. De Gouveia's (2009) study revealed that the most used modalities in practice were mobilization, massage, exercise therapy, dry needling and offering ergonomic advice. Since mobilization and massage were not options included in this study's questionnaire, these cannot be compared. However, the results of the studies were similar when addressing dry needling, exercise therapy and ergonomic advice. Papadopoulos (1997) also found that in Canada, exercise therapy was well prescribed.

#### **5.3.12 Number of Years since Graduating**

The majority of respondents (75%) had graduated within the past ten years. A quarter (25%) of respondents graduated more than 11 years ago (with 16 years being the highest possible number of years since graduation of a South African graduate) (Q7; Section 4.3.7; Table 7). This correlates positively with other studies showing that the majority of chiropractors have spent less than ten years in practice (De Gouveia, 2009; Bunge, 2007; Mathews, 2006 and Fletcher, 2005). Additionally, most respondents (43.3%) graduated five before. In contrast, the WFC Identity Consultation indicated that the average number of years since graduation was 13 (Northstar Research Partners, 2004).

These results demonstrate that the respondents of this study had been in practice for a shorter time than those in the WFC Identity Consultation. This would be expected due to chiropractic only being taught in South Africa since 1989.

### **5.3.13 Number of Years in Practice**

The results of the number of years since graduation (Q7; Section 4.3.7; Table 7) were congruent to the number of years they had been in practice (Q11; Section 4.3.11; Table 11), with the majority of respondents (46.7%) having been in active practice for less than 5 years, 28.3% had been practicing for 6-10 years, and 24.1% had practiced for more than 11 years. The majority of respondents (46.7%) had been in practice for five years or less. This also correlates well with other South African studies showing that the majority of chiropractors have spent less than 10 years in active practice (De Gouveia, 2009; Bunge, 2007; Mathews, 2006 and Fletcher, 2005). This is, however, in contradiction to the average age of chiropractors being 36, as most chiropractors would start practicing soon after qualifying (Bunge, 2000), thus it could be assumed that the average age of chiropractors would be approximately 31 years of age or that the average time in practice would be more than five years. This could be due to numerous factors including; chiropractors starting studying later than the usual 18 years of age, taking gap years post school, the chiropractic course extending more than the minimum of five years, qualified chiropractors taking extended leave due to personal or health reasons or taking time off from chiropractic to explore other career options.

These results vary greatly from those of the WFC Identity Consultation which illustrate that the majority of WFC respondents (54%) had been in practice for 11 years or longer with the average number of years in practice being 13 (Northstar Research Partners, 2004). Thus chiropractors in South Africa have been in practice for a significantly shorter period than those of the WFC Identity Consultation. This, would also be expected due to chiropractic only being taught in South Africa since 1989.

#### **5.3.14 Role in Chiropractic**

Most respondents (77.5%) were in full time practice, 19.2% in part time practice, which gave a total of 96.7% of respondents working in clinical practice, 10% were involved in administration and 6.7% were involved with academia (Q8; Section 4.3.8; Table 8). These results were similar to those found in De Gouveia's (2009) study, which stated that 95% of chiropractors in South Africa were in clinical practice, and the WFC Identity Consultation which found that 91% of respondents were in clinical practice. These results were expected, as the majority of people pursuing a career in chiropractic would be seeking a clinical profession rather than administrative or academic careers.

#### **5.3.15 Setting of Practice**

With regards to setting of their practice (Q9; Section 4.3.9; Table 9) 58.3% were in private practice, 37.5% were involved with a multidisciplinary practice whilst only 3.3% practiced within a hospital setting. This is similar to the findings of other studies carried out on chiropractors in South Africa (De Gouveia, 2009; Bunge, 2007; Mathews, 2006 and Fletcher, 2005). Chiropractors have limited access to practicing in an in-hospital setting; however, they may have their rooms in a hospital medical suite (South Africa, 2001). This explains the high percentage of chiropractors in private and multidisciplinary practices.

#### **5.3.16 Situation of Practice**

The majority of respondents (72.5%) practiced in an urban area, 24.2% were in sub-urban areas and only 2.5% practiced in a rural area (Q10; Section 4.3.10; Table 10). These results were similar to the findings of other studies conducted on chiropractors in South Africa (De Gouveia, 2009; Bunge, 2007; Mathews, 2006 and Fletcher, 2005). Most chiropractors in South Africa work in the small private sector (CASA, 2008), which caters for the middle to high income earners, generally located in the urban/sub-urban areas, who tend to be members of medical aid schemes (18% of the population) (Van As, 2005). The majority of wealth in South Africa would

be located in the urban/suburban setting (Van As, 2005). It is estimated by Van As (2005) that 82% of the population cannot afford medical aid therefore making chiropractic treatment a luxury. In the rural areas there is also little demand for chiropractic services as Van As (2005) estimates that only 1% of the Black population and 10% of the White population know about chiropractic.

Myburgh and Mouton (2007) have strongly suggested that for chiropractic in South Africa to impose educational, professional and societal legitimacy, the largely untapped public sector needs to be penetrated, and that the key to a prosperous future of chiropractic in South Africa is dependent on chiropractic penetrating the previously disadvantaged patient base in South Africa. This hypothesis could be enforced by encouraging government involvement to further incorporate chiropractic in the hospital setting and setting up more chiropractic clinics in rural areas.

#### **5.3.17 Summary and Review of Objective 1**

From the demographic data, it can be summarised that the typical chiropractor who practiced in South Africa at the time of data collection in 2009 was a White (89.2%) male (60.8%) of approximately 35 years of age (45% were between 30-39 years of age) who studied at DUT (53.3%), obtaining an M.Tech: Chiropractic qualification (76.7%), held no other qualifications (62.5%) and had not practiced overseas (71.7%). He was in full time (77.5%), private practice (58.3%), in an urban area (72.5%) and had been in practice for less than 10 years (75%). He practiced as a 'mixer' practitioner (59.2%) / evidence based practitioner (59.1%), and his chiropractic technique of choice was Diversified (51.4%).

Thus, it can be assumed that the responses of this questionnaire reflect the perceptions of the typical chiropractor in South Africa.

## **5.4 OBJECTIVE 2: TO DETERMINE CHIROPRACTORS' PERCEPTION OF THE IDENTITY OF THE CHIROPRACTIC PROFESSION**

This question was included to determine if there was congruence amongst chiropractors in South Africa with respect to their professional identity.

### **5.4.1. Public Identity**

The majority of respondents (90%) 'strongly agreed' that 'It was important for a profession to have a clear public identity' (Q18; Section 4.4.1; Table 17a). Whereas, the minority of chiropractors (1.7%) 'strongly agreed' that 'the chiropractic profession had a clear public identity' (Table 17b). These results correspond with those of the WFC Identity Consultation, where 90% of respondents 'strongly agreed' that 'it was important for a profession to have a clear identity' and only 4% of respondents who 'strongly agreed' that the 'chiropractic profession had a clear public identity' (Identity Consultation: Report and Recommendations, 2005).

These contradictory results show that the profession in South Africa does not perceive itself to have a clear public identity and that one is urgently required. In essence, it supports the notion that formulating an identity will not limit the profession, but rather give the public and the profession a common reference to define chiropractic function, position and values (Briggance, 2005). While the ultimate audience for an identity is the public, health administrators and governments, the immediate need is to create an identity to unite the profession as much time is spent debating the issue internally (Identity Consultation: Report and Recommendations, 2005). Thus, a unified identity will aid the profession in attaining internal congruence and provide a banner with which to market the profession.

According to the WFC Identity Consultation: Report and Recommendations (2005), the goal of an identity is '*To create one clear global identity for chiropractic that leads to greater public understanding, acceptance and utilization of chiropractic services*

*and therefore a greater role for chiropractic with the public and within national health care systems’.*

Caplan and Associates (1994) revealed that in Canada, chiropractors felt that the image of chiropractic and the confidence in chiropractic continues to develop. However, old barriers to the development of the profession remain strong, and chiropractors themselves were a barrier to the development of their own profession as they were defensive and lacked real confidence and leadership in the promotion of chiropractic. It was also found that chiropractors thought that there was too much internal discord within the profession to be able to advance as it should, especially as chiropractic has a relatively small population compared to similar medical fraternities or counterparts. In South Africa, there are approximately 506 chiropractors registered with AHPCSA (2008), whereas in North America, for example, there are over 65 000 chiropractors (Meeker and Mootz, 2005). With such a small population of chiropractors in South Africa, it would be assumed that consensus regarding a professional identity would be attainable. However, according to a qualitative study by Myburgh and Mouton (2007), it was shown that the international discourse within the profession was being reflected locally. However, reasons for this incongruence requires future research.

#### **5.4.2 Summary and Review of Objective 2**

The great majority of respondents in South Africa (90%) ‘strongly agreed’ that it was important for a profession to have a clear public identity. However, only 1.7% of respondents ‘strongly agreed’ that the ‘chiropractic profession had a clear public identity’.



### **5.5 OBJECTIVE 3: TO DETERMINE HOW SOUTH AFRICAN CHIROPRACTORS' PERCEIVE THE PUBLIC VIEW OF THE IDENTITY OF THE CHIROPRACTIC PROFESSION**

This section of the questionnaire aimed to determine how chiropractors thought the public viewed the chiropractic profession and how the chiropractors would like the public to view the chiropractic profession. This objective also aimed to determine if there was a discrepancy in those opinions, as consumer preferences are a primary driving force in the demand for chiropractic services.

#### **5.5.1 Central Importance of Identity**

Respondents 'strongly agreed' that the spine was of central importance to the practice (80%) and the public identity (75%) of chiropractic, 82.5% 'strongly agreed' that the nervous system was of central importance to the practice of chiropractic whereas 68% 'strongly agreed' that the nervous system was of central importance to the public identity of chiropractic (Q25; Section 4.5.7; Table 21). These results compared favorably with the findings of the WFC Identity Consultation (Northstar Research Partners, 2004) which showed a high response with respect to the spine (72%) and the nervous system (85%) being of central importance to the practice of chiropractic. However, the results were lower when asked if the spine (66%) and the nervous system (60%) were of central importance to the public identity of chiropractic. The reasons for this are unclear and warrant further investigation.

Results showed that respondents felt that the spine was of greater importance to the practice and public identity of chiropractic than the WFC respondents as well as being more important than the nervous system in the public perception.

### 5.5.2 Scope of Practice

There are major discrepancies between how chiropractors believe the public *currently* perceive chiropractic and how they *would like* chiropractic to be perceived (Identity Consultation: Report and Recommendations, 2005). Nearly half of the chiropractors (45%) believed that the public *currently* had no clear perception of chiropractic, 40.8% believed that the public saw chiropractic as offering primary health care either with a focused (35%) or broad scope (5.8%) and 14.2% thought chiropractic was *currently* seen as offering specialist care (Q19; Section 4.5.1; Table 18a; Figure 3).

However, most chiropractors (74.2%) thought that chiropractic *should* be perceived as offering primary health care, either with a focused (55%) or broad scope (19.2%), whilst 23.3% thought that chiropractic should be seen by the public as offering specialist care (Q20; Section 4.5.2; Table 18b; Figure 3). According to the AHPCSA, chiropractors are primary contact health care providers (AHPCSA, 2007). Duenas, Carucci, Funk and Gurney (2003) indicated that 84% of chiropractors in Connecticut thought that they were qualified as primary care practitioners. Results from the WFC Identity Consultation (Northstar Research Partners, 2004) showed that 44% of respondents thought that chiropractic was perceived by the public as offering primary health care, whereas 91% would have liked chiropractors to be perceived as primary health care practitioners. Similarly, a study by Pollentier and Langworthy (2007) on chiropractors in the United Kingdom, found that 98% of respondents considered chiropractors to be primary health care practitioners. Thus, results from South Africa, United Kingdom, Connecticut and the WFC Identity Consultation, all suggest that chiropractors *would like* chiropractic to be perceived as offering primary health care.

### **5.5.3 Perceptions of Chiropractic in South Africa as Determined by Chiropractors**

It was demonstrated in this study that respondents thought that the public *currently* saw chiropractic as offering the management of neck and back pain (88.2%) and spinal problems (72.9%). However, they were not in agreement as to whether the public saw chiropractic management to have an impact on general health (Q23; Section 4.5.5; Table 20a). The vast majority of respondents *would like* the public to view chiropractic management as having an impact on general health (Q24; Section 4.5.6; Table 20b), which is in keeping with the mission statement of the evidence based chiropractor; 'to alleviate pain and disease conditions and promote health' (Keating, 2005b). The majority of respondents agreed that *current* public perception of chiropractic was: the management of back and neck pain and the management of spinal problems, which is in keeping with other studies of public perception in the United States of America and Canada (Hurwitz *et al.*, 1998), New Zealand (New Zealand Consumers Institute, 1997) and Western Australia (Straton, Sweeney and Grandage, 1990).

A large discrepancy in public knowledge was observed when respondents thought that only 15.1% of the public *currently* perceived chiropractic to be 'the management of neuromusculoskeletal conditions and their impact on general health'. Whereas, 88.2% of the respondents *would like* the public to perceive chiropractic as 'the management of neuromusculoskeletal conditions and their impact on general health'. This was placed as the most desired perception followed by: the management of neuromusculoskeletal conditions (86.7%), the management of back and neck pain and their impact on general health (86.6%), the management of spinal problems and their impact on general health (85.7%), the management of spinal problems (84.9%), wellness care (84%), the management of back and neck pain (82.3%), primary health care (78.5%), non-drug/ non-surgical health care (73.2%) and lastly the management of the vertebral subluxation (71.5%) and its impact on general health (71.4%).

These desired perceptions (Q24; Section 4.5.6; Table 20b) varied greatly from current perceptions where only 5.9% agreed that the public viewed chiropractic to offer primary health care and less than a third of respondents felt that chiropractic offered any impact on general health (Q23; Section 4.5.5; Table 20a).

Only 13.7% of the respondents thought that the public perceived chiropractic to offer wellness care (Q23; Section 4.5.5; Table 20a). Whereas 84% of them agreed that chiropractic should be perceived as offering wellness care (Q24; Section 4.5.6; Table 20b), 83% of WFC respondents agreed that chiropractic should be perceived as offering wellness care (Identity Consultation: Report and Recommendations, 2005). At present, there is limited public support for the notion that chiropractic care improves overall health and wellbeing (Identity Consultation: Report and Recommendations, 2005; Vernon, 2005). This is supported by a study carried out in Western Australia (Straton, Sweeney and Grandage, 1990) which states that only 4% of patients would consider going to a chiropractor for health maintenance, and a study conducted in the United States (Criterion Research Group, 1999) found that patients generally did not accept the concept of seeking a chiropractic adjustment for general well-being, 69% disagreed that they would seek chiropractic to optimise their health.

More research is required to assess whether chiropractic has a role in the improvement of overall health before it is claimed as a brand advantage (Vernon, 2005). The Identity Consultation: Report and Recommendations (2005) stated that 'there is little existing research or scientific evidence to support chiropractic's role in overall health improvement, yet, there is a great deal of research on the costs (physical, societal and economic) of back pain and disability and research supporting chiropractors' ability to treat the causes of back pain'.

These results were in keeping with findings from the WFC Identity Consultation and demonstrate that the profession wants to be viewed in a broader, more coherent health context (Identity Consultation: Report and Recommendations, 2005). A study

in Canada by Caplan and Associates (1994) inferred that most public perception of chiropractic was based on ignorance, misinformation and bias, rather than fact, and that the public had very little understanding about chiropractic education, qualifications and scope of practice. This was reflected locally in a study by Van As (2005) where 32% of school guidance counselors (regarded for this study as public opinion) felt that they were not informed enough to comment on the role of chiropractic in the South African health care system.

With respect to chiropractic being a non-drug/non-surgical profession, 51.3% of chiropractors believed that this described *current* public perception perfectly (Q23; Section 4.5.5; Table 20a) and 73.1% thought that this was how respondents *would like* the profession to be perceived (Q24; Section 4.5.6; Table 20b). However, when asked later in the questionnaire (Q35; Section 4.8.1; Table 31) whether the respondents agreed that the practice of chiropractic should not include the use of prescription drugs, only 62.5% of chiropractors 'agreed'. This is 16.5% less than the 79% of WFC respondents who opposed the use of prescription drugs (Identity Consultation: Report and Recommendations, 2005). This could be due to: a number of respondents having achieved other qualifications which permit the use of prescription drugs; as well as respondents who felt that they would have a larger patient base should they be able to inject/prescribe medicine, and would therefore be seen as offering a more mainstream healthcare service.

In a study carried out on chiropractors in South Africa by De Gouveia (2009), it was found that males perceived the use of non steroidal anti inflammatory drugs and pharmacological agents (for this research regarded as prescription drugs) more favorably than females. This was in keeping with the findings of Tatalias (2006) who stated that females were more likely to utilize Complementary and Alternative Medicine (CAM) and were therefore less likely to want to include allopathic adjuncts than their male counterparts. Literature shows that older individuals were more likely to utilize CAM (Tatalias, 2006; Menniti-Ippolito *et al.*, 2002; Reid, 2002; Kayne, Beattie and Reeves 1999) as compared to younger generations who were more

likely to include allopathic medicine in practice. The findings of De Gouveia's (2009) study could be comparable to this study as the demographic factors of the respondents were similar in terms of age and gender. Thus, it could be assumed that respondents would have been more approving of the usage of prescription drugs in the chiropractic profession in South Africa.

The results of this study demonstrate that nearly three quarters (73.1%) of respondents *would like* the profession to be perceived by the public as non-drug/non-surgical healthcare (Q24; Section 4.5.6; Table 20b). The majority of respondents (62.5%) 'agreed' that chiropractic should not include the use of prescription drugs. However, this still left 37.5% who thought that chiropractic should include the use of prescription drugs (Q35; Section 4.8.1; Table 31). Thus, it would appear from these results that certain members of the chiropractic profession in South Africa would like prescription drugs to be included into their scope of practice, whilst others would prefer to maintain a drug free approach. This was confirmed in De Gouveia's study (2009) which found that less than half of the respondents would consider administering prescription drugs in practice.

#### **5.5.4 Position of Chiropractic in Healthcare System**

Chiropractors in South Africa are required to register with the AHPCSA which indicates that chiropractic is regarded to be CAM (AHPCSA, 2007). The World Health Organization, the US National Institute of Health and the European Parliament have also classified it as such. However, there is debate as to whether chiropractic is not CAM but rather mainstream. Inglis, Fraser and Penfold (1979) stated that 'in the interest of public interest, chiropractic should be integrated into the mainstream health care system as no other health professional is as well qualified to diagnose and treat spinal mechanical dysfunction'.

Spinal adjustments to relieve back pain and restore normal joint and muscle function (musculoskeletal conditions) are considered mainstream but the same treatment methods to empower the body and regulate visceral function (non musculoskeletal

conditions) and to improve overall wellbeing are considered to be CAM (Chapman-Smith and Cleveland III, 2005). There is evidence that demonstrates the efficacy of chiropractic in the treatment of certain musculoskeletal disorders (Bronfort, Haas and Evans, 2005). However, insufficient to variable evidence is available for the treatment of non-musculoskeletal disorders (Vernon, 2005).

The majority of respondents (92.5%) in this study believed that the public *currently* perceived chiropractic to offer complementary and alternative healthcare (Q21; Section 4.5.3; Table 19a), whereas 89.2% believed that it *should* be seen as offering mainstream healthcare (Q22; Section 4.5.4; Table 19b). These findings were congruent with the demographics of this study which showed that the majority of chiropractors had a mixer (59.2%) / evidence based (59.1%) philosophy (Q16; Section 4.3.16; Table 15) and therefore would like to see chiropractic integrated into mainstream healthcare (Keating, 2005).

The WFC Identity Consultation: Report and Recommendations (2005) showed very similar results with 89% believing chiropractic is *currently* viewed by the public as complementary and alternative and 88% believing that chiropractic *should* be perceived as offering mainstream healthcare. The WFC Identity Consultation: Report and Recommendations (2005) stated that 'chiropractic is leading the way with respect to complementary and alternative healthcare services entering the mainstream, so this is becoming less and less of an issue for chiropractic'.

#### **5.5.5 Importance of Chiropractic Attributes to Patients**

The following attributes were considered by the respondents to be very important to patients seeking chiropractic care (Q26; Section 4.5.8; Table 22): reputation for effectiveness (92.5%), safety of chiropractic procedures (90.8%), specialized knowledge and education (90.8%), diagnostic ability (89.2%), the deliverance of manual procedures (86.6%). These results were in keeping with the WFC Identity Consultation: Report and Recommendations (2005) which found that the most

valued attributes of chiropractic were: efficacy of care and specialized knowledge and education.

These results were later confirmed when the respondents of this study were asked about what they thought the chiropractic profession had as a competitive advantage over physiotherapists (Q30; Section 4.6.2; Table 26). They rated the adjustment (manual procedures), better level of chiropractic education and the ability to diagnose as the main advantages.

### **5.5.6 Attributes important in Shaping Public Perceptions**

Results showed that all the qualities listed were considered by the respondents as 'very important' in shaping the general public's perception of chiropractic (Q27; Section 4.5.9; Table 23). However, the following showed the highest responses: spinal care expertise (95.8%), the ability to diagnose the cause of symptoms (95%), ability to manage back pain (93.4%), safety of chiropractic procedures (93.3%), hands on care (92.5%), ability to get the patient back to work/daily activities (90.9%), level of education/training (89.2%), patient-centered care (88.3%), issues of ethics, professional behaviour and trust (88.3%), quick recovery from pain and disability (87.5%) and the ability to manage pain (87.5%). Thus, when communicating an identity to the public, these pertinent points need to be emphasized so as to gain the confidence and acceptance of the public. These results reiterate the philosophical orientations of South African chiropractors and emphasize the patient-centered care approach that they implement. With respect to the ability to make a diagnosis, this could increase the confidence that the public had in chiropractic when accessing them as a primary care practitioner over other similar professions such as physiotherapy. Furthermore, when asked what respondents thought were the main competitive advantages that chiropractors had over physiotherapists (Q30; Section 4.6.2; Table 26), 39.2% thought that 'the ability to diagnose' was an important advantage. Thus, the role of diagnostician may be a differentiating factor of chiropractic from similar professions and when communicated to the public may increase confidence in chiropractors as primary



care practitioners and facilitate future integration into the mainstream health care system.

Similar to the findings of this study, the WFC Identity Consultation: Report and Recommendations (2005) highlighted that the most important factors in shaping the public's perception were: chiropractics' ability to get patients back to work/daily activities and their patient-centered approach. Spinal care expertise and ability to manage pain were also considered to be important.

The results demonstrated that South African chiropractors placed great emphasis on the safety of chiropractic procedures. A reason for this could be because South African chiropractors are primarily of mixer and evidence based philosophical orientations, thus, being more patient-centered in their approach. A comparison could not be made with the WFC Identity Consultation as this option was not included in that survey. 'Safety of chiropractic procedures' was included in this study as an option in the focus group.

The following showed lower responses indicating slightly less importance than the previous factors, but still very important in shaping the general public's perceptions of chiropractic. The attitudes of the media (74.2%) and other health care providers (75.8%) were considered to be 'very important' for chiropractic to gain social acceptance and be integrated into the health care system. This was confirmed in the study by Louw and Myburgh (2005), which found that general practitioners in South Africa who understood chiropractic and its usefulness, were more likely to refer patients to a chiropractor.

Third party funding for care was not considered to be of less importance (55%) in shaping perception of the chiropractic profession, as 98% of medical aids in South Africa provide cover for chiropractic treatment (Van As, 2005).

Reasons for 'a practice model that does not involve drugs or surgery' being of less importance (55%) than other attributes/qualities could be that: respondents held additional qualifications that enabled them to administer these agents: the typical respondent to this study was; a male of approximately 36 years of age, who according to Kayne, Beattie and Reeves (1999), Menniti-Ippolito *et al* (2002), Reid (2002) and Tatalias (2006) would be more likely to utilize prescription drugs in practice and furthermore, more than a third of chiropractors (37.5%)(Q35; Section 4.8.1; Table 31) felt that chiropractic should include the use of prescription drugs in practice.

### **5.5.7 Public Levels of Confidence with Respect to Ethics, Education and Quality of Care**

Nearly all (96.8%) of the chiropractors 'agreed' that concerns with respect to the ethics and professional conduct of some members of the profession have a significant impact on the level of public confidence in chiropractic health care (Q28; Section 4.5.10; Table 24). The majority of WFC respondents (86%) agreed with this (Identity Consultation: Report and Recommendations, 2005). According to the Identity Consultation: Report and Recommendations (2005), a Gallup poll conducted in 2003 showed that Americans saw chiropractors as the least honest and ethical of all health professionals, with only 31% of Americans considering chiropractors to be honest and ethical, as opposed to 68% for medical doctors.

There was a strong response that 69.2% of chiropractors 'disagreed' that the public were aware of the level of education of chiropractors (Q28; Section 4.5.10; Table 24), 80% of WFC respondents agreed with this (Identity Consultation: Report and Recommendations, 2005). According to Chapman-Smith and Cleveland III (2005), there is much misunderstanding about the quality and extent of chiropractic education.

Focus groups held in Canada and the United States of America found that a large portion of the public thought that chiropractors study for two years and the quality of their education was significantly inferior to that of medical education. Caplan and Associates (1994) found that the Canadian public understood very little about chiropractic education, qualifications and scope of practice. Similarly, in South Africa, Van As (2005) found that 42.3% of school guidance counsellors were unaware of the level of education that a chiropractor receives, believing it was of a diploma or higher diploma level and just 20.3% knowing that it was of a master's level. Myburgh and Mouton (2007) found that patients in South Africa were uncertain of the professional and educational status that a chiropractor could claim.

When asked if chiropractors felt that the general public had confidence in the quality of care provided by chiropractors (Q28; Section 4.5.10; Table 24), over two thirds (69.1%) believed that the general public had confidence in the quality of care provided by chiropractors, whilst nearly one third (30.9%) 'disagreed'. Further research into the general public's view of chiropractic needs to be administered to determine the actual and not perceived views of the general public of the chiropractic profession.

### **5.5.8 Summary and Review of Objective 3**

Respondents in South Africa were in agreement that the public had no clear perception of the chiropractic profession (45%) and the desired perception is for the public to see chiropractors as offering primary health care: focused scope (55%), within mainstream healthcare (89.2%).

The respondents perceived the public to view chiropractic as offering the management of: neck and back pain (88.2%) and spinal problems (72.9%). However, respondents would like the public to perceive chiropractic to be seen as the management of neuromusculoskeletal conditions and their impact on general health (88.2%). Respondents agreed that the spine was of central importance to the practice of chiropractic as well as the public identity of chiropractic.

The findings of this study indicate that, when communicating an identity to the general public in South Africa, emphasis needs to be placed on the safety of chiropractic procedures and the level and extent of chiropractic education (discussed further in Section 5.5.5). The reputation of chiropractic also needs to be improved as most public perception is based on ignorance, misinformation or bias, rather than fact (Caplan and Associates, 1994). An increase in the public awareness would increase the trust and credibility of the chiropractic profession. Thus, improved knowledge, identity, and reputation are essential to facilitate public acceptance of chiropractic in the future.

#### **5.6 OBJECTIVE 4: TO DETERMINE HOW SOUTH AFRICAN CHIROPRACTORS' SEE CHIROPRACTIC RELATIVE TO PHYSIOTHERAPY**

These questions were included as the public may see chiropractic and physiotherapy as offering similar services. It was necessary to evaluate if chiropractors felt that this was a barrier to creating a clear public identity.

##### **5.6.1 Chiropractic Relative to Physiotherapy in South Africa**

A study by Naidoo and Buhler (2009) on the perceptions, attitudes and knowledge of physiotherapy and chiropractic students regarding each others professional practice in South Africa, revealed that chiropractic students had a more favourable perception of physiotherapy than physiotherapy students had of chiropractors. Results from Naidoo and Buhlers (2009) study showed that 47% of chiropractic students saw physiotherapy as direct competition to chiropractic. However, 80% of physiotherapy students considered chiropractic to be in direct competition to physiotherapy. It was concluded that a possible reason for the inter-professional competitiveness could be because of the overlap of the scope of practice of the two professions in South Africa and internationally. Thus, it was recommended by Naidoo and Buhler (2009) to further define the roles, scope and characteristics of both professions to create two separate identities.

From these results, it would appear that both professions would benefit from a clear professional identity, which is in keeping with the findings of this study (Q29; Section 4.6.1; Table 25), which stated that: 60% of respondents felt that chiropractic and physiotherapy were two separate professions. Similarly, 68.1% did not want the professions to be combined, and to remain separate. The majority of respondents did not want physiotherapy to be the gatekeepers for chiropractic. This is akin with findings of this study which state that chiropractors would like to be perceived as primary health care practitioners, whom the public have direct access to.

### **5.6.2 Competitive Advantage of Chiropractic over Physiotherapy in South Africa**

In this study, when asked what chiropractors saw as the competitive advantage that chiropractors had over physiotherapists (Q30; Section 4.6.2; Table 26), the majority of responses indicated that chiropractors saw the chiropractic adjustment (60.8%), the better level of chiropractic education (40%) and the ability to diagnose (39.2%) as the main competitive advantages. This correlates with the emphasis that the respondents placed on specialized knowledge and education and diagnostic ability (Q26; Section 4.5.8; Section 5.5.5; Table 22).

### **5.6.3 Summary and Review of Objective 4**

Most respondents in South Africa 'strongly agreed' (60%) that physiotherapy and chiropractic were two separate professions. Most respondents (43.4%) believed that they were two similar professions each with their own identity. Respondents 'strongly disagreed' (68.1%) that the two professions should be combined. Under half (38.8%) of the respondents 'strongly disagreed' that chiropractic should be the gatekeeper for physiotherapy whilst 25% 'strongly agreed' that they should be. The majority of respondents (83.2%) 'strongly disagreed' that physiotherapy should be the gatekeeper for chiropractic. The following factors amongst others were considered to be competitive advantages that chiropractic had over physiotherapy: the chiropractic adjustment (60.8%), the level of chiropractic education and training (40%) and the ability to make a diagnosis (39.2%).

## **5.7 OBJECTIVE 5: TO DETERMINE HOW SOUTH AFRICAN CHIROPRACTORS' PERCEIVE MEDICAL DOCTORS TO VIEW THE IDENTITY OF THE CHIROPRACTIC PROFESSION**

The opinions of medical doctors regarding chiropractic were considered to be important as they have a strong influence over the public. However, they were considered to be the secondary target in the development of the public identity for chiropractic (Identity Consultation: Report and Recommendations, 2005).

### **5.7.1 Medical Doctors' Perceptions of Chiropractic**

The results of this study (Q31; Section 4.7.1; Table 27) reflected that the majority of chiropractors in South Africa thought that medical doctors currently perceived chiropractic as: non-drug/non-surgical health care (63.1%), the management of neck and back pain (62.2%) and spinal problems (48.3%). These results were consistent with findings from the WFC Identity Consultation which found that medical doctors first and foremost saw chiropractic as the management of back and neck pain (67%) and non-drug / non-surgical health care (47%).

However, most respondents in this study were undecided as to whether medical doctors regarded chiropractic as competitors in the health care system (54.3%), with 28.9% believing that this was how medical doctors perceived the profession. However, 55% of respondents of the WFC Identity Consultation believed that this was how chiropractic was perceived (Northstar research Partners, 2004). This demonstrated that respondents felt that medical doctors in South Africa did not perceive chiropractic to be a competitor within the health care system as readily as their international counterparts.

This may be due to the number of qualified chiropractors in South Africa versus the number of qualified chiropractors internationally. In South Africa, there were approximately 506 chiropractors registered with AHPCSA (2008) at the time of this study, whereas in North America, for example, there were over 65 000 chiropractors

(Meeker and Mootz, 2005). Therefore, due to the small number of chiropractors in South Africa relative to North America, the profession may not pose as significant a threat to the medical profession as in North America. Furthermore, the philosophical orientation of the majority of chiropractors in South Africa, being primarily 'mixer'/evidence-based, also encourages integration of the profession into the mainstream health care system. Therefore, their aim is to be a partner as opposed to a threat to mainstream medicine.

Respondents felt that in South Africa medical doctors were undecided as to: whether the management of; neuromusculoskeletal conditions (62.7%), spinal problems (62.6%), back and neck pain (60.2%) or the vertebral subluxation (31.8%) had any impact on general health, which is in keeping with findings of the WFC Identity Consultation. The WFC study found that less than 14% of respondents believed that medical doctors saw chiropractic management to have any impact on general health (Northstar research Partners, 2004). This may be due to the lack of research substantiating claims that chiropractic has an effect on general health or any non-musculoskeletal conditions (Vernon, 2005).

Respondents were also undecided as to whether chiropractic was seen by medical doctors offering wellness care (63.8%) or primary health care (53%) (Q31; Section 4.7.1; Table 27). These results demonstrated that the respondents thought that medical doctors currently perceived chiropractic very differently to how respondents would like chiropractic to be perceived as primary care practitioners. These findings were supported by Louw and Myburgh (2005), who found that the majority of GP's in South Africa thought that chiropractors were ineffectual in the general management of patients. They also stated that the role of chiropractic in South Africa was seen as secondary to mainstream health care practices. Similarly, only 1% of respondents of the WFC Identity Consultation felt that medical doctors perceived chiropractic as offering primary health care.

### 5.7.2 Scope of Practice and Current Position in Health Care

The vast majority of respondents (73.3%) felt that medical doctors *currently* had no clear perception of the chiropractic profession (Q32; Section 4.7.2; Table 28). This was 24.3% more than the 49% of respondents from the WFC Identity Consultation. This may indicate that medical doctors abroad had a greater knowledge, and therefore greater acceptance of the chiropractic profession than those in South Africa. The results of this study (Q33; Section 4.7.3; Table 29) revealed that 96.7% of respondents thought that chiropractic services were *currently* perceived by medical doctors as complementary and alternative (CAM) compared with 2.5% who thought they perceived chiropractic services as mainstream.

These results were reflected in the WFC Identity Consultation which found that 98% of respondents thought that medical doctors perceived chiropractic as offering CAM as opposed to 2% who viewed it as mainstream (Northstar Research Partners, 2005). This was the converse of how chiropractors would like to be seen (Q22; Section 4.5.4; Table 19b) with 89.2% of chiropractors who *desired* to be seen as offering mainstream care and 10.8% who would like to be seen as offering CAM care.

Louw and Myburgh (2005) found that GP's saw chiropractic as offering a CAM approach and that the role of chiropractors in South Africa was seen as secondary to mainstream medical practices. This finding contradicted results found in the Netherlands and Norway but confirmed findings from the United States of America (Langworthy and Birkelid, 2001; Langworthy and Smink, 2000 and Teitlebaum, 2000). Myburgh and Mouton (2005) stated that the lack of a unified identity could add further confusion to the chiropractor's role in the healthcare system. Future research could be conducted to determine whether medical practitioners see a place for the chiropractic profession in mainstream healthcare.



### **5.7.3 Inter-professional Relations between Chiropractic and Medical Doctors**

The most important factors with respect to inter-professional relations were: medical doctors' perceptions about the safety (93.5%) and effectiveness (92.5%) of chiropractic care, and medical doctors' knowledge and understanding of the standards for chiropractic education and practice (92.5%) (Q34; Section 4.7.4: Table 30). The attitudes and behaviours of chiropractors (90.7%) and medical doctors (85.75) were also considered to be 'very important'. The influences, attitudes and behaviours of third party payers (54.6%) and financial barriers to referring patients for chiropractic health care (64.4%) were considered of less importance.

This sequence of importance was in keeping with the findings of the WFC Identity Consultation (Northstar Research Partners, 2005).

Therefore, from this sequence of results, the following factors need to be emphasized when communicating an identity to the medical fraternity: the safety and effectiveness of chiropractic and the standards for education and practice. It was also evident when investigating public perceptions that the educational standards of chiropractic had been grossly underestimated. The safety and effectiveness of chiropractic could be reiterated to medical doctors through scientific trials and communication thereof. This could further enforce the credibility and evidence based philosophy of 59.2% of chiropractors in South Africa.

Louw and Myburgh (2005) found that 46% of GP's in South Africa referred patients to chiropractors. It was found by Van As (2005) and Louw and Myburgh (2005) that with respect to GP's in South Africa, there was a significant relationship between a lack of knowledge and a positive perception of the profession. As GP's are primary contact practitioners with a trusted reputation, they have a large influence over public perceptions as they are the portal of entry or gatekeepers into the health care system. Thus, if GP's have little or negative knowledge of chiropractic, it could be assumed that when asked by patients, they would communicate these views to their patients. Therefore, if knowledge of chiropractic is increased in the medical fraternity, inter-professional relations could be improved (Louw and Myburgh, 2005).

To increase the knowledge of chiropractic and positively effect referrals from medical doctors, tactical interventions and awareness programs could be implemented (Louw and Myburgh, 2005). Increasing knowledge through informal means such as through patients of chiropractic or through being a patient of chiropractic could also be beneficial (Langworthy and Birkelid, 2001; Brussee, Assendelft and Breen, 2001).

The influences, attitudes and behaviours of third party payers and financial barriers to referring to chiropractors were also considered to be of less importance (between 54.6% and 64.6%) as most medical aids in South Africa reimburse chiropractic care.

#### **5.7.4 Summary and Review of Objective 5**

Respondents in South Africa felt that medical doctors did not have a clear perception of chiropractic (73.3%), and 96.7% thought that chiropractic was perceived by medical doctors as CAM. This is not how respondents would like to be seen. Respondents agreed that medical doctors perceived chiropractic to offer non-drug/non-surgical health care (81.6%), the management of: neck and back pain (84.9%), neuromusculoskeletal conditions (61.1%), and spinal problems (75.4%). However, respondents felt that medical doctors did not think that chiropractic management had any impact on general health. Half of the chiropractors (50.4%) thought that medical doctors saw chiropractic as a competitor in the healthcare system.

The most important factors with respect to inter-professional relations were: medical doctors' perceptions about the safety (93.5%) and effectiveness (92.5%) of chiropractic care, and medical doctors' knowledge and understanding of the standards for chiropractic education and practice (92.5%).

## **5.8 OBJECTIVE 6: TO DETERMINE SOUTH AFRICAN CHIROPRACTORS' KNOWLEDGE OF WFC IDENTITY SURVEY**

Questions to determine South African chiropractors' perceptions of the WFC identity were included, as CASA has adopted this identity.

### **5.8.1 Prescription Drug Policy**

Over half of respondents (62.5%) 'agreed' that chiropractic should not include the use of prescription drugs and 37.5% thought that chiropractic should include the use of prescription drugs (Q35, Section 4.8.1; Table 31). This debate has been discussed under Sections 5.5.3 and 5.5.5.

### **5.8.2 WFC Identity Statement**

When asked if respondents knew about the WFC identity: '*The experts in spinal health care within the health care system*' (Q36; Section 4.8.2; Table 32), 54.2% of the respondents knew about it, whereas 45.8% did not. Of the 54.2 % of the respondents who knew about the identity, 47.5% agreed with it, whilst 12.5% did not agree (Q37; Section 4.8.3; Table 33). Considering that 90% (Q18; Section 4.4.1; Table 17a) of respondents 'strongly agreed' that it was important for a profession to have a clear public identity, it would have been assumed that more respondents would have been aware of the WFC identity consultation. This could be an area for further research.

### **5.8.3 Reasons for Disagreement**

The respondents were asked to comment as to why they disagreed with the WFC identity (Q38; Section 4.8.4; Table 34). The comments highlighted that: chiropractors treated the extremities as well as the spine, they also treated the nervous system which was not included in the statement, and some found it naïve that chiropractors could claim to be the experts in spinal healthcare claiming to know more than orthopedic and neurosurgeons.

Additional comments by respondents stated that there was a strong need for a public identity of chiropractic, and greater emphasis needed to be placed on educating the public about chiropractic services. It was also felt that individual chiropractors needed to get more involved in creating awareness and promoting their profession. These comments reiterate the findings of this study.

#### **5.8.4 Summary and Review of Objective 6**

Just over half of the respondents (54.2%) knew about the WFC identity, 47.5% of whom agreed with it. Reasons for disagreement included: that the word 'spinal' was limiting, as chiropractors also treat all other joints in the body; no reference was made to the nervous system and respondents saw the term 'expert' as arrogant, as there are other professions with equal or superior knowledge of the spine.

### **5.9 CONCLUSION**

Thus the results of this study are highly comparable with the findings of the WFC Identity Consultation and other studies, indicating that internationally and locally, there is a lack of a clear identity for the chiropractic profession and that the international discourse has been reflected locally. Key findings of the study were: that the chiropractic profession in South Africa lacked a clear public identity and that there was a major discrepancy between how the profession is *currently* perceived by the public and medical doctors and how respondents *would like* chiropractic to be perceived. The chiropractic profession in South Africa strives to be well integrated as a mainstream health care provider in a primary contact position, offering focused scope care, for the treatment of neuromusculoskeletal conditions and their impact on general health. Chiropractic and physiotherapy were considered to be two separate professions each with its own identity.

## **CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS**

### **6.1 CONCLUSION**

The perceptions of South African chiropractors, regarding their professional identity have been described in this study.

The international discourse with regards to the professional identity was shown to have been reflected locally and according to chiropractors in South Africa had affected the public and medical doctors' opinions of the profession. Chiropractors in South Africa felt that the chiropractic profession in South Africa lacked a clear identity, which was considered to be vital.

The study revealed that there was a significant difference between how South African chiropractors thought the public and medical doctors currently perceived chiropractic and how they would like to be perceived. Chiropractic was seen to be viewed by the public as offering complementary and mainstream healthcare services but the desired perception was for the chiropractic profession to be perceived by the public as offering mainstream healthcare. The goal is for chiropractic to become integrated into mainstream health care and offering primary health care, first line treatment in the management of neuromusculoskeletal problems as well as impacting on general health. However, more research is required to assess the role that chiropractic offers in general health if this is to be marketed as an advantage of chiropractic health care to the public, especially with the emergence of evidence based medicine and health care to which most respondents strongly agreed to practice.

The vast majority of chiropractors thought that medical doctors had no clear perception of the chiropractic profession and that most medical doctors saw chiropractic in the complementary and alternative health care system. This may limit the acceptance of chiropractic by the public as the majority of chiropractors thought

that medical doctors' perceptions, knowledge and understanding of chiropractic were very important with respect to their inter-professional relations.

Chiropractic was seen by the majority of chiropractors to have the competitive advantage over physiotherapists. The following factors were considered to be the main competitive advantages that chiropractic had over physiotherapy: the chiropractic adjustment, the level of chiropractic education and the ability to make a diagnosis.

Just over half of the respondents knew about the World Federation of Chiropractic's (WFC) survey, of whom the vast majority agreed with it.

The proposed brand platform/identity statement of the WFC was that chiropractors were: *'The experts in spinal health care within the health care system'*.

This statement however, was felt by some respondents to be restricting in that it only encompassed the spine within the scope of chiropractic practice and it claimed superiority over other health care providers such as neurosurgeons, neurologists and orthopedic surgeons. A proposed revision to this statement based on findings in this study would be that chiropractic is a discipline that offers:

*'Primary health care with emphasis on conservative management of the neuromusculoskeletal system'*.

This study provided useful and necessary information which could influence public and medical views of chiropractic in the future. The results of this study were very similar to those of the WFC Identity Consultation and other international studies. It demonstrates that international views and opinions had been reflected locally and that there was a great deal of work to be done within the profession to resolve internal conflict. The public and medical fraternity need to be further educated about chiropractic to facilitate further future interaction and ensure the survival of the profession by establishing cultural authority of any specific domain of the healthcare system in South Africa.

## **6.2 RECOMMENDATIONS**

### **6.2.1 Questionnaire**

- In question 13, traction, massage, mobilization and heat therapy should have been added to the list of modalities, as well as a box marked 'no modalities used'.
- In question 16, the lickert scales had 'strongly agree' on the far left of the scale and 'strongly disagree' was on the far right of the scale. However, in questions 18, 25 and 29 'strongly disagree' was on the far left and 'strongly agree' was on the far right. This should have been uniform to avoid confusion.
- Some questions (such as questions 23, 24, 26, 27 and 31) had many elements to each question which could have led to respondent fatigue. The answer blocks could have caused visual confusion with the possible result of a box being erroneously marked. In future, the most important elements should be chosen and long lists should be avoided in order to gain the most accurate response.
- In Question 28, a 4 point lickert scale was used, whereas a 7 point lickert scale should have been used to maintain conformity and uniformity of the questionnaire.
- Question 32, was poorly expressed and may have been ambiguous. A more appropriate alternative to this question could have been 'Do you know about the WFC's definition of the professions identity?'

### **6.2.2 Research**

- Research to determine the perceived scope of practice of the three philosophical orientations of chiropractors (i.e. straights, mixers and evidence based).
- Reasons for the internal discord regarding the professional identity in South Africa need to be established.
- To determine reasons for South African respondents placing more importance on the spine, with respect to the practice and the public identity of chiropractic in South Africa, than respondents from the WFC Identity Consultation.
- Extensive research needs to be administered to determine the role of chiropractic and its impact on general health, if this is to be claimed as an advantage of chiropractic.
- Further research into the general public's view of chiropractic needs to be administered to determine the actual and not perceived views of the general public of the chiropractic profession.
- To determine the impact that ethics and professional conduct have on the general public's view of the profession in South Africa.
- Future research could be done to determine whether medical doctors see a place for the chiropractic profession in mainstream healthcare.



### 6.2.3 Profession

- An increased number of research publications in medical journals may help to increase awareness and positively influence the perceptions of the medical fraternity and therefore indirectly influence public perceptions of chiropractic. The increasing number of chiropractors practicing evidence based chiropractic should also increase the scientific credibility of the chiropractic profession amongst other medical professionals.
- The current perceived perceptions of the public and medical doctors about chiropractic do not represent how chiropractors strive to be seen, thus future efforts need to be made to educate the public and the medical fraternity about chiropractic. This could be implemented by distributing educational pamphlets at sports events. More media campaigns need to be implemented and more talks at health conferences could take place. Chiropractors need to be more involved and united in the promotion of their profession to the general public and the medical fraternity.
- According to chiropractors in South Africa, the public see chiropractic as managing back and neck pain, this is one of the leading reasons for visits to a medical doctor. However, if public knowledge of chiropractic is broadened and marketed as 'primary health care with particular emphasis on the neuromusculoskeletal system', it could be more widely accepted and incorporated into mainstream health care, thus the utilization of chiropractic services could be increased.
- Chiropractors in South Africa need to expand their services in order to service a larger section of the population; this may ensure the future survival of the profession in South Africa. This could be done by making chiropractic treatment more affordable to the middle and lower class income earners and by making themselves more accessible by penetrating areas which have only a few or no chiropractors.

- The following information needs to be effectively communicated to the public and the medical fraternity with media campaigns by an institution rather than each individual promoting their own 'brand' of chiropractic and thus create a uniform brand platform.
- The identity of the profession:- '*primary health care with emphasis on conservative management of the neuromusculoskeletal system*', should be communicated together with information supporting this identity which would include: the specialized approach to examination, diagnosis and treatment based on evidence based practices; offering conservative care; avoiding drugs and surgery; expert providers of manual therapy and adjunctive modalities; collaboration with other health care professionals; and a patient centered-approach to health care and wellness.
- It is also important to reiterate the high ethical standards that are associated with the practice of chiropractic as well as the level of education that chiropractors receive. It also imperative that the vast majority of chiropractors are unified in the communication of this identity in order for the public and the medical fraternity to gain a unified, definitive perception of the chiropractic profession.

## REFERENCES

Allied Health Professions Council of South Africa (AHPCSA). (portia@ahpcsa.co.za). 22<sup>nd</sup> July 2008. *Chiropractic JanFeb 2008. pdf*. Email to K. Keyter. (karenk@worldonline.co.za) [Accessed 22<sup>nd</sup> July 2008].

Allied Health Professions Council of South Africa. 2007. [Online]. Available at: <http://www.ahpcsa.co.za> [Accessed 15<sup>th</sup> September 2007].

ANZCO, Australian and New Zealand Classification of Occupations. 2006. *Census of Population and housing, Chiropractors, Profile using data from census 2006*. [Online]. Available at: [www.health.vic.gov.au/\\_\\_\\_data/assets/pdf.../chiropractic-profile.pdf](http://www.health.vic.gov.au/___data/assets/pdf.../chiropractic-profile.pdf) [Accessed 19<sup>th</sup> September 2009].

Assendelft, W.J.J., Pfeifle, C.E. and Bouter, L.M. 1995. Chiropractic in the Netherlands: A Survey of Dutch Chiropractors. *Journal of Manipulative and Physiological Therapeutics* [Online], (18): 129-134. [Online] Available at: <http://www.wfc./projects/identity/publications/survey> [Accessed 3<sup>rd</sup> March 2006].

Baer, H.A. 1987. Divergence and convergence in two systems of manual medicine: osteopathy and chiropractic in the United States. *Medical Anthropology Quarterly*, 1(2): 176-93.

Bergh, Z.C. and Theron, A.L. 1999. *Psychology in the Work Context*. 1<sup>st</sup> Edition. South Africa: International Thompson Publishing.

Bernard, H.R., 2000. *Social Research Methods: Qualitative and Quantitative Approaches*. California: Sage Publications

Brantingham, J.W. and Snyder, W.R. 1999. From Africa to Africa. *Chiropractic History*, 19(1):53-59.

Breen, A., Carrington, M., Collier, R. and Vogel, S. 2000. Communication between general and manipulative practitioners: a survey. *Complementary Therapies in Medicine*, 8(1):8-14.

Briggance, B.B. 2005. A proposal regarding the identity of Chiropractic: embrace the centrality of the spine. *Journal of Chiropractic Humanities*, 12: 8-15.

British Chiropractic Association. 2003. *British Chiropractic Association Professional Statement. Professional statement policy.* [Online] Available at: <http://www.wfc./projects/identity/publications/survey> [Accessed 3<sup>rd</sup> March 2006].

Bronfort, G., Haas, M. and Evans, R. 2005. The Clinical Effectiveness of Spinal Manipulation for Musculoskeletal Conditions. In Haldeman, S. (ed.) *Principles and Practice of Chiropractic*. 3<sup>rd</sup> Edition. U.S.A: McGraw Hill.

Brussee, W.J., Assendelft, W.J. and Breen, A.C.2001. A communication between general practitioners and chiropractors. *Journal of Manipulative and Physiological Therapeutics*, 24(1):12-16.

Bunge, J. 2007. A survey to determine post graduate student confidence in their knowledge and skills acquired during the chiropractic course at the University of Johannesburg. M.Tech.Chiropractic, South Africa.

Caplan, K. and Associates. 1994. *The image, position and reputation of chiropractic in the health care marketplace today: a qualitative investigation into attitudes toward, and perceptions of, chiropractic in Canada.* Unpublished monograph. [Online] Available at: <http://www.wfc./projects/identity/publications/survey> [Accessed 3<sup>rd</sup> March 2006].

Carey, P.F., Clum, G. and Dixon, P. 2005. *Final Report of the Identity Consultation*. World Federation of Chiropractic. Canada. [Online]. Available at: <http://www.wfc.org> [Accessed 3<sup>rd</sup> March 2006].

Carter, R. 1998. An identity for Canadian Chiropractic. *Journal of Canadian Chiropractic Association*, 42(3).

Chaffe, J. 1997. *Thinking Critically*. 5<sup>th</sup> Edition. Houghton Mifflin Company. Boston. New York.

Chapman-Smith, D. (DChapman-Smith@wfc.org). 6<sup>th</sup> March 2007. *Identity consultation*. Email to K. Keyter (karenk@worldonline.co.za) [Accessed 6<sup>th</sup> March 2007].

Chapman-Smith, D.A. and Cleveland III, C.S. 2005. International Status, Standards, and Education of the Chiropractic Profession. In Haldeman, S. (ed.) *Principles and Practice of Chiropractic*. 3<sup>rd</sup> Edition. U.S.A: McGraw Hill.

Chapman-Smith, D. 2000. *The Chiropractic Profession*. U.S.A: NCMIC Group Inc

Cherkin, D.C. and Mootz, R.D. 1997. *Chiropractic in the United States: Training, Practice and Research*. AHCPR Publication Number 98-N002. Rockville, MD: Agency for Health Care policy and Research. Public Health Service, US Department of Health and Human Services.

Chiropractic Association of South Africa. 2009. *A Closer Look at the World of Chiropractic, 2009-2010*. South Africa.

Chiropractic Association of South Africa (CASA). 2008. [Online] Available at: <http://www.chiropractic.co.za> [Accessed on 12th June 2008].

Commission on Alternative Medicine, Social Departementete. 1987. *Legitimization for Vissa Kiropraktorer* [English Summary]. Stockholm, Sweden.

Cooper, R.A. and Mckee, H.J. 2003. Chiropractic in the United States: Trends and Issues. *Journal of Public Health and Health Care Policy* [Online], 81(1): 107-138. [Online] Available at: <http://www.wfc./projects/identity/publications/survey> [Accessed 3<sup>rd</sup> March 2006].

Coulter, I.D. 2006. *Logic and evidence for the identity of chiropractic, primary care or spinal doctor*. [online]. Available at: <http://c3r.org/accrac06/bios-abstracts/nelson-abstract.htm> [Accessed 6th July 2006].

Coulter I.D. 1992. The Sociology of Chiropractic: Future Options and Directions. In Haldeman, S. (ed.) *Principles and Practice of Chiropractic*. Appleton and Lange.

Councils on Chiropractic Education International. [Online]. Available at: [www.cceintl.org](http://www.cceintl.org). [Accessed 22<sup>nd</sup> August, 2009].

Criterion Research Group. 1999. *General Population Survey (Province of Alberta): A Quantitative Report*. College of Chiropractors of Alberta. Unpublished Monograph.

Curtis, P. and Bove, G. 1992. Family physicians and chiropractors: what's best for the patient. *Journal of Family Practitioners*, 35: 552-555.

Declaration of Helsinki. 1975.

De Gouveia, N. 2009. The knowledge, perception and utilization of vitamin and mineral supplements, natural medicines and pharmacological agents as adjuncts to Chiropractic practice in South Africa. M.Tech.: Chiropractic Durban University of Technology.

Duenas, R., Carucci, G.M., Funk, M.F. and Gurney, M.W. 2003. Chiropractic – primary care, neuromusculoskeletal care, or musculoskeletal care? Results of a survey of chiropractic college presidents, chiropractic organization leaders, and Connecticut-licensed doctors of chiropractic. Connecticut Chiropractic Association. *Journal of manipulative and physiological therapeutics*, 26:510-523.

*DUT Chiropractic Handbook*. 2009. Durban University of Technology. South Africa.

Dyer, C. 1997. *Beginning Research in Psychology. A Practical Guide to Research Methods and Statistics*. Blackwell Publishers Ltd. Oxford.

Epstein, A. 1978. *Ethos and Identity*. Tavistock, London. Page 101. [Online] Available at: [http://edutechwiki.unige.ch/en/Professional\\_identity](http://edutechwiki.unige.ch/en/Professional_identity) [Accessed on 27th July 2007].

Esterhuizen, T. 2008. Interviewed by K. Keyter, Chiropractic Department, Durban University of Technology, Durban, 7<sup>th</sup> August 2008.

Fletcher, J. 2005. A survey of treatment regimes of chiropractic in South Africa. M.Tech.: Chiropractic, University of Johannesburg.

Gaumer, G., Koren, A. and Gemmen, E. 2002. Barriers to Expanding Primary Care Roles for Chiropractors: The Role of Chiropractic as Primary Care Gatekeeper. *Journal of Manipulative and Physiological Therapeutics*, 25(7): 428.

Gibbons, R.W. 1980. *The Rise of the Chiropractic Educational Establishment*. Littleton. Who's who in Chiropractic International Publishing Company.

Gibbs, A. 1997. *Social Research Update- Issue 19. Focus Groups*. University of Surrey. [Online]. Available from: <http://www.soc.surrey.ac.uk/sru/SRU19.html> [Accessed 28th August 2007].

Graziano, A.M. and Raulin, M.L. 2004. *Research Methods: a process of enquiry*. 5<sup>th</sup> edition. Pearson education group Inc.

Haldeman, S. (Ed.) 2005. *Principles and Practice of Chiropractic*. (3<sup>rd</sup> ed.). U.S.A. McGraw Hill.

Haldeman, S. 2000. The Evolution of Chiropractic-Science and Theory. Excerpt from Keynote Presentation on September 21<sup>st</sup>, 2000: 2000 International Conference on Spinal Manipulation.

Health Professions Council of South Africa. 2009. [Online]. Available at: <http://www.hpcs.co.za>. [Accessed 22nd November 2009].

Hulley, S.B., Cummings, S.R., Browner, W.S., Grady, D.G. and Newman, T.B. 2007. *Designing Clinical Research*. 3<sup>rd</sup> Edition. Philadelphia, USA: Lippincott Williams and Wilkins.

Hupkes, G.J. 1990. A Proposal for the “Equal Playing Fields” for Chiropractic in SA’s health care delivery system. M.Sc. University of South Africa.

Hurwitz, E.L., Coulter, I.D., Adams, A.H., Genovese, B.J. and Shekelle, P.G. 1998. Use of chiropractic services from 1985 through 1991 in the United States and Canada. *American Journal of Public Health* [Online], 1998; 88(5):771-776.

*Identity Consultation: Report and Recommendations*. Paper delivered at the WFC Assembly, Sydney, Australia, 15<sup>th</sup> June 2005.

Inglis, B.D., Fraser, B. and Penfold, B.R. 1979. *Chiropractic in New Zealand: Report for the commission of Inquiry*. Government Printer. Wellington, New Zealand. [Online] Available at: <http://www.wfc.org/projects/identity/publications/survey> [Accessed 3<sup>rd</sup> March 2006].



Johnson, C., Baird, R. and Dougherty, P.E. 2008. Chiropractic and public health: current state and future vision. *Journal of Manipulative and physiological Therapeutics* [Online], 31 (6): 397-410. Available at: <http://imptonline.org/article/PIIS0161475408001784/fulltext> [Accessed 9th May 2009].

Kapsalis, C. 2000. *Use of Chiropractic Services in Canada: A Study Based on Statistics Canada's National Population Health Survey 1994 and 1996*. Canada. [Online] Available at: <http://www.wfc./projects/identity/publications/survey> [Accessed 23<sup>rd</sup> March 2006].

Kaptchuk, T.J. and Eisenberg, D.M. 1998. Chiropractic: origins, controversies contributions. *Archives of Internal Medicine* [Online], 158 (20): 2215-24. Available at: <http://archinte.ama-assn.org/cgi/content/full/158/20/2215> [Accessed 15th June 2009].

Kayne, S., Beattie, N. and Reeves, A. 1999. Survey of buyers of over-the-counter homeopathic medicines. *Pharmaceutical Journal*. 263: 210-212.

Keating, J.C. 2005 (a). A Brief History of the Chiropractic Profession. In Haldeman, S. (ed.) *Principles and Practice of Chiropractic*. 3<sup>rd</sup> Edition. U.S.A: McGraw Hill.

Keating, J.C. 2005 (b). Philosophy in Chiropractic. In Haldeman, S. (ed.) *Principles and Practice of Chiropractic*. 3<sup>rd</sup> Edition. U.S.A: McGraw Hill.

Keating, J.C., Cleveland III, C.S. and Menke, M. 2005. *Chiropractic history: a primer. Association for the History of Chiropractic*. [Online]. Available at: <http://data.memberclicks.com/site/ahc/Chiro/History/Primer.pdf>. [Accessed 16th June 2008].

Keating, J.C. and Mootz, R.D. 1989. The Influence of Political Medicine on Chiropractic Dogma: Implications for Scientific Development. *Journal of Manipulative and Physiological Therapeutics*. 12:393-398.

Kehoe, J. 1994. *Money, Success and You. Harness your mind to achieve Prosperity*. Zoetic Inc. Canada.

Kew, M.F. 2006. The Assessment of the Knowledge and Perception of Personal Trainers within Durban with Respect to Chiropractic. M.Tech.: Chiropractic, Durban Institute of Technology, South Africa.

Langworthy, J.M. and Birkelid, J. 2001. General practice and chiropractic in Norway: How well do they communicate and what do GP's want to know? *Journal of Manipulative and Physiological Therapeutics*, 24(9):576-81.

Langworthy, J.M. and Smink, R.D. 2000. Chiropractic through the eyes of Physiotherapists, Manual Therapists, and Osteopaths in the Netherlands. *The Journal of Alternative and Complementary Medicine*, 6(5):437-443.

Lapane, K.L., Quillian, B. and Hughes, C.M. 2007. *A Comparison of Two Distribution Methods on Response Rates to a Patient Safety Questionnaire in Nursing Homes*. Brown medical School. America.

Louw, J.D. and Myburgh, C. 2005. The Knowledge of General Practitioners about Chiropractic as a Factor that may Influence Health Care Integration in South Africa. M.Tech.: Chiropractic, Durban Institute of Technology, South Africa.

MacLennan, A. and Wilson, D. 1996. Prevalence and Cost of Alternative Medicine in Australia. *Lancet* [Online], 347(9001): 569.

Mainous, G., Gill, J., Zoller, J. and Wolman, M. 2000. Fragmentation of Patient Care between Chiropractors and Family Physicians. *Journal of American Medical Associations*, 9: 446-450.

Martin, S.C. 1993. Chiropractic and the social context of medical technology, 1895-1925. *Technology and Culture*,. 34 (4): 808-34.

Mathews, M. 2006. The prevalence and factors associated with occupational overuse syndromes in the hands and wrists of chiropractors in South Africa. M.Tech.: Chiropractic, Durban University of Technology, South Africa.

McDonald, W.P., Durkin, K.F. and Pfefer, M., 2004. *How Chiropractors Think and Practice: The Survey of North American Chiropractors*. Institute for social research. Ohio Northern University. [Online] Available at: <http://www.wfc./projects/identity/publications/survey> [Accessed 3<sup>rd</sup> March 2006].

Mearns, K.J. and Reader, T. 2007. Organizational support and safety outcomes: An un-investigated relationship? *Safety Science*, 46: 388-397.

Meeker, W.C. and Haldeman, S. 2002. Chiropractic a Profession at the Crossroads of Mainstream and Alternate Medicine. *Annals of Internal Medicine*, 136:216-227.

Meeker, W.C. and Mootz, R.D. 2005. Integration of Chiropractic in Health Care. In S. Haldeman, S. (ed.) *Principles and Practice of Chiropractic*. 3<sup>rd</sup> Edition. U.S.A: McGraw Hill.

Menniti-Ippolito, F., Gargiulo, L., Bologna, E., Forcella, E. and Raschetti, R. 2002. The use of unconventional medicine in Italy: A nation-wide survey. *European Journal of Pharmacology*. 58: 61-64.

Mootz, R.D., Coulter, I.D. and Schultz, G.D. 2005. Professionalism and Ethics in Chiropractic in Haldeman, S. (ed.) *Principles and Practice of Chiropractic*. 3<sup>rd</sup> Edition. U.S.A: McGraw Hill.

Mootz, R.D. and Phillips, R.B. 1997. Chiropractic Belief Systems. In Cherkin, D.C. and Mootz, R.B. (ed.) *Chiropractic in the United States: Training, Practice and Research*. Rockville, MD.

Morgan, C., Isaac, J.D. and Sansone C. 2001. The role of interest in understanding the career choices of female and male college students. *Journal of Research*. 44(5-6):295-320.

Morgan, D.L. 1998. *Moderating Focus Groups*. Volume 4. Sage Publications. Thousand Oaks.

Mouton, J. 1996. *Understanding Social Research*. South Africa: Van Schaik Publishers.

Myburgh, C. and Mouton, J. 2007. Developmental issues in Chiropractic: a South African practitioner and patient perspective. *Journal of Manipulative Physiological Therapeutics*. March-April; 30(3):206-214.

Naidoo, M. 2008. A survey to determine the knowledge and perceptions of biokineticists with respect to the chiropractic profession. M.Tech.: Chiropractic, Durban University of Technology, South Africa.

Naidoo, N. and Buhler, L. 2009. The perceptions, attitudes and knowledge of physiotherapy and chiropractic students regarding each others' professional practice. *South African Journal of Physiotherapy*, 65(2):32-38.

National Centre for Complementary and Alternative Medicine, 2004. [Online]. Available: <http://www.aamc.org/research/adhocgp/pdfs/nccam.pdf>. [Accessed 16 June 2009].

Nelson, C.F., Lawrence, D.J., Triano, J.J., Bronfort, G., Perle, S.M., Metz, R.D., Hegetschweiler, K. and LaBrot, T. 2005. *Chiropractic as spine care: a model for the profession*. [Online]. Available at: <http://www.chiroandosteo.com/content/13/1/9> [Accessed 15 April 2009].

New Zealand Consumers' Institute. 1997. The Art of Healing – what you need to know about non conventional therapies. *Consumer No. 363*, 20-27.

North Star Research Partners. 2004. *Consultation on Identity, Quantitative Research Findings*. [Online] Available at: <http://www.wfc.org> [Accessed 3<sup>rd</sup> March 2006].

Painter, F.M. 2007. *The identity of the chiropractic profession*. [online]. Available at: [http://www.chiro.org/ChiroZine/ABSTRACTS/Identity\\_of\\_the\\_Chiropractic\\_Profession.shtml](http://www.chiro.org/ChiroZine/ABSTRACTS/Identity_of_the_Chiropractic_Profession.shtml) [Accessed 20th September 2007].

Papadopoulos, C. 1997. *Canadian Chiropractic Resources databank (CCRD): a national summary report*. Unpublished monograph. [Online]. Available at: <http://www.wfc./projects/identity/publications/survey> [Accessed 3<sup>rd</sup> March 2006].

Pollentier, A. and Langworthy, J.M. 2007. The scope of chiropractic practice: A survey of chiropractors in the UK. *Clinical Chiropractic* (10), 147-155.

Prescott, J.D. 2001. 'Adjustment' vs. manipulation. *The chiropractic journal* [Online]. Available at: <http://www.worldchiropracticalliance.org/tcj/2001/jul/jul2001z.htm> [Accessed on 20th September 2009].

Reid, S. 2002. A Survey of the use of over-the-counter homeopathic medicines purchased in health stores in Central Manchester. *Homeopathy*, 91: 225-229.

Rose, K.A. and Adams, A. 2000. A survey of the use of evidence-based health care in chiropractic college clinics. *Journal of Chiropractic Education*. [Online], 14(2): 71-7. Available at: <http://www.journalchiroed.com/2000/JCEFall2000Rose.PDF> [Accessed 12 May 2008].

Sanchez, R.E. 1991. A Look in the Mirror: A Critical and Exploratory Study of Public Perceptions of the Chiropractic Profession in New Jersey. *Journal of Manipulative and Physiological Therapeutics*, 14 (3): 165-176.

Scollon, R. and Scollon, W.S. 1995. *Intercultural Communication*. Massachusetts. Blackwell.

South Africa. Allied Health Professions Council Act 63 of 1982 as corrected by: Government Notice No. R. 266 of 26<sup>th</sup> March 2001. Pretoria: Government Printer.

South African Society of Physiotherapy. 2009. *What is Physio?* [Online]. Available at [www.physiosa.org.za](http://www.physiosa.org.za). [Accessed 18<sup>th</sup> October 2009].

Straton, R.G., Sweeney, J. and Grandage, J. 1990. *Review of the Relationship of Chiropractic Services to the Public Health System in Western Australia*. Unpublished. [Online]. Available at: <http://www.wfc./projects/identity/publications/survey> [Accessed 3<sup>rd</sup> March 2006].

Tatalias, J.A. 2006. A prospective, epidemiological pilot study to investigate the level of knowledge of homeopathy and its contextualization in health shops in the Gauteng area. M.Tech.: Homeopathy, Durban University of Technology. South Africa.

Till, G. 1997. Aspects of Chiropractic History in South Africa. Technikon Natal, unpublished handout.

Van As, R.K. 2005. The knowledge and Perception of Vocational Counselors in South Africa with Respect to Chiropractic. M.Tech.: Chiropractic, Durban University of Technology, South Africa.

Verhoef, M.J and Page, S.A. 1996. Physicians Perspective on Chiropractic Treatment. *Journal of Canadian Chiropractic Association*, 40 (4): 214-219.

Vernon, H. 2005. *The Treatment of Headache, Neurologic and Non-Musculoskeletal Disorders by Spinal Manipulation*. In S. Haldeman (Ed.) Principles and Practice of Chiropractic. 3<sup>rd</sup> Edition. U.S.A: McGraw Hill.

Vinci, C. and Peterson, C.K. 2003. A Pilot Survey of Chiropractic in Italy. *European Journal of Chiropractic*, 2003: (47): 61-78.

Wardwell, W.I. 1994 (a). Differential Evolution of the Osteopathic and Chiropractic Professions in the United States. *Perspectives in Biology and Medicine*, 37(4):595-608.

Wardwell, W.I. 1994 (b). Alternative Medicine in the United States. *Social Science and Medicine*, 38(8):1061-8.

Wardwell, W.I. 1992. *Chiropractic: History and Evolution of a new Profession*. St Louis, USA. Mosby-Year book.

Wehmeier, S. 2006. *Oxford Advanced Learners Dictionary*. International Students Edition. 7<sup>th</sup> Ed. Oxford. Oxford University Press.

Whisker, G. 2001. The Postgraduate Research Handbook. Succeed with your MA. Mphil. EdD and PhD. Palgrave. New York.

Wilson, F.J.H. 2003. A Survey of chiropractors in the United Kingdom. *European Journal of Chiropractic*, 2003:50:185-198.

World Federation of Chiropractic (WFC). 2005. [Online]. Available at: [www.wfc.org](http://www.wfc.org).

UJ Chiropractic Handbook. 2009. *University of Johannesburg. South Africa.*



## ETHICS CLEARANCE CERTIFICATE

Student Name	Karen Keyter	Student No	20200723
Ethics Reference Number	FHSEC 093/08	Date of FRC Approval	28/10/2008
Research Title:	<b>The Perceptions of South African Chiropractors, regarding their Professional Identity.</b>		

*In terms of the ethical considerations for the conduct of research in the Faculty of Health Sciences, Durban University of Technology, this proposal meets with Institutional requirements and confirms the following ethical obligations:*

1. The researcher has read and understood the research ethics policy and procedures as endorsed by the Durban University of Technology, has sufficiently answered all questions pertaining to ethics in the DUT 186 and agrees to comply with them.
2. The researcher will report any serious adverse events pertaining to the research to the Faculty of Health Sciences Research Ethics Committee.
3. The researcher will submit any major additions or changes to the research proposal after approval has been granted to the Faculty of Health Sciences Research Committee for consideration.
4. The researcher, with the supervisor and co-researchers will take full responsibility in ensuring that the protocol is adhered to.
5. **The following section must be completed if the research involves human participants:**

	YES	NO	N/A
❖ Provision has been made to obtain informed consent of the participants	x		
❖ Potential psychological and physical risks have been considered and minimised	x		
❖ Provision has been made to avoid undue intrusion with regard to participants and community	x		
❖ Rights of participants will be safe-guarded in relation to: <ul style="list-style-type: none"> <li>- Measures for the protection of anonymity and the maintenance of Confidentiality.</li> </ul>	x		
- Access to research information and findings.	x		
- Termination of involvement without compromise	x		
- Misleading promises regarding benefits of the research	x		

SIGNATURE OF STUDENT/RESEARCHER

27/10/08

DATE

SIGNATURE OF SUPERVISOR/S

27/10/08

DATE

SIGNATURE OF HEAD OF DEPARTMENT

27/10/08

DATE

27/10/08

DATE

SIGNATURE: CHAIRPERSON OF RESEARCH ETHICS COMMITTEE

## APPENDIX B

### LETTER OF PERMISSION

**From:** David Chapman-Smith [DChapman-Smith@wfc.org]  
**To:** karenk@worldonline.co.za  
**Cc:** HaldemanMD@aol.com; Serena Smith \(\ssmith@wfc.org\) [SSmith@wfc.org]; Evalie Heath \(\Botswana & Zimbabwe\) [ekheath@netconnect.co.zw]  
**Subject:** FW: Identity Consultation  
**Sent:** Tue, 6/03/2007 9:50 PM

Dear Karen

This is your authority to adapt the WFC questionnaire for your use. It may be found at the website under Identity Consultation. Your questionnaire should be issued under your name, or some other name than the WFC, though the fact that it is derived from the WFC questionnaire can be stated openly.

Good luck and, in return, let us have your results in due course.

If you have any questions they should be referred in the first instance to my assistant Serena Smith to whom I am copying this.

Best wishes

David

PS Serena – please open a folder Identity Survey under South Africa/2007.

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## APPENDIX C

### LETTER OF INFORMATION AND INFORMED CONSENT – FOCUS GROUP

Dear Participant

I would like to welcome you to the focus group of my study.

**The title of my research project is:**

The Identity of the Chiropractic Profession in South Africa.

**Principle Investigator:** Karen Keyter

**Co-investigators:** Dr. Laura Wilson  
Dr. Brian Kruger

**Brief Introduction and purpose of the study:**

Identity: Represents the process by which the person seeks to integrate his various statuses and roles, as well as his diverse experiences, into a coherent image or self.

The public identity can also be interchanged with perceived image of a profession.

From the beginning of chiropractic over 100 years ago there has been a continual debate over the conflicting views of the role of chiropractic. As a result chiropractic has failed to define its role in the health care system in an understandable, credible and scientifically coherent way. The perceived image or public identity of chiropractic has long been debated within the profession, and outside consultants have repeatedly advised the profession to clearly define their image.

Today chiropractors find themselves lost between mainstream and alternative health care. Due to the profession being unsure of its identity the public are even more unaware of the role of chiropractic, and a profession not understood is not used.

Due to this continuing controversy the World Federation of Chiropractic conducted an extensive two year identity consultation by a representative task force consisting of chiropractors from around the world. The consultation resulted in the identity of chiropractic being defined as ‘the spinal health care experts in the health care system’.

However of the 3689 participants in this study only 34 were from South Africa, and since the Chiropractic Association of South Africa has since adopted this identity, it would be useful to conduct a similar study in South Africa to determine whether chiropractors in South Africa agree with this identity. A study done by Myburgh and Mouton found that chiropractors in South Africa could not claim congruence on important factors such as the identity of the chiropractic profession in South Africa, poor integration with mainstream healthcare stakeholders as well as the absence of a marketable model of the practice of chiropractic.

A unified identity will help the profession to establish its cultural authority over any specific domain of health care which will ensure the survival of the profession as well as the increase the utilization of the service.

**Aim of the study:**

- To formulate a relevant identity for chiropractic in South Africa
- To compare and contrast the identity found from the data received from the questionnaires against the World Federation of Chiropractics identity that they formulated from their worldwide survey.
- To compare demographic data with aspects of the identity.

**Remuneration:**

Participation in this study is voluntary and there will be no remuneration.

**Procedure:**

Before commencing the focus group discussion, kindly read and sign the informed consent form, confidentiality statement and code of conduct. Each member will then receive a copy of the questionnaire, after which each of the questions will be discussed in sequential order. Please recommend any suggestions that you may have regarding the questions in order to limit any misinterpretation by the respondents. You are requested to comment on how the questionnaire should be modified in order to enhance the understanding of the questions to accurately assess the Identity of the Chiropractic Profession in South Africa. If inconsistencies are found or changes proposed, a unanimous vote is required to institute change to the questionnaire.

If you have any further queries please feel free to contact either my supervisor or myself.

**Supervisor:** Dr. Laura Wilson: 031 373 2923

**Researcher:** Karen Keyter : 031 373 2205

**Statement of agreement to participate in the research study:**

I....., ID number....., have read this Document in its entirety and understand its contents. Where I have had any questions or queries, these have been explained to me by..... to my satisfaction. Furthermore, I fully understand that I may withdraw from this study at any stage without any adverse consequences and my future health care will not be compromised. I, therefore voluntarily agree to participate in this study.

Subjects name (print):.....Subjects signature:.....Date:.....

Researchers name (print):.....Researchers signature:.....Date:.....

Witness name (print):.....Witness signature:.....Date:.....

Supervisors name (print):.....Supervisors signature:.....Date:.....

Co supervisors name (print):.....Co supervisors signature:.....Date:.....

Your participation in this study is much appreciated and you are assured your comments and contributions to the discussion will be kept confidential throughout. The results of the discussion will only be used for research purposes.

Your time, opinion and assistance with this project are invaluable and greatly appreciated.

Karen Keyter

## APPENDIX D

### CONFIDENTIALITY STATEMENT – FOCUS GROUP

#### **IMPORTANT NOTICE:**

**THIS FORM IS TO BE READ AND FILLED IN BY EVERY MEMBER PARTICIPATING IN THE FOCUS GROUP, BEFORE THE FOCUS GROUP MEETING CONVENES.**

#### **DECLARATION**

1. All information contained in the research documents and any information discussed during the focus group meeting will be kept private and confidential. This is especially binding to any information that may identify any of the participants in the research process.
2. The returned questionnaires will be coded and kept anonymous in the research process.
3. None of the information shall be communicated to any other individual or organization outside of this specific focus group as to the decisions of this focus group.
4. The information from this focus group will be made public in terms of a journal publication, which will in no way identify any participants of this research.

Once this form has been read and agreed to, please fill in the appropriate information below and sign to acknowledge agreement.

#### **Please print in block letters:**

Focus Group Member:	_____	Signature:	_____
Witness Name:	_____	Signature:	_____
Researcher's Name:	_____	Signature:	_____
Supervisor's Name:	_____	Signature:	_____

## APPENDIX E

### CODE OF CONDUCT – FOCUS GROUP

#### **IMPORTANT NOTICE:**

**THIS FORM IS TO BE READ AND FILLED IN BY EVERY MEMBER PARTICIPATING IN THE FOCUS GROUP, BEFORE THE FOCUS GROUP MEETING CONVENES.**

As a member of this committee, I agree to abide by the following conditions:

1. All information contained in the research documents and any information discussed during the focus group meeting will be kept private and confidential. This is especially binding to any information that may identify any of the participants in the research process.
2. None of the information shall be communicated to any other individual or organization outside of this specific focus group as to the decisions of this focus group.
3. The information from this focus group will be made public in terms of a journal publication, which will in no way identify any participants of this research.

No.	Member represents	Member's Name	Signature	Contact details
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

## APPENDIX F

### PRE FOCUS GROUP QUESTIONNAIRE

Thank you for agreeing to participate in this study.

Please read and answer each question to the best of your ability. When answering the questions please provide answers that reflect your own perspective.

Answer by placing a tick in the appropriate box, unless otherwise stated tick only one box per question.

#### Demographic details:

1. Gender:

Male ☐

Female ☐

2. What is your age?

\_\_\_\_\_ Years

3. Ethnic group (statistical purposes only):

White ☐

Black ☐

Indian ☐

Other ☐

4. Which institution did you graduate from?

Durban University of Technology (formerly Technikon Natal) ☐

University of Johannesburg (formerly Technikon Witwatersrand) ☐

Other, please specify

5. What qualification do you hold?

M.Tech.Chiropractic ☐

Doctor of Chiropractic ☐

6. How many years has it been since you graduated?

5 or less ☐

6 to 10 ☐

11 – 20 ☐

More than 20 ☐

7. Which of the following best describes your role in chiropractic..? (You may tick more than one block).

Administration ☐  
 Clinical practice- Full time ☐  
 Clinical Practice – Part time ☐  
 Research ☐  
 Retired ☐  
 Academia ☐

If solely involved in academia please proceed to question 13.

8. If you are in clinical practice which best describes the setting of your practice?

Private Practice ☐  
 Hospital ☐  
 Multidisciplinary Practice ☐

9. In what area is your practice situated?

Urban ☐  
 Sub –urban ☐  
 Rural ☐

10. How many years have you been in active practice?

5 or less ☐  
 6 to 10 ☐  
 11 – 20 ☐  
 More than 20 ☐

11. What Chiropractic technique do you use in your practice?

Diversified ☐  
 SOT ☐  
 Activator ☐  
 Best ☐  
 Gonstead ☐

Other, please specify.

12. What Chiropractic technique do you use in your practice?

Manipulation of the spine	<input type="checkbox"/>	Ultrasound	<input type="checkbox"/>
Manipulation of the extremities	<input type="checkbox"/>	Interferential Current	<input type="checkbox"/>
Mobilisation	<input type="checkbox"/>	TENS	<input type="checkbox"/>



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Traction	<input type="checkbox"/>	Heat therapy	<input type="checkbox"/>
Massage	<input type="checkbox"/>	Laser	<input type="checkbox"/>
Excercise therapy	<input type="checkbox"/>	Ergonomic advice	<input type="checkbox"/>
Cold therapy	<input type="checkbox"/>	Dry needling	<input type="checkbox"/>
Dietary Advice	<input type="checkbox"/>	Other, Please Specify	

13. What kind of Chiropractor do you consider yourself to be?

Straight ☐

Mixer ☐

Evidence based ☐

Other, please specify

14. Have you practiced overseas?

No ☐

Yes ☐

If yes, Where?

15. To begin, please indicate the extent to which you agree or disagree with the following statements. Please use the 7-point scale below where 1 means *strongly disagree* and 7 means *strongly agree*. You may of course choose any number in between.

	<u><b>Strongly Disagree</b></u>							<u><b>Strongly Agree</b></u>
	1	2	3	4	5	6	7	
It is important for a profession to have a clear public identity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The chiropractic profession has a clear public identity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. Do you think that the chiropractic profession **is currently perceived** by the general public South Africa as offering *primary health care: focused scope*, *primary health care: broad scope*, or *specialist care*?

Primary health care: focused scope ☐

Primary health care: broad scope ☐

Specialist care ☐

No clear perception of the Chiropractic profession ☐

### **Primary Health Care:** **Focused Scope**

Direct access; focused scope of practice; may have overall responsibility for patient and coordination of care within scope of practice. **Example: dentist, optometrist**

### **Primary Health Care:** **Broad Scope**

Direct access; broad scope of practice; overall responsibility for patient and coordination of care. **Example: Family MD/GP,**

### **Specialist Care:**

Primary care and specialist training; focused scope of practice; practice on referral.  
**Example: orthopaedic surgeon, radiologist.**

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17. Again, using the definitions provided, do you think the chiropractic profession **should be perceived** by the general public in your country as offering *primary health care: focused scope, primary health care: broad scope, or specialist care?*

- Primary health care: focused scope ☐
- Primary health care: broad scope ☐
- Specialist care ☐

18. Using the definitions below, do you think the chiropractic profession and its services are **currently perceived** by the general public in your country as *mainstream* or *complementary and alternative*?

- Mainstream ☐
- Complementary & Alternative ☐

### **Mainstream:**

Services which are part of the core health delivery system.

### **Complementary & Alternative:**

Services accepted by many of the public but that are not part of the core health delivery system.

19 Using the above definitions provided, do you think the chiropractic profession and its services **should be perceived** by the general public in your South Africa as *mainstream* or *complementary and alternative*?

- Mainstream ☐
- Complementary & Alternative ☐

20. Please indicate to what extent you agree with the following statement.

***From my perspective as a chiropractor, chiropractic health care is currently perceived by the general public in South Africa as...***

	<b><u>Does Not Describe Public Perception At All</u></b>							<b><u>Describes Public Perception Perfectly</u></b>
	1	2	3	4	5	6	7	
Non-drug / non-surgical health care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Primary health care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wellness care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of back & neck pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of back & neck pain and their impact on general health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of neuromusculoskeletal conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of neuromusculoskeletal conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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and their impact on general health							
The management of spinal problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of spinal problems and their impact on general health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of vertebral subluxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of vertebral subluxation and its impact on general health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. Please indicate to what extent you agree with the following statement.

***From my perspective as a chiropractor, I would like chiropractic health care to be perceived by the general public in South Africa as...***

	<u>Does Not</u> <u>Describe</u> <u>Public</u> <u>Perception At</u> <u>All</u> <u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>Describes</u> <u>Public</u> <u>Perception</u> <u>Perfectly</u> <u>7</u>
Non-drug / non-surgical health care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Primary health care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wellness care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of back & neck pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of back & neck pain and their impact on general health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of neuromusculoskeletal conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of neuromusculoskeletal conditions and their impact on general health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of spinal problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of spinal problems and their impact on general health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of vertebral subluxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of vertebral subluxation and its impact on general health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. When communicating with the general public to promote the use of chiropractic services, which view do you think **should** receive more emphasis...?

- The general public's view of the chiropractic profession ☐
- Chiropractors' view of the profession ☐
- Both views are equally important ☐

## The Perceptions of South African Chiropractors, Regarding Their Professional Identity

23. Please indicate the extent to which **you agree or disagree** with the following statements.

	<b><u>Strongly Disagree</u></b>						<b><u>Strongly Agree</u></b>
	1	2	3	4	5	6	7
The spine is of central importance to the practice of chiropractic.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The spine is of central importance to the public identify of chiropractic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The nervous system is of central importance to the practice of chiropractic.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The nervous system is of central importance to the public identity of chiropractic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

24. Patients seek chiropractic care for different reasons. In your opinion, how important are each of the following attributes of chiropractic health care **to patients?**

	<b><u>Not at All Important</u></b>						<b><u>Very Important</u></b>
	1	2	3	4	5	6	7
Specialized knowledge & education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic ability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-drug / non-surgical approach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manual procedures (adjusting, mobilization, manipulation, soft tissue, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exercise/ rehabilitation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutritional support/advice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifestyle counselling/ advice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of third party funding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reputation for effectiveness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## The Perceptions of South African Chiropractors, Regarding Their Professional Identity

25. In your opinion, how important are each of the following in shaping the general public's perception of the chiropractic profession?

	<u>Not at All</u> <u>Important</u>						<u>Very</u> <u>Important</u>
	1	2	3	4	5	6	7
Ability to diagnose the cause of symptoms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A practice model that does not involve drugs or surgery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hands-on care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preventative care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quick recovery from pain and disability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spinal care expertise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to manage back pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to manage pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to get the patient back to work/ daily activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Patient-centered care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of education/ training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attitudes of other health care professionals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attitudes of the media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attitudes of government and health authorities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The profession's different model of health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Issues of ethics, professional behaviour and trust	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Third party funding for care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. Please indicate to what extent you agree with the following statements:

	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Concerns with respect to the ethics and professional conduct of some members of the profession have a significant impact on the level of public confidence in chiropractic health care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The general public is aware of the level of education of chiropractors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The general public has confidence in the quality of care provided by chiropractors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Up to this point in the survey we have asked about opinions of chiropractors and the general public. Now we would like to ask you a few questions regarding how you believe medical doctors perceive the practice of chiropractic.

27. Please indicate how well each of the following statements describes how you believe chiropractic health care is **currently perceived by medical doctors**.

***From my perspective as a chiropractor, chiropractic health care is currently perceived by medical doctors in my country as...***

	<b><u>Does Not Describe Their Perception At All</u></b>						<b><u>Describes Their Perception Perfectly</u></b>
	1	2	3	4	5	6	7
Non-drug / non-surgical health care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Primary health care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wellness care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of back & neck pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of back & neck pain and their impact on general health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of neuromusculoskeletal conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of neuromusculoskeletal conditions and their impact on general health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of spinal problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of spinal problems and their impact on general health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of vertebral subluxation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The management of vertebral subluxation and its impact on general health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A competitor within health care delivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

28. Using the definitions provided below, do you think the chiropractic profession is **currently perceived** by **medical doctors** as offering *primary health care: focused scope*, *primary health care: broad scope*, or *specialist care*?

- Primary health care: focused scope ☐
- Primary health care: broad scope ☐
- Specialist care ☐
- No clear perception of the role of the Chiropractic profession ☐

29. Do you think the chiropractic profession and its services are **currently perceived by medical doctors** as *mainstream* or *complementary and alternative*?

- Mainstream ☐
- Complementary & Alternative ☐

## The Perceptions of South African Chiropractors, Regarding Their Professional Identity

30. Independent studies in various countries have called for greater mutual cooperation and respect between chiropractic and medical doctors in the interest of patients. In your opinion, how important are each of the following with respect to inter-professional relations?

	<u>Not At All</u> <u>Important</u>						<u>Very</u> <u>Important</u>
	1	2	3	4	5	6	7
Medical doctors' perceptions about the effectiveness of chiropractic health care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medical doctors' perceptions about the safety of chiropractic health care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medical doctors' knowledge and understanding of the standards for chiropractic education and practice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attitudes and behaviours of medical doctors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attitudes and behaviours of chiropractors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Influence, attitudes and behaviours of third party payers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial barriers to referring patients for chiropractic health care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

31. Since 1999, the World Federation of Chiropractic has had a policy statement opposing any use of prescription drugs in the practice of chiropractic. In that policy the WFC resolves that “**for reasons of chiropractic principle, patient welfare and interdisciplinary cooperation, the practice of chiropractic does not include the use of prescription drugs**”.

To what extent do you agree with this policy? Do you ...

- Strongly agree ☐
- Somewhat agree ☐
- Somewhat disagree ☐
- Strongly disagree ☐

The World Federation of Chiropractic ran an international identity consultation resulting in the following identity for the profession being formed.....

32. Do you know about the World Federation of Chiropractic's identity?

- Yes ☐
- No ☐

If no, please proceed to question 35.

33. Do you agree with the identity formulated by the World Federation of Chiropractic?

- Yes ☐
- No ☐

The Perceptions of South African Chiropractors, Regarding Their Professional Identity

34. If No please comment

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35. And finally, do you have any comments to add?

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**THANK YOU FOR YOUR TIME. YOUR FEEDBACK IS GREATLY APPRECIATED**



## APPENDIX G

### FOCUS GROUP DISCUSSION

#### Transcript of the Tape Recordings

Wednesday 18<sup>th</sup> of June 2008

K.K: Hello everyone, my name is Karen Keyter. Thank you all for giving up your time to be here, I really appreciate it. Drinks and snacks are provided so please help yourself. The purpose of a focus group is to ensure the questionnaire design and content accurately reflects the aims of this study as well as to rule out any ambiguity. This session will be recorded so please speak loudly and clearly and if somebody is speaking please allow them to finish before commenting. Everything said is strictly confidential and please could you maintain this confidentiality. Permission has been granted by David Chapman-Smith to use and adapt the World Federation of Chiropractic questionnaire. I will now give you time to please read through the questionnaire following which we will go through one question at a time, any opinions and suggestions would be greatly appreciated. Thank you.

K.K: Question 1, is that okay?

D.D: Yes

K.K: Question 2 and 3?

D.D: Yes

R.R: Just a query, why is it still important?

K.K: I don't know

L.W: For statistical data capturing reasons

R.R: Do they still capture in race groups?

L.W: Yes, if its not there they want to know why its not there

R.R: Old habits

L.W: Yes

K.K: Question 4?

B.K: If it says other how are you going to quantify that? If you say 'other' you can't put a number to that, do you know what I mean?

K.K: Yes

B.K: Why don't you go back to that list that the WFC had and just add our two institutions on it?

L.W: It's really long

B.K: I know it is

L.W: The thing is for the amount of people that are going to graduate from that whole comprehensive list, is not that huge to warrant that space

B.K: But what about the guys like Ray and Dave and them

L.W: Oh no, there should be a line there saying where they came from, so we'll categorize it according to what the answers are

B.K: Oh ok

L.W: Rather than having a whole page dedicated to which institution you graduated from

R.R: But it does say there, please specify

B.H: You need a box or something

L.W: Yes, you need a line

K.K: Question 5

B.H: What about adding in something else, like engineering or something

K.K: Should I put in, other, please specify

B.K, B.H: Yes

L.W: Should we, I know in another questionnaire, we had two questions, what chiropractic qualification do you hold, and then what other qualifications

B.K: That's better

K.K: Okay

D.D, B.K: Yes, make a second question

K.K: Okay, question 6

D.D: Fine

K.K: Question 7

R.R: Is this going to be filled in by chiropractors?

K.K: Yes

R.R: So where does administration fit in

B.H: If you run your own business

B.K: You can only tick one block surely

K.K: You may tick more than one box, like you will be academia and in private practice

R.R: What do you mean by administration?

B.H: Yes?

K.K: That was from the WFC survey

B.K: It's probably if you are not actually practicing

D.D: This might sound picky but maybe question 7 should not be broken up onto another page

K.K: Okay

D.D: Because you turn over and then see the rest of the question, it throws you off

K.K: Okay

R.R: Shall we put it on the next page D.D?

D.D: Yes

L.W: Sorry, just to go back, so would you suggest we take administration out, or do you think that people that are chiropractors...

R.R: Is it important for the survey? Is it someone who works in an office?

L.W: Yes, if they are a chiropractor and not practicing they may have a different opinion of the identity, than someone who is practicing, or someone who is in academia

R.R: Okay that's fine

L.W: Should we say there...

B.H: You should define it a little bit

L.W: Yes maybe it's a little bit confusing to people

D.D: Well you've got academia here; you've got everything, so basically...

B.H: It could also be like an assistant role, so say you're not the principal chiropractor, you're in an office or you're doing your mentorship with someone

R.R: It's a bit confusing

K.K: Do you think I should take administration out?

L.W: I think take it out

B.K: See what they mean by it, what roles they're talking about and then get back to it and decide whether you should remove it or define it

R.R: Maybe have another block and say 'any other role'  
L.W: Yes that would be better  
K.K: Then if solely involved in academia, or if they are not practicing I say please refer to question 13 these are practice based questions, question 8?  
B.H: Can you tick more than one?  
K.K: Yes, we can put there you may tick more than one block  
R.R: What is a hospital setting? If you've got your practice in a hospital setting?  
K.K: Or like that lady at Kimberly hospital  
L.W: Yes, but there is really only one person in South Africa who works in a hospital  
B.H: But what about consulting rooms in hospitals?  
B.K: Like Dr Gomes  
L.W: We could define that and put that in as a separate...  
R.R: It's a setting  
B.H: So when you say hospital, like a patient goes to a hospital and says my back hurts  
D.D: Who works in a hospital in South Africa?  
R.R: There has always been one at Kimberly hospital  
L.W: Yes the Kimberly hospital  
D.D: Is it?  
L.W: Her name is ... I can't remember  
B.H: So you should say hospital system or something  
D.D: So she's not just renting rooms from the hospital?  
L.W: No, no  
D.D: She's part of the team?  
L.W: Yes, she works in the outpatients ward  
R.R: Who is it there?  
B.K: Isn't it Ronel?  
L.W: Ronel, yes that's it  
R.R: I hope that continues hey  
L.W: It's been running since Dr Till was here  
D.D: How come they haven't done it in any other hospitals?  
L.W: That is the question  
K.K: Two girls are actually doing their research at Kimberly hospital, questionnaires, like what the medical staff thinks of chiropractic, that will be interesting. Question 9? Okay. Question 10? Okay. Question 11? This is the one you asked about  
R.R: Yes  
K.K: Maybe we should say, what manipulative techniques do you use, and then the next one what additional therapies do you use  
B.H: Yes  
R.R: Laser? That's not an accepted chiropractic technique  
K.K: We've got it here at the clinic  
D.D: It's an adjunct technique  
R.R: It's a modality  
B.H: Can we call it a treatment?  
R.R: What auxiliary therapies do you use in your practice?  
B.H: Is manipulation an auxiliary therapy  
R.R: Not at all, that's the prime function of a chiropractor

L.W: So then we can add another question, do you use manipulation of the spine and or the extremities?

B.H: I think we should consider saying do you use manipulation or adjustment of the spine

D.D: Why?

B.H: What about the definition of long lever and short lever

B.K: There is a difference

B.H: In terms of defining our profession, I mean does the manipulation itself or cracking of the back... anyone can do that

B.K: Manipulation is the medically accepted term and the adjustment is what the chiropractor's use, so you will get an idea to what they think of themselves

D.D: We do use the term manipulation, but rather chiropractic manipulation, because if we start using the term chiropractic adjustment that has always created some kind of confusion

B.H: I'm thinking in terms of what you're trying to do

R.R: We're trying to get what they are thinking

B.K: Well that might be another question then

L.W: It definitely gives you some worthwhile information in contextualizing the information

R.R: What adjunctive techniques do you use in your practice?

K.K: Okay

L.W: So are we going to say adjunctive therapy or auxiliary therapy?

K.K: What additional auxiliary therapy do you use in your practice?

B.H: Are we going to keep manipulation in the options?

L.W, K.K: No, no we'll take it as a separate question

B.H: As far as chiropractic technique, BEST, that's an energy stress technique

B.K: No there's a chiropractic technique called BEST as well

R.R: Bioenergetic synchronization technique

B.H: Okay

L.W: Sorry, just to get some clarity there, so question 10 and 11 stays as is, question 12 changes, we take manipulation out and then we have an extra question saying do you use the term manipulation or adjustment? Then do we do a third question for do you use manipulation for the spine and extremities or just the spine?

R.R: Yes, that sounds better and exercise is with a 's'

B.K: Yes

K.K: Yes, that is one word that I just can't ever spell

B.K: There is a thing called spell check at the top of the computer screen

K.K: I know

L.W: Sorry, just coming back to the question, how are we going to phrase that then? Do you manipulate the spine...?

B.K: Just say when treating a patient do you manipulate the spine, the extremities or both?

L.W: But then we've got that confusion with the word manipulate

R.R: And adjustment

B.K: Do you manipulate slash adjust...

L.W: Okay

R.R: I'd like to distinguish between the two

D.D: Why don't we put in a question like, do you...?

R.R: Do you use the term manipulation or adjustment to your patients when describing a treatment?

D.D: You should put something in it about the joint pop, that the joint pop is a...

B.K: Cavitation

D.D: Cavitation is important to your manipulation/adjustment; do you think I'm going off here?

L.W: Yes, if they said no what would that mean in terms of the person?

D.D: It would be interesting, because we as older chiropractors are complaining that, we feel that a lot of students that are graduating are not adjusting the way we were taught to adjust and being told that they can adjust this, they can't adjust that, maybe they're not being as, delivering the same adjustments as us, maybe that they don't feel the joint pop is important, maybe some people do, I don't know?

R.R: Do you consider the cavitation to be an important result?

B.K: When Brian Nook came along it's not

R.R: Exclusively

B.K: You don't have to get it to be successful, which he felt was a grade IV mobilization not a grade V, which is a manipulation where you hear a pop, I think that is where that stemmed out of, I do agree with you that maybe that people are leaning on that a little bit

D.D: Can I just ask a question, when you are adjusting a patient, do you prefer to hear the joint pop, do you feel that your adjustment is better?

B.K: I d, but...

B.H: I don't

D.D: Okay so you don't consider it important when you are delivering a manipulation?

B.H: I mainly use the activator

D.D: Okay

B.H: Probably about 90% activator and 10% adjusting, but when I do adjust with the hand, then I think it's important

D.D: To hear the joint cavitation

B.H: Yes

R.R: But you don't hear it with the activator?

B.H: Yes

B.K: You'll never hear it from that

R.R: Yes

D.D: Well that's interesting

K.K: Do I need to put a question in?

D.D: It's up to you, I don't know if I'm going off the track here or not

B.K: We should think about it, it has got some implications, I didn't think about it from his point of view, if you were using the activator or any other light touch technique...

L.W: But you're going to get that answer from question 11.

D.D: I think it's an interesting question

B.H: But is the click necessary to define

R.R: An adjustment?

B.K: Yes

R.R: No, you can't say it is

D.D: No, but we're just asking if it's important to the practitioner to whether...

R.R: He considers it

B.K: The medical aids use this, I think the law still says that to be paid you have to give a manipulation as a chiropractor, I think

R.R: That's right; manipulation doesn't have to cause a cavitation

B.H: But now we're also discussing the effectiveness, maybe leaning toward that side of is it effective, kind of leading away from this topic

B.K: Yes you are right

R.R: Okay

K.K: So the question, do you use the term manipulation slash adjustment, just that? Or, when explaining a treatment to a patient? What should I say?

B.K: Just do you use the term manipulation or adjustment

R.R: Do you use the term, not slash, use manipulation OR adjustment

B.K: Or manipulation, one line, square block, adjustment, one line, square block

R.R: Yes

K.K: Okay

L.W: Karen, the question you are thinking of is, remember we wanted to look at those people who are only adjusting the spine and not looking at the extremities

K.K: Yes

L.W: So that was do you manipulate slash adjust the spine or extremities or both

K.K: Okay

K.K: Question 13

B.H: Can I just make a comment on evidence based; does this imply that the others are not evidence based?

B.K: Yes, I think so

B.H: Okay, so whose evidence are you taking then, because there is lots of research out there?

R.R: I think the question is do you as a chiropractor work only with evidence based?

B.K: Maybe we should say evidence based medicine?

L.W: Perhaps we should put definitions in for those three; some people might be unclear to what you mean by them

R.R: Are you sure they all know what a straight chiropractor is?

B.K: Well, then we'll define it

K.K: I'll put in blocks like these and then define them

B.H: How are we going to define them?

R.R: After 100 years, they are still trying

D.D: Can you fill in more than one block in this question?

K.K: No

D.D: Like mixer and evidence based, why not?

L.W: Because by being evidence based, you will be a mixer

B.K: Yes, but you can't be both

L.W: It depends on the definitions that we use, so if we were to use for a straight, you believe in the whole vitalism concept with the innate flowing through the nervous system, the definition used for the straights and the for the mixer, you might say you use whatever, the evidence based will only be researched...

R.R: You could be both, if you are adjusting wrists and elbows and things, that's got nothing to do with the innate

L.W: So what is the solution?

R.R: That's why we are battling with our identity

L.W: yes, exactly, it 'is the crux of the problem

B.K: I don't think you can, you either believe in evidence based...

B.H: Being evidence based or let's say straight chiropractors, they can pull out research and say, when we adjust the spine...

B.K: Yes, but it is not peer reviewed, it is easy to look at research, is it a widely accepted journal, let's take CBP for instance, chiropractic bio physics was done by the dad and the son, I mean it's a joke

B.H: That has been published in 'Spine', so does that not qualify as evidence if you are using published journals, 'Spine' is quite accepted as there are very few chiropractic techniques that can claim they have been published in 'Spine'

D.D: Are we also now saying that science is now finished investigating chiropractic

B.H: Not at all

D.D: Are there not further that would crop up?

B.H: Not at all, that's what I am saying, that you do get straight techniques that are doing research and are getting published in noted journals and aren't just...

D.D: So some straight chiropractors may become evidence based?

B.K: But for now it is not, so you are going on faith

B.H: No, no, no, but for now like CBP would be, if you define it as going into peer reviewed journal, randomized trials ...

B.K: Last I heard it wasn't, but maybe it's changed

R.R: I still don't consider this question to be clear, so what kind of chiropractor do you consider yourself to be, a straight chiropractor?

D.D: That's clear

R.R: Mixer

D.D: That's pretty clear

R.R: Evidence based

B.H: Okay, so who understands what by a mixer?

D.D: You take the best of both worlds

R.R: All sorts of different techniques, as many techniques you know of and you use them all

B.K: I would say that I am purely evidence based, so I use manipulation simply for a facet syndrome and nothing more there is no extended benefit, I only accept full blown medical research for it, nothing more

B.H: Okay, so your definition of chiropractic is different to, so you would not treat someone for a non neuromusculoskeletal condition?

B.K: Until the medical evidence is put forward like let's take infantile colic, there is a nice study, done in Holland and it's quite clear, middle ear infections, an ENT study done in 2005 is starting to look good, you know what I mean, that's evidence based medicine in my opinion

B.H: Okay this might be controversial, can you not put symptom based care...

L.W: Would that not be a mixer?

B.H: Not necessarily

B.K: What do you mean by symptom based?

B.H: Okay, I treated somebody for his back pain and then that went away, I spoke to him about his back and when he should get it checked again and the likelihood of things recurring, he never got it checked again. I saw him a couple of months later and did the same thing again, explained everything on a musculoskeletal level and said you know

when to come back to prevent this, he said yes, when my hemorrhoids come back, I said, what do you mean? He said, I had hemorrhoids, I never told you but after the first bit of treatment they went away and two days before my back got sore the hemorrhoids came back, and after the first treatment they went back again, now I'm not saying that chiropractic can treat hemorrhoids and we can't claim it because there is no research for it, but if that person had come to me and said can you treat me for hemorrhoids, I would have said no, I'll treat your spine and see if anything happens.

D.D: Maybe you should show those hemorrhoids that activator

B.H: So what I'm saying is that when you choose to treat a symptom like lower back pain, a neuralgia or a sciatica, is that your selected criteria for accepting a patient, or is it, look, I've noticed your spine is not right and that's what you should treat?

D.D: What do you mean not right?

B.H: SO there is a neural articular dysfunction

B.K: How do you define that?

B.H: Well, it depends which technique you are using

B.K: What is a neural articular dysfunction, there must be a definition?

B.H: So if the joint complex isn't working correctly you are going to have an aberration of the neurological information that comes from that joint

B.K: How are you going to pick that up? Diagnose that using the current methods we know, anything?

R.R: It's called a subluxation if that's what you are talking about?

B.H: Yes

B.K: Okay, that's why we are doing this, because my personal opinion was that a subluxation was an outdated thing, that it was unproven, nothing there, and that what we were looking at were facet joints with overlying muscle spasm. We, have tried to prove the connection with changing insulin and cortisol levels, cortisol has maybe changed, okay, but insulin levels haven't changed, the asthmatic hasn't changed not from a dysfunction point of view, only from a functional point of view, not from a direct nerve visceral connection, but how do you know that?

D.D: I don't want to stick on this point, otherwise we will be here all night, I don't want to get into any kind of disagreement or agreement, but you mentioned colic?

B.K: Yes

D.D: Are you saying that there is research evidence to say that chiropractic can help colic?

B.K: Yes, they don't understand...

D.D: So is it a visceral spinal thing, I know I'm going off the subject, but I've always wondered about this colic scenario, what part of the spine are we adjusting? Is it the parasympathetic, is it the sympathetic? Is there a specific segment? No one has ever been able to tell me

R.R: We are going off the subject here guys

D.D: But, you see, what I'm trying to point out here is that maybe we should make this question here, straight or mixer

B.H: Yes

D.D: That's it, or 'other'?

B.H: Because there, like with asthma, when I started going to a chiropractor, my asthma cleared up, that is what got me interested in it, I never mentioned it to him, it was Dr. Wally Pretorius, that sorted that out, but now that is what I'm saying, some symptoms will



respond, for instance I also have sinus problems but my sinuses have never cleared up from a chiropractic treatment although I'm sure some have. O using the symptom as a qualification for treatment, that is the difference between the straight approach that says, when the spine is not aligned whatever is happening your body is not going to work at an optimal level, you can call that the subluxation, whether it's parasympathetic, sympathetic, whether it's one level or more, I'm sure we've all treated lower back pain with a neck adjustment

B.K: No

B.H: You haven't, have you?

D.D: I normally treat the whole spine for most cases

B.H: Yes, so you wouldn't just stick to the area

L.W: Can I just propose an idea then, we keep this question as it is, we take 'other' out, we put three definitions for straight, mixer and evidence based and we add in a third question: Do you ever treat patients, what were you saying, something about the symptoms, do only treat their pain or sometimes would you treat their symptoms?

R.R: Is your practice symptom based?

D.D: That's unclear

B.H: That is also not the right way to put it

R.R: The problem here is that the mixer could be the evidence based guy as well

B.K: I actually haven't got a problem with that question, I think the guys will know what we mean out of that

L.W: From that; straight, mixer or evidence based?

B.K: If you do practice evidence based medicine you will know what it is about

B.H: Can you tick more than one then?

L.W: You see, I think by the definitions, these are taken from Scott Haldemann, his new edition of Chiropractic Principles and Practice; they use three clear, distinct definitions which are not interchangeable

B.K: well let's put them in little blocks like that at the bottom of the question

L.W: Yes, I think the idea is to have people gravitate toward one specific idea rather than saying well I do everything

B.K: but what would you be if you are using activator, which one would you tick?

B.H: I'd tick mixer

B.K: Because you are using activator and normal treatment

D.D: And you are adjusting

B.H: And sometimes I treat symptoms, and sometimes I treat people when they didn't have any symptoms

B.K, D.D: Okay

B.H: For me this is a loaded question

R.R: But this is what the crux of the problem is with chiropractic

B.H: Yes

L.W: Oh, I have a great idea, why don't we make it into several questions, so the first one would be; Do you think a straight chiropractor is a ...

R.R: Or how would you define a straight chiropractor?

D.D: But this is about the person filling in the form. Are you a straight? Are you a Mixer? Or do you feel you are evidence based. Okay so I think if you put the definitions in the guy can just choose, or otherwise we are going to be here all night just on this one question

B.H: Is it crucial to having it in terms of the context?  
B.K: it's what the whole thing is about; it's about these three, that exact question  
L.W: I've got a very good idea, why don't we put in some qualifying statements like; I think I'm a straight chiropractor because I believe in...  
B.K: Those aren't definitions though  
L.W: Yes, but there is a discrepancy between what people would consider straight and what the textbook says is straight, so I might say I am a straight chiropractor because I don't treat peoples symptoms I treat their whole spine and I'm looking at nerve interference doesn't necessarily mean I'm believing in the innate and the whole vitalistic approach  
B.K: That's a mixer  
D.D: Shouldn't there be there be another whole study on this, and leave it out of this, this one is not about that, that's another study  
B.H: That's what I'm thinking  
L.W: Okay  
B.H: What are the objectives of this study?  
D.D: I don't know, this is general information, this is not focusing on what chiropractic is or isn't, how we perceive ourselves and how the public perceive us  
B.H: I think that it could warrant a whole study on its own  
B.K: But I think lets just review that question  
L.W: Okay, can we have general consensus that it stays as is?  
D.D: Yes  
L.W: With definitions?  
B.K: Yes  
B.H: No, I don't think it should stay as it is, or with definitions because like I said his definition of mixer and mine are different  
B.K: If we put the definition there, and say, by these definitions...  
B.H: But I can guarantee you that there will be people who will be like, I like that part of straight, but I'm a mixer  
B.K: If you do that straight away  
D.D: Then you are a mixer  
B.K: And you can't be straight  
B.H: Then they might say, okay are you a mixer or evidence based?  
B.K: You are a mixer  
B.H: Then I say straight and mixer  
B.K: You can't be because I incorporate no straight concepts  
B.H: Why not?  
B.K: Because I don't believe in it  
L.W: Okay, this is a discussion for another time  
D.D: Okay, let's go guys  
L.W: Before we move on, we need to have some consensus on this question, does it come out or does it stay?  
D.D: I say leave it and put in definitions for those who don't know what a straight, a mixer or evidence based is, I think it is quite clear  
R.R: Leave it and see what happens  
K.K: Okay, shall we go to question 14

L.W: Everyone has to agree that the question stays as is though, if there is one person who doesn't agree then...

B.H: I don't

L.W: Okay

B.H: But I'll go along with the group

R.R: No, no

L.W: No, no you can't do that, that's not focus group policy; we'll come back to it

K.K: Okay, question 14, is that okay?

R.R: But why the question?

K.K: We wanted to see if someone who has practiced overseas has different views to someone who has qualified and only practiced in South Africa

R.R, D.D: Okay

K.K: Okay, this is where the main questionnaire begins

R.R, D.D: Okay

K.K: Question 16

All: Okay

K.K: Okay, question 17 is how *should* we be perceived, the previous one was how are we *currently* perceived

R.R: What would we like them to perceive us as?

K.K: Yes, is that alright?

All: Okay

K.K: Question 18 is, is chiropractic *currently* perceived as mainstream or alternative and the next one, question 19 is the same but, *should* it be perceived as mainstream or alternative?

All: Mmm, yes

K.K: Question 20?

B.H: Can we tick more than one?

B.K: I think you can on that one

L.W: It is one tick per line

D.D: It goes onto the next page

K.K: Yes, it is one tick per line

B.H: Okay

L.W: Maybe we should just write that there

R.R: Yes, they must be able to tick more than one

K.K: Yes, okay question 20? Is that okay?

R.R: Yes

K.K: Okay the next question, question 21 is the same as the previous one, but this is how *you would like* to be seen by the general public, the previous one was how is chiropractic *currently* seen by the general public

All: Okay

K.K: Question 22

B.H: Can I just ask one question is this promote to the public or to the medical profession?

R.R: With the general public

B.H: Okay, sorry

K.K: Is that question alright?

L.W: Maybe we should just make that in bold

K.K: Which? To promote?

L.W, B.K: To the general public

R.R: which view do you perceive should have more emphasis, the general public's view of chiropractic, how can you put more emphasis on that?

B.H: The way I see it, just using patients, if you are trying to explain what is going on, you keep it on their level, relevant to them, whereas if you were going to speak to a medical doctor, you might use a different approach, you wouldn't use the same language

R.R: I understand that, which view do you think should receive more emphasis, the general public's view of the chiropractic profession, how can I influence that? How could we put more emphasis on that?

B.K: Should we promote ourselves more and correct the public's view of chiropractic or change it or increase it? Or do we first need to change the chiropractor's view of chiropractic? Which is what this is about again, this discussion we've already had about subluxation, maybe we need to fix our internal discord before we can fix the public's view, you know, we can't go out there and convince the public, like if him and I went out and tried to convince somebody/teach them about chiropractic they would get totally different views on what we do

R.R: Yes, so which view would I choose, the general public view of the chiropractic profession should receive more emphasis, how do we give that more emphasis, that is my question?

D.D: Very strange question this

R.R: Yes, it's not clear, when communicating with the general public to promote the use of chiropractic, which view do you think should receive more emphasis, the general public's view, what is the general public's view? We don't know

R.R: We don't know, we are trying to influence them

B.K: It should be, work harder to correct their view or change their view so that they understand what chiropractic is, or do we need to fix our own point of view, internally you know

D.D: I see, yes

B.H: Oh

B.K: That's what I see it as, I would say they are both important

L.W: I'm not too sure if that is what they are wanting

R.R: I'd fail that question

B.K: Should we sell chiropractic harder to the public or do we need to fix our own internal problems, I think that is what they are getting at

K.K: Yes I also think so

B.K: About the subluxation, the whole evidence based issue; my thinking is how can you sell yourself without....

B.H: What is the aim of it? Is it to get more patients or to...

K.K: To clear up the identity

R.R: To clear up the identity of the profession

B.K: I think if you clear up the identity, then you can go to the public

K.K: Yes

B.K: Because at the moment we can go out there and get two different stories, yet we are both chiropractors

R.R: That's right

B.H: But the person will come to you not because you are a chiropractor but because they heard something about you

B.K: Yes, but we still have to publicly say...

D.D: Should we not use, to promote the *identity* of chiropractic services instead of the word, *use*, of chiropractic

R.R: Yes

B.K: Yes, that's actually good

R.R: That's it D.D

L.W: Sorry what did you say D.D?

K.K: To promote the *identity* of the chiropractic services instead of the *use* of chiropractic services

B.H: Yes

D.D: And then maybe, the general public's view or identity again of our profession, maybe change the word *view* to *identity*, I don't know

L.W: I think, you know in light of the definition of the WFC they came up with a definition that chiropractic is a neuromusculoskeletal specialist, to me what this question says, is should we market ourselves according to what we think or according to what the public think, so if the public think that chiropractors are back doctors then should we market ourselves as back doctors, or if the profession thinks that they are neuromusculoskeletal specialists, do we market ourselves as neuromusculoskeletal specialists, that is my understanding of the question

B.K: I think we should scrap the question, very ambiguous

D.D: It's a trick question

K.K: So is it a unanimous decision?

All: Yes

K.K: Question 23?

B.H: Can I make a comment, can we combine spine and nervous system because for me that would be the difference between our definition of a mixer, where you can say okay that part of the spine is affecting colic and I'm saying the nervous system can affect colic

B.K: Then you don't really get the evidence based question either

D.D: Does the spine not incorporate the nervous system?

B.K: But then you are asking the same thing twice

D.D: The spine and the nervous system, maybe just have two questions, I don't know

R.R: This is just getting the opinion of the guy who reads the question, I think the questions are quite clear, we're just arguing about whether it's true or not, we must get their idea of what that question is about, to me the question is quite clear, what do you think D.D?

I mean we're just asking their opinion

B.H: Again, you can tick every line?

K.K: Yes

D.D: Yes

B.H: Then that will answer the question

K.K, R.R: Okay

D.D: Leave that then

K.K: Question 24?

R.R: Are these questions from that book you mentioned earlier?

K.K: This is from the WFC questionnaire

R.R: They obviously put a lot of thought behind it, that's fine with me

D.D: I'm happy with that

K.K: Question 25?

D.D: Maybe, the, in your opinion, you could put *in your* in bold?

K.K: Okay

R.R: What about mentioning the safety of the treatment, because a lot of people are worried that it is not safe, maybe a question in there to ensure the public that it is a safe therapy?

D.D, R.R: The safety of chiropractic procedures?

K.K: The safety of chiropractic procedures?

D.D, R.R: Yes

K.K: Okay

R.R: It would be difficult to put those options in a 1-15 ascending order, which would be most important

K.K: Yes, okay, question 26? Are you all happy?

All: Yes

K.K: up until now we have asked about chiropractors and the general public's opinions of chiropractic, now we will be asking about the perceived perceptions of medical doctors' views of chiropractic, I'm not sure whether we should keep this question in as I know there has been a whole separate study of the perceptions of medical doctors toward chiropractic

B.K: So is the rest of the paper on what medical doctors think?

K.K: Not the whole rest of the paper, just the next three questions

L.W: I think we must keep it in, because it is the same as the previous questions, it addresses what you think the medical doctors think and what you would like the medical doctors to think, whereas in the study that was done they only looked at the perceptions of medical doctors of chiropractic

R.R: That's fine

K.K: Question 28?

L.W: Can I make a suggestion, to possibly put the *safety of chiropractic procedures* question in there again?

D.D: Yes

R.R: Yes, good thinking Batman

K.K: Okay, Question 28? Is that okay, the definitions are earlier in the paper

D.D: Okay

K.K: Question 29

All: Yes

K.K: Question 30? Is that alright?

All: Yes

K.K: Okay, question 31?

B.K: What about injecting Voltaren, actually prescribing drugs?

D.D: Any use of drugs

B.K: Any whatsoever

B.H: So if you tell somebody to take a Disprin, is that prescribing?

K.K: That's not a prescription drug, that is an over the counter drug

B.H: Okay, above schedule two, so schedule three and upward

K.K: Should I specify that?

B.K: I would maybe put a schedule in because that clears it, because I could say if it hurts tonight, just take two voltarens, but you can get it over the counter or whatever, take two panados whatever, it is not the same as this, so schedule it and it clears everything up

R.R: Yes

K.K: Okay so, opposing any use of prescription drugs *above schedule three*?

B.H: But did the WFC say that in their definition?

K.K: No

D.D: It says the use of prescription drugs which in this country means that it has to be schedule three and above

K.K: Okay

D.D: As far as I understand, you can get anti-inflammatories over the counter as long as it is for five days or less, but I think that the people filling this in will understand, and either strongly agree or somewhat agree, I don't think it matters

R.R: Yes, let's move on

D.D: I think it's quite well worded, the answers I think leave a lot of room for... because the straight is going to put strongly agree...

B.H: But are we not looking for information on the answer, do you just want to know a general thing, or do you want to know specifically, just in terms of the research process?

L.W: No, we just want to know if they agree, somewhat agree or disagree

All: Okay, that's fine

K.K: Question 32?

All: Fine

K.K: Question 33?

B.H: Can you change that to maybe these four options, strongly agree, somewhat agree, somewhat disagree and strongly disagree?

B.K: Fair enough and if they fall in the negative two, strongly or somewhat disagree, please comment

K.K: Okay, finally do you have any comments to add?

R.R: Well I've got a comment to add, I think this WFC identity is hopeless

B.K: It's what the chiropractors think of themselves, but the rest of mainstream medicine... I thought the identity was much longer than that

L.W: That's what I thought, the whole neuromusculoskeletal specialist

K.K: I have it here, but I don't know if I should put it all in, because they have basically commented on each question

B.H: But surely they came up with their definition?

L.W: I thought the final definition was, the neuromusculoskeletal specialists focusing mostly on nervous system disorders...

R.R: It's clear enough to us but to the general public it's gibbeldygoosh, they don't know neuromusculo... or what we are talking about, that's where we make our mistake, that's why we joined this profession because it is controversial

L.W: While Karen is looking up can we just have a look at question 22 again, sorry, I know there was a mutual consensus to scrap the question, but I think it is important to have a question on how to advertise or promote the profession in terms of the general public's view

B.H: If you are using it as a promoting thing, if you want to promote amongst patients you shouldn't use the medical model because it's gibberish to them, they don't understand what a subluxation is, I don't even use that word, you can have the question, just say when

promoting chiropractic to patients do you use the patients view or the chiropractors view or the medical view, when you are promoting to interprofessional relationships do you use the chiropractic view, the patients view or the outside peoples view?

D.D: I would say you use your own view when you are promoting chiropractic and your own view is different to everyone else's

R.R: That's what this is all about, how can we identify ourselves to either the public or to the medical doctors, how do we describe who we are?

B.K: I thought of it completely differently, I thought lets say this, if CASA was to promote chiropractic, what would we fix up first, the publics view or the chiropractors view, that's how I see it

L.W: That's how I see it as well

B.K: So if we had to say to CASA listen guys we want to start pumping chiropractic and let people know what it is, there is a problem, does it lie with the public or the chiropractor?

R.R: I fully agree with you

B.H: What would you suggest Brian?

B.K: I would just say in order to promote the profession of chiropractic...

R.R: Should the chiropractors agree on the identity first or should we go to the public first

D.D: How they perceived us to be, from that direction...

L.W: we can't ask them for an identity though because that's is the aim of the study, but we can say when communicating with the general public about chiropractic, which view do you think is the most important to put forward, what the general public thinks, what the chiropractic profession thinks of itself or both views

D.D: Well if you've been practicing as a straight chiropractor for 29 or 30 years and for that length of time you've been indoctrinating your patients into your way of thinking, then you are going to have a different opinion, I don't really understand this because then he is going to have a different opinion to a mixer who will tell his patients what a chiropractor is in a different light

B.K: I don't know that question is very ambiguous

B.H: Once we've defined an identity then we can say, are we going to use this identity to promote chiropractic...

L/W: So if we were to put a question at the end...

R.R: Yes, but if we did come up with a statement there would be 50% that didn't agree with it

D.D: For example, what do you think the public think of the chiropractic profession?

B.H: I think they all think different things

D.D: I think most of the public see us as 'ruk and plukkers' and back specialists, that's the way think most of the public perceive us to be

B.K: We are fairly specialized

R.R: That's the way we should go, we treat lower back pain and headaches and pains in the spine

D.D: I don't think they perceive us to be diabetic and thyroid specialists, although some chiropractors would like to think so

B.H: But having said that, this may sound controversial, we had a patient that responded with blood pressure

D.D: But if you watch a sitcom in America 90% of patients come with a back, spinal or a neck problem



L.W: But I think in the context of the questionnaire where we ask the individual what do you think that the patients perspective is, what do you think the publics perspective is, what is your perspective, what would you like to seen as? So in terms of your advertising, do you want your profession to be marketed as, in terms of what you think yourself as or in terms of what you would like the public to see you as, I think that is really the question, because at the end of the day with doing this identity consultation, the aim is to create some kind of unity, do we still leave the question out?

D.D: Well what are we going to do with this question?

B.K: I've got to go guys, sorry

L.W: Okay, we'll leave that one out, but what about question 13, the straight, mixer and evidence based

B.H: Well we can't complete that

L.W: No, if he's left, he's left; we just need to get some consensus

D.D: I think straight and mixer because I think a mixer is going to be evidence based as well, and a straight is going to be the one who believes in this whole vitalism and all that, or just leave it as it is

L.W: B.H, do you have a suggestion for us because you feel this question is lacking?

D.D: If I was filling in that I would probably fill in mixer and evidence based, I would fill in two squares

B.H: You can either do it two ways, you can limit it to straight and mixer because evidence based would be a mixer by definition, or you can leave it as it is and tick more than one

D.D: Ray, question 13, what kind of chiropractor do you consider yourself to be, straight, mixer or evidence based?

R.R: All three

L.W: That's not really giving us any information if someone ticks all three

D.D: Why?

L.W: Because the way I practice, I could also tick all three, that doesn't tell the researcher anything

D.D: Well then you need to put a 7 point lickert scale into the question, with strongly disagree to strongly agree

B.H: Yes

L.W: I think that is the best way to do it because my perception of a straight is , like at times I would call myself a straight chiropractor and at other times I don't think that I am

D.D: 1-7 that's it

B.H: Yes that's it

L.W: So we need to put about two or three things per straight, mixer and evidence based in the definitions and then I agree, strongly agree, strongly disagree. Perfect.

## **APPENDIX H**

### **QUESTIONNAIRE AMMENDMENTS-FOCUS GROUP**

#### **QUESTION 4.**

A line on which to write the answer was added next to 'Other, please specify'.

#### **QUESTION 5.**

'Chiropractic' was added into the question 'What chiropractic qualification do you hold?'

#### **QUESTION 6.**

The question 'Do you hold any other qualifications' was added.

#### **QUESTION 8.**

The option of 'any other role' was added to the answer options.

#### **QUESTION 9.**

'Practice in a hospital setting' was added to the answer options.

#### **QUESTION 12.**

'Manipulative' was added to the question 'What chiropractic manipulative technique do you use in your practice?'

#### **QUESTION 13.**

The question was re-worded from

'What chiropractic techniques do you use in your practice?' to

'What additional auxiliary therapies do you use in your practice?'

The answer options 'manipulation of the spine' and 'manipulation of the extremities' were removed.

#### **QUESTION 14.**

The question 'when treating a patient, what do you adjust/manipulate?' was added.

**QUESTION 15.**

The answer options removed from question 13 were made into a question of their own, the question added being, 'When treating a patient, what do you adjust/manipulate?'

**QUESTION 16.**

Definitions were added to aid with clarity, and a lickert scale was added to the answer blocks.

**QUESTION 18.**

'Please tick one box per line' was added to the instruction.

**QUESTION 22.**

Was deleted from the questionnaire due to ambiguity.

**QUESTION 28.**

In you opinion was made bold and underlined.

The answer option 'Ensure safety of chiropractic procedure' was added.

**QUESTION 30.**

The answer option 'Ensure safety of chiropractic procedure' was added.

**QUESTION 36.**

The answer options were changed from a yes or no option to, 'strongly agree, somewhat agree, somewhat disagree, strongly disagree'.

**QUESTION 37.**

The question was rephrased from, 'If no, please comment' to 'If you answered somewhat or strongly disagree, please comment.'



## APPENDIX I

### QUESTIONNAIRE AMMENDMENTS - PILOT STUDY

#### Question 13

The phrase 'chiropractic techniques' was replaced with 'modalities'.

#### Question 15

Was re-worded to 'In your practice, what do you adjust/ manipulate?'

#### Questions 29 and 30

Were added in by the Faculty of Health Science Research and Ethics Committee;

#### Question 29

In the South African market, how do you see chiropractic relative to physiotherapy? Please mark one box per line.

	<u><i>Strongly Disagree</i></u>						<u><i>Strongly Agree</i></u>	
	1	2	3	4	5	6	7	
As two separate professions								
As two similar professions, each with its own identity								
Two professions that should be combined								
Chiropractic should be the gatekeeper for physiotherapy								
Physiotherapy should be the gatekeeper for chiropractic								

#### Question 30

What do you see as the competitive advantage that chiropractors have over physiotherapists in South Africa?

## APPENDIX J

### FINAL QUESTIONNAIRE

Thank you for agreeing to participate in this study.

**Please read and answer each question to the best of your ability. When answering the questions please provide answers that reflect your own perspective.**

**Answer by placing an 'X' in the appropriate box, unless otherwise stated mark only one box per question.**

#### Demographic details:

1. Gender:

Male

☐

Female

☐

2. What is your age? \_\_\_\_\_ Years

3. Ethnic group (statistical purposes only):

White

☐

Indian

☐

Black

☐

Other

☐

4. Which institution did you graduate from?

Durban University of Technology (formerly Technikon Natal)

☐

University of Johannesburg (formerly Technikon Witwatersrand)

☐

Other, please specify: \_\_\_\_\_

☐

5. What chiropractic qualification do you hold?

M.Tech.Chiropractic

☐

Doctor of Chiropractic (DC)

☐

6. Do you hold any other qualifications?

No

☐

Yes, please specify: \_\_\_\_\_

☐

7. How many years has it been since you graduated?

5 or less	<input type="checkbox"/>
6 to 10	<input type="checkbox"/>
11 – 20	<input type="checkbox"/>
More than 20	<input type="checkbox"/>

8. Which of the following best describes your role in chiropractic? (You may mark more than one block).

Administration	<input type="checkbox"/>
Clinical practice - Full time	<input type="checkbox"/>
Clinical practice - Part time	<input type="checkbox"/>
Research	<input type="checkbox"/>
Retired	<input type="checkbox"/>
Academia	<input type="checkbox"/>
Any other role	<input type="checkbox"/>

If solely involved in academia please proceed to question 13.

9. If you are in clinical practice, which best describes the setting of your practice?

Private Practice	<input type="checkbox"/>
Multidisciplinary Practice	<input type="checkbox"/>
Practice in a hospital setting	<input type="checkbox"/>

10. In what area is your practice situated?

Urban	<input type="checkbox"/>
Sub –urban	<input type="checkbox"/>
Rural	<input type="checkbox"/>

11. How many years have you been in active practice?

5 or less	<input type="checkbox"/>
6 to 10	<input type="checkbox"/>
11 – 20	<input type="checkbox"/>
More than 20	<input type="checkbox"/>

12. What chiropractic manipulative technique do you use in your practice?

Diversified	<input type="checkbox"/>
SOT	<input type="checkbox"/>
Activator	<input type="checkbox"/>
Best	<input type="checkbox"/>
Gonstead	<input type="checkbox"/>
Other, please specify: _____	<input type="checkbox"/>

13. What modalities do you use in your practice? (You may mark more than one block)

Exercise therapy	<input type="checkbox"/>	Ultrasound	<input type="checkbox"/>
Cold therapy	<input type="checkbox"/>	Interferential Current	<input type="checkbox"/>
Dietary advice	<input type="checkbox"/>	TENS	<input type="checkbox"/>
Ergonomic advice	<input type="checkbox"/>	Dry needling	<input type="checkbox"/>
Other, please specify: _____		<input type="checkbox"/>	

14. Which term do you most commonly use?

Adjustment	<input type="checkbox"/>
Manipulation	<input type="checkbox"/>



15. In your practice, what do you adjust/manipulate?

The spine

☐

The extremities

☒

The spine and the extremities

☐

16. Using the following definitions, what kind of chiropractor do you consider yourself to be? Please mark one box per line.

	Strongly Agree					Strongly Disagree	
	1	2	3	4	5	6	7
Straight	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mixer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evidence Based Medicine	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Straight chiropractors: believe that vertebral subluxation leads to interference with the innate intelligence within the nervous system and is a primary underlying risk factor for almost any disease. Their treatment follows the traditional chiropractic lexicon: spinal analysis, detect subluxation, correct with adjustment. Straight chiropractors prefer to remain separate and distinct from mainstream health care.

Mixers: believe subluxation is one of the many causes of disease and they incorporate many different treatments including soft tissue therapy, electromodalities, dry needling etc. Mixers generally want to be integrated into mainstream medicine.

Evidence based chiropractors: make use of the best available scientific literature and accumulated clinical knowledge and expertise to interpret, retrieve and apply the results of scientific studies to establish a diagnosis and communicate different treatment plans to the patient. Evidence based chiropractors seek to be incorporated into main stream health care.

17. Have you practiced overseas?

No

☐

Yes , please specify where: \_\_\_\_\_

☒

18. Please indicate the extent to which you agree or disagree with the following statements. Please use the 7-point scale below where 1 means *strongly disagree* and 7 means *strongly agree*. You may of course choose any number in between. Please mark one box per line.

	Strongly Disagree				Strongly Agree		
	1	2	3	4	5	6	7
It is important for a profession to have a clear public identity.							
The chiropractic profession has a clear public identity.							

19. Do you think that the chiropractic profession **is currently perceived** by the general public in South Africa as offering *primary health care: focused scope*, *primary health care: broad scope*, or *specialist care*?

Primary health care: focused scope	
Primary health care: broad scope	
Specialist care	
No clear perception of the chiropractic profession	

<b><u>Primary Health Care: Focused Scope</u></b>	<b><u>Primary Health Care: Broad Scope</u></b>	<b><u>Specialist Care:</u></b>
Direct access; focused scope of practice; may have overall responsibility for patient and coordination of care within scope of practice. Example: dentist, optometrist.	Direct access; broad scope of practice; overall responsibility for patient and coordination of care. Example: Family MD/GP,	Primary care and specialist training; focused scope of practice; practice on referral. Example: orthopaedic surgeon, radiologist.

20. Again, using the definitions provided, do you think the chiropractic profession **should be perceived** by the general public in South Africa as offering *primary health care: focused scope*, *primary health care: broad scope*, or *specialist care*?

Primary health care: focused scope	
Primary health care: broad scope	
Specialist care	

21. Using the definitions below, do you think the chiropractic profession and its services are **currently perceived** by the general public in South Africa as *mainstream* or *complementary and alternative*?

Mainstream	<input type="checkbox"/>
Complementary & Alternative	<input type="checkbox"/>

**Mainstream:**  
Services which are part of the core health delivery system.

**Complementary & Alternative:**  
Services accepted by many of the public but that are not part of the core health delivery system.

22. Using the above definitions provided, do you think the chiropractic profession and its services **should be perceived** by the general public in South Africa as *mainstream* or *complementary and alternative*?

Mainstream	<input type="checkbox"/>
Complementary & Alternative	<input type="checkbox"/>

23. Please indicate to what extent you agree with the following statement. Please mark one box per line.

***From my perspective as a chiropractor, chiropractic health care is currently perceived by the general public in South Africa as...***

	<u>Does Not Describe Public Perception At All</u>				<u>Describes Public Perception Perfectly</u>		
	1	2	3	4	5	6	7
Non-drug / non-surgical health care							
Primary health care							
Wellness care							
The management of back & neck pain							
The management of back & neck pain and their impact on general health							
The management of neuromusculoskeletal conditions							
The management of neuromusculoskeletal conditions and their impact on general health							
The management of spinal problems							
The management of spinal problems and their impact on general health							
The management of vertebral subluxation							
The management of vertebral subluxation and its impact on general health							

24. Please indicate to what extent you agree with the following statement. Please mark one box per line.

***From my perspective as a chiropractor, I would like chiropractic health care to be perceived by the general public in South Africa as...***

	<u>Does Not Describe Public Perception At All</u>				<u>Describes Public Perception Perfectly</u>		
	1	2	3	4	5	6	7
Non-drug / non-surgical health care							
Primary health care							
Wellness care							
The management of back & neck pain							
The management of back & neck pain and their impact on general health							
The management of neuromusculoskeletal conditions							
The management of neuromusculoskeletal conditions and their impact on general health							
The management of spinal problems							
The management of spinal problems and their impact on general health							
The management of vertebral subluxation							
The management of vertebral subluxation and its impact on general health							

25. Please indicate the extent to which **you agree or disagree** with the following statements. Please mark one box per line.

	<u>Strongly Disagree</u>				<u>Strongly Agree</u>		
	1	2	3	4	5	6	7
The spine is of central importance to the practice of chiropractic.							
The spine is of central importance to the public identity of chiropractic							
The nervous system is of central importance to the practice of chiropractic.							
The nervous system is of central importance to the public identity of chiropractic							

26. Patients seek chiropractic care for different reasons. In your opinion, how important are each of the following attributes of chiropractic health care **to patients?** Please mark one box per line.

	<u>Not at All</u> <u>Important</u>						<u>Very</u> <u>Important</u>	
	1	2	3	4	5	6	7	
Specialized knowledge & education								
Diagnostic ability								
Non-drug / non-surgical approach								
Manual procedures (adjusting, mobilization, manipulation, soft tissue, etc.)								
Exercise/ rehabilitation								
Nutritional support/advice								
Lifestyle counselling/ advice								
Availability of third party funding								
Reputation for effectiveness								
Safety of chiropractic procedures								

27. **In your opinion**, how important are each of the following in shaping the general public's perception of the chiropractic profession? Please mark one box per line.

	<u>Not at All</u> <u>Important</u>						<u>Very</u> <u>Important</u>	
	1	2	3	4	5	6	7	
Ability to diagnose the cause of symptoms								
A practice model that does not involve drugs or surgery								
Hands-on care								
Preventative care								
Quick recovery from pain and disability								
Spinal care expertise								
Ability to manage back pain								
Ability to manage pain								

Ability to get the patient back to work/ daily activities							
Patient-centred care							
Level of education/ training							
Attitudes of other health care professionals							
Attitudes of the media							
Attitudes of government and health authorities							
The profession's different model of health							
Issues of ethics, professional behavior and trust							
Third party funding for care							
Safety of chiropractic procedures							

28. Please indicate to what extent you agree with the following statements:

	<u><b>Strongly Disagree</b></u>	<u><b>Somewhat Disagree</b></u>	<u><b>Somewhat Agree</b></u>	<u><b>Strongly Agree</b></u>
Concerns with respect to the ethics and professional conduct of some members of the profession have a significant impact on the level of public confidence in chiropractic health care.				
The general public is aware of the level of education of chiropractors.				
The general public has confidence in the quality of care provided by chiropractors.				

29. In the South African market, how do you see chiropractic relative to physiotherapy? Please mark one box per line.

	<u><b>Strongly Disagree</b></u>				<u><b>Strongly Agree</b></u>		
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
As two separate professions							
As two similar professions, each with its own identity							
Two professions that should be combined							
Chiropractic should be the gatekeeper for physiotherapy							
Physiotherapy should be the gatekeeper for chiropractic							

30. What do you see as the competitive advantage that chiropractors have over physiotherapists in South Africa?

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Up to this point in the survey we have asked about opinions of chiropractors and the general public. Now we would like to ask you a few questions regarding how you believe medical doctors perceive the practice of chiropractic.

31. Please indicate how well each of the following statements describes how you believe chiropractic health care is **currently perceived by medical doctors**. Please mark one box per line.  
***From my perspective as a chiropractor, chiropractic health care is currently perceived by medical doctors in South Africa as...***

	<u>Does Not Describe</u> <u>Their Perception At</u> <u>All</u>				<u>Describes Their</u> <u>Perception</u> <u>Perfectly</u>		
	1	2	3	4	5	6	7
Non-drug / non-surgical health care							
Primary health care							
Wellness care							
The management of back & neck pain							
The management of back & neck pain and their impact on general health							
The management of neuromusculoskeletal conditions							
The management of neuromusculoskeletal conditions and their impact on general health							
The management of spinal problems							
The management of spinal problems and their impact on general health							
The management of vertebral subluxation							
The management of vertebral subluxation and its impact on general health							
A competitor within health care delivery							

32. Using the definitions in question 19, do you think the chiropractic profession is **currently perceived by medical doctors** as offering *primary health care: focused scope*, *primary health care: broad scope*, or *specialist care*?

Primary health care: focused scope	<input type="checkbox"/>
Primary health care: broad scope	<input type="checkbox"/>
Specialist care	<input type="checkbox"/>
No clear perception of the role of the Chiropractic profession	<input type="checkbox"/>

33. Do you think the chiropractic profession and its services are **currently perceived by medical doctors** as *mainstream* or *complementary and alternative*?

Mainstream	<input type="checkbox"/>
Complementary & Alternative	<input type="checkbox"/>

34. Independent studies in various countries have called for greater mutual cooperation and respect between chiropractic and medical doctors in the interest of patients. In your opinion, how important are each of the following with respect to inter-professional relations? Please mark one box per line.

	<b><u>Not At All Important</u></b>				<b><u>Very Important</u></b>		
	1	2	3	4	5	6	7
Medical doctors' perceptions about the effectiveness of chiropractic health care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medical doctors' perceptions about the safety of chiropractic health care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medical doctors' knowledge and understanding of the standards for chiropractic education and practice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attitudes and behaviours of medical doctors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attitudes and behaviours of chiropractors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Influence, attitudes and behaviours of third party payers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial barriers to referring patients for chiropractic health care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



35. Since 1999, the World Federation of Chiropractic has had a policy statement opposing any use of prescription drugs in the practice of chiropractic. In that policy the WFC resolves that “**for reasons of chiropractic e practice of chiropractic does not include the use of prescription drugs**”.

To what extent do you agree with this policy? Do you ...

Strongly agree ☐ Somewhat agree ☐ Somewhat disagree ☐ Strongly disagree ☐

36. The World Federation of Chiropractic ran an international identity consultation resulting in the following being proposed as an identity with which to market the chiropractic profession:

'The experts in spinal health care within the health care system'.

Do you know about the World Federation of Chiropractic's identity?

Yes ☐ No ☐

If no, please proceed to question 39.

37. To what extent do you agree with the identity formulated by the World Federation of Chiropractic?

Strongly agree ☐ Somewhat agree ☐ Somewhat disagree ☐ Strongly disagree ☐

38. If you answered somewhat or strongly disagree please comment.

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39. And finally, do you have any comments to add?

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**THANK YOU FOR YOUR TIME. YOUR FEEDBACK IS GREATLY APPRECIATED**

## APPENDIX K

### FINAL LETTER OF INFORMATION



#### **LETTER OF INFORMATION**

Dear Participant

I would like to welcome you to my research study.

**The title of my research project is:**

The Perceptions of South African Chiropractors, regarding their Professional Identity.

Principle Investigator: Karen Keyter

Co- Investigators: Dr. Laura Wilson. (M.Tech Chiro, CCEP).  
Dr. Brian Kruger. (M.Tech Chiro, CCSP).

**Brief Introduction and Purpose of the Study:**

From the beginning of chiropractic over 100 years ago there has been a continual debate over the conflicting views of the role of chiropractic. As a result chiropractic has failed to define its role in the health care system in an understandable, credible and scientifically coherent way. The perceived image or public identity of chiropractic has long been debated within the profession, and outside consultants have repeatedly advised the profession to clearly define their image.

Today chiropractors find themselves lost between mainstream and alternative healthcare. Due to the profession being unsure of its identity, the public are even unsure of the role of chiropractic, and a profession not understood, is not used.

Due to this continuing controversy the World Federation of Chiropractic (WFC) conducted an extensive two year identity consultation by a representative consisting of chiropractors from around the world. The consultation resulted in the identity of chiropractic being defined as 'the spinal health care experts in the health care system'.

However of the 3689 participants in this study only 34 were from South Africa, and since the Chiropractic Association of South Africa (CASA) has adopted this identity, it would be useful to conduct a similar study in South Africa to determine whether chiropractors in South Africa agree with this identity.

A study by Myburgh and Mouton found that chiropractors in South Africa could not claim congruence on important factors such as the identity of the chiropractic profession in South Africa, poor integration with mainstream healthcare stakeholders as well as the absence of a marketable model of the practice of chiropractic.

A unified identity will help the profession to establish its cultural authority over any specific domain of health care which will ensure the survival of the profession as well as increase the utilization of the service.

**Aims of the Study:**

- To determine the demographics of South African chiropractors.
- To determine how South African chiropractors perceive their identity by assessing their own perceptions of chiropractic.
- To determine how the South African chiropractors perceive their identity by assessing how they would like to be perceived by the public and medical practitioners.
- To compare these results with other studies.

**Remuneration:**

Participation in this study is voluntary and there will be no remuneration.

**Procedure:**

Please would you take 10-15 minutes of your time to fill in this questionnaire, after which could you please return it in the pre-addressed envelop provided, or if returning it by email, email back the questionnaire to [bronwynj@dut.ac.za](mailto:bronwynj@dut.ac.za).

The questionnaires will be received by a neutral party, and only the researcher and her supervisors will have access to them to maintain participant confidentiality. The data will be analysed by an independent statistician and results will be reported in aggregate.

If you have any further questions please feel free to contact either my supervisor or myself.

**Researcher: Karen Keyter : 031 373 2205**

**Supervisor: Dr. Laura Wilson : 031 373 2923**

Your time, opinion and assistance with this project are invaluable and greatly appreciated.

Karen Keyter