The level of knowledge about osteopathy among medical doctors in private practice in the rural and small-town Weinviertel region

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Translated by

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Author's declaration of originality

I hereby certify that I am the sole author of this Master's thesis.

I certify that all literal and paraphrased quotations of works of other authors, published or unpublished, are marked as such and that all resources are duly referenced. No paper with the same contents has ever been presented before any other examination authority. This thesis corresponds to the thesis which has been assessed by the thesis supervisor.

_____ _____

Date Signature

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Abstract

Osteopathy is a science transmitted by high-quality training. In Austria only persons who have a degree in an orthodox medicine profession like medical doctors, dentists or physiotherapists can undergo the training. Osteopathy is not yet regulated by law in Austria. The initial contact with patients is reserved for medical doctors. Physiotherapists need a doctor's referral. Accordingly the following central questions are of interest for osteopaths whose basic discipline is physiotherapy: What is the current level of knowledge about osteopathy among medical doctors in private practice in the Weinviertel, a small-town and rural Austrian region? The thesis at hand focuses on medical doctors in private practice in the Weinviertel, a small-town and rural region in Austria. To what extent do medical doctors view osteopathy as an option for diagnosis and therapy in their daily work? Are there differences concerning the knowledge of the medical doctors depending on their sex, age, professional experience and specialty?

The data presented in this study were gathered in 2006 by means of a posted questionnaire designed by M. Eppensteiner in 2006. 149 of 563 posted questionnaires were returned, which corresponds to a total response rate of 25.9%. The doctors who answered the questionnaire answered correctly at a percentage of 62.7% on average (SD: 18.4). Female doctors are better informed about osteopathy than male doctors (65.9%, SD: 16.3 versus 59.9%, SD: 19.8; Wilcoxon test: W=3109, p=0.07). Doctors aged between 40 and 50 have the highest level of knowledge (65.3% right answers, SD: 17.4), doctors older than 50 the lowest (Wilcoxon test: W=2143). General practitioners are better informed than dentists (65.5%, SD: 17.1 versus 59.1%, SD: 19.5, Wilcoxon test: W=838, p=0.10). In general the doctors are well informed about general aspects of osteopathy (on average 76.6% right answers, SD: 25.1). On the other hand, 70% of the doctors do not feel confident concerning their knowledge about osteopathy and 75% would like to have more information about osteopathy.

Medical doctors who are better informed about the spectrum of diagnosis and treatment options offered by osteopathy can prescribe osteopathic treatment and refer their patients to osteopaths in a more targeted manner.

Keywords: Osteopathy, Weinviertel, Medical doctor, Dentist, Knowledge

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1. General introduction

1.1. Topic outline

In Austria, osteopathy is currently neither legally recognized nor regulated (Austrian Society of Osteopathy, 2009). Accordingly, osteopathy does not constitute an official method of treatment within the public health system (Austrian Social Security Institutions, 2009).
On an international level, osteopathy is considered a form of complementary alternative medicine (CAM) (Ernst and Dixon, 2004).
For osteopaths working in Austria, the legal acts regulating the basic disciplines medical doctor (BGBl[1] I n°. 169/1998, 1998), dentist (BGBl I n°. 126/2005c, 2005) and physiotherapist (BGBl n°. 460/1992, 1992, last amended by BGBl n°. 327/1996, 1996) apply. As a result, osteopaths whose basic discipline is physiotherapy need a medical doctor's referral for undertaking osteopathic treatment on patients (BGBl n°. 460/1992, 1992, last amended by BGBl n°. 327/1996, 1996).
With the exception of prophylactic treatment, the Austrian law restricts the right of first contact with patients to medical doctors (BGBl I n°. 169/1998, 1998). Society regards medical doctors as experts in health-related matters and they are the ones consulted by the patients. Consequently, medical doctors frequently have to decide what treatment approach they recommend to their patients.

Due to the legal situation described above, osteopaths whose basic discipline is physiotherapy depend on medical doctors to consider osteopathy as a method of treatment for relevant patients and to prescribe osteopathic treatment (Eppensteiner, 2007). Therefore it is of great importance that medical doctors dispose of a certain level of general knowledge about osteopathy. However, sometimes they need more specific knowledge to be able to refer patients with certain problems to osteopaths or to prescribe osteopathy in a more exact manner. This osteopathy-related knowledge was surveyed among medical doctors in private practice in the Weinviertel region by means of a questionnaire developed by Maria Eppensteiner in 2006 (Eppensteiner 2007).
Medical doctor Sven Seewald conducted a similar survey using a version of Eppensteiner's questionnaire which he adapted to his needs beforehand to examine the perspective of medical doctors in the Western Austrian town of Bregenz (Seewald, 2007).

[1] Austrian Federal Law Gazette

The author of the thesis at hand works as a self-employed physiotherapist and osteopath in a small town in the Austrian Weinviertel region. The experiences of the author and his colleagues suggest that the demand for osteopathic treatment in private practices seems to be increasing among patients. Due to the growing awareness of osteopathy among the general population, medical doctors are likely to provide their opinion on osteopathy. Subsequently, they have the opportunity to consider osteopathy as an additional treatment option and prescribe it to their patients.
From an osteopathic viewpoint, recognition of osteopathy and its integration into the professional practice of medical doctors in private practice as a complementary or alternative treatment option to orthodox medicine is desirable. As a starting point for considerations regarding the promotion of recognition and integration of osteopathy, the medical doctors' current knowledge about osteopathy is of interest. This thesis attempts to give insight into this topic from the viewpoint of an osteopath with physiotherapy as a basic discipline.

1.2. Research questions

On the basis of the above-mentioned questionnaire, this thesis attempts to find answers to the following questions:

- What is the level of knowledge about osteopathy among medical doctors in private practice in the rural and small-town Weinviertel region?
- To what extent do medical doctors in private practice consider osteopathy as an option for diagnosis and therapy in their daily work?
- Are there differences concerning the knowledge in terms of sex, age, professional experience and specialty of the medical doctors?

1.3. Thesis objective and structure

Based on the reasons outlined in the introduction, the central aim of this thesis is to assess the level of knowledge about osteopathy among medical doctors in private practice in the Weinviertel region by means of a questionnaire. An additional aim of this survey is to identify whether the osteopathy-related knowledge of the medical doctors needs to be improved and whether medical doctors consider osteopathy as a diagnosis and therapy option for their patients.

In the first part of this thesis, a hermeneutic approach is followed to present a brief literature overview of Eppensteiner (2007) and Seewald (2007). In her 2007 thesis, Maria Eppensteiner developed a questionnaire on this topic. Following the pilot study conducted by Eppensteiner in 2007, the questionnaire (version 1) entitled "Osteopathy-related knowledge of medical doctors" (Eppensteiner 2007) was also used in practice.
Subsequently, definitions of the terms osteopathy, complementary alternative medicine (CAM) (according to the World Health Organization (WHO)) and allopathic human medicine will be provided and osteopathy will be situated within the classification of these medical systems.
This is followed by an overview of the history of osteopathy, a description of the current legal regulations in the European Union (EU), especially in Austria, and an introduction to osteopathy as a treatment method.
Following a brief theoretical discussion of the term "knowledge" and the attempt to categorize knowledge, an overview of the Weinviertel region and the current regional medical infrastructure will be provided.

Empirical quantitative data collection by means of a questionnaire was chosen to reach a high number of medical doctors in private practice with different specialties.

2. Introduction

This chapter provides an overview of available osteopathic literature.
As an osteopath with physiotherapy as her basic discipline, Maria Eppensteiner collaborates with medical doctors (Eppensteiner, 2007).
Eppensteiner regards medical doctors as therapists as well as educators and referrers. Therefore, Eppensteiner wanted to survey their knowledge about osteopathy in order to foster the successful collaboration of medical doctors with osteopaths and to find out what they know about the osteopathic profession.
In 2006, Eppensteiner designed a quantitative questionnaire in order to be able to answer these questions for herself. She conducted an email survey among osteopaths to define the most important characteristics of osteopathy, which would serve as information for medical doctors from an osteopath's view. On the basis of these data, she then designed version 1 of the questionnaire (Eppensteiner, 2007). These characteristics of osteopathy were then adapted in collaboration with experts and fellow osteopathy students and questionnaire version 2 was designed and tested in a pilot study with 43 medical doctors to determine the questionnaire's feasibility.

Sven Seewald, a medical doctor in the Western Austrian town Bregenz, examined the following questions (Seewald, 2007): Do medical doctors know what osteopathy is? Do medical doctors make referrals to osteopaths or do they collaborate with osteopaths? Do medical doctors know about indications and contraindications in osteopathy? Do medical doctors know that the professional title "osteopath" is not protected and that there are no clearly defined regulations regarding osteopathic training? Do medical doctors have experience with osteopathy?

Seewald used the questionnaire developed by Eppensteiner as a basis for his study. In a 2007 pilot study, he sent out the questionnaire to 18 medical doctors he knew (seven returned questionnaires) in an anonymous survey. Following a revision of the questionnaire, he sent it out to 245 Bregenz-based doctors. The response rate was 16.1%.

In his evaluation of results, Seewald (2007) describes that the majority of medical doctors who had responded confirmed not to be informed well about osteopathy. However, they did show a solid level of general knowledge about the nature of osteopathy. A third of them had been treated by an osteopath before. In practice, somewhat less than half of the self-employed doctors referred their patients to osteopathic treatment. Medical doctors were aware that acute and chronic disorders of the musculoskeletal system could be treated by means of osteopathy. Problems concerning the gastrointestinal tract, the urogenital system and pregnancy were less known as indications for osteopathic treatment among the medical doctors. They lacked information about the training required to become an osteopath and about the fact that the profession "osteopath" was not protected by law (Seewald, 2007).

3. Osteopathy and its country-specific framework conditions

This chapter provides an overview of the current situation concerning osteopathy in Europe and in Austria.

3.1. Osteopathy

To date there is no standard international definition of osteopathy. Finding all existing definitions and comparing them goes beyond the scope of this thesis.

In order to still be able to provide a short description of osteopathy as a diagnosis and treatment method, I identified the common features of the definitions of eight international osteopathic organizations (American Academy of Osteopathy (AAO), 2009, Australian Osteopathic Association (AOA-Aust), 2009, General Osteopathic Council

(GOSc), 2009a, Austrian Society of Osteopathy (OEGO), 2009, Osteopathic European Academic Network (OSEAN), 2009, The Osteopathic Society of New Zealand (OSNZ), 2009, German Osteopathic Association (VOD), 2009, World Osteopathic Health Organisation (WOHO), 2009).
The definitions include the following common features:

- Osteopathy is a self-contained treatment method within the health system.
- Osteopathy views present symptoms always in connection with the individual's situation as a whole and his or her medical history.
- Diagnosis and individual treatment are carried out through the hands of the osteopath. Osteopathy works with the structure of the body to restore the best possible functioning of the entire organism.
- It thereby builds on the principle of the self-healing possibilities of the body.

3.1.1. Philosophy of osteopathy

In addition to the knowledge about the anatomy and physiology of the entire body and the clinical use of knowledge in diagnosis and treatment, philosophy plays an important part in osteopathy (Hartmann, 2004).
The philosophy of osteopathy is based on the following five osteopathic principles (Hartmann, 2004):

- Life is motion.
- Structure governs function.
- The body functions as a unit.
- The law of the artery is supreme.
- The organism heals itself (Ligner & Van Assche, 1993).

These principles form a "*framework*" (McGovern, 2006) that helps the osteopath to analyze and treat health problems (McGovern, 2006). These principles act between body, mind and soul. This corresponds to the concept of a "triune man", the so-called differentiated unity of man (Hartmann, 2005).

The idea of interplay between body, mind and soul can also be found in other fields of CAM. From this fact it can be derived that osteopathy is a concept of holistic medicine and is recognized as a method of complementary medicine (Umbrella Organization of Austrian Doctors for Holistic Medicine, 2008).

3.1.2. Definitions of complementary and alternative medicine (CAM)/ traditional medicine (TM)

There is a great number of definitions of complementary and alternative medicine and of traditional medicine; these three terms are used differently. The following is an attempt to provide short definitions of the three terms.

Alternative medicine is a therapy form which is used as a replacement of conventional treatment (Ernst et al., 1995).

Complementary medicine is a therapy form which complements conventional medicine in diagnosis, treatment and/or prevention (Ernst et al., 1995).

More than a hundred different forms of therapy (such as homeopathy, phytotherapy, aroma therapy and many more) and products do not correspond with the approach of conventional medicine and are therefore called "alternative". However, there are different degrees of awareness and positioning of these forms of therapy (often depending on country and region) (Ernst et al., 1995).

The use of CAM is experiencing a strong increase in the developed countries (WHO, 2005b).

Traditional medicine is a comprehensive term that includes systems such as traditional Chinese medicine (TCM), Indian Ayurveda, Arab Unani Medicine and other medical systems (WHO, 2005a).

According to the WHO, traditional medicine is widely used in developing countries, as conventional medicine is very difficult to access in these countries (WHO, 2005b).

3.1.3. Definitions of allopathy and orthodox medicine ("Schulmedizin")

The term allopathy (from Greek *allos* "other" and *pathos* "suffering") was first coined by homeopath Christian Friedrich Samuel Hahnemann in the first edition of the second volume of his book "Reine Arzneimittellehre"[2]. In this book, Hahnemann speaks of combating the disease by remedies that produce effects in a healthy subject that are opposite (allopathic) to the symptoms (Hahnemann, 1833).

Allopathy is used as a collective term to refer to all opponents of Hahnemann's doctrine (Jütte, 1996).

Franz Fischer, also a homeopath, uses the term *Schulmedizin* (German for orthodox medicine; the term literally translates to "academic medicine") for the first time in the journal "Homöopathische Monatsblätter" in 1876 (Jütte, 1996).

[2] Title of the English translation: Materia medica pura.

A regular and widespread use of the term *Schulmedizin* can only be observed from 1890 onwards (Wölfing, 1974). This term, however, only exists in the German language (Stellamor and Steiner, 1999).

On an international level, osteopathy is classified as a form of complementary alternative medicine (CAM) (Ernst and Dixon, 2004).

3.2. History and development of osteopathy in Europe

After a long period of development Doctor Andrew Taylor Still established osteopathy in the United States of America in 1874 because he was unsatisfied with and disappointed by the possibilities of orthodox medicine of the time (Hartmann, 2005).
Still developed this manual medical concept as an alternative to the allopathic and traditional medicine of his time. By manipulation of a bone (Greek: osteon) the functions of supply and excretion in the body and its tissues became ensured. The self-healing mechanism could resume and suffering (Greek: pathos) was alleviated (Jolandos, 2008). For Still osteopathy is a science (Hartmann, 2005).
In 1892, Still founded the officially recognized "American School of Osteopathy (ASO)" in Kirksville, Missouri. Those graduating from this school receive the title "Doctor of Osteopathy" (DO) (Gevitz, 2004). Approximately 50 years later, the US government provided this title with the same legal status as the title "Medical Doctor" (Gevitz, 2004).
With the foundation of the "British School of Osteopathy" (BSO) in London in 1917, John Martin Littlejohn (1866-1947), a student of Still's, brought osteopathy to Europe (Liem and Dobler, 2002). Spreading from Great Britain, osteopathy gradually also became popular in continental Europe (Wernheim, 2005).

3.3. Legal situation in the European Union (EU)

Within the EU there are no uniform guidelines regarding osteopathic training and practice (Engel, 2007). This is illustrated on the basis of the following examples.

Under United Kingdom (UK) law, the professional title "osteopath" has been protected since 1993 (Osteopathic International Alliance, 2009). Under the same law, osteopathy is regulated by the "General Osteopathic Council" (GOsC). This legal institution promotes, develops and regulates the profession of osteopathy in the UK and thereby protects the interests of the public. A person is only allowed to practise osteopathy if he or she is registered with the GOsC. In order to become registered with the GOsC, he or

she has to present the required professional qualification and be able to prove that he or she maintains and extends his or her professional competence throughout his or her professional practice. In the UK, osteopaths are allowed to treat patients without a prescription by a medical doctor (General Osteopathic Council, 2009b).

In Finland, France, Iceland and Malta, osteopathy is legally regulated as a profession (status 31/12/2007) (Osteopathic International Alliance, 2009).
While practising osteopathy was legalized in Belgium in 1999 (Colla law), no complete regulation of the profession of osteopathy has taken place there (status 31/10/2006) (Belgian Society of Osteopathy, 2009).
In Germany no legal regulations are in place regarding the practice of osteopathy. However, the current legal situation does allow medical doctors and healthcare practitioners to practise osteopathy, as osteopathy is recognized as a medical discipline in Germany (31/12/2007) (German Osteopathic Association (VOD), 2009). Non-medical practitioner (German: *Heilpraktiker*) is a recognized profession within the German health system (Osteopathic International Alliance, 2009). Members of other professions (e.g. physiotherapists) are only allowed to work on the basis of a referral from a medical doctor (VOD, 2009).

Other EU member states do not provide a legal framework for practising osteopathy (Engel, 2007). This is also the case in Austria (Austrian Society of Osteopathy, 2009).

3.4. Osteopathy in Austria

3.4.1. Legal regulations for osteopathy in Austria

In Austria, the titles "osteopath", "Bachelor of Science in Osteopathy" and "Master of Science in Osteopathy" are not regulated by law. The same is true for criteria regulating osteopathic training.
The legal conditions for the basic disciplines medical doctor and physiotherapist allow members of these professions to practise osteopathy. The legal conditions for persons with the basic qualifications dentist, midwife, occupationaltherapist, medical massage therapist and certified massage practitioner are unclear with respect to practising osteopathy (Austrian Society of Osteopathy, 2005).
In Austria the first contact with patients is reserved for medical doctors (the general medical profession and specialists) (BGBl I n^{o}. 169/1990, 1990) and dentists (BGBl. I n^{o}. 126/2005, 2005).

Physiotherapists are only allowed to treat patients based on a referral by a medical doctor or dentist (BGBl. n.º 327/1996, 1996). In most cases medical doctors prescribe therapies that are included in the benefits catalogues of the Austrian health insurance providers of the national social security system (Austrian Social Security, 2008). To date, osteopathy is not included in these Austrian benefit catalogues (Austrian Social Security Institutions, 2009).

Private health insurance providers, on the other hand, often include osteopathic treatment in their benefit catalogues (Merkur, 2008, Uniqua, 2008, Muki, 2010). Patients receive a cost refund provided that the osteopathic treatment was undertaken by a medical doctor or dentist or by a physiotherapist who conveyed treatment on the basis of a referral by a medical doctor (Merkur, 2008). This is granted on the condition that the osteopath has had more than 1,500 units of osteopathic training (Muki, 2010).

3.4.2. Representation of the osteopathic profession in Austria

The Austrian Society of Osteopathy (OEGO), a not-for-profit organization, was founded in 1995. It advocates the promotion and recognition of osteopathy and administrates the members' directory as well as a registry of all *Diplom-Osteopathen*, a Master of Science in Osteopathy (MSc) and a Bachelor of Science in Osteopathy (BSc) in Austria. It further campaigns for the establishment and monitoring of academic criteria for osteopathic training as a sign of quality assurance (Austrian Society of Osteopathy, 2009). Osteopaths in Austria are not obligated to become a member of the OEGO.

The OEGO is a member organization of the European Federation of Osteopaths (EFO) and the Forum for Osteopathic Regulation in Europe (FORE) (Austrian Society of Osteopathy, 2009). The EFO is an independent association which is active on a European level (Brussels) and which has a control function that advocates for establishing osteopathy as an independent profession in Europe (Hartmann, 2006).

FORE seeks to bring together national Registers and Competent Authorities for osteopathy across Europe (Forum for Osteopathic Regulation in Europe, 2010).

The Austrian Association of Doctors for Osteopathy (ÖÄGO) is another association advocating for the recognition of osteopathy in Austria (Vienna School of Osteopathy/ Doctors, 2008). The ÖÄGO is a member organization of the Umbrella Organization of Austrian Doctors for Holistic Medicine (Umbrella Organization of Austrian Doctors for Holistic Medicine, 2008), which is the largest association of medical organizations for complementary medicine in Austria.

3.4.3. Osteopathic training in Austria

In cooperation with the Danube University Krems (DUK) and the International Academy of Osteopathy, the Vienna School of Osteopathy (WSO) offers part-time osteopathic training programmes that correspond to the quality criteria of the OEGO and therefore to international standards (Austrian Society of Osteopathy, 2009).
The WSO degree programme lasts six years and is completed with the title Master of Science (Vienna School of Osteopathy, 2009). Graduates who have completed the IAO programme receive the degree *Diplom-Osteopath* (D.O. of the IAO) after a five-year training with the possibility of continuing the training to receive a Bachelor of Science with Honours in Osteopathy (B.Sc. (Hons) Osteopathy) and to then complete a Master's programme with a degree of Master of Science in Osteopathy (MSc Ost.) (The International Academy of Osteopathy, 2010).
The majority of the osteopaths who have completed the degree at the WSO since the school's foundation are physiotherapists. Until 2007, 125 physiotherapists, 29 medical doctors – 20 of them general practitioners and nine specialists – and four members of other professions have completed the programme (Schandl, 2007).
From 2007/2008 onwards, only medical doctors, dentists and physiotherapists are admitted to the training programmes at the WSO and the IAO (Wilfling, 2007).

3.4.4. Austrian registry of osteopaths

As mentioned above, the OEGO compiles a registry of all of its full members. These are osteopaths who have completed a recognized osteopathic training programme with a minimum of 1,500 training units and who also fulfil the other criteria for full membership at the OEGO (Austrian Society of Osteopathy, 2009). In addition, the OEGO manages a directory of all members who hold a diploma or Bachelor's or Master of Science degree in osteopathy.
The WSO and the IAO keep records of their graduates (Vienna School of Osteopathy, 2009, The International Academy of Osteopathy, 2010).

3.4.5. Cost of osteopathic treatment in Austria

To this date, osteopathy is not included in the catalogue of benefits of the Austrian public health insurance companies (Austrian Social Security Institutions, 2009). Accordingly patients can only receive a refund for the costs incurred by osteopathic treatment if they have supplemental insurance (Merkur, 2008, Uniqua, 2008, Muki, 2010). The pricing for osteopathic treatment lies with the individual osteopaths. The majority of osteopaths charge approximately the same amount for the first treatment and for further treatments (50 to 70 euros). These treatments last between 45 and 90 minutes (Krönke, 2003).

3.5. Osteopathy as a method for treatment

For a better understanding of osteopathy, the following chapter provides an overview of the possible elements of osteopathic treatment with its three basic treatment approaches (structural (parietal), craniosacral and visceral approach) and a selection of possible techniques. In addition, an explanation of the adherence of osteopathy to CAM will be given using the osteopathic principles.

3.5.1. Osteopathic treatment

Osteopathic treatment is based on three fundamental principles (structural, craniosacral, visceral) and offers various treatment options. Independently of the sex and age of the patient, osteopathy can be adapted to the illness (Mayer, 2001).
In osteopathy, the patient history includes physical and psychological events in the past; also traumata play an important part in this process (Gilliar et al., 1996).
Through a manual examination of the patient as a whole, the osteopath looks for primary and secondary causes of the pathology and for local and superordinate interconnections (Gilliar et al., 1996).
For the osteopathic diagnosis, osteopathic findings are analyzed and assessed together with orthodox medical findings (e.g. imaging techniques, neurology, laboratory results) (Mayer, 2001). However, findings do not automatically correspond to a diagnosis, since not every finding in osteopathy automatically entails treatment (Mayer, 2001).

3.5.2. The three basic principles of osteopathic treatment

Structural osteopathy works with techniques on the musculoskeletal system to treat dysfunctions of the bones, muscles, ligaments and fasciae (Vienna School of Osteopathy, 2009).

Craniosacral osteopathy treats dysfunctions on the level of the whole nervous system, of the cerebrospinal fluid and the bony and membranous attachments between the head (cranium) and the sacrum (Austrian Society of Osteopathy, 2009).

Visceral osteopathy treats dysfunctions on the level of the inner organs (Austrian Society of Osteopathy, 2009).

3.5.3. Overview of osteopathic treatment techniques

In the following, examples of osteopathic techniques are presented. The selection of examples provided is based on the questionnaire which forms the basis of this Master's thesis and does not claim to be complete.
Osteopathic techniques can be distinguished by characteristics such as velocity, amplitude and direction; furthermore, there are direct (also called structural) and indirect (also called functional) techniques (Liem and Dobler, 2002). With reference to the questionnaire on which this Master's thesis is based, a distinction is also made in relation to the sensations of pain and force, ranging from painful (e.g. fascial techniques) to forceful (muscle energy techniques) and gentle techniques (craniosacral techniques).

- Structural techniques according to Andrew Taylor Still

These direct, structural techniques work with bones and joints. They are used on vertebral and peripheral joints. They serve to mobilize and manipulate structural tissue (Ligner & Van Assche, 1993).

- Muscle energy techniques according to Fred L. Mitchell

These techniques are applied to treat anything from simple muscle tensions up to complex joint dysfunctions. The osteopath senses the motoric barrier and demands a specifically directed active muscle tension which is adapted to the patient. This is followed by a relaxation phase and a subsequent passive extension of the scope of movement (Liem and Dobler, 2002).

- Myofascial techniques according to Rolin Becker

By applying soft pressure and pull, stimuli are exerted onto fasciae, thereby setting reactions towards the normalization of tissue in motion (Greenman, 2005).

- Neuromuscular re-education techniques according to Lawrence H. Jones

A special positioning technique serves to relax and permanently relieve painful muscle and tendon points ("tender points") (Ligner & Van Assche, 1993).

- Functional techniques according to Harold Hoover, Charles Bowles and William Johnston

Functional techniques have an indirect effect via the reflexes of the spinal cord and the central nervous system. The dysfunctional body part is adjusted and, depending on the breathing of the patient, guided in the direction with the least resistance (Franke, 2005).

- Craniosacral techniques according to William Garner Sutherland

These mainly gentle techniques eliminate restrictions of movement of the cranium, the bony sacrum and the coccyx, the membrane system of sacrum and spinal canal and of the cerebrospinal fluid. Since the craniosacral rhythm is present in the whole body, these techniques have effects locally as well as on the whole human system (Hartmann, 2004).

- Visceral techniques according to Jean Pierre Barral and Pierre Mercier

The intrinsic movement of the inner organs (motility) and mobility within the organic structure (mobility in relation with other structures and organs) are sensed as well as examined and treated regarding changes in tension. The aim is to support the physiological function of the inner organs (Liem and Dobler, 2002).

4. Definition of knowledge

Since the subject of this thesis is to assess the level of knowledge of medical doctors about osteopathy, a definition of the term "knowledge" is necessary.

There are numerous definitions of knowledge. These definitions range from Plato's "knowledge is a justified true belief" (Plato, 1981), one of the cornerstones of the European philosophical tradition of knowledge which still in use today (Nonaka and Takeuchi, 1997), to the contemporary philosophy based on the linguistically-derived everyday language formula for knowledge "S knows that p" (p stands for a statement,

and S for a subject, usually an individual). A majority of representatives of contemporary philosophy agree that knowledge is a certain form of true belief (Craig, 1993).
Gottschalk-Mazouz (2007) regards existing definitions of knowledge as attempted definitions. From these attempts he has derived typical characteristics of knowledge (Gottschalk-Mazouz, 2005).
According to Gottschalk-Mazouz, knowledge does not only comprise knowledge about facts, but it also entails objectives, hypotheses, knowledge about knowledge and knowledge about a lack of knowledge (Gottschalk-Mazouz, 2003). Knowledge is interconnected internally and requires knowledge that is linked to other knowledge (Gottschalk-Mazouz, 2007).
There are two forms of knowledge: personal, subjective knowledge ("somebody knows something") and external, objective representations of such a personal knowledge ("something contains knowledge") (Gottschalk-Mazouz, 2007).
Subjective truth comes before objective truth and is itself derived from an insight into external reality (Davidson, 2004).
Beside the concept of knowledge, the concept of lack of knowledge (Gottschalk-Mazouz calls this concept *Nichtwissen* in German) also has to be specified (Gottschalk-Mazouz, 2007). A lack of knowledge is when somebody is aware in some way that he or she does not know something. Characteristics of a lack of knowledge are error, ignorance and unawareness (Gottschalk-Mazouz, 2002).
The difference between belief and knowledge lies in the difference between the degrees of certainty (Kern, 2006).
"I can have guessed correctly and thereby accidentally stumbled upon the truth… Intuitively, such cases do not count as knowledge"[3] (Bieri, 1997, p. 75-84).

Sceptics claim that the concept of knowledge turns out to be a chimera upon closer inspection, as it designates an ideal of which we have to accept that we will never be able to reach it (Kern, 2006).

For the purposes of the thesis at hand, specific answers will be explained.
Knowledge in this context is constituted of "correct statements" that can be classified as "true". These statements thus correspond to the opinion of a majority of osteopaths (Eppensteiner, 2007). However, knowledge also includes "incorrect statements" that can be classified as "false". A majority of osteopaths would also agree with this assessment (Eppensteiner, 2007). These statements are to be considered as an assessment by the medical doctors, irrespective of whether they are true or false.

[3] Translation from the German original.

Missing answers, wrong answers and "do not know" answers are categorized as "lack of knowledge".

A transparent competence assessment process is increasingly essential but does not give conclusive information about the effective knowledge (Glaboniat, 2006). Knowledge is difficult to assess and categorize by means of numbers. The traditional school grading system provides us with one option of displaying knowledge (Glaboniat, 2006). Grades are considered traditional, manageable, easily understandable and justiciable (Sommerauer, Starzer and Teml, 2006) and are easier to apply in decision, eligibility or selection processes than extensive portfolios or other verbal assessments (Vierlinger, 1999).

For the results of the thesis at hand, the following assessment levels of the Austrian school system were defined (BGBl. n°. 371/1974, 1974 amended for the last time by BGBl. II n°. 35/1997, 1997).

- Five (*insufficient*): 50% or less of the knowledge: not all requirements are fulfilled.
- Four (*sufficient*): Between 50.1% and 63.9% of the knowledge: the requirements regarding the most essential points are fulfilled. At least half of the percentage points need to be obtained.
- Three (*satisfactory*): Between 64% and 79.9% of the knowledge: the requirements are completely fulfilled.
- Two (*good*): Between 80% and 89.9% of the knowledge: the requirements are fulfilled beyond the essential requirements.
- One (*very good*): Between 90% and 100% of the knowledge: the demanded requirements are fulfilled far beyond the essential requirements. (Federal Ministry for Education, Art and Culture, 2010).

The use of this grading system is to provide the possibility to perform a successful selection of the results and to enable a simple and unified assessment (Glaboniat, 2006).

5. Description of the Weinviertel region in the Austrian federal state Lower Austria (NÖ)

The Weinviertel region, located in the federal state Lower Austria, is divided into the districts Gänserndorf (GF), Hollabrunn (HL), Mistelbach (MI), Korneuburg (KO) and the municipality Gerasdorf (district Vienna and Greater Vienna area) and Tulln north of the Danube (TU). Approximately 279,252 people live in the 124 municipalities of this region (2001 census, Weinviertel, 2008). Regarding population growth rates, a south-north decline can be observed within the Weinviertel region. Compared to the numbers in Lower Austria and Austria, the population growth rate is increasing above average in the districts KO and GF and below average in the districts HL and MI (Regionalmanagement, 2008).

5.1. Health care offer in the Weinviertel regions

This chapter provides an overview of the distribution of representatives of the medical professions in the Weinviertel regions and briefly discusses the role of general practitioners (GP) in the European health system.
The municipalities of Mistelbach, Stockerau, Hollabrunn and Korneuburg dispose of state-run hospitals. Bad Pirawath/ district GF has a health and rehabilitation centre (Dresden University of Technology, 2006). In the Weinviertel, 563 medical doctors in private practice are registered as working extramurally (Lower Austrian Medical Association, 2006).

Due to the fact that Physio Austria (the association of physiotherapists in Austria) does not require their self-employed members to register their practice address, no definite numbers are available regarding the number of physiotherapists practising in the Weinviertel (information by Physio Austria – Federal Association of Austrian Physiotherapists, 2008). The number of physiotherapists practising in the Weinviertel region and registered with Physio Austria is 100.
There are currently (status 2008) three osteopaths registered in the Weinviertel region (Vienna School of Osteopathy, 2008, Austrian Society of Osteopathy, 2008, The International Academy of Osteopathy, 2010). Rates are represented in Table 1.

	Number		
District	MDs	Physiotherapists	Osteopaths
GF	149	16	0
HL	80	15	1
KO	163	39	2
MI	149	15	0
TU	22	15	0
Total	563	100	3

Table 1: Number of MDs, physiotherapists and osteopaths in the Weinviertel region.

The high number of GPs (240, that is 42.63% of the medical doctors in private practice, Lower Austrian Medical Association, 2006) in the small-town and rural Weinviertel region highlights their importance within the Austrian health system. Based on their significant role concerning initial patient contact, GPs in Austria play an essential part in the referral to osteopaths and in the prescription of osteopathic treatment. In the United Kingdom (UK) osteopathy is, next to acupuncture and chiropractic, the most popular CAM therapy form to which GPs transfer their patients. In Germany, GPs mainly refer their patients to acupuncturists, chiropractors and herbal medicine practitioners (Schmidt, Jacobs and Barton, 2002). In the UK, GPs have a clear understanding of how and where osteopathy is used (Petit, 2000). GPs agreed that osteopathy should be available on the National Health System (NHS), provided that it is supported by appropriate research (Petit, 2000) and effectiveness (Perry and Dowrick, 2000) and that it is comprehensible (White, Resch and Ernst, 1997).

6. Methodology

The thesis at hand is an empirical, quantitative socio-scientific study. The results are described and compared. Details regarding the methodological processes are provided in the subsequent chapters.

6.1. Data collection

The data collection was conducted by means of a quantitative questionnaire, using the original version designed by Maria Eppensteiner in July 2006 (appendix 1) (Eppensteiner, 2007). Version 2 of the questionnaire was not available yet at the time of the mailing.

The questionnaire comprises two parts. Part A consists of 17 primarily closed questions regarding osteopathy. The multiple choices given are "true", "not true" and "do not

know". Part B consists of eight personal questions, which are also primarily closed questions. Both parts offer an option to make comments.

The lists of medical doctors in private practice in the Weinviertel region were made using the official lists of the Austrian Medical Association (Lower Austrian Medical Association, 2006) and the Austrian Dentists' Association (Lower Austrian Dentists' Association, 2006).
Depending on availability, email address, fax number or postal address were used.
The preferred medium for mailing was email, followed by fax and postal mail with post-paid return envelope. Therefore, additional email addresses and fax numbers were taken from the Medical Register (Medical Register, 2006).
The following selection criteria were defined:

- Medical doctors in private practice who practise medicine in the five districts of the Weinviertel region (KO, GF, HL, MI, TU).
- Medical doctors who are registered on the lists of the Medical Association (Lower Austrian Medical Association, 2006) and the State Dentists' Association (Lower Austrian Dentists' Association, 2006).
- General practitioners (GP), dentists and specialist doctors (with the exception of dermatologists and radiologists).

Every questionnaire was provided with a number in order to guarantee the anonymity of the surveyed doctors and to raise their readiness to answer the questionnaire. This approach will also make it possible to provide the doctors who participated in the survey with access to the results of the study on the website www.osteopathicresearch.com.
The mailing for the KO district took place in calendar week (CW) 31 of 2006, then GF district (CW 32), HL district (CW 33), MI (CW 34) and TU (CW 34). Depending on the availability of the medical doctor, the questionnaire including cover letter was sent by email, fax or postal mail. Altogether, 563 questionnaires were sent out, out of which 102 by email, 255 by fax and 206 by postal mail (the numbers are represented in Table 2).

	Number			
District	Email	Fax	Post	Total per district
GF	29	51	69	149
HL	10	52	18	80
KO	32	82	49	163
MI	27	66	56	149
TU	4	4	14	22
Total	102	255	206	563

Table 2: Numbers of posted questionnaires.

No time limit was set for returning the completed questionnaire. The last questionnaire was returned on 29 September 2006. After this date no further questionnaires were returned. The doctors were also free to choose their preferred medium for returning the questionnaire.

6.2. Response rate and sample characteristics

In this chapter, the doctors who took part in the survey are characterised by means of the general information, part B, about their professional training, demographical issues and their job location. However, first of all, I will present response rates in order to show in which districts the information was gained.

149 of 563 posted questionnaires were completed, resulting in a total response rate of 25.9%. Individual response rates are represented in Table 3.

	Sample structure			Response rate	
District	Number of returned qu.	Percent returned	Valid percent correct returned	Posted questionnaires	Response rate
GF	28	18.8	19.2	149	18.8%
HL	20	13.4	13.7	80	25.0%
KO	58	38.9	39.7	163	35.6%
MI	32	21.5	21.9	149	21.5%
TU	8	5.4	5.5	22	36.4%
Total	146	98.0	100.0	563	25.9%
Missing	3	2.0			

Table 3: Response rates and number of doctors participating in the individual districts.

Most doctors participating in this survey practise in the district Korneuburg (KO), followed by the district Mistelbach (MI); yet the response rate was highest in the district Tulln, where the fewest questionnaires were posted.

6.2.1. Professional training

Question 18-1 about "the professional training" was answered by all of the doctors.
The doctors' specialty is summarised in Table 4. Most of them are general practitioners, followed in number by dentists, paediatricians and gynaecologists.

Specialty	Number	Valid percent
General practitioner	73	49.0
Dentist	29	19.5
Paediatrician	9	6.1
Gynaecologist	8	5.4
Consultant internist	5	3.3
Anaesthetist	4	2.7
Surgeon	3	2.0
Otolaryngologist	3	2.0
Pulmonologist	3	2.0
Urologist	3	2.0
Ophthalmologist	2	1.3
Consultant neurologist	2	1.3
Consultant neurologist and psychiatrist	2	1.3
Consultant psychiatrist	1	0.7
Consultant orthopaedist	1	0.7
Consultant for accident surgery	1	0.7
Total	149	100

Table 4: Professional training.

Group sizes are too low for a reasonable evaluation of the data for each specialty. Therefore, three groups were formed, comprising general practitioners ('GP'), dentists ('Dent') and other specialists ('Other'). The according percentages are 19.5% dentists, 31.5% other specialists and 49.0% general practitioners.

There are no significant statistical differences concerning the professional training depending on the doctors' sex (χ^2 test: χ^2=2.8238, df=2, p=0.24) or age. The most distinct difference can be observed between doctors aged 40 to 50 and doctors older than 50 (χ^2 test: χ^2=3.5555, df=2, p=0.17): there is a higher representation of general practitioners in the age group 'older than 50' (55.4%) than in the others (40.0%). In contrast, the age group '40 to 50' comprises more specialists (40.0% vs. 25%). The number of dentists is almost the same in all the age groups.
The difference in profession between doctors with a professional experience of 10 to 20 years and more than 20 years is statistically significant (χ^2 test: χ^2=9.4063, df=2,

p=0.01): the group with more than 20 years of professional experience is formed by 64.6% GPs, 20.8% specialists and only 14.6% dentists, whereas the group '<20' comprises only 33.3% GPs, but 29.2% dentists and 37.5% other specialists.

6.2.2. Male and female doctors

Question 25 about their "sex" was answered by 98% of the doctors (three missing values). 53.4% of them are male and 46.6% are female.

The distribution of sex among the doctors aged 40 to 50 and older than 50 years is distinctly but not significantly different (χ^2 test:χ^2=2.6525, df=1, p=0.10; relative numbers of men and women classified by age groups are represented in Table 5).

Sex		20-40	40-50	>50
n	Female	14	33	20
	Male	10	31	36
%	Female	58.3	51.6	35.7
	Male	41.7	48.4	64.3

Table 5: Sex of the doctors grouped by age groups.

The oldest doctors (>50 years) are predominantly male (64.3%); the doctors in the other age groups are predominantly female (58.3% of the doctors aged 20 to 40 and 51.6% of the doctors aged 40 to 50).
Since age should correlate with professional experience, it is interesting to compare the age groups to the groups formed by years of professional experience (cf. Table 6).

Sex		1-5	5-10	10-20	>20
n	Female	12	16	21	19
	Male	7	17	26	28
%	Female	63.2	48.5	44.7	40.4
	Male	36.8	51.5	55.3	59.6

Table 6: Sex of the doctors grouped by years of professional experience.

Most of the least experienced doctors (1 to 5 years of professional experience) are female (63.2%); the other groups predominantly comprise the data of male doctors (51.5% to 59.6%). The greatest difference can be observed between the doctors with less than 5 and more than 20 years of professional experience (χ^2 test: χ^2=1.9686, df=1, p=0.16; no significant difference).

Most of the general practitioners are female (52.8%). Specialists are predominantly male (53.6% male dentists and 63.0% male other specialists). Differences in sex do not significantly depend on the professional experience of the doctors. The most distinct difference can be observed between general practitioners and specialists (χ^2 test: χ^2=2.223, df=1, p=0.14).

6.2.3. Age of the doctors

Question 24 about their age ("age group") was answered by 97.3% of the doctors (four missing values). Only 16.6% are younger than 40, 44.8% are 40 to 50 years old, and the remaining 38.6% are older than 50.

Most of the male doctors are older than 50 (46.8%), whereas the female doctors are generally younger. Differences in age between women and men are significant (Wilcoxon test: W=2092, p=0.03). The numbers are represented in Table 7.

Age		Female	Male
n	20-40	14	10
	40-50	33	31
	>50	20	36
%	20-40	20.9	13.0
	40-50	49.3	40.3
	>50	29.9	46.8

Table 7: Age of female and male doctors participating in the survey.

The professional experience is significantly dependent on the age of the doctors (cf. Table 8).

Age		1-5	5-10	10-20	>20
n	20-40	9	13	2	0
	40-50	9	19	36	1
	>50	0	1	9	46
%	20-40	50.0	39.4	4.3	0.0
	40-50	50.0	57.6	76.6	2.1
	>50	0.0	3.0	19.1	97.9

Table 8: Age groups of the doctors grouped by years of professional experience.

Half of the doctors with 1 to 5 years of professional experience are 20 to 40 years old; the others are 40 to 50 years old, whereas 97.9% of the doctors with more than 20 years

of professional experience are older than 50. A Kruskal-Wallis test with the dependent variable 'age' and the independent variable 'professional experience' results in χ^2=99.703, df=3, p<0.0001. Subsequent Wilcoxon tests show significant differences between all pairs of groups defined by the professional experience of the doctors (p<0.0001) with exception of the doctors with 1 to 5 and 5 to 10 years of professional experience (Wilcoxon test: W=261, p=0.42).

Differences in age between the professional groups are not significant (Kruskal-Wallis test: χ^2=0.663, df=2, p=0.72).

6.2.4. Professional experience of the doctors

Question 19 "How long have you been practising as a doctor?" was answered by 99.3% of the doctors (one missing value). Group sizes are represented in Table 9 and Fig. 1.

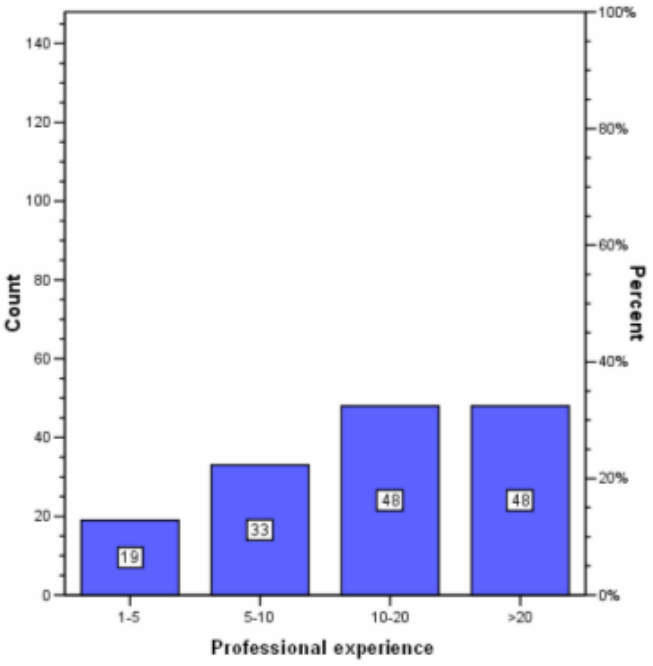

Fig. 1: Professional experience of the doctors in years.

Professional experience		Number	Percent	Valid percent
Valid	1-5 y	19	12.8	12.8
	5-10 y	33	22.1	22.3
	10-20 y	48	32.2	32.4
	>20 y	48	32.2	32.4
	Total	148	99.3	
Missing		1	0.7	
Total		149	100.0	

Table 9: Years of professional experience of the doctors.

The smallest number of the doctors taking part in this survey have a professional experience of less than 5 years (12.8%). Most of them have been practising for more than 10 years (64.8%, half of them 10 to 20 years and half >20 years).

In general, the female doctors have a shorter professional experience than the male doctors. Most of the female doctors have been working for 10 to 20 years (30.9%), most of the male doctors longer than 20 years (35.9%). However, differences in professional experience do not significantly depend on the sex of the doctors (Wilcoxon test: W=2283, p=0.13) (cf. Table 10).

Professional experience		Female	Male
n	1-5	12	7
	5-10	16	17
	10-20	21	26
	>20	19	28
%	1-5	17.6	9.0
	5-10	23.5	21.8
	10-20	30.9	33.3
	>20	27.9	35.9

Table 10: Years of professional experience grouped by sex.

Again, as already described before, professional experience correlates with the age of the doctors (cf. Table 11). A Kruskal-Wallis test with the dependent variable 'professional experience' and the independent variable 'age' results in χ^2=97.06, df=2, p<0.0001. All pairs of age groups differ significantly in professional experience (Wilcoxon test: p<0.0001).

Professional experience		20-40	40-50	>50
n	1-5	9	9	0
	5-10	13	19	1
	10-20	2	36	9
	>20	0	1	46
%	1-5	37.5	13.8	0.0
	5-10	54.2	29.2	1.8
	10-20	8.3	55.4	16.1
	>20	0.0	1.5	82.1

Table 11: Years of professional experience grouped by age.

Professional experience does not differ significantly between the groups of general practitioners (GP), dentists and other specialists (cf. Table 12; Kruskal-Wallis test: χ^2= 2.323, df=2, p=0.31).

Professional experience		GP	Dent	Other
n	1-5	10	2	7
	5-10	16	6	11
	10-20	16	14	18
	>20	31	7	10
%	1-5	13.7	6.9	15.2
	5-10	21.9	20.7	23.9
	10-20	21.9	48.3	39.1
	>20	42.5	24.1	21.7

Table 12: Years of professional experience of general practitioners (GP), dentists and other specialists.

The largest group of the general practitioners (42.5%) has a professional experience of more than 20 years, whereas specialists and dentists primarily have a professional experience of 10 to 20 years (48.3% and 39.1%, respectively).

Question 18-2 about their "job location" was answered by 96.6% of the doctors (five missing values).
Almost 80% of the doctors work in their private practice and approximately 20% at a hospital, additionally. Interestingly, only one doctor works at a hospital, singly.

6.3. Statistical methods

Subject of interest

The main subject of interest is the medical doctors' knowledge about osteopathy.
The 17 questions of part A of the questionnaire are summarised and represented in nine sections (cf. Table 13). For a general overview of the objective knowledge, the percentage of right answers of the nine individual sections of the questionnaire and of the whole questionnaire was calculated for each doctor individually.

Variable	Abbreviation	Questions
General knowledge	gen_kn	1.2
Aims of osteopathic treatment	aims_kn	3
Structures treated	struct_kn	4
Techniques used	techn_kn	5
Target groups of osteopathy	targ_kn	6
Procedure of osteopathic treatment	proc_kn	7.8
Indications and contraindications	ind_kn	9.10.11
Osteopathic training	train_kn	12.13.14
Information about osteopathy	inf_kn	15.16.17
Total knowledge	total_kn	

Table 13: Calculated variables.

Missing answers

There are numerous missing answers for some questions. Thus, a possible correlation of the relative frequencies of these missing answers and of the answer "do not know" was tested ahead of data evaluation. Since these data deviate from normal distribution, Spearman correlation was used, resulting in $R=0.61$ ($p<0.001$). This significant positive linear correlation shows that the number of missing answers was higher when a higher number of doctors explicitly answered that they "do not know" the answer.

Therefore, missing data and the answers "do not know" were collapsed and interpreted as a lack of knowledge. Positive and negative answers ("true" and "not true", respectively) were also collapsed and labelled "concrete answers". This way, the general (subjective) knowledge was evaluated.

Subsequently, positive and negative answers were evaluated singly without consideration of the missing and "do not know" answers in order to evaluate the (objective) knowledge about the right answers.

Statistical methods used

General overview of the knowledge about osteopathy

First of all, the percentage of right answers in each of the nine sections of the questionnaire as well as the total percentage of right answers in the whole questionnaire was calculated for each doctor individually.

In the next step, mean values and standard deviations (SD) of the results of all doctors of the sample were calculated.

For a more detailed overview, mean values of the percentage of right answers of the single nominal answers and their 95%- confidence intervals (95%-CI) were also calculated.

Dependencies of the knowledge of the doctors on their sex, age, professional experience and specialty

Since these variables describing the knowledge of the doctors deviate from normal distribution, their dependencies on the independent variables sex, age, professional experience and profession were assessed by means of non-parametric statistical tests (Kruskal-Wallis tests, Wilcoxon tests and χ^2 tests; level of significance α=0.05, two-tailed).

The according null hypothesis can be expressed by:

The percentage of right answers (calculated dependent variables) does not differ for the doctors grouped by the independent variables sex, age, professional experience and profession.

χ^2 tests were used for the assessment of dependencies of the relative frequencies of concrete and not concrete answers (which reflect the insecurity of the doctors answering the individual questions) and of right and wrong answers on the independent variables sex, age, professional experience and profession.

In this respect, it has to be stressed that counts are low in many cells (of the tables) and thus, results of these tests are uncertain. Prerequisite of this test are expected frequencies higher than 5 in more than 80% of the single cells and never lower than 1.

In these cases, Fisher's exact p, which is less influenced by low cell counts (also <5), was calculated.

In order to explain the expressions "cells" and "expected frequencies", I will present an example (referral to osteopaths):

Observed frequencies	GP	Dent		Row sums
Yes	34	10		44
No	32	18		50
Column sums:	66	28		Total sum: 94

GP/Yes, GP/No, Dent/Yes and Dent/No are the ***cells*** containing the observed frequencies of all the answers in both groups. Assuming that two groups of a sample are independent (null hypothesis), the relative frequencies within both groups singularly act like the relative frequencies in the total sample. This means that if there is no difference in the answering behaviour between the general practitioners ('GP') and the dentists ('Dent'), expected frequencies calculated for the total group ('GP' and 'Dent' together), should not differ from the real ones.

Presuming this independence, the expected frequency for this test will be calculated as follows: Expected frequency = Row sum/Total sum × Column sum

In this example, ***expected frequencies*** are:

Expected frequencies	GP	Dent
Yes	30.9	13.1
No	35.1	14.9

Afterwards, expected frequencies were compared to the observed frequencies and the deviations were given as χ^2. Additionally, the significance of the deviations was calculated by the statistical software. Values below the level of significance ($p<0.05$) denote significant group differences. In this example, $\chi^2=1.97$ and $p=0.16$. Thus, group differences are not significant.

The according null hypothesis can be expressed by:

Relative frequencies of answers (categories of the dependent variables) do not differ for the independent variables (categories of the variables sex, age, professional experience and profession).

The software used for the evaluation was SPSS® 12.0.0. and R 2.9.1.

Data presentation

For the total knowledge and the results of the nine sections of the questionnaire, data are presented in tables comprising the number and relative frequencies of the individual answers for the subgroups formed by the independent variables sex, age, professional experience and profession. Modes (i.e. the most frequent answers) in the subgroups are denoted in green.

If significant ($p<0.05$) or distinct ($p<0.10$) dependencies of knowledge can be observed on an independent variable, results of the χ^2 tests for each question of the according section are summarised in another table, followed by a more detailed description of the results of questions where significant or distinct differences between subgroups can be observed.

A summary of all results (raw data, results for all individual questions and independent variables) is added in the annex.

Additional notes

Sums of the observed frequencies (n) of individual groups may differ (smaller values) from the total number, since missing answers for the independent (grouping) variables cannot be taken into consideration.

7. Results

This chapter summarizes the relevant answers of the questionnaires which were filled in by the doctors. Only answers that show a significant difference are described. Answers with non-significant differences are only described when they bear relevance for the discussion.
The succession of the two parts of the questionnaire is reversed at this point, starting with the general information, part B, about the participants' contact and experience with osteopathy.

Question 20 "What other professional groups do you co-operate with?" was answered by 85.23% of the doctors (22 missing values).
Most doctors (71.1%) co-operate with physiotherapists, 52.3% with homeopaths and 40.3% with osteopaths. This is the second lowest value for the specified professional groups homeopaths, osteopaths, physiotherapists, occupationaltherapists, alternative medicine practitioners and nutrition specialists.
Neither significant nor distinct influences of sex, age, professional experience or specialty on the number of co-operations ***with osteopaths*** can be observed.

44.1% of the female doctors and 37.2% of the male doctors co-operate with osteopaths (χ^2 test: χ^2=0.4667, df=1, p=0.49, i.e. no significant difference).
Co-operation with osteopaths is least frequent in the age group '20 to 40' (33.3%) and most frequent in the age group '40 to 50' (43.1%). A chi-square test with the results of these two groups results in χ^2=0.3455, df=1, p=0.56.

The greatest differences concerning professional experience can be observed between the groups '1 to 5' (36.8%) and '5 to 10' (45.5%). Again, a chi-square test with the results of these two groups shows no significant differences (χ^2=0.0624, df=1, p=0.80).

General practitioners (GP) co-operate most frequently with physiotherapists (87.7%), dentists with homeopaths and osteopaths (34.5% each), and other specialists with physiotherapists (78.7%) (cf. Table 14).

	GP		Dent		Other	
	n	Valid percent	n	Valid percent	n	Valid percent
Homeopaths	47	64.4	10	34.5	21	44.7
Osteopaths	33	45.2	10	34.5	17	36.2
Physiotherapists	64	87.7	5	17.2	37	78.7
Occupationaltherapists	46	63.0	2	6.9	23	48.9
Alternative medicine practitioners	31	42.5	9	31.0	22	46.8
Nutrition specialists	26	35.6	2	6.9	15	31.9
Others	9	12.3	2	6.9	4	8.5

Table 14: Co-operations of the doctors grouped as general practitioners, dentists and other specialists.

As mentioned before, there is no significant difference between general practitioners, dentists and other specialists concerning the number of co-operations with osteopaths. A χ^2 test with the results of the dentists and general practitioners results in $\chi^2=0.5883$, df=1, p=0.44.

Question 21-1 "Have you ever undergone osteopathic treatment?" was answered by 91.9% of the doctors (12 missing values).
26% of all doctors who answered this question had undergone osteopathic treatment themselves.
Slightly more female (26.6%) than male doctors (23.6%) had undergone osteopathic treatment before.
The fewest of the doctors who have undergone osteopathic treatment themselves are from the age group '20 to 40' (16.7%) and most of them are from the age group '40 to 50' (28.3%).
Doctors with a professional experience of 1 to 5 years have the least personal experience with osteopathic treatment (22.2%), doctors with a professional experience of 10 to 20 years the most (26.7%).

The smallest number of doctors who have undergone osteopathic treatment themselves are from the group 'GP' (20.6%), whereas 33.3% of the dentists and 28.6% of the other specialists have undergone osteopathic treatment themselves before.

Question 21-2 "If you have undergone osteopathic treatment, was your personal experience positive?" was answered by 28.2% of the doctors (107 missing values).

91% of these doctors had a positive experience.

Seemingly, the question was misinterpreted by some doctors. Only three of the eight doctors who stated having no positive experience had really undergone osteopathic treatment before; the others did not answer the question about former osteopathic treatment. In contrast, only 30 of the 34 doctors with a positive experience had been treated osteopathically before, one had not, and three did not answer the question about former osteopathic treatment.
Two of the doctors described their positive experience (one would not be able to work without it anymore and one described the successful treatment of his preterm infants) and two their negative experience (no improvement of their health problems at all).
Neither significant nor distinct influences of sex, age, professional experience or specialty on the number of positive personal experiences can be observed.

Question 22-1 "Have you ever referred patients to an osteopath?" was answered by 89.9% of the doctors (15 missing values). 44.8% had referred a patient to an osteopath, the others had not. Group sizes are represented in Fig. 2.

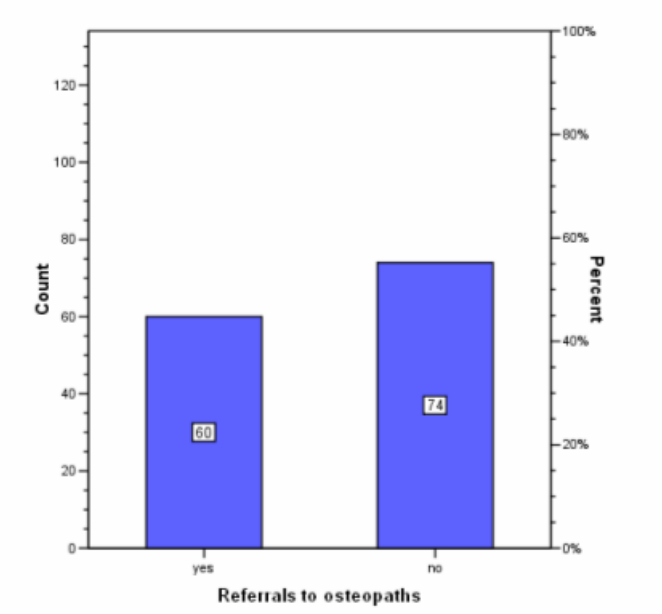

Fig. 2: Less than 50% of the doctors had referred patients to an osteopath before.

There was a distinct but not significant influence of the sex on the number of referrals. Female doctors had referred patients to osteopaths more often than male doctors (53% vs. 37%, χ^2=3.056, df=1, p=0.08).

Question 22-2 "If you have referred patients to an osteopath, was your experience positive?" was answered by 45.6% of the doctors (81 missing values). The results are represented in Table 15 and Fig. 3.

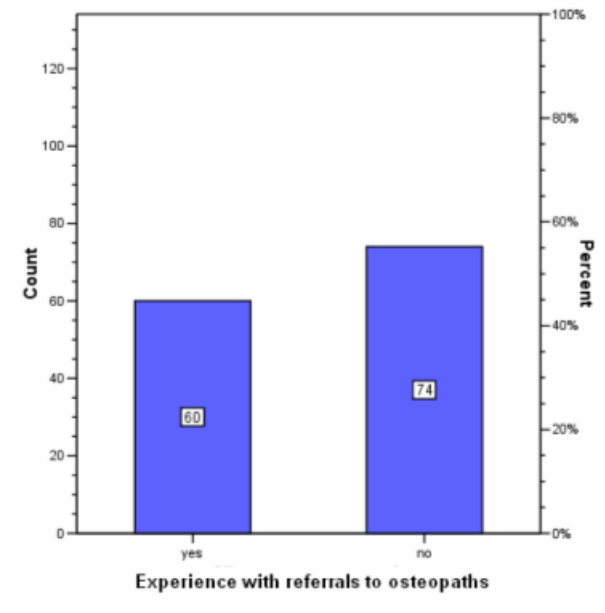

Fig. 3: A high percentage of positive experiences with referrals of patients to an osteopath can be observed.

Experience with referrals		n	Percent	Valid percent
Valid	Yes	66	44.3	97.1
	No	2	1.3	2.9
	Total	68	45.6	
Missing		81	54.4	
Total		149	100.0	

Table 15: Number of doctors (uncorrected values) with or without ('yes'/'no') positive experience with referrals to an osteopath.

Seemingly, this question was also misinterpreted by some doctors. Only one of the two doctors who stated having no positive experience had referred a patient to osteopathic treatment before.

In contrast, only 56 of the doctors with a positive experience had referred patients to an osteopath before, and 10 did not answer the question about referrals to an osteopath. The numbers of corrected answers is represented in Table 16.

Experience with referrals		Number	Percent
Valid	Yes	56	98.2
	No	1	1.8

Table 16: Number of doctors (corrected values) with or without ('yes'/'no') positive personal experience with referrals to an osteopath.

Question 22-3 "If you have referred patients to an osteopath, did the patients give positive feedback?" was answered by 41.6% of the doctors (87 missing values). Group sizes are represented in Fig. 4.

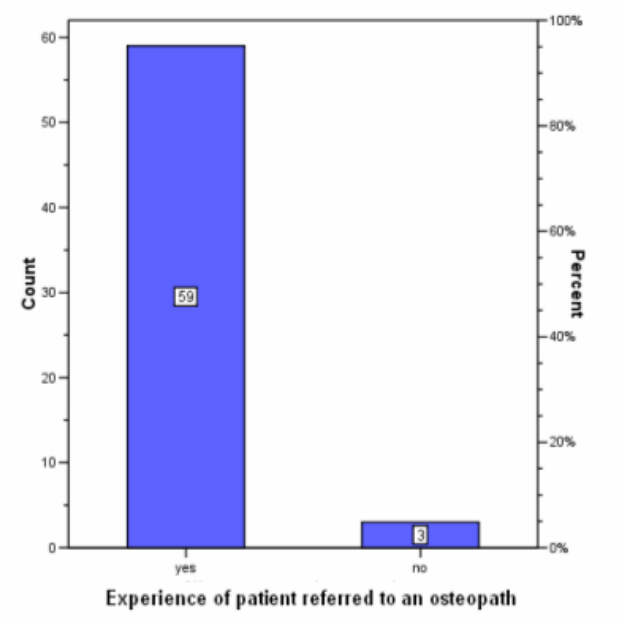

Fig. 4: Patients' feedback was positive in most cases after being referred to an osteopath by the doctor.

Again, there were two more answers than doctors who stated having referred patients to an osteopath. Seemingly, this question was misinterpreted by them. Only one of the two doctors who stated getting no positive feedback had really referred a patient to an osteopath before, one had not and one did not answer the question about referrals. In contrast, only 50 of the doctors with positive feedback had referred a patient to an osteopath before, two had not and seven did not answer the question about referrals to an osteopath.
After correction of these discrepancies, 98% (n=50) of the patients had given positive feedback and only 2% (n=1) had not.

Question 23-1 "Do you feel well informed about osteopathy?" was answered by 90.6% of the doctors (14 missing values). Only 30% of these doctors stated having sufficient information and approximately 70% stated that they were not well informed about osteopathy. Neither significant nor distinct influences ($p<0.10$) of sex, age, professional experience and specialty can be observed. The most distinct results of the χ^2 tests are $\chi^2=0.0024$, df=1, p=0.96 (sex: female vs. male), $\chi^2=1.3876$, df=1, p=0.24 (age: 20 to 40 vs >50), $\chi^2=2.3378$, df=1, p=0.13 (professional experience: 5 to 10 vs. 10 to 20) and $\chi^2=1.5799$, df=1, p=0.21 (profession: Dent vs. GP).

Question 23-2 "Would you like to have more information about osteopathy?" was answered by 77.2% of the doctors (34 missing values). Approximately 75% of these doctors wanted to have more information.
Two doctors wanted to know if health insurance covered the costs; one wanted to know if osteopathy was effective in the treatment of dysfunctions of the eyes; and one wanted to do further studies if it was not too expensive.
There is no significant or distinct influence of sex, age, professional experience or specialty on the interest in more information: 75.9% of the female and 73.8% of the male doctors wanted to have more information. Differences are not significant (χ^2=0.0026, df=1, p=0.96).

The lowest need for more information can be observed in the group of doctors older than 50 (71.4%) and the highest in the age group '40 to 50' (80.8%). Differences are not significant (χ^2=0.6698, df=1, p=0.41).
The lowest need for additional information can be observed in the group of doctors with more than 20 years of professional experience (69.4%) and the highest in the group '1 to 5' (88.2%). Differences are not significant (Fisher's exact p=0.18).

The lowest need for more information can be observed in the group 'GP' (68.9%) and the highest in the group 'Dent' (83.3%). This difference is not significant (χ^2=0.8193, df=1, p=0.37).

7.1. Knowledge about osteopathic aspects: summary of the results of part A of the questionnaire

7.1.1. Total percentage of right answers

On average, 62.7% (SD: 18.4) of the questions of the whole part A of the questionnaire concerning the knowledge about osteopathic aspects were answered correctly by each doctor. The highest score is 89.3% of right answers. Mean value and standard deviation of the percent of right answers grouped by independent variables are summarized in Table 17; results of the according Wilcoxon tests are summarized in Table 18.

Indep. var.	Sex		Age			Professional experience				class_prof		
Group	Female	Male	20-40	40-50	>50	1-5	5-10	10-20	>20	GP	Dent	Other
n	68	78	24	65	56	19	33	48	48	73	29	47
Mean total_kn [%]	65.9	59.9	61.0	65.3	60.0	65.5	63.7	63.9	59.2	65.5	59.1	60.5
SD total_kn	16.3	19.8	20.7	17.4	18.5	16.2	18.7	18.2	19.3	17.1	19.5	19.3

Table 17: Relative frequencies of right answers in the whole questionnaire, grouped by independent variables.

	Sex		Age						class_prof					
Group	Female	Male	20-40	40-50	20-40	>50	40-50	>50	GP	Dent	GP	Other	Dent	Other
	W	p	W	p	W	p	W	p	W	p	W	p	W	p
total_kn	3109	**0.07**	697	0.45	719.5	0.62	2143	**0.09**	838	**0.10**	1454.5	0.16	649.5	0.74

	Professional experience											
Group	1-5	5-10	1-5	10-20	1-5	>20	5-10	10-20	5-10	>20	10-20	>20
	W	p	W	p	W	p	W	p	W	p	W	p
total_kn	329.5	0.77	477	0.78	543	0.23	791	1	912	0.25	1341.5	0.17

Table 18: Group differences of relative frequencies of right answers in the whole questionnaire (results of the Wilcoxon tests).

There are no significant differences concerning the total knowledge about osteopathy depending on any independent variable, but there are distinct ones:
On average, female doctors know 65.9% of the right answers; male doctors know 59.9% (Wilcoxon test: W=3115, p=0.07).

Doctors older than 50 have a distinctly lower level of knowledge about osteopathy (60.0% right answers) than doctors aged 40 to 50, which is the age group with the highest level of knowledge (65.3% right answers, W=2172, p=0.07); and finally, dentists have a distinctly lower level of knowledge about osteopathy than general practitioners (59.1% vs. 65.5%, p=0.10).

The percentage of correct answers for each individual question is presented in Table 19. Data are sorted in ascending order for each section of the questionnaire.

Section	Question	Right answers (% of total)	95% CI
General knowledge	An osteopath works with his hands, homeopathy and medicinal herbs.	62.4	54.4-69.8%
	Osteopathy is predominantly preventive.	67.8	59.9-74.8%
	Osteopathy stimulates the self-healing capacity of the body.	73.8	66.2-80.2%
	Osteopathy is another name for chiropractic.	78.5	71.3-84.4%
	Osteopathy is a holistic method.	87.9	81.7-92.2%
	An osteopath works only with his hands.	89.3	83.3-93.3%
Aims	The aim of osteopathy is to re-establish physical and psychological well-being exclusively by energetic treatment.	48.3	40.4-56.3%
	The aim of osteopathy is to re-establish physical and psychological well-being by treating osteoporotic bones.	76.5	69.1-82.6%
	The aim of osteopathy is to re-establish physical and psychological well-being by correcting movement restrictions of structures and tissues.	90.6	84.8-94.3%
Structure	An osteopath examines and treats the inner organs.	34.2	27.1-42.2%
	An osteopath examines and treats fasciae.	61.7	53.7-69.2%
	An osteopath examines and treats the cranial bones.	63.1	55.1-70.4%
	An osteopath examines and treats the spine, exclusively.	81.2	74.2-86.7%
	An osteopath examines and treats the whole musculoskeletal system.	91.9	93.9-99.3%
Techniques	An osteopath uses active relaxation techniques.	21.5	15.6-28.7%
	An osteopath uses reflex zones.	28.2	21.6-35.9%
	An osteopath uses muscle energy techniques.	30.9	24.0-38.7%
	An osteopath uses myofascial techniques.	65.8	57.8-72.9%
	An osteopath uses acupuncture.	69.8	62.0-76.6%
	An osteopath uses techniques for mobilization and manipulation.	73.8	66.2-80.2%
	An osteopath uses craniosacral techniques.	79.9	72.7-85.5%
Target groups	Newborn babies belong to the target group of osteopathy.	47.0	39.1-55.0%
	Infants and children younger than six years belong to the target group of osteopathy.	56.4	48.4-64.1%
	Children older than six years belong to the target group of osteopathy.	67.8	59.9-74.8%
	Elderly people belong to the target group of osteopathy.	81.2	74.2-86.7%
	Adults belong to the target group of osteopathy.	87.9	81.7-92.2%
Procedure	An osteopath uses painful techniques.	4.7	2.3-9.4%

Section	Question	Right answers (% of total)	95% CI
	An osteopath uses forceful techniques.	18.8	13.3-25.8%
	During treatment, an osteopath concentrates only on the dysfunction.	75.2	67.7-81.4%
	An osteopath uses gentle techniques.	87.9	81.7-92.2%
	During treatment, an osteopath works with the whole body.	93.3	88.1-96.3%
Indications	There are contraindications for osteopathic treatment.	27.5	21.0-35.2%
	Osteopathy is suitable for treating problems of the urogenital tract (PMS, incontinence,…).	40.3	32.7-48.3%
	Osteopathy is suitable for treating pregnancy-related problems and medical conditions related to birth.	47.0	39.1-55.0%
	Osteopathy is suitable for treatment of afflictions of the digestive system.	47.7	39.8-55.6%
	Osteopathy is suitable for treatment of dysfunctions of the masticatory apparatus.	71.1	63.4-77.8%
	Osteopathy is suitable for treatment of health problems after accidents.	81.9	74.9-87.2%
	Osteopathy is suitable for treatment of headache, migraine and vertigo.	82.6	75.7-87.8%
	Osteopathy is suitable for treatment of chronic and acute musculoskeletal pain.	94.0	88.9-96.8%
	A patient can receive osteopathic treatment in spite of taking medication.	94.0	88.9-96.8%
Training	Osteopathic training in Austria lasts 2/4/6.5 years.	30.9	24.0-38.7%
	For practising osteopathy, it is necessary to have knowledge about the 'five elements'.	32.9	25.9-40.8%
	In Austria, no basic training in a medical profession is required for becoming an osteopath.	54.4	46.4-62.2%
	In Austria, in order to be admitted to part-time osteopathic training, basic training in medicine, odontology, veterinary medicine, physiotherapy, occupationaltherapy or midwifery is required.	65.8	57.8-72.9%
	For practising osteopathy, it is necessary to have undergone thorough training of palpatory skills.	88.6	82.5-92.8%
	For practising osteopathy it is necessary to have well founded basic knowledge of anatomy, physiology and pathology.	94.0	88.9-96.8%
Information	Your patient finds a fully trained osteopath in the yellow pages.	16.8	11.6-23.6%
	Your patient finds a fully trained osteopath in a register available from the health insurance.	27.5	21.0-35.2%
	Your patient finds a fully trained osteopath on the webpages of the schools which offer a complete training programme in osteopathy.	76.5	69.1-82.6%

Table 19: Percentage of right answers to the individual questions.

Individual results of these nine sections of the questionnaire and of the questions concerning personal experience with osteopathy are summarized in the following subchapters.

7.1.2. General knowledge about osteopathy

On average, 76.6% (SD: 25.1) of the six questions of the section about general knowledge about osteopathy of the questionnaire were answered correctly. Mean value and standard deviation of the percent of right answers grouped by independent variables are summarized in Table 20; results of the according Wilcoxon tests are summarized in Table 21.

Ind. var.	Sex		Age			Professional experience				class_prof		
Category	Female	Male	20-40	40-50	>50	1-5	5-10	10-20	>20	GP	Dent	Other
n	68	78	24	65	56	19	33	48	48	73	29	47
Mean gen_kn [%]	79.9	74.4	71.5	82.1	72.3	80.7	78.3	80.6	69.8	77.6	72.4	77.7
SD gen_kn	23.3	26.4	28.9	23.1	24.7	23.7	27.2	22.9	25.9	25.3	26.5	24.1

Table 20: Relative frequencies of right answers in this section of the questionnaire, grouped by independent variables.

	Sex		Age						class_prof					
Group	Female	Male	20-40	40-50	20-40	>50	40-50	>50	GP	Dent	GP	Other	Dent	Other
	W	p	W	p	W	p	W	p	W	p	W	p	W	p
gen_kn	2992.5	0.17	613.5	0.11	683	0.91	2287.5	0.01	928.5	0.32	1648.5	0.71	606	0.40

	Professional experience											
Group	1-5	5-10	1-5	10-20	1-5	>20	5-10	10-20	5-10	>20	10-20	>20
	W	p	W	p	W	p	W	p	W	p	W	p
gen_kn	323.5	0.85	468.5	0.86	575.5	0.09	790.5	0.99	970	0.08	1448.5	0.02

Table 21: Group differences of relative frequencies of right answers in this section of the questionnaire (results of the Wilcoxon tests).

There are significant differences concerning the general knowledge about osteopathy depending on age and professional experience of the doctors. Medical doctors aged 40 to 50 have a significantly higher level of knowledge than those older than 50.

Doctors with more than 20 years of professional experience have the lowest level of general knowledge about osteopathy. Compared to the doctors with 10 to 20 years of professional experience, the difference is significant; differences compared to the other groups are distinct.

7.1.2.1 Level of knowledge in relation to the age of the doctors

Table 22 shows the results of the χ^2 tests and the Fisher's exact tests for analysis of the knowledge level in relation to the age of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	**Age**		**Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)**				**'true' vs. 'not true'**			
Statement	Cat. 1	Cat. 2	Test	chi2	df	p	Test	chi2	df	p
An osteopath works only with his hands.	20-40	>50	Fisher's exact p			0.67	Fisher's exact p			1.00
	20-40	40-50	Fisher's exact p			1.00	Fisher's exact p			0.48
	40-50	>50	Fisher's exact p			0.51	Fisher's exact p			0.59
An osteopath works with his hands, homeopathy and medicinal herbs.	20-40	>50	Chi-square/Yates	0.0958	1	0.76	Fisher's exact p			0.41
	20-40	40-50	Chi-square/Yates	0.0659	1	0.80	Fisher's exact p			1.00
	40-50	>50	Chi-square/Yates	0.3202	1	0.57	Fisher's exact p			0.13
Osteopathy is a holistic method.	20-40	>50	Fisher's exact p			1.00	Fisher's exact p			**0.08**
	20-40	40-50	Fisher's exact p			0.68	Fisher's exact p			0.28
	40-50	>50	Chi-square/Yates	0.0673	1	0.80	Fisher's exact p			0.50
Osteopathy stimulates the self-healing capacity of the body.	20-40	>50	Fisher's exact p			0.55	Fisher's exact p			1.00
	20-40	40-50	Fisher's exact p			0.35	Fisher's exact p			0.63
	40-50	>50	Chi-square/Yates	0.0143	1	0.90	Fisher's exact p			0.51
Osteopathy is another name for chiropractic.	20-40	>50	Fisher's exact p			1.00	Fisher's exact p			**0.09**
	20-40	40-50	Fisher's exact p			0.73	Fisher's exact p			**0.001**
	40-50	>50	Chi-square/Yates	0.7314	1	0.39	Fisher's exact p			**0.08**
Osteopathy is predominantly preventive.	20-40	>50	Chi-square/Yates	0.0131	1	0.91	Fisher's exact p			0.74
	20-40	40-50	Fisher's exact p			0.38	Fisher's exact p			0.36
	40-50	>50	Chi-square/Yates	0.4054	1	0.52	Chi-square/Yates	3.6698	1	**0.06**

Table 22: Results of the χ^2 tests of the answers to the various questions, classified by age groups. First the ratio between concrete answers and non-concrete answers was examined; second only the correct and incorrect answers were taken into account.

Significant differences depending on age groups regarding the assessment of the statements only occurred regarding the assessment whether osteopathy is another term for chiropractic (20-40 vs. 40-50; Fisher's exact p=0.001). Further distinct differences (p<0.10) regarding this statement can be observed between the age groups '20 to 40' and '>50' and the age groups '40 to 50' and '>50'. Furthermore, significant differences regarding the statements "Osteopathy is a holistic method" ('20 to 40' vs. '>50', Fischer's

exact p=0.08) and "Osteopathy is predominantly preventive" ('40 to 50' vs. '>50', χ^2=3.670, df=1, p=0.06) could be identified.

The answers of the medical doctors to these statements will therefore be illustrated in more detail in the following section.

Analysis of the variable 'chiropractic' classified by age

Fig. 5 and Table 23 show the distribution of the valid values of the variable 'chiropractic' ("Osteopathy is another name for chiropractic"), classified by the variable 'age'.

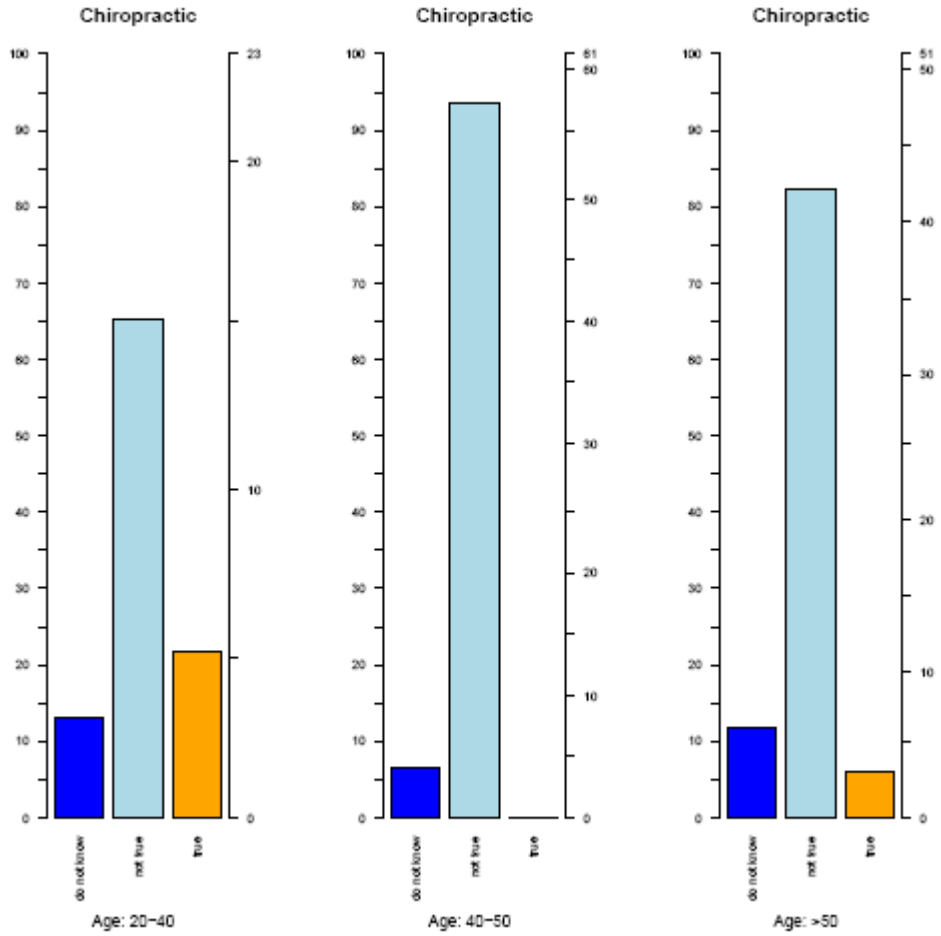

Fig. 5: Valid results regarding the variable 'chiropractic' ("Osteopathy is another name for chiropractic"), classified by the variable 'age' (left axis: %, right axis: n).

Age	20-40		40-50		>50	
Chiropractic	n	% valid	n	% valid	n	% valid
Do not know	3	13.04	4	6.55	6	11.76
Not true	15	65.21	57	93.44	42	82.35
True	5	21.73	0	0	3	5.88

Table 23: Overview of the values in the variable 'chiropractic' ("Osteopathy is another name for chiropractic"), classified by the variable 'age' (in percent and in absolute numbers).

Overall, 135 of the 149 values (90.6%) of the dependent variable are valid; 10 values are missing. In three cases (2.0%) no unambiguous classification was possible due to missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable had a value.
The age group '40 to 50' showed the highest level of knowledge, while the incorrect answers "true" and "do not know" were most common in the age group '20 to 40'.

Variable 'holistic' classified by age

Table 24 shows the percentages of the answers to the statement "Osteopathy is a holistic method" (variable 'holistic'), classified by the variable 'age'.

	20-40		40-50		>50	
Holistic	n	% valid	n	% valid	n	% valid
Do not know	3	12.5	4	6.25	4	7.4
Not true	2	8.33	2	3.12	0	0
True	19	79.16	58	90.62	50	92.59

Table 24: Overview of the values in the variable 'holistic' ("Osteopathy is a holistic method"), classified by the variable 'age' (in percent and in absolute numbers).

Overall, 142 of the 149 values (95.3%) of the dependent variable are valid. In four cases (2.7%) an unambiguous classification was not possible due to missing values in the independent variable. While the age groups '40 to 50' and '>50' show only slight differences in comparison, the frequency of the answers "not true" and "do not know" in the age group '20 to 40' indicates a considerably lower level of knowledge in this group.

Variable 'prevention' classified by age

Table 25 summarizes the percentages of the answers to the statement "Osteopathy is predominantly preventive" (variable 'prevention'), classified by the variable 'age'.

	20-40		40-50		>50	
Prevention	n	% valid	n	% valid	n	% valid
Do not know	5	21.73	7	11.47	6	12.24
Not true	15	65.21	50	81.96	33	67.34
True	3	13.04	4	6.55	10	20.4

Table 25: Overview of the values in the variable 'prevention' ("Osteopathy is predominantly preventive"), classified by the variable 'age' (in percent and in absolute numbers).

Overall, 133 of the 149 values (89.3%) of the dependent variable are valid; twelve values are missing. In three cases (2.0%), an unambiguous classification was not possible due to missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable has a value. In this category, as well, the age group '40 to 50' provided the highest number of correct answers. Lack of knowledge was most commonly admitted in the age group '20 to 40', while incorrect answers were most common in the age group '>50'.

7.1.2.2 Level of knowledge in relation to the professional experience of the medical doctors

Table 26 shows the results of the χ^2 tests and the Fisher's exact tests for the analysis of the knowledge level in relation to the professional experience of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	Professional experience		Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)				'true' vs. 'not true'			
Statement	Cat. 1	Cat. 2	Test	chi2	df	p	Test	chi2	df	p
An osteopath works only with his hands.	1-5	5-10	Fisher's exact p			1.00	Fisher's exact p			1.00
	1-5	10-20	Fisher's exact p			1.00	Fisher's exact p			0.28
	1-5	>20	Fisher's exact p			0.42	Fisher's exact p			1.00
	5-10	10-20	Fisher's exact p			1.00	Fisher's exact p			0.40
	5-10	>20	Fisher's exact p			0.30	Fisher's exact p			1.00
	10-20	>20	Fisher's exact p			0.16	Fisher's exact p			0.22
An osteopath works with his hands, homeopathy and medicinal herbs.	1-5	5-10	Chi-square/Yates	0.0624	1	0.80	Fisher's exact p			1.00
	1-5	10-20	Chi-square/Yates	0.0045	1	0.95	Fisher's exact p			0.29
	1-5	>20	Chi-square/Yates	0.3406	1	0.56	Fisher's exact p			0.40
	5-10	10-20	Chi-square/Yates	0.0042	1	0.95	Fisher's exact p			0.17
	5-10	>20	Chi-square/Yates	0.5178	1	0.47	Fisher's exact p			0.27
	10-20	>20	Chi-square/Yates	0.4219	1	0.52	Fisher's exact p			**0.003**
Osteopathy is a holistic method.	1-5	5-10	Fisher's exact p			1.00	Fisher's exact p			0.38
	1-5	10-20	Fisher's exact p			0.67	Fisher's exact p			1.00
	1-5	>20	Fisher's exact p			0.67	Fisher's exact p			0.30
	5-10	10-20	Fisher's exact p			1.00	Fisher's exact p			0.26
	5-10	>20	Fisher's exact p			1.00				
	10-20	>20	Chi-square/Yates	0.1116	1	0.74	Fisher's exact p			0.24
Osteopathy stimulates the self-healing capacity of the body.	1-5	5-10	Fisher's exact p			1.00	Fisher's exact p			1.00
	1-5	10-20	Fisher's exact p			1.00	Fisher's exact p			1.00
	1-5	>20	Fisher's exact p			1.00	Fisher's exact p			0.66
	5-10	10-20	Chi-square/Yates	0.0148	1	0.90	Fisher's exact p			1.00
	5-10	>20	Chi-square/Yates	0.0148	1	0.90	Fisher's exact p			0.69
	10-20	>20	Chi-square/Yates	0.0684	1	0.79	Fisher's exact p			1.00
Osteopathy is another name for chiropractic.	1-5	5-10	Fisher's exact p			1.00	Fisher's exact p			0.64
	1-5	10-20	Fisher's exact p			1.00	Fisher's exact p			0.49
	1-5	>20	Fisher's exact p			0.32	Fisher's exact p			1.00
	5-10	10-20	Fisher's exact p			0.73	Fisher's exact p			**0.08**
	5-10	>20	Chi-square/Yates	0.627	1	0.43	Fisher's exact p			0.39
	10-20	>20	Chi-square/Yates	2.5733	1	0.11	Fisher's exact p			0.59
Osteopathy is predominantly preventive.	1-5	5-10	Fisher's exact p			1.00	Fisher's exact p			1.00
	1-5	10-20	Fisher's exact p			1.00	Fisher's exact p			1.00
	1-5	>20	Fisher's exact p			0.53	Fisher's exact p			0.70
	5-10	10-20	Chi-square/Yates	0.0513	1	0.82	Fisher's exact p			0.71
	5-10	>20	Chi-square/Yates	0.4384	1	0.51	Fisher's exact p			0.74
	10-20	>20	Chi-square/Yates	0.5307	1	0.47	Chi-square/Yates	0.721	1	0.40

Table 26: Results of the χ^2 tests of the answers to the questions, classified by professional experience of the medical doctors. First the ratio between concrete answers and non-concrete answers was examined; second only the correct and incorrect answers were taken into account.

Significant differences between doctors with different degrees of professional experience only occurred in their assessment of the statement on whether osteopaths work manually, homeopathically and with medicinal herbs ('10 to 20' vs. '>20'; Fisher's exact p=0.003). A further distinct difference (p<0.10) can be observed regarding the statement "Osteopathy is another name for chiropractic" ('5 to 10' vs. '10 to 20'; Fisher's exact p=0.08).

The answers of the medical doctors to these statements will therefore be illustrated in more detail in the following section.

Variable 'man + others' classified by professional experience

Fig. 6 and Table 27 show the distribution of the valid values of the variable 'man + others' ("An osteopath works with his hands, homeopathy and medicinal herbs"), classified by the variable 'professional experience'.

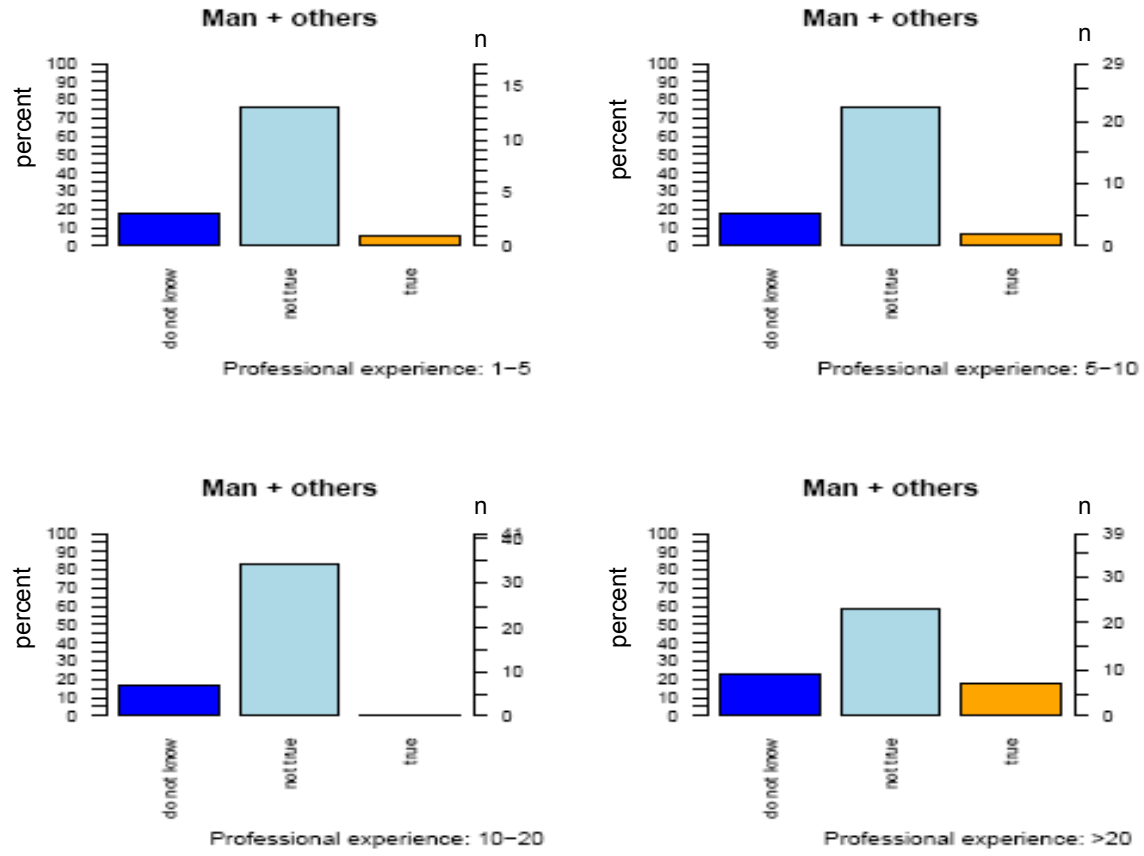

Fig. 6: Valid results regarding the variable 'man + others' ("An osteopath works with his hands, homeopathy and medicinal herbs"), classified by the variable 'professional experience' (left axis: %, right axis: n).

	1-5		5-10		10-20		>20	
Man + others	n	% valid	n	% valid	n	% valid	n	% valid
Do not know	3	17.64	5	17.24	7	17.07	9	23.07
Not true	13	76.47	22	75.86	34	82.92	23	58.97
True	1	5.88	2	6.89	0	0	7	17.94

Table 27: Overview of the values of the variable 'man + others' ("An osteopath works with his hands, homeopathy and medicinal herbs"), classified by the variable 'professional experience' (in percent and in absolute numbers).

Overall, 128 of the 149 values (85.9%) of the dependent variable are valid. 20 values are missing. In one case (0.7%) neither the dependent nor the independent variable has a value. Incorrect answers and the answer "do not know" occurred most frequently among the group of doctors with more than 20 years of professional experience.
Lack of knowledge (answer: "do not know") was similar in the other groups. The group with the highest number of correct answers was the one with 10 to 20 years of professional experience.

Variable 'chiropractic' classified by professional experience

Table 28 summarizes the answers to the statement "Osteopathy is another name for chiropractic" (variable 'chiropractic'), classified by the variable 'professional experience' in percent.

	1-5		5-10		10-20		>20	
Chiropractic	n	% valid	n	% valid	n	% valid	n	% valid
Do not know	1	5.55	2	6.66	4	8.51	6	14.28
Not true	16	88.88	24	80.00	42	89.36	34	80.95
True	1	5.55	4	13.33	1	2.12	2	4.76

Table 28: Overview of the values in the variable 'chiropractic' ("Osteopathy is another name for chiropractic"), classified by the variable 'professional experience' (in percent and in absolute numbers).

Overall, 142 of the 149 values (95.3%) of the dependent variable are valid; six values are missing. In one case (0.7%) no value is available for the independent variable. Also with regard to this question, the medical doctors with 10 to 20 years of professional experience showed the highest level of knowledge. The number of incorrect answers was highest in the group '5 to 10'; obvious uncertainty ("do not know") was highest in the group '>20'.

7.1.3. Knowledge about the aims of osteopathy

On average, 71.8% (SD: 30.9) of the three questions of the section about the aims of osteopathy were answered correctly. Mean value and standard deviation of the percent of right answers grouped by independent variables are summarized in Table 29; results of the according Wilcoxon tests are summarized in Table 30.

Ind. var.	Sex		Age			Professional experience				class_prof		
Group	Female	Male	20-40	40-50	>50	1-5	5-10	10-20	>20	GP	Dent	Other
n	68	78	24	65	56	19	33	48	48	73	29	47
Mean aims_kn [%]	72.1	71.8	75.0	73.3	68.5	73.7	73.7	75.0	66.0	74.4	65.5	71.6
SD aims_kn	29.7	32.3	33.0	30.7	30.8	32.5	32.0	27.9	32.6	29.7	35.1	30.3

Table 29: Relative frequencies of right answers in this section of the questionnaire, grouped by independent variables.

	Sex		Age						class_prof					
Group	Female	Male	20-40	40-50	20-40	>50	40-50	>50	GP	Dent	GP	Other	Dent	Other
	W	p	W	p	W	p	W	p	W	p	W	p	W	p
aims_kn	2611.5	0.87	821.5	0.68	769.5	0.28	2001.5	0.31	914.5	0.25	1621	0.59	624	0.52

	Professional experience											
Group	1-5	5-10	1-5	10-20	1-5	>20	5-10	10-20	5-10	>20	10-20	>20
	W	p	W	p	W	p	W	p	W	p	W	p
aims_kn	315.5	0.98	460.5	0.95	520	0.35	799.5	0.94	906	0.25	1326	0.17

Table 30: Group differences of relative frequencies of right answers in this section of the questionnaire (results of the Wilcoxon tests).

There are no significant differences in knowledge depending on any of the independent variables.

7.1.4. Knowledge about structures treated by osteopaths

On average, 66.4% (SD: 28.9) of the five questions of the section about structures treated by osteopaths were answered correctly. Mean value and standard deviation

of the percent of right answers grouped by independent variables are summarized in Table 31; results of the according Wilcoxon tests are summarized in Table 32.

Ind. var.	Sex		Age			Professional experience				class_prof		
Group	Female	Male	20-40	40-50	>50	1-5	5-10	10-20	>20	GP	Dent	Other
n	68	78	24	65	56	19	33	48	48	73	29	47
Mean struct_kn [%]	71.2	61.8	67.5	69.5	61.8	76.8	66.7	66.7	61.3	71.2	62.1	61.7
SD struct_kn	26.6	30.4	31.7	28.3	28.4	28.5	31.1	27.8	28.1	27.5	26.9	31.4

Table 31: Relative frequencies of right answers in this section of the questionnaire, grouped by independent variables.

	Sex		Age						class_prof					
Group	Female	Male	20-40	40-50	20-40	>50	40-50	>50	GP	Dent	GP	Other	Dent	Other
	W	p	W	p	W	p	W	p	W	p	W	p	W	p
struct_kn	3109	0.07	766.5	0.90	762.5	0.33	2126.5	0.10	838.5	0.09	1423.5	0.11	670	0.90

	Professional experience											
Group	1-5	5-10	1-5	10-20	1-5	>20	5-10	10-20	5-10	>20	10-20	>20
	W	p	W	p	W	p	W	p	W	p	W	p
struct_kn	380	0.19	565	0.12	606.5	0.03	812.5	0.84	897	0.30	1286.5	0.32

Table 32: Group differences of relative frequencies of right answers in this section of the questionnaire (results of the Wilcoxon tests).

There is a significant difference in knowledge about the structures treated by osteopaths depending on the professional experience of the doctors. Doctors with 1 to 5 years of professional experience have the highest level of knowledge. Compared to the doctors with more than 20 years of professional experience, the difference is significant; compared to the doctors with 10 to 20 years of professional experience, the difference is distinct.

Distinct differences ($p<0.10$) in knowledge can also be observed between female and male doctors, dentists and general practitioners, and depending on age.

7.1.4.1 Level of knowledge in relation to the sex of the medical doctors

Table 33: shows the results of the χ^2 tests and the Fisher's exact tests for the analysis of the knowledge level in relation to the sex of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	Sex		Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)				'true' vs. 'not true'			
Statement	**Cat. 1**	**Cat. 2**	**Test**	**chi2**	**df**	**p**	**Test**	**chi2**	**df**	**p**
An osteopath examines and treats the spine, exclusively.	Female	Male	Chi-square/Yates	0.0176	1	0.89	Fisher's exact p			0.68
An osteopath examines and treats the whole musculoskeletal system.	Female	Male	Fisher's exact p			0.50	Fisher's exact p			0.25
An osteopath examines and treats fasciae.	Female	Male	Chi-square/Yates	0.2054	1	0.65	Chi-square/Yates	0.1075	1	0.74
An osteopath examines and treats the cranial bones.	Female	Male	Chi-square/Yates	0.3656	1	0.55	Chi-square/Yates	2.601	1	0.11
An osteopath examines and treats the inner organs.	Female	Male	Chi-square/Yates	1.5445	1	0.21	Chi-square/Yates	0.8039	1	0.37

Table 33: Results of the χ^2 tests of the answers to the questions, classified by sex. First the ratio between concrete answers and non-concrete answers was examined; second only the correct and incorrect answers were taken into account.

Regarding the relation of the sex of the medical doctors to the knowledge about structures treated by osteopaths, no significant or distinct ($p<0.10$) differences between male and female medical doctors can be observed on the basis of the answers to the statements. The distinct difference in the overall result therefore is not due to extreme differences in the reaction to one or a few statements, but rather due to small differences in a number of statements.

7.1.4.2 Level of knowledge in relation to the age of the medical doctors

Table 34 shows the results of the χ^2 tests and the Fisher's exact tests for the analysis of the knowledge level in relation to the age of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers

(missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	Age		Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)				'true' vs. 'not true'			
Statement	**Cat. 1**	**Cat. 2**	**Test**	**chi2**	**df**	**p**	**Test**	**chi2**	**df**	**p**
An osteopath examines and treats the spine, exclusively.	20-40	>50	Fisher's exact p			0.54	Fisher's exact p			0.55
	20-40	40-50	Fisher's exact p			1.00	Fisher's exact p			0.56
	40-50	>50	Chi-square/Yates	1.2355	1	0.27	Fisher's exact p			1.00
An osteopath examines and treats the whole musculoskeletal system.	20-40	>50	Fisher's exact p			0.58	Fisher's exact p			1.00
	20-40	40-50	Fisher's exact p			1.00				
	40-50	>50	Fisher's exact p			0.45	Fisher's exact p			0.22
An osteopath examines and treats fasciae.	20-40	>50	Chi-square/Yates	0.0465	1	0.83	Fisher's exact p			0.73
	20-40	40-50	Chi-square/Yates	0.0037	1	0.95	Fisher's exact p			0.50
	40-50	>50	Chi-square/Yates	0.8085	1	0.37	Chi-square/Yates	0	1	1.00
An osteopath examines and treats the cranial bones.	20-40	>50	Chi-square/Yates	0.0034	1	0.95	Chi-square/Yates	1.1146	1	0.29
	20-40	40-50	Fisher's exact p			0.77	Fisher's exact p			1.00
	40-50	>50	Chi-square/Yates	0.1753	1	0.68	Chi-square/Yates	3.1696	1	**0.08**
An osteopath examines and treats the inner organs.	20-40	>50	Chi-square/Yates	1.5873	1	0.21	Chi-square/Yates	0.6974	1	0.40
	20-40	40-50	Chi-square/Yates	4.1269	1	**0.04**	Chi-square/Yates	0.8155	1	0.37
	40-50	>50	Chi-square/Yates	0.5122	1	0.47	Chi-square/Yates	0.0312	1	0.86

Table 34: Results of the χ^2 tests of the answers to the questions, classified by age groups. First the ratio between concrete answers and non-concrete answers was examined; second only the correct and incorrect answers were taken into account.

Also as far as the different age groups are concerned, no significant differences in the correct answers to the questions can be identified. The only distinct differences can be observed regarding the answers to the statement "An osteopath examines and treats the cranial bones" between the age groups '40 to 50' and '>50' (χ^2=3.170, df=1, p=0.08). However, regarding the number of concrete answers ("true" and "not true") and missing or non-concrete ("do not know") answers a significant difference can be observed between the age groups '20 to 40' and '40 to 50', which could be an indicator of a differing self-assessment of the medical doctors' own level of knowledge.

Variable 'cranial bones' classified by age

Table 35 summarizes the percentages of the answers to the statement "An osteopath examines and treats the cranial bones" (variable 'cranial bones'), classified by the variable 'age'.

	20-40		40-50		>50	
Cranial bones	n	% valid	n	% valid	n	% valid
Do not know	4	17.39	11	17.18	6	12.24
Not true	3	13.04	8	12.5	14	28.57
True	16	69.56	45	70.31	29	59.18

Table 35: Overview of the values in the variable 'cranial bones' ("An osteopath examines and treats the cranial bones"), classified by the variable 'age' (in percent and in absolute numbers).

Overall, 136 of 149 values (91.3%) of the dependent variable are valid; nine values are missing. In four cases (2.7%) no unambiguous classification was possible due to missing values in the independent variable. While the medical doctors of the age group '>50' were the ones to least often indicate that they "do not know" the answer, they were also the ones with the lowest percentage of correct answers. The younger medical doctors (groups '40 to 50' and '20 to 40') were better informed; the distribution of answers is similar in both groups.

Variable 'inner organs' classified by age

Fig. 7 and Table 36 show the distribution of the valid values of the variable 'inner organs' ("An osteopath examines and treats the inner organs"), classified by the variable 'age'.

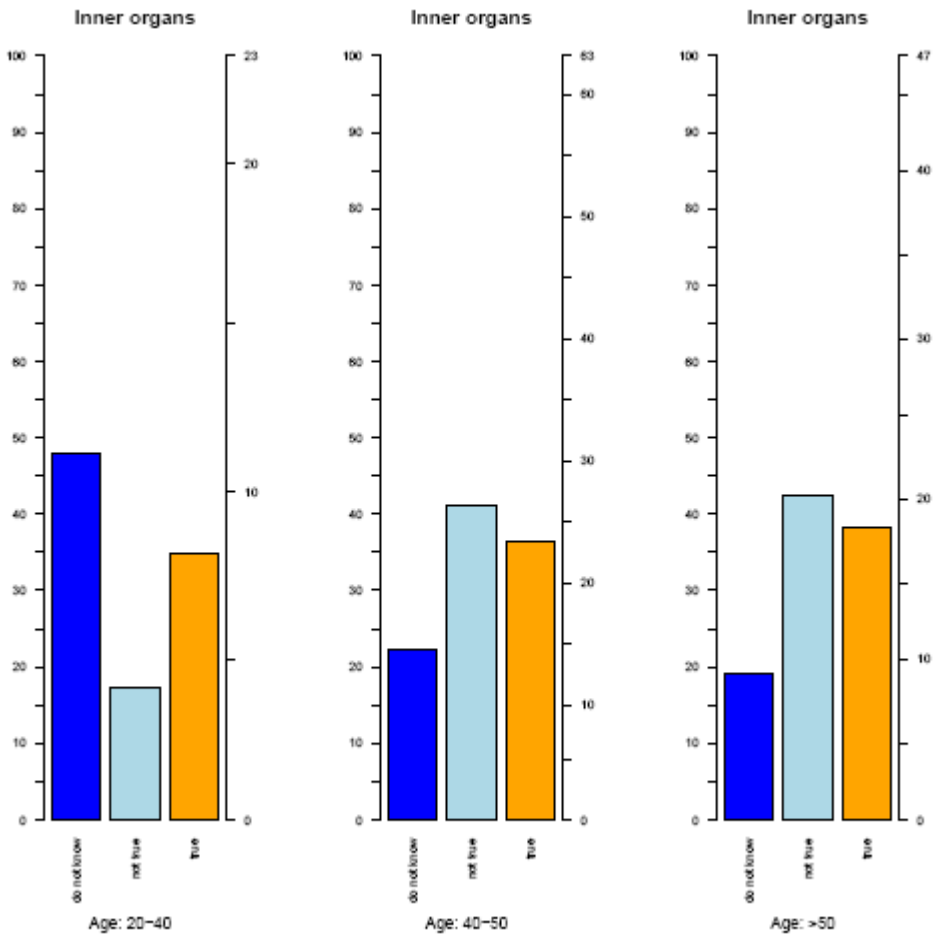

Fig. 7: Valid results regarding the variable 'inner organs' ("An osteopath examines and treats the inner organs"), classified by the variable 'age' (left axis: %, right axis: n).

	20-40		40-50		>50	
Inner organs	n	% valid	n	% valid	n	% valid
Do not know	11	47.82	14	22.22	9	19.14
Not true	4	17.39	26	41.26	20	42.55
True	8	34.78	23	36.5	18	38.29
Missing	2		9		1	

Table 36: Overview of the values in the variable 'inner organs' ("An osteopath examines and treats the inner organs"), classified by the variable 'age' (in percent and in absolute numbers).

Overall, 133 of the 149 values (89.3%) of the dependent variable are valid; 12 values are missing. In three cases (2.0%) no unambiguous classification was possible due to missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable has a value.

With 47.8%, the number of doctors who declared not to know the answer is approximately twice as high in the age group '20 to 40' as in the other two age groups.

Regarding the concrete answers, this group shows a lower percentage of incorrect answers ("not true").

7.1.4.3 Level of knowledge in relation to the profession of the medical doctors

Table 37 shows the results of the χ^2 tests and the Fisher's exact tests for the analysis of the knowledge level in relation to the profession of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	class_prof		Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)				'true' vs. 'not true'			
Statement	**Cat. 1**	**Cat. 2**	**Test**	**chi2**	**df**	**p**	**Test**	**chi2**	**df**	**p**
An osteopath examines and treats the spine, exclusively.	Dent	Other	Chi-square/Yates	1.2591	1	0.26	Fisher's exact p			**0.07**
	Dent	GP	Fisher's exact p			1	Fisher's exact p			0.35
	Other	GP	Chi-square/Yates	2.4548	1	0.12	Fisher's exact p			0.55
An osteopath examines and treats the whole musculoskeletal system.	Dent	Other	Fisher's exact p			0.7				
	Dent	GP	Fisher's exact p			0.32	Fisher's exact p			0.56
	Other	GP	Fisher's exact p			0.11	Fisher's exact p			0.29
An osteopath examines and treats fasciae.	Dent	Other	Chi-square/Yates	0.4304	1	0.51	Fisher's exact p			0.52
	Dent	GP	Chi-square/Yates	0.0171	1	0.9	Fisher's exact p			0.17
	Other	GP	Chi-square/Yates	2.0588	1	0.15	Fisher's exact p			0.36
An osteopath examines and treats the cranial bones.	Dent	Other	Chi-square/Yates	2.249	1	0.13	Chi-square/Yates	0.024	1	0.88
	Dent	GP	Fisher's exact p			1	Chi-square/Yates	0.0005	1	0.98
	Other	GP	Chi-square/Yates	3.8399	1	**0.05**	Chi-square/Yates	0.0003	1	0.99
An osteopath examines and treats the inner organs.	Dent	Other	Chi-square/Yates	0.1568	1	0.69	Chi-square/Yates	3.2543	1	**0.07**
	Dent	GP	Chi-square/Yates	0.0154	1	0.9	Chi-square/Yates	4.6137	1	**0.03**
	Other	GP	Chi-square/Yates	1.1067	1	0.29	Chi-square/Yates	0.0116	1	0.91

Table 37: Results of the χ^2 tests of the answers to the questions, classified by professional groups. First the ratio between concrete answers and non-concrete answers was examined; second only the correct and incorrect answers were taken into account.

One single significant difference can be observed between the professional groups general practitioners and dentists in the frequency of the affirmation or negation of the statement "An osteopath examines and treats the inner organs" (χ^2=4.614, df=1, p=0.03). Between dentists and other specialists there is a distinct difference regarding this statement (χ^2=3.254, df=1, p=0.07) as well as regarding the statement "An osteopath examines and treats the spine, exclusively" (Fisher's exact p=0.07).

The distinct difference between general practitioners and other specialists in the number of concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") to the statement "An osteopath examines and treats the cranial bones" indicates a differing self-assessment of the medical doctors' own level of knowledge (χ^2=3.840, df=1, p=0.05).

Variable 'inner organs' classified by profession

Fig. 8 and Table 38 show the distribution of valid values of the variable 'inner organs' ("An osteopath examines and treats the inner organs"), classified by the variable 'profession'.

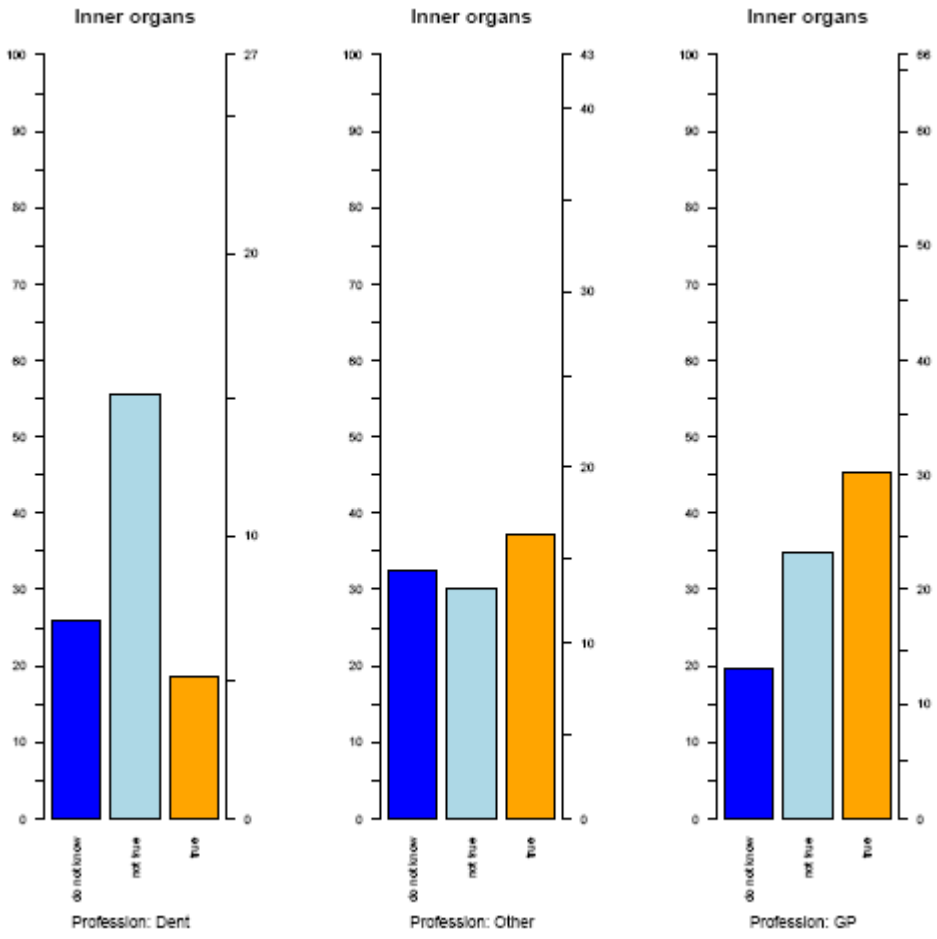

Fig. 8: Valid results regarding the variable 'inner organs' ("An osteopath examines and treats the inner organs"), classified by the variable 'profession' (left axis: %, right axis: n).

	Dent		Other		GP	
Inner organs	n	% valid	n	% valid	n	% valid
Do not know	7	25.92	14	32.55	13	19.69
Not true	15	55.55	13	30.23	23	34.84
True	5	18.51	16	37.2	30	45.45

Table 38: Overview of the values in the variable 'inner organs' ("An osteopath examines and treats the inner organs"), classified by the variable 'profession' (in percent and in absolute numbers).

Overall, 136 of the 149 values (91.3%) of the dependent variable are valid; 13 values are missing. More than half of the dentists (55.6%) considered the statement that osteopaths examine and treat inner organs as false, while "only" 30% to 35% of the medical doctors in the two other groups shared this opinion. The group of the general practitioners provided the highest percentage of correct answers (45.5%).

Variable 'spine only' classified by profession

Table 39 summarizes the percentages of the answers to the statement "An osteopath examines and treats the spine, exclusively" (variable 'spine only'), classified by the variable 'profession'.

	Dent		Other		GP	
Spine only	n	% valid	n	% valid	n	% valid
Do not know	1	3.7	7	16.27	2	2.98
Not true	23	85.18	36	83.72	62	92.53
True	3	11.11	0	0	3	4.47

Table 39: Overview of the values in the variable 'spine only' ("An osteopath examines and treats the spine, exclusively"), classified by the variable 'profession' (in percent and in absolute numbers).

Overall, 137 of the 149 values (91.9%) of the dependent variable are valid; 12 values are missing. The highest level of knowledge can be found in the group of general practitioners. While incorrect answers were most common in the group of dentists, the group of other specialists did not provide any incorrect answers but showed a considerably higher number of doctors who declared not to know the answer.

Variable 'cranial bones' classified by profession

Table 40 summarizes the percentages of the answers to the statement "An osteopath examines and treats the cranial bones" (variable 'cranial bones'), classified by the variable 'profession'.

	Dent		Other		GP	
Cranial bones	n	% valid	n	% valid	n	% valid
Do not know	2	7.4	11	25.58	8	11.42
Not true	6	22.22	6	13.95	13	18.57
True	19	70.37	26	60.46	49	70.00

Table 40: Overview of the values in the variable 'cranial bones' ("An osteopath examines and treats the cranial bones"), classified by the variable 'profession' (in percent and in absolute numbers).

Overall, 124 of the 149 values (83.2%) of the dependent variable are valid; 25 values are missing. Specialists (with the exception of dentists) regarded their own knowledge about this topic as particularly poor.

7.1.4.4 Level of knowledge in relation to the professional experience of the medical doctors

Table 41 shows the results of the χ^2 tests and the Fisher's exact tests for the analysis of the knowledge level in relation to the professional experience of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	Professional experience		Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)				'true' vs. 'not true'			
Statement	Cat. 1	Cat. 2	Test	chi2	df	p	Test	chi2	df	p
An osteopath examines and treats the spine, exclusively.	1-5	5-10	Fisher's exact p			0.40	Fisher's exact p			1.00
	1-5	10-20	Fisher's exact p			0.66	Fisher's exact p			0.51
	1-5	>20	Fisher's exact p			0.16	Fisher's exact p			1.00
	5-10	10-20	Fisher's exact p			0.75	Fisher's exact p			0.56
	5-10	>20	Chi-square/Yates	0.1266	1	0.72	Fisher's exact p			1.00
	10-20	>20	Chi-square/Yates	0.675	1	0.41	Fisher's exact p			0.60
An osteopath examines and treats the whole musculoskeletal system.	1-5	5-10	Fisher's exact p			1.00	Fisher's exact p			0.38
	1-5	10-20	Fisher's exact p			1.00	Fisher's exact p			0.29
	1-5	>20	Fisher's exact p			1.00	Fisher's exact p			1.00
	5-10	10-20	Fisher's exact p			0.68				
	5-10	>20	Fisher's exact p			0.39	Fisher's exact p			0.52
	10-20	>20	Fisher's exact p			1.00	Fisher's exact p			0.49
An osteopath examines and treats fasciae.	1-5	5-10	Fisher's exact p			1.00	Fisher's exact p			0.63
	1-5	10-20	Fisher's exact p			1.00	Fisher's exact p			0.25
	1-5	>20	Chi-square/Yates	0.2852	1	0.59	Fisher's exact p			0.65
	5-10	10-20	Chi-square/Yates	0.0165	1	0.90	Chi-square/Yates	0.2227	1	0.64
	5-10	>20	Chi-square/Yates	0.1905	1	0.66	Fisher's exact p			1.00
	10-20	>20	Chi-square/Yates	0.4747	1	0.49	Chi-square/Yates	0.4336	1	0.51
An osteopath examines and treats the cranial bones.	1-5	5-10	Fisher's exact p			1.00	Fisher's exact p			0.28
	1-5	10-20	Fisher's exact p			0.73	Fisher's exact p			**0.09**
	1-5	>20	Fisher's exact p			1.00	Fisher's exact p			**0.01**
	5-10	10-20	Chi-square/Yates	0.0513	1	0.82	Fisher's exact p			0.75
	5-10	>20	Chi-square/Yates	0.0082	1	0.93	Chi-square/Yates	2.1039	1	0.15
	10-20	>20	Chi-square/Yates	0.2625	1	0.61	Chi-square/Yates	1.5223	1	0.22
An osteopath examines and treats the inner organs.	1-5	5-10	Chi-square/Yates	0.2286	1	0.63	Fisher's exact p			0.45
	1-5	10-20	Fisher's exact p			0.36	Chi-square/Yates	4.7407	1	**0.03**
	1-5	>20	Chi-square/Yates	0.0002	1	0.99	Chi-square/Yates	1.988	1	0.16
	5-10	10-20	Chi-square/Yates	3.398	1	**0.07**	Chi-square/Yates	1.5052	1	0.22
	5-10	>20	Chi-square/Yates	0.164	1	0.69	Chi-square/Yates	0.1307	1	0.72
	10-20	>20	Chi-square/Yates	1.8551	1	0.17	Chi-square/Yates	0.5202	1	0.47

Table 41: Results of the χ^2 tests of the answers to the questions, classified by professional experience. First, a distinction was made between concrete answers and non-concrete answers; second only correct and incorrect answers were taken into account.

Significant differences can be observed between medical doctors with 1 to 5 and >20 years of professional experience regarding the assessment of the statement "An osteopath examines and treats the cranial bones". The groups '1 to 5' and '10 to 20' years of professional experience showed distinct but not significant differences regarding this statement.

Also the question whether osteopaths examine and treat the inner organs as answered by medical doctors with 1 to 5 and 10 to 20 years of professional experience showed a significant difference between the answers of these two groups.

Therefore the answers of the medical doctors regarding these statements are presented in more detail in the following.

Variable 'cranial bones' classified by professional experience

Fig. 9 and Table 42 show the distribution of the valid values of the variable 'cranial bones' ("An osteopath examines and treats the cranial bones"), classified by the variable 'professional experience'.

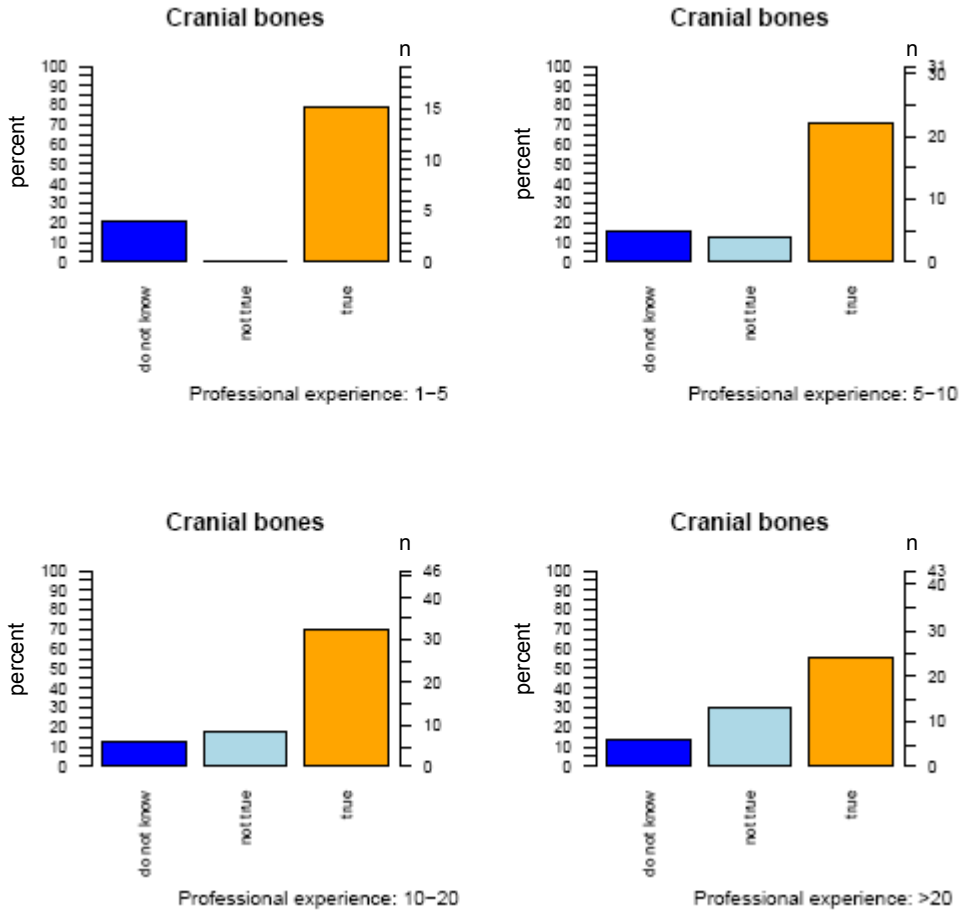

Fig. 9: Valid results regarding the variable 'cranial bones' ("An osteopath examines and treats the cranial bones"), classified by the variable 'professional experience' (left axis: %, right axis: n).

	1-5		5-10		10-20		>20	
Cranial bones	n	% valid	n	% valid	n	% valid	n	% valid
Do not know	4	21.05	5	16.12	6	13.04	6	13.95
Not true	0	0.00	4	12.90	8	17.39	13	30.23
True	15	78.94	22	70.96	32	69.56	24	55.81

Table 42: Overview of the values in the variable 'cranial bones' ("An osteopath examines and treats the cranial bones"), classified by the variable 'professional experience' (in percent and in absolute numbers).

Overall, 142 of the 149 values (95.3%) of the dependent variable are valid; six values are missing. The frequency of incorrect answers increases with increasing age. While none of the members of the group '1 to 5' provided an incorrect answer ("not true"), the percentage of incorrect answers among the medical doctors with 20 or more years of professional experience is 30.2%.

Variable 'inner organs' classified by professional experience

Fig. 10 and Table 43 show the distribution of the valid values of the variable 'inner organs' ("An osteopath examines and treats the inner organs"), classified by the variable 'professional experience'.

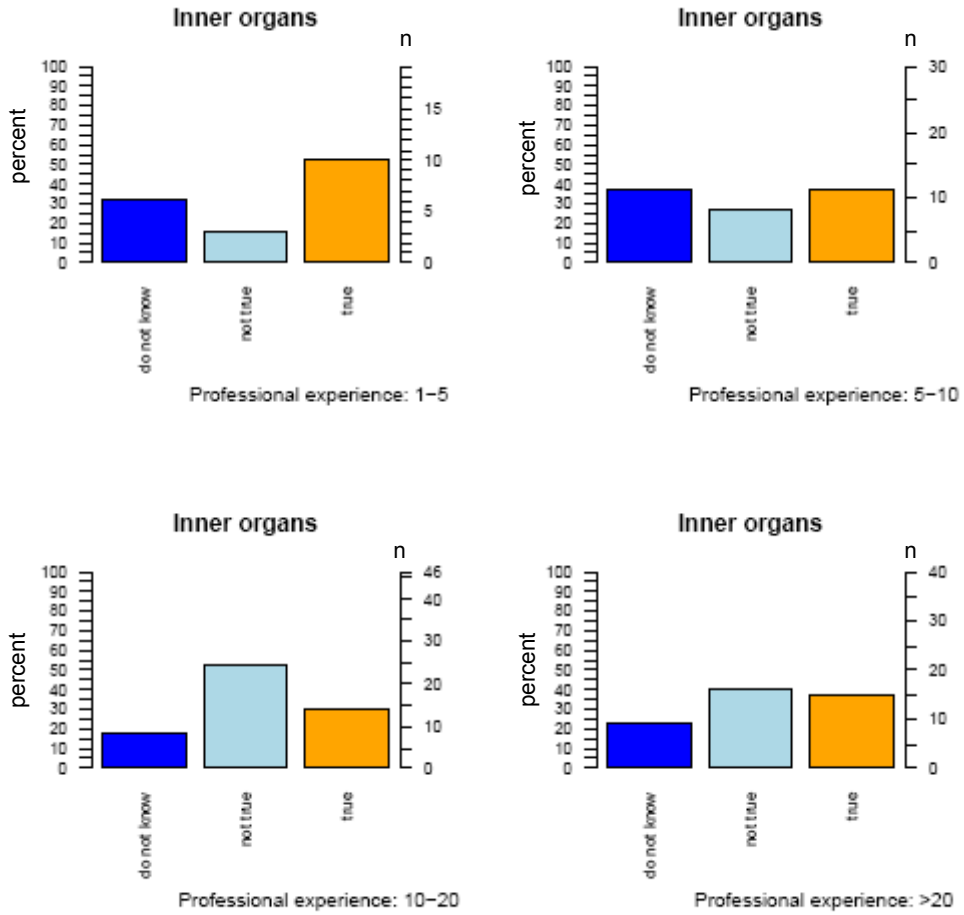

Fig. 10: Valid results regarding the variable 'inner organs' ("An osteopath examines and treats the inner organs"), classified by the variable 'professional experience' (left axis: %, right axis: n).

	1-5		5-10		10-20		>20	
Inner organs	n	% valid	n	% valid	n	% valid	n	% valid
Do not know	6	31.57	11	36.66	8	17.39	9	22.5
Not true	3	15.78	8	26.66	24	52.17	16	40.0
True	10	52.63	11	36.66	14	30.43	15	37.5

Table 43: Overview of the values in the variable 'inner organs' ("An osteopath examines and treats the inner organs"), classified by the variable 'professional experience' (in percent and in absolute numbers).

Overall, 141 of the 149 values (94.6%) of the dependent variable are valid; seven values are missing. In one case (0.7%) no unambiguous classification was possible due to a missing value in the independent variable. Especially the more experienced medical doctors regarded the statement that osteopaths examine and treat inner organs to be not true: in the group of '10 to 20' years of professional experience, 50% considered this statement to be not true, while in the group with 1 to 5 years of professional experience only 16% shared this opinion.

Also with respect to the self-assessment of their own level of knowledge, distinct differences can be observed in the groups. The answer "do not know" was most frequently found among the medical doctors with 5 to 10 years of professional experience (36.7%) and least frequently among the medical doctors with 10 to 20 years of professional experience (17.4%).

7.1.5. Knowledge concerning techniques used in osteopathic treatment

On average, 52.8% (SD: 23.7) of the seven questions of the section concerning the knowledge about techniques used in osteopathic treatment were answered correctly. Mean value and standard deviation of the percent of right answers grouped by independent variables are summarized in Table 44; results of the according Wilcoxon tests are summarized in Table 45.

Ind. var.	Sex		Age			Professional experience				class_prof		
Group	Female	Male	20-40	40-50	>50	1-5	5-10	10-20	>20	GP	Dent	Other
n	68	78	24	65	56	19	33	48	48	73	29	47
Mean techn_kn [%]	51.7	53.5	44.6	55.4	52.6	45.9	54.1	55.4	51.8	57.1	51.2	47.1
SD techn_kn	24.8	23.1	27.1	22.2	23.3	23.6	22.8	24.8	23.5	22.0	26.3	23.8

Table 44: Relative frequencies of right answers in this section of the questionnaire, grouped by independent variables.

	Sex		Age						class_prof					
Group	Female	Male	20-40	40-50	20-40	>50	40-50	>50	GP	Dent	GP	Other	Dent	Other
	W	p	W	p	W	p	W	p	W	p	W	p	W	p
techn_kn	2542.5	0.66	616	0.12	571.5	0.29	1938.5	0.53	934.5	0.35	1296.5	0.02	757.5	0.41

	Professional experience											
Group	1-5	5-10	1-5	10-20	1-5	>20	5-10	10-20	5-10	>20	10-20	>20
	W	p	W	p	W	p	W	p	W	p	W	p
techn_kn	244	0.18	357	0.16	385	0.32	770.5	0.84	840	0.64	1250	0.47

Table 45: Group differences of relative frequencies of right answers in this section of the questionnaire (results of the Wilcoxon tests).

There are significant differences in the knowledge about techniques used in osteopathic treatment between general practitioners and specialists other than dentists. On average, 57% of the general practitioners answered the questions correctly, whereas only 47% of the specialists other than dentists knew the right answers.

7.1.5.1 Level of knowledge in relation to the profession of the medical doctors

Table 46 shows the results of the χ^2 tests and the Fisher's exact tests for the analysis of the knowledge level in relation to the profession of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	class_prof		Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)				'true' vs. 'not true'			
Statement	Cat. 1	Cat. 2	Test	chi2	df	p	Test	chi2	df	p
An osteopath uses myofascial techniques.	Dent	Other	Chi-square/Yates	2.8995	1	**0.09**	Fisher's exact p			1.00
	Dent	GP	Chi-square/Yates	0.0031	1	0.96	Fisher's exact p			**0.09**
	Other	GP	Chi-square/Yates	7.5837	1	**0.01**	Fisher's exact p			0.10
An osteopath uses craniosacral techniques.	Dent	Other	Chi-square/Yates	0.2631	1	0.61	Fisher's exact p			0.38
	Dent	GP	Fisher's exact p			1	Fisher's exact p			**0.02**
	Other	GP	Chi-square/Yates	0.3938	1	0.53	Fisher's exact p			0.14
An osteopath uses techniques for mobilization and manipulation.	Dent	Other	Chi-square/Yates	0.4647	1	0.5	Fisher's exact p			0.15
	Dent	GP	Chi-square/Yates	3.7929	1	**0.05**	Fisher's exact p			0.33
	Other	GP	Chi-square/Yates	1.1119	1	0.29	Fisher's exact p			0.53
An osteopath uses active relaxation techniques.	Dent	Other	Chi-square/Yates	0.104	1	0.75	Chi-square/Yates	1.467	1	0.23
	Dent	GP	Chi-square/Yates	1.7406	1	0.19	Fisher's exact p			0.36
	Other	GP	Chi-square/Yates	0.7893	1	0.37	Chi-square/Yates	0.292	1	0.59
An osteopath uses acupuncture.	Dent	Other	Chi-square/Yates	0.2169	1	0.64	Fisher's exact p			0.29
	Dent	GP	Chi-square/Yates	0.0703	1	0.79	Fisher's exact p			0.61
	Other	GP	Chi-square/Yates	0.0117	1	0.91	Fisher's exact p			0.65
An osteopath uses muscle energy techniques.	Dent	Other	Chi-square/Yates	0.1642	1	0.69	Chi-square/Yates	1.573	1	0.21
	Dent	GP	Chi-square/Yates	0.5675	1	0.45	Chi-square/Yates	0.001	1	0.97
	Other	GP	Chi-square/Yates	0.0215	1	0.88	Chi-square/Yates	1.562	1	0.21
An osteopath uses reflex zones.	Dent	Other	Chi-square/Yates	0.6693	1	0.41	Chi-square/Yates	1.143	1	0.29
	Dent	GP	Chi-square/Yates	0.7934	1	0.37	Chi-square/Yates	0.131	1	0.72
	Other	GP	Chi-square/Yates	0.0264	1	0.87	Chi-square/Yates	4.201	1	**0.04**

Table 46: Results of the χ^2 tests of the answers to the questions, classified by professional groups. First the ratio between concrete answers and non-concrete answers was examined; second only the correct and incorrect answers were taken into account.

Significant differences in the distribution of correct and incorrect answers can be observed for the statements "An osteopath uses reflex zones" (between general practitioners and specialists other than dentists) and "An osteopath uses craniosacral techniques" (between GPs and dentists). The same two groups also differ distinctly, but not significantly, in their answers to the statement "An osteopath uses myofascial techniques".

Significant differences can be observed between GPs and specialists other than dentists concerning the answer to the statement "An osteopath uses myofascial techniques". Dentists and other specialists differ in this matter as well, but only distinctly, not significantly.

Variable 'myofascial techniques' classified by profession

Fig. 11 and Table 47 show the distribution of valid values of the variable 'myofascial techniques' ("An osteopath uses myofascial techniques"), classified by the variable 'profession'.

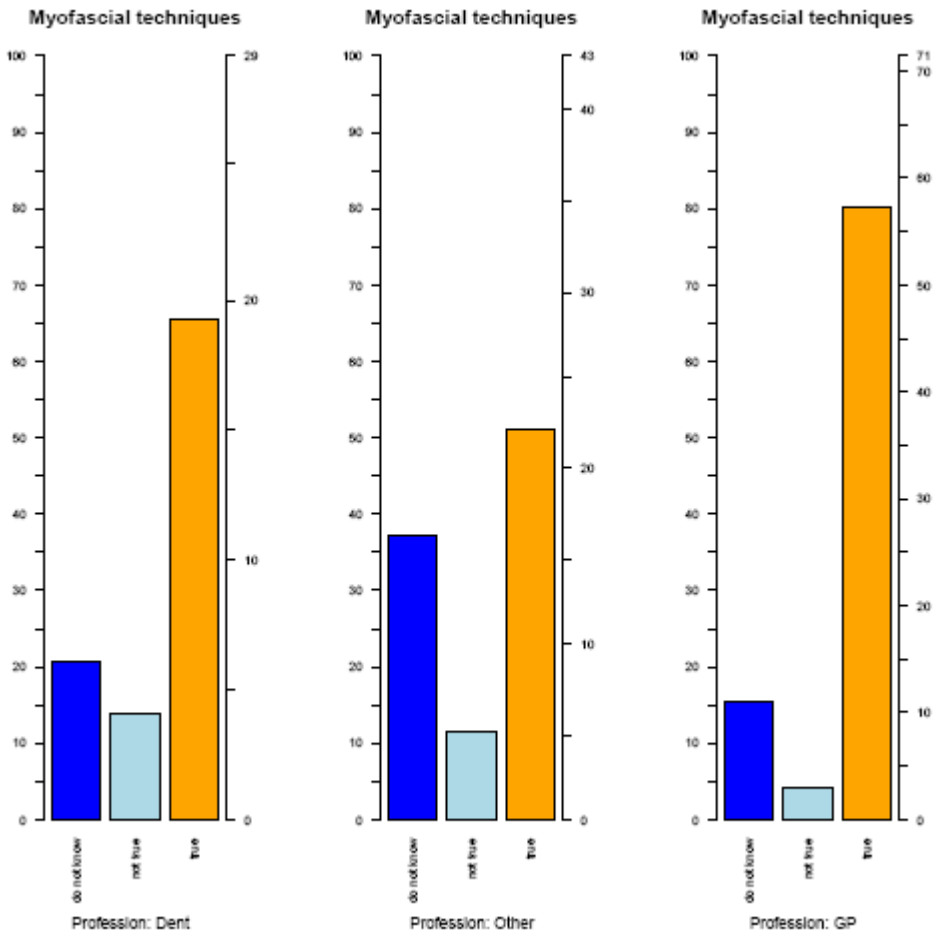

Fig. 11: Valid results regarding the variable 'myofascial techniques' ("An osteopath uses myofascial techniques"), classified by the variable 'profession' (left axis: %, right axis: n).

	Dent		Other		GP	
Myofascial techniques	n	% valid	n	% valid	n	% valid
Do not know	6	20.68	16	37.2	11	15.49
Not true	4	13.79	5	11.62	3	4.22
True	19	65.51	22	51.16	57	80.28

Table 47: Overview of the values in the variable 'myofascial techniques' ("An osteopath uses myofascial techniques"), classified by the variable 'profession' (in percent and in absolute numbers).

Overall, 143 of the 149 values (96.0%) of the dependent variable are valid; six values are missing. 13.8% of the dentists considered the statement to be not true compared to only 4.2% of the general practitioners. Among the specialists, excluding dentists, the level of uncertainty was highest. 37.2% declared not to know the answer, while only 15.5% of the general practitioners and 20.7% of the dentists did not provide a concrete answer.

Variable 'mobilization and manipulation' classified by profession

Table 48 summarizes the percentages of the answers to the statement "An osteopath uses techniques for mobilization and manipulation" (variable 'mobilization and manipulation'), classified by the variable 'profession'.

	Dent		Other		GP	
Mobilization and manipulation	n	% valid	n	% valid	n	% valid
Do not know	8	28.57	10	21.27	5	7.24
Not true	0	0	5	10.63	6	8.69
True	20	71.42	32	68.08	58	84.05

Table 48: Overview of the values in the variable 'mobilization and manipulation' ("An osteopath uses techniques for mobilization and manipulation"), classified by the variable 'profession' (in percent and in absolute numbers).

Overall, 144 of the 149 values (96.6%) of the dependent variable are valid. The most certain group were the GPs, of whom only 7.24% stated not to know the answer, while the highest level of uncertainty was found among the dentists, of whom 28.6% stated not to know the answer. Regarding the distribution of positive and negative answers, there were no distinct differences.

Variable 'reflex zones' classified by profession

Fig. 12 and Table 49 show the distribution of valid values of the variable 'reflex zones' ("An osteopath uses reflex zones"), classified by the variable 'profession'.

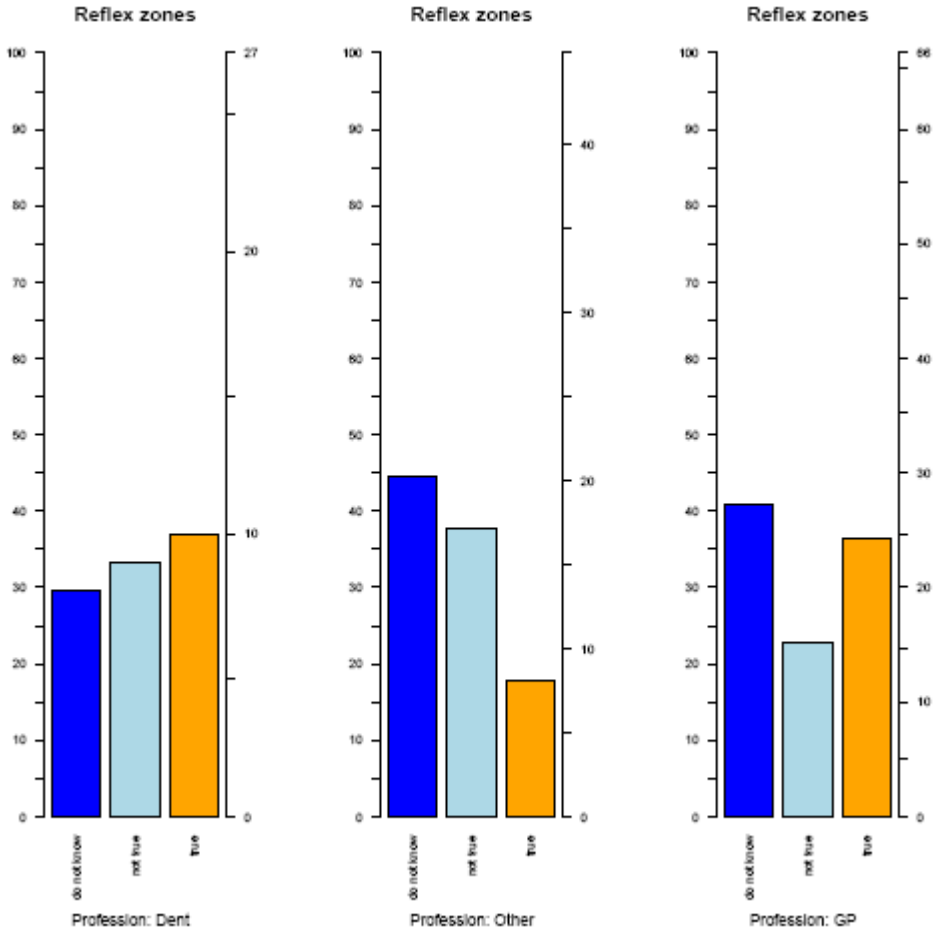

Fig. 12: Valid results regarding the variable 'reflex zones' ("An osteopath uses reflex zones"), classified by the variable 'profession' (left axis: %, right axis: n).

	Dent		Other		GP	
Reflex zones	n	% valid	n	% valid	n	% valid
Do not know	8	29.62	20	44.44	27	40.9
Not true	9	33.33	17	37.77	15	22.72
True	10	37.03	8	17.77	24	36.36

Table 49: Overview of the values in the variable 'reflex zones' ("An osteopath uses reflex zones"), classified by the variable 'profession' (in percent and in absolute numbers).

Overall, 138 of the 149 values (92.6%) of the dependent variable are valid. The level of uncertainty was highest among the group of specialists (44.4% of the answers indicate that they "do not know"). 37.8% of this group held that the statement was not true and

17.8% believed that it was true. Among the general practitioners the level of uncertainty was only slightly lower (40.9%); however, a greater part of them was convinced that it was true (36.0%) rather than not true (22.7%) that osteopaths used reflex zones.

7.1.6. Knowledge about the target groups of osteopathy

On average, 68.1% (SD: 32.1) of the five questions of the section about the target groups of osteopathy were answered correctly. Mean value and standard deviation of the percent of right answers grouped by independent variables are summarized in Table 50; results of the according Wilcoxon tests are summarized in Table 51.

Ind. var.	Sex		Age			Professional experience				class_prof		
Group	Female	Male	20-40	40-50	>50	1-5	5-10	10-20	>20	GP	Dent	Other
n	68	78	24	65	56	19	33	48	48	73	29	47
Mean targ_kn [%]	78.2	59.2	71.7	72.9	60.4	76.8	73.3	66.7	61.7	68.8	69.0	66.4
SD targ_kn	29.9	31.5	34.8	30.1	32.2	32.2	28.6	33.6	32.4	30.7	31.4	35.2

Table 50: Relative frequencies of right answers in this section of the questionnaire, grouped by independent variables.

	Sex		Age						class_prof					
Group	Female	Male	20-40	40-50	20-40	>50	40-50	>50	GP	Dent	GP	Other	Dent	Other
	W	p	W	p	W	p	W	p	W	p	W	p	W	p
targ_kn	3571.5	<0.001	792	0.91	807	0.14	2223	0.03	1064.5	0.97	1677.5	0.83	696.5	0.87

	Professional experience											
Group	1-5	5-10	1-5	10-20	1-5	>20	5-10	10-20	5-10	>20	10-20	>20
	W	p	W	p	W	p	W	p	W	p	W	p
targ_kn	349	0.48	533.5	0.26	578	0.08	863	0.48	950	0.12	1254	0.44

Table 51: Group differences of relative frequencies of right answers in this section of the questionnaire (results of the Wilcoxon tests).

There are significant differences concerning the knowledge about the target groups of osteopathy depending on sex and age. The level of knowledge of the female doctors is significantly higher than that of the male doctors and the level of knowledge of the doctors older than 50 is significantly lower than that of the doctors aged 40 to 50.
Another distinct difference can be observed between doctors with less than 5 years of professional experience and those with a professional experience of more than 20 years.

7.1.6.1 Level of knowledge in relation to the sex of the medical doctors

Table 52 shows the results of the χ^2 tests and the Fisher's exact tests for the analysis of the knowledge level in relation to the sex of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	Sex		Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)				'true' vs. 'not true'			
Statement	Cat. 1	Cat. 2	Test	chi2	df	p	Test	chi2	df	p
Newborn babies belong to the target group of osteopathy.	Female	Male	Chi-square/Yates	3.3423	1	**0.07**	Chi-square/Yates	6.7681	1	**0.01**
Infants and children younger than six years belong to the target group of osteopathy.	Female	Male	Chi-square/Yates	4.0475	1	**0.04**	Chi-square/Yates	10.1628	1	**0.001**
Children older than six years belong to the target group of osteopathy.	Female	Male	Chi-square/Yates	2.1824	1	0.14	Chi-square/Yates	3.754	1	**0.05**
Adults belong to the target group of osteopathy.	Female	Male	Chi-square/Yates	1.8459	1	0.17	Fisher's exact p			0.50
Elderly people belong to the target group of osteopathy.	Female	Male	Chi-square/Yates	0.0208	1	0.89	Fisher's exact p			0.62

Table 52: Results of the χ^2 tests of the answers to the questions, classified by sex. First the ratio between concrete answers and non-concrete answers was examined; second only the correct and incorrect answers were taken into account.

The only significant differences between male and female medical doctors regarding these statements could be found in the assessment whether newborn babies and infants and children younger than six years belong to the target group of osteopathy. These two questions also showed distinct differences between men and women in the frequency of concrete answers.
A further significant difference ($p<0.10$) can be observed in the answer to the question whether children older than six years belong to the target group.

The answers of the medical doctors to these statements will therefore be illustrated in more detail in the following section.

Variable 'newborn' classified by sex

Fig. 13 and Table 53 show the distribution of valid values of the variable 'newborn' ("Newborn babies belong to the target group of osteopathy"), classified by the variable 'sex'.

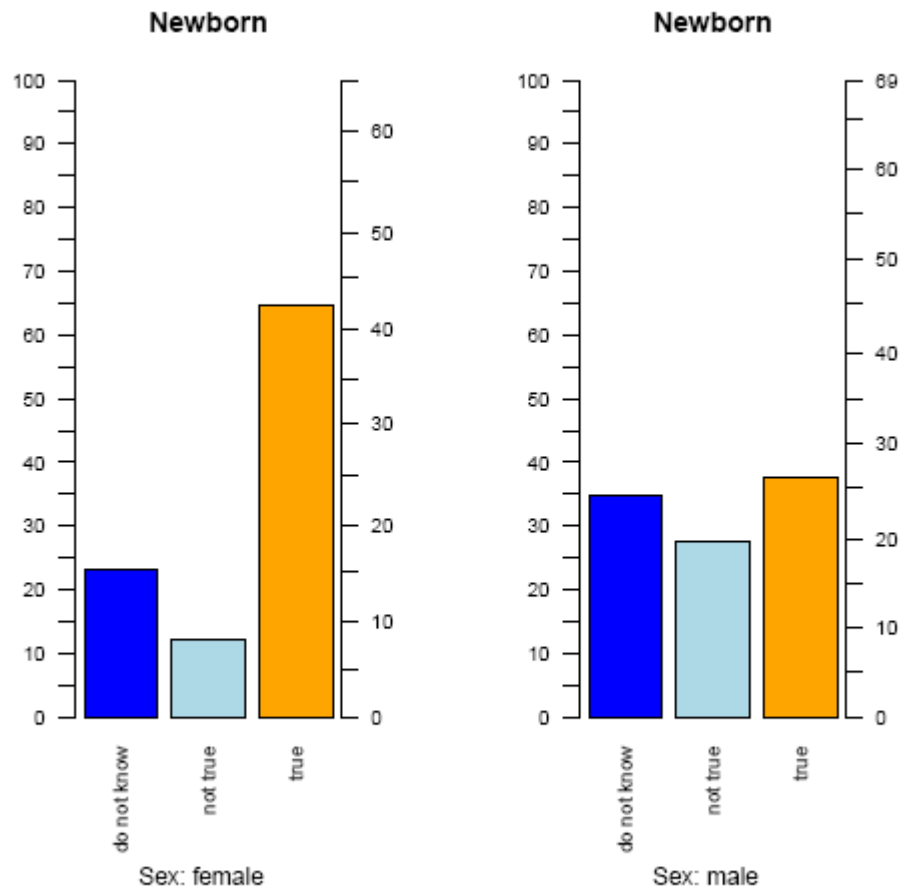

Fig. 13: Valid results regarding the variable 'newborn' ("Newborn babies belong to the target group of osteopathy"), classified by the variable 'sex' (left axis: %, right axis: n).

	Female		Male	
Newborn	n	% valid	n	% valid
Do not know	15	23.07	24	34.78
Not true	8	12.3	19	27.53
True	42	64.61	26	37.68

Table 53: Overview of the values in the variable 'newborn' ("Newborn babies belong to the target group of osteopathy"), classified by the variable 'sex' (in percent and in absolute numbers).

Overall, 134 of the 149 values (89.9%) of the dependent variable are valid; twelve values are missing. In two cases (1.3%) no unambiguous classification was possible due to missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable has a value. Female doctors more frequently gave a concrete answer ("true", "not true") and a correct answer compared to their male colleagues.

Variable 'infants' classified by sex

Fig. 14 and Table 54 show the distribution of valid values of the variable 'infants' ("Infants and children younger than six years belong to the target group of osteopathy"), classified by the variable 'sex'.

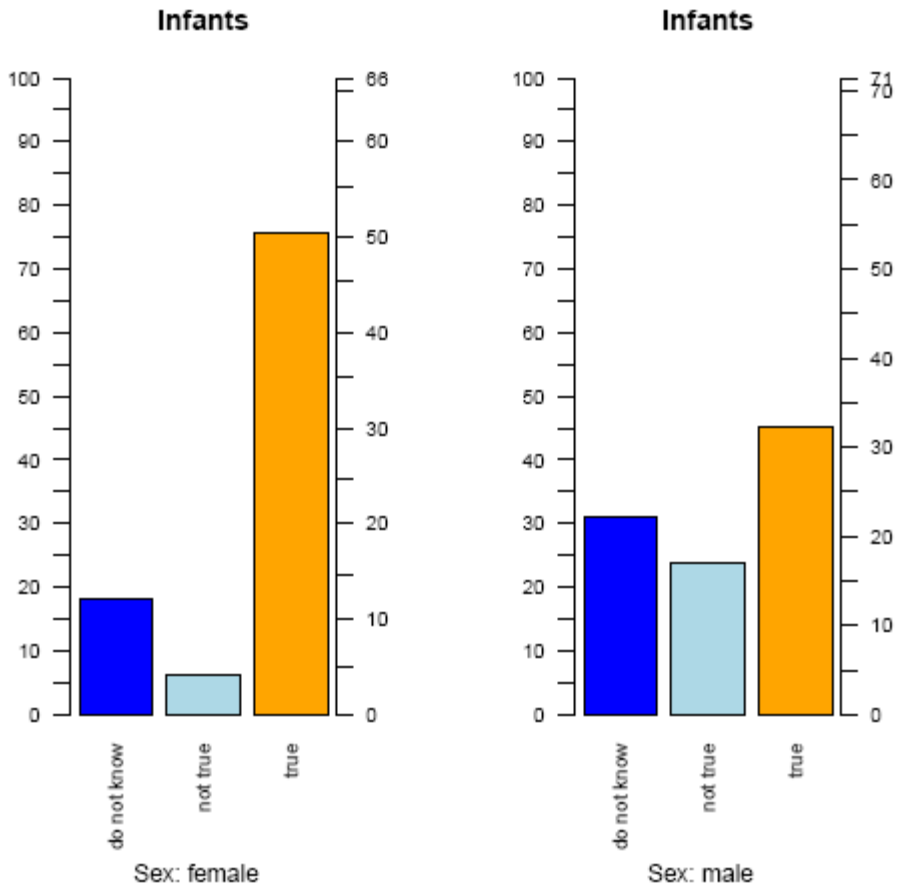

Fig. 14: Valid results regarding the variable 'infants' ("Infants and children younger than six years belong to the target group of osteopathy"), classified by the variable 'sex' (left axis: %, right axis: n).

	Female		Male	
Infants	n	% valid	n	% valid
Do not know	12	18.18	22	30.98
Not true	4	6.06	17	23.94
True	50	75.75	32	45.07

Table 54: Overview of the values in the variable 'infants' ("Infants and children younger than six years belong to the target group of osteopathy"), classified by the variable 'sex' (in percent and in absolute numbers).

Overall, 137 of the 149 values (91.9%) of the dependent variable are valid; nine values are missing. In two cases (1.3%) no unambiguous classification was possible due to missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable has a value. Like the previous question, this question also shows unambiguously that the female doctors disposed of a higher level of knowledge than their male counterparts. This can be seen from the number of concrete answers ("true", "not true") and the number of correct answers.

Variable 'children older than 6' classified by sex

Fig. 15 and Table 55 show the distribution of valid results of the variable 'children older than 6' ("Children older than six years belong to the target group of osteopathy"), classified by the variable 'sex'.

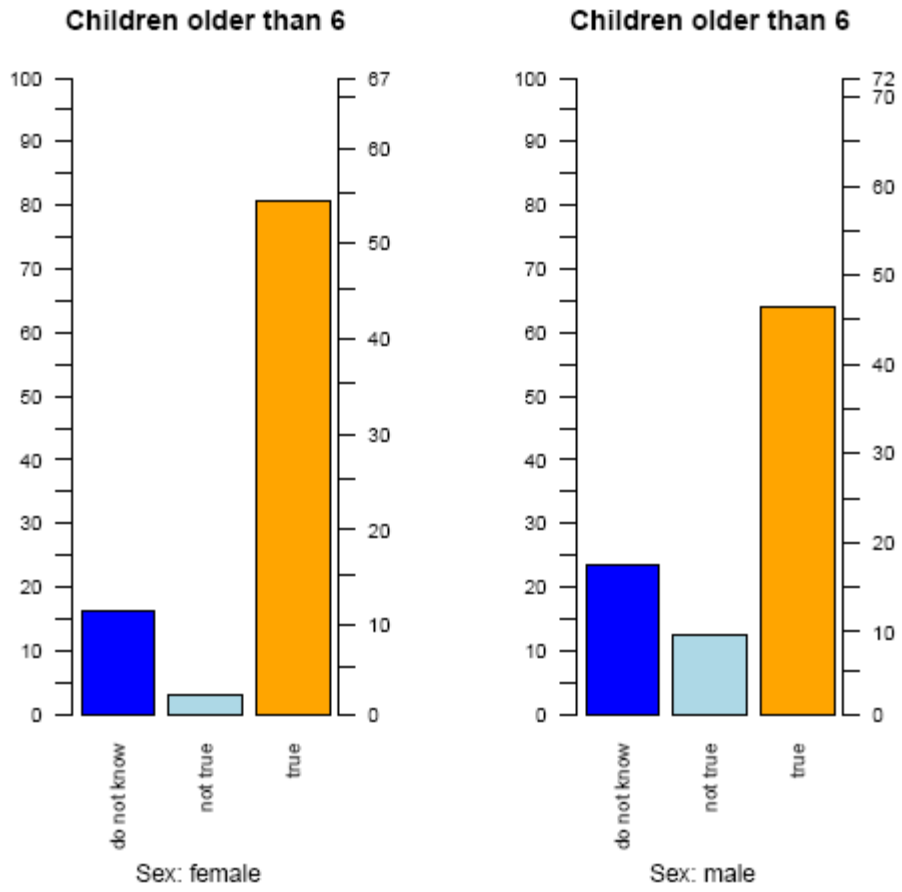

Fig. 15: Valid results regarding the variable 'children older than 6' ("Children older than six years belong to the target group of osteopathy"), classified by the variable 'sex' (left axis: %, right axis: n).

	Female		Male	
Children older than 6	n	% valid	n	% valid
Do not know	11	16.41	17	23.61
Not true	2	2.98	9	12.5
True	54	80.59	46	63.88

Table 55: Overview of the values in the variable 'children older than 6' ("Children older than six years belong to the target group of osteopathy"), classified by the variable 'sex' (in percent and in absolute numbers).

Overall, 139 of the 149 values (93.3%) of the dependent variable are valid; seven values are missing. In two cases (1.3%) no unambiguous classification was possible due to missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable has a value. Compared to the previous questions, the number of concrete answers was higher among the men. However, the level of knowledge among the female doctors was higher than that of the male doctors also with respect to this question.

7.1.6.2 Level of knowledge in relation to the age of the medical doctors

Table 56 shows the results of the χ^2 tests and the Fisher's exact tests for the analysis of the knowledge level in relation to the age of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	Age		Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)				'true' vs. 'not true'			
Statement	Cat. 1	Cat. 2	Test	chi2	df	p	Test	chi2	df	p
Newborn babies belong to the target group of osteopathy.	20-40	>50	Chi-square/Yates	0.0025	1	0.96	Fisher's exact p			**0.10**
	20-40	40-50	Chi-square/Yates	0.2385	1	0.63	Fisher's exact p			0.48
	40-50	>50	Chi-square/Yates	1.3753	1	0.24	Chi-square/Yates	1.018	1	0.31
Infants and children younger than six years belong to the target group of osteopathy.	20-40	>50	Chi-square/Yates	0.0244	1	0.88	Fisher's exact p			**0.08**
	20-40	40-50	Chi-square/Yates	0.1625	1	0.69	Fisher's exact p			0.43
	40-50	>50	Chi-square/Yates	0.274	1	0.60	Chi-square/Yates	1.8731	1	0.17
Children older than six years belong to the target group of osteopathy.	20-40	>50	Chi-square/Yates	0.1389	1	0.71	Fisher's exact p			0.16
	20-40	40-50	Fisher's exact p			0.38	Fisher's exact p			0.18
	40-50	>50	Chi-square/Yates	3.0344	1	**0.08**	Fisher's exact p			1.00
Adults belong to the target group of osteopathy.	20-40	>50	Fisher's exact p			0.49	Fisher's exact p			1.00
	20-40	40-50	Fisher's exact p			0.66	Fisher's exact p			1.00
	40-50	>50	Chi-square/Yates	2.138	1	0.14	Fisher's exact p			1.00
Elderly people belong to the target group of osteopathy.	20-40	>50	Fisher's exact p			1.00	Fisher's exact p			0.51
	20-40	40-50	Fisher's exact p			0.29	Fisher's exact p			1.00
	40-50	>50	Chi-square/Yates	1.2355	1	0.27	Fisher's exact p			1.00

Table 56: Results of the χ^2 tests of the answers to the questions, classified by age groups. First the ratio between concrete answers and non-concrete answers was examined; second only the correct and incorrect answers were taken into account.

None of the statements regarding the target groups of osteopathy show significant differences in the answers of the different age groups. However, there were distinct differences ($p<0.10$) regarding the question whether newborn babies and young children belong to the target group of osteopathy.

The answers of the medical doctors to these statements will therefore be illustrated in more detail in the following section.

Variable 'newborn' classified by age

Fig. 16 and Table 57 show the distribution of valid values of the variable 'newborn' ("Newborn babies belong to the target group of osteopathy"), classified by the variable 'age'.

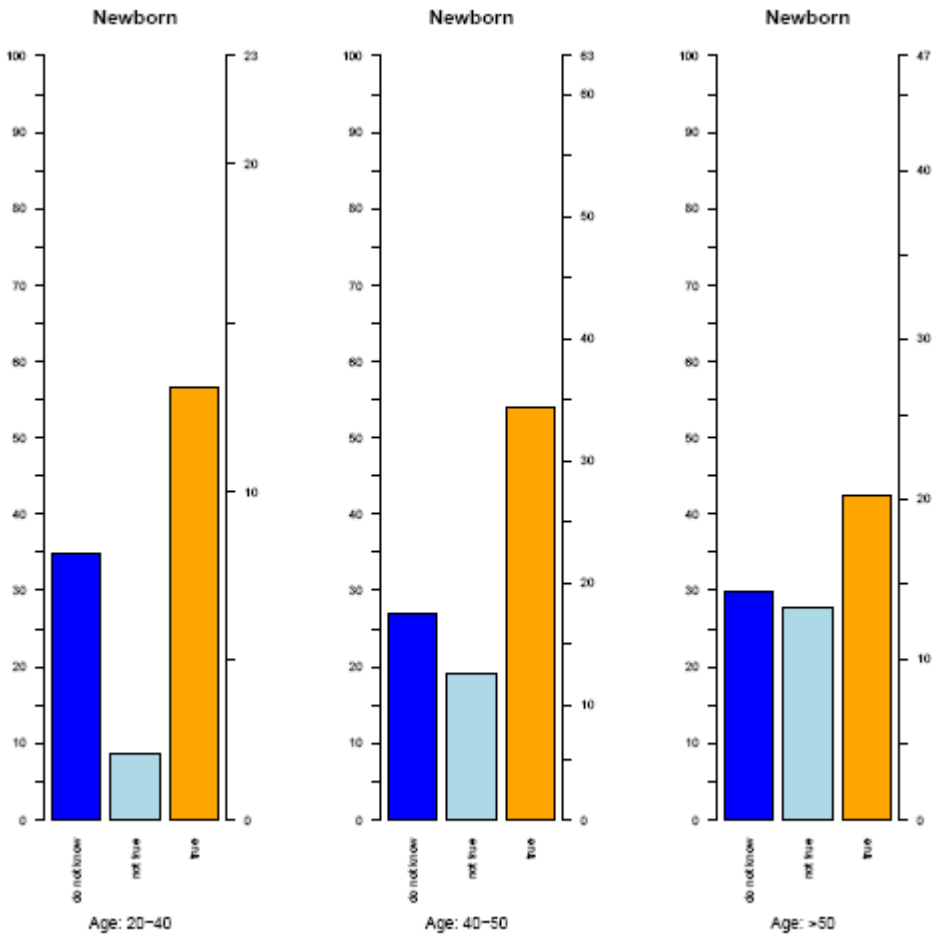

Fig. 16: Valid results regarding the variable 'newborn' ("Newborn babies belong to the target group of osteopathy"), classified by the variable 'age' (left axis: %, right axis: n).

	20-40		40-50		>50	
Newborn	n	% valid	n	% valid	n	% valid
Do not know	8	34.78	17	26.98	14	29.78
Not true	2	8.69	12	19.04	13	27.65
True	13	56.52	34	53.96	20	42.55

Table 57: Overview of the values in the variable 'newborn' ("Newborn babies belong to the target group of osteopathy"), classified by the variable 'age' (in percent and in absolute numbers).

Overall, 133 of the 149 values (89.3%) of the dependent variable are valid; twelve values are missing. In three cases (2.0%) no unambiguous classification was possible due to missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable has a value. With 25% of the answers indicating that they "do not know", their level of knowledge was poor. The members of the age group '20 to 40' were most willing to admit their own lack of knowledge (34.8%); at the same time they also provided the lowest number of incorrect answers (8.7%). In the age group '>50', 29.8% stating not to know the answer were opposed by 27.7% who gave an incorrect answer.

Variable 'infants' classified by age

Fig. 17 and Table 58 show the distribution of valid values of the variable 'infants' ("Infants and children younger than six years belong to the target group of osteopathy"), classified by 'age'.

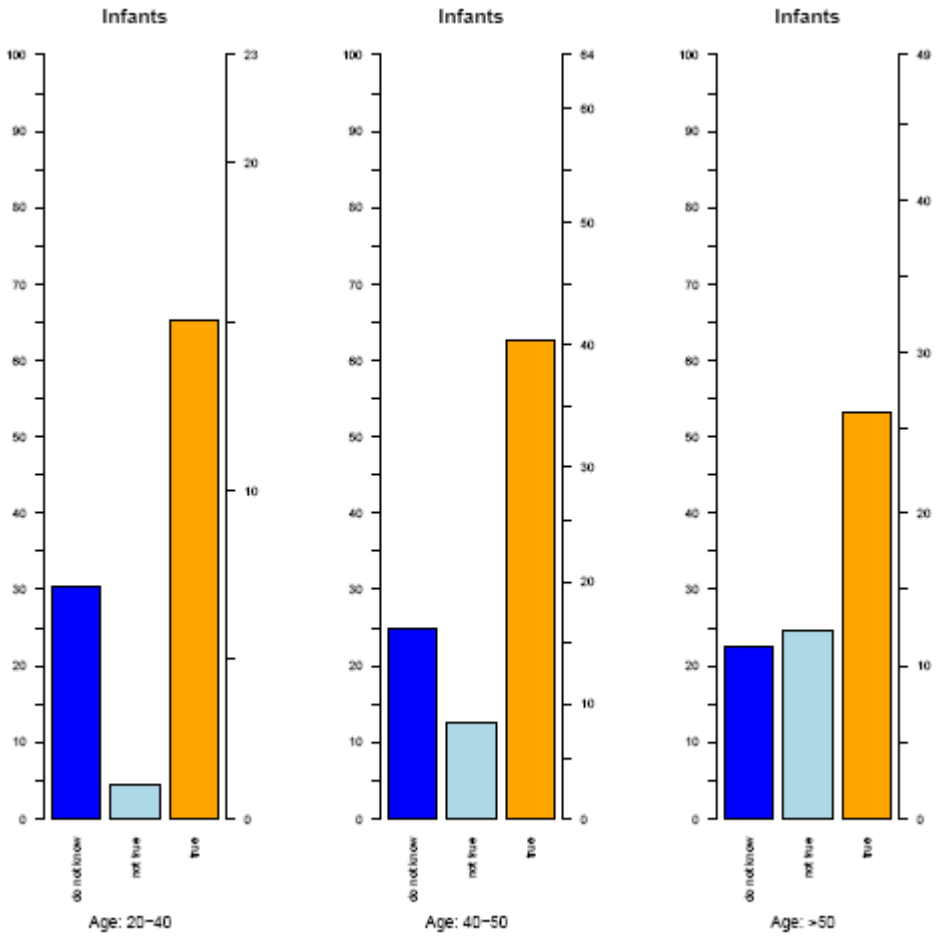

Fig. 17: Valid results regarding the variable 'infants' ("Infants and children younger than six years belong to the target group of osteopathy"), classified by the variable 'age' (left axis: %, right axis: n).

	20-40		40-50		>50	
Infants	n	% valid	n	% valid	n	% valid
Do not know	7	30.43	16	25.0	11	22.44
Not true	1	4.34	8	12.5	12	24.48
True	15	65.21	40	62.5	26	53.06

Table 58: Overview of the values in the variable 'infants' ("Infants and children younger than six years belong to the target group of osteopathy"), classified by the variable 'age' (in percent and in absolute numbers).

Overall, 136 of the 149 values (91.3%) of the dependent variable are valid; eight values are missing. In three cases (2.0%) no unambiguous classification was possible due to missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable has a value. Most of the correct answers (65.2%) were provided by the age group '20 to 40'; at the same time this group was also the one to answer with "do not know" most frequently. However, also the lowest number of incorrect answers can be observed in this group. In contrast, in the group of 50-year-olds and older only slightly more than half of the answers were correct. This was also the group with the highest number of incorrect answers (24.5%).

Variable 'children older than 6' classified by age

Table 59 summarizes the percentages of the answers regarding the statement "Children older than six years belong to the target group of osteopathy" (variable 'children older than 6'), classified by the variable 'age'.

	20-40		40-50		>50	
Children older than 6	n	% valid	n	% valid	n	% valid
Do not know	5	21.73	10	15.62	13	25.49
Not true	0	0.00	7	10.93	5	9.80
True	18	78.26	47	73.43	33	64.70

Table 59: Overview of the values in the variable 'children older than 6' ("Children older than six years belong to the target group of osteopathy"), classified by the variable 'age' (in percent and in absolute numbers).

Overall, 138 of the 149 values (92.6%) of the dependent variable are valid; seven values are missing. In three cases (2.0%) no unambiguous classification was possible due to missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable has a value. Slightly more than a quarter of the >50-year-old doctors answered this question with "do not know", compared to 15.6% of the 40- to 50-year-olds. The group of 20- to 40-year-old doctors provided the highest number of correct answers. However, also in this group, 21.7% answered with "do not know".

7.1.6.3 Level of knowledge in relation to the professional experience of the medical doctors

Table 60 shows the results of the χ^2 tests and the Fisher's exact tests for the analysis of the knowledge level in relation to the professional experience of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	Professional experience		Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)				'true' vs. 'not true'			
Statement	**Cat. 1**	**Cat. 2**	**Test**	**chi2**	**df**	**p**	**Test**	**chi2**	**df**	**p**
Newborn babies belong to the target group of osteopathy.	1-5	5-10	Chi-square/Yates	0.0022	1	0.96	Fisher's exact p			0.37
	1-5	10-20	Chi-square/Yates	0.0103	1	0.92	Fisher's exact p			0.14
	1-5	>20	Chi-square/Yates	0.2358	1	0.63	Fisher's exact p			0.13
	5-10	10-20	Chi-square/Yates	0.1932	1	0.66	Chi-square/Yates	0.1385	1	0.71
	5-10	>20	Chi-square/Yates	0.0617	1	0.80	Chi-square/Yates	0.3383	1	0.56
	10-20	>20	Chi-square/Yates	1.1385	1	0.29	Chi-square/Yates	0.0001	1	0.99
Infants and children younger than six years belong to the target group of osteopathy.	1-5	5-10	Fisher's exact p			1.00	Fisher's exact p			0.64
	1-5	10-20	Chi-square/Yates	0.0707	1	0.79	Fisher's exact p			0.40
	1-5	>20	Chi-square/Yates	0.0103	1	0.92	Fisher's exact p			0.24
	5-10	10-20	Chi-square/Yates	0.4004	1	0.53	Fisher's exact p			0.74
	5-10	>20	Chi-square/Yates	0.1905	1	0.66	Chi-square/Yates	0.4922	1	0.48
	10-20	>20	Chi-square/Yates	0	1	1.00	Chi-square/Yates	0.0471	1	0.83
Children older than six years belong to the target group of osteopathy.	1-5	5-10	Fisher's exact p			1.00	Fisher's exact p			1.00
	1-5	10-20	Fisher's exact p			0.53	Fisher's exact p			0.42
	1-5	>20	Chi-square/Yates	0.9626	1	0.33	Fisher's exact p			1.00
	5-10	10-20	Chi-square/Yates	0.2055	1	0.65	Fisher's exact p			0.45
	5-10	>20	Chi-square/Yates	1.1251	1	0.29	Fisher's exact p			1.00
	10-20	>20	Chi-square/Yates	0.2061	1	0.65	Fisher's exact p			0.48
Adults belong to the target group of osteopathy.	1-5	5-10	Fisher's exact p			1.00				
	1-5	10-20	Fisher's exact p			1.00	Fisher's exact p			1.00
	1-5	>20	Fisher's exact p			0.26				
	5-10	10-20	Fisher's exact p			1.00	Fisher's exact p			0.51
	5-10	>20	Fisher's exact p			0.19				
	10-20	>20	Chi-square/Yates	1.4235	1	0.23	Fisher's exact p			0.50
Elderly people belong to the target group of osteopathy.	1-5	5-10	Fisher's exact p			0.71				
	1-5	10-20	Fisher's exact p			0.26	Fisher's exact p			0.56
	1-5	>20	Fisher's exact p			1.00	Fisher's exact p			1.00
	5-10	10-20	Fisher's exact p			0.73	Fisher's exact p			0.27
	5-10	>20	Chi-square/Yates	0.1266	1	0.72	Fisher's exact p			1.00
	10-20	>20	Chi-square/Yates	1.2642	1	0.26	Fisher's exact p			0.62

Table 60: Results of the χ^2 tests of the answers to the questions, classified by professional experience. First the ratio between concrete answers and non-concrete answers was examined; second only the correct and incorrect answers were taken into account.

The results of the questions do not show any striking differences regarding the professional experience of the doctors.

7.1.7. Knowledge about the procedure of osteopathic treatment

On average, 56.0% (SD: 18.3) of the five questions of the section about the procedure of osteopathic treatment were answered correctly. Mean value and standard deviation of the percent of right answers grouped by independent variables are summarized in Table 61; results of the according Wilcoxon tests are summarized in Table 62.

Ind. var.	Sex		Age			Professional experience				class_prof		
Group	Female	Male	20-40	40-50	>50	1-5	5-10	10-20	>20	GP	Dent	Other
n	68	78	24	65	56	19	33	48	48	73	29	47
Mean proc_kn [%]	56.5	55.6	56.7	59.1	51.4	54.7	58.2	60.0	50.8	57.8	53.8	54.5
SD proc_kn	16.9	19.8	24.8	15.6	17.0	17.4	19.6	18.5	17.0	16.2	22.1	19.0

Table 61: Relative frequencies of right answers in this section of the questionnaire, grouped by independent variables.

	Sex		Age						class_prof					
Group	Female	Male	20-40	40-50	20-40	>50	40-50	>50	GP	Dent	GP	Other	Dent	Other
	W	p	W	p	W	p	W	p	W	p	W	p	W	p
proc_kn	2710.5	0.8	749.5	0.75	780.5	0.22	2293	0.005	955	0.4	1600	0.48	661.5	0.82

	Professional experience											
Group	1-5	5-10	1-5	10-20	1-5	>20	5-10	10-20	5-10	>20	10-20	>20
	W	p	W	p	W	p	W	p	W	p	W	p
proc_kn	266	0.31	365	0.14	507.5	0.43	761	0.74	988.5	0.04	1500	0.005

Table 62: Group differences of relative frequencies of right answers in this section of the questionnaire (results of the Wilcoxon tests).

There are significant differences in knowledge about the procedure of osteopathic treatment depending on age and professional experience of the doctors. Medical doctors between 40 and 50 years of age have a significantly higher level of knowledge than those older than 50.

Doctors with more than 20 years of professional experience have the lowest level of knowledge. Compared to the doctors with 10 to 20 and 5 to 10 years of professional experience, the difference is significant.

7.1.7.1 Level of knowledge in relation to the age of the medical doctors

Table 63 shows the results of the χ^2 tests and the Fisher's exact tests for the analysis of the knowledge level in relation to the age of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	Age		Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)				'true' vs. 'not true'			
Statement	Cat. 1	Cat. 2	Test	chi2	df	p	Test	chi2	df	p
During treatment, an osteopath concentrates only on the dysfunction.	20-40	>50	Chi-square/Yates	0.0794	1	0.78	Fisher's exact p			1.00
	20-40	40-50	Fisher's exact p			0.16	Fisher's exact p			0.63
	40-50	>50	Chi-square/Yates	5.2975	1	**0.02**	Fisher's exact p			0.71
During treatment, an osteopath works with the whole body.	20-40	>50	Fisher's exact p			1.00	Fisher's exact p			1.00
	20-40	40-50	Fisher's exact p			0.29	Fisher's exact p			1.00
	40-50	>50	Fisher's exact p			0.41	Fisher's exact p			1.00
An osteopath uses painful techniques.	20-40	>50	Chi-square/Yates	0.0958	1	0.76	Fisher's exact p			**0.10**
	20-40	40-50	Chi-square/Yates	0.0987	1	0.75	Fisher's exact p			0.64
	40-50	>50	Chi-square/Yates	1.7626	1	0.18	Fisher's exact p			0.14
An osteopath uses forceful techniques.	20-40	>50	Chi-square/Yates	0.0219	1	0.88	Fisher's exact p			0.50
	20-40	40-50	Chi-square/Yates	1.7088	1	0.19	Fisher's exact p			0.20
	40-50	>50	Chi-square/Yates	3.7367	1	**0.05**	Chi-square/Yates	0.0112	1	0.92
An osteopath uses gentle techniques.	20-40	>50	Fisher's exact p			1.00	Fisher's exact p			1.00
	20-40	40-50	Fisher's exact p			0.70				
	40-50	>50	Chi-square/Yates	0.3385	1	0.56	Fisher's exact p			0.45

Table 63: Results of the χ^2 tests of the answers to the questions, classified by age groups. First the ratio between concrete answers and non-concrete answers was examined; second only the correct and incorrect answers were taken into account.

Regarding correct answers, no significant differences between the age groups of the doctors could be identified. Only the question whether osteopaths apply painful techniques showed a distinct difference (p=0.10) between the 20- to 40-year-old doctors and the age group '>50'.

There was a significant difference between the age groups '40 to 50' and '>50' in the uncertainty regarding the answer to the question whether osteopaths only concentrate on the dysfunction. A distinct, if not significant, difference could also be identified

between the same age groups regarding the uncertainty in answering the question whether osteopaths use forceful techniques.

The answers of the medical doctors to these statements will therefore be illustrated in more detail in the following section.

Variable 'dysfunction' classified by age

Fig. 18 and Table 64 show the distribution of valid values of the variable 'dysfunction' ("During treatment, an osteopath concentrates only on the dysfunction"), classified by the variable 'age'.

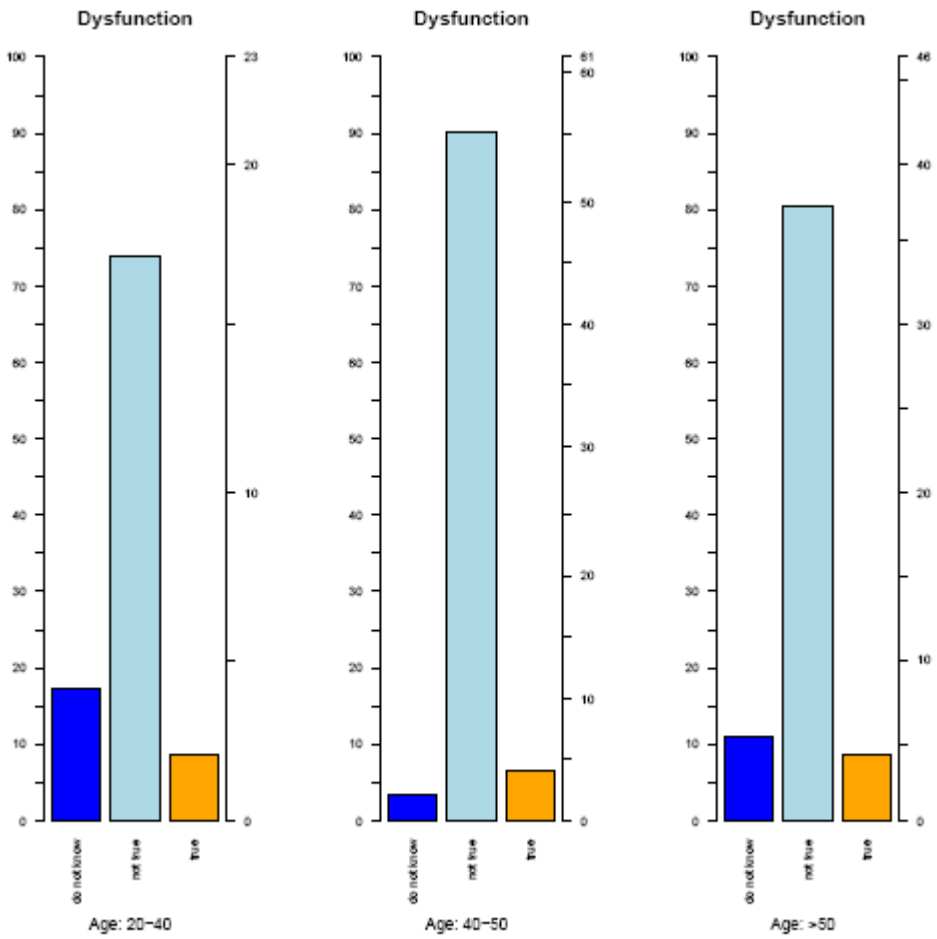

Fig. 18: Valid results regarding the variable 'dysfunction' ("During treatment, an osteopath concentrates only on the dysfunction"), classified by the variable 'age' (left axis: %, right axis: n).

	20-40		40-50		>50	
Dysfunction	n	% valid	n	% valid	n	% valid
Do not know	4	17.39	2	3.27	5	10.86
Not true	17	73.91	55	90.16	37	80.43
True	2	8.69	4	6.55	4	8.69

Table 64: Overview of the values in the variable 'dysfunction' ("During treatment, an osteopath concentrates only on the dysfunction"), classified by the variable 'age' (in percent and in absolute numbers).

Overall, 130 of the 149 values (87.2%) of the dependent variable are valid; 15 values are missing. In three cases (2.0%) no unambiguous classification was possible due to missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable has a value.

Uncertainty occurred most frequently in the age group of 20- to 40-year-old doctors. 17.4% of this group answered that they "do not know" the answer. In this respect, the 40- to 50-year-old doctors were more certain (3.3% answered "do not know"). This was also the age group with the highest number (90.2%) of correct answers ("not true"). In contrast, only 73.9% of the doctors between 20 and 40 years of age answered correctly.

Variable 'painful techn' classified by age

Table 65 summarizes the percentages of the answers regarding the statement "An osteopath uses painful techniques" (variable 'painful techn'), classified by the variable 'age'.

	20-40		40-50		>50	
Painful techn	n	% valid	n	% valid	n	% valid
Do not know	6	26.08	12	19.35	11	23.40
Not true	15	65.21	46	74.19	36	76.59
True	2	8.69	4	6.45	0	0.00

Table 65: Overview of the values in the variable 'painful techn' ("An osteopath uses painful techniques"), classified by the variable 'age' (in percent and in absolute numbers).

Overall, 132 of the 149 values (88.6%) of the dependent variable are valid; 13 values are missing. In three cases (2.0%) no unambiguous classification was possible due to missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable has a value. The majority of the medical doctors thought that osteopaths did not use painful techniques. This answer was most frequently given by the >50-year-olds (76.6%) and least frequently by the 20- to 40-year-olds (65.2%).

Variable 'forceful techn' classified by age

Table 66 summarizes the percentages of the answers regarding the statement "An osteopath uses forceful techniques" (variable 'forceful techn'), classified by the variable 'age'.

	20-40		40-50		>50	
Forceful techn	n	% valid	n	% valid	n	% valid
Do not know	8	36.36	12	19.67	14	30.43
Not true	8	36.36	37	60.65	23	50.00
True	6	27.27	12	19.67	9	19.56

Table 66: Overview of the values in the variable 'forceful techn' ("An osteopath uses forceful techniques"), classified by the variable 'age' (in percent and in absolute numbers).

Overall, 129 of the 149 values (86.6%) of the dependent variable are valid; 16 values are missing. In three cases (2.0%) no unambiguous classification was possible due to missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable has a value.
The group of 40- to 50-year-old doctors was most certain in answering this question (19.7% answered "do not know"); those between 20 and 40 were most uncertain (36.4%). Among the group of 40- to 50-year-olds the statement was most frequently regarded as not true (60.7%), and in the group of 20- to 40-year-olds it was least frequently regarded as not true (36.4%).

7.1.7.2 Level of knowledge in relation to the professional experience of the medical doctors

Table 67 shows the results of the χ^2 tests and the Fisher's exact tests for the analysis of the knowledge level in relation to the professional experience of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	Professional experience		Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)				'true' vs. 'not true'			
Statement	Cat. 1	Cat. 2	Test	chi2	df	p	Test	chi2	df	p
During treatment, an osteopath concentrates only on the dysfunction.	1-5	5-10	Fisher's exact p			0.71	Fisher's exact p			0.53
	1-5	10-20	Fisher's exact p			**0.09**	Fisher's exact p			0.56
	1-5	>20	Chi-square/Yates	0.2852	1	0.59	Fisher's exact p			0.29
	5-10	10-20	Fisher's exact p			0.26	Fisher's exact p			1.00
	5-10	>20	Chi-square/Yates	1.9285	1	0.16	Fisher's exact p			0.68
	10-20	>20	Chi-square/Yates	8.2735	1	**0.004**	Fisher's exact p			0.72
During treatment, an osteopath works with the whole body.	1-5	5-10	Fisher's exact p			1.00				
	1-5	10-20	Fisher's exact p			1.00				
	1-5	>20	Fisher's exact p			1.00	Fisher's exact p			1.00
	5-10	10-20	Fisher's exact p			1.00				
	5-10	>20	Fisher's exact p			0.64	Fisher's exact p			0.51
	10-20	>20	Fisher's exact p			0.68	Fisher's exact p			0.24
An osteopath uses painful techniques.	1-5	5-10	Chi-square/Yates	0.1596	1	0.69	Fisher's exact p			1.00
	1-5	10-20	Fisher's exact p			1.00	Fisher's exact p			1.00
	1-5	>20	Chi-square/Yates	0.723	1	0.40	Fisher's exact p			1.00
	5-10	10-20	Chi-square/Yates	0.0745	1	0.78	Fisher's exact p			0.64
	5-10	>20	Chi-square/Yates	0.0575	1	0.81	Fisher's exact p			1.00
	10-20	>20	Chi-square/Yates	0.7905	1	0.37	Fisher's exact p			0.36
An osteopath uses forceful techniques.	1-5	5-10	Chi-square/Yates	0.8678	1	0.35	Fisher's exact p			0.38
	1-5	10-20	Chi-square/Yates	1.7032	1	0.19	Fisher's exact p			0.25
	1-5	>20	Chi-square/Yates	0.0946	1	0.76	Fisher's exact p			0.40
	5-10	10-20	Chi-square/Yates	0.0042	1	0.95	Chi-square/Yates	0.0441	1	0.83
	5-10	>20	Chi-square/Yates	0.3846	1	0.54	Chi-square/Yates	0.0655	1	0.80
	10-20	>20	Chi-square/Yates	1.1719	1	0.28	Chi-square/Yates	0.0562	1	0.81
An osteopath uses gentle techniques.	1-5	5-10	Fisher's exact p			1.00				
	1-5	10-20	Fisher's exact p			1.00				
	1-5	>20	Fisher's exact p			1.00	Fisher's exact p			1.00
	5-10	10-20	Fisher's exact p			0.73				
	5-10	>20	Fisher's exact p			0.73	Fisher's exact p			1.00
	10-20	>20	Chi-square/Yates	0.0952	1	0.76	Fisher's exact p			1.00

Table 67: Results of the χ^2 tests of the answers to the questions, classified by the professional experience of the medical doctors. First the ratio between concrete answers and non-concrete answers was examined; second only the correct and incorrect answers were taken into account.

In regard to the professional experience, no distinct differences could be identified regarding the number of correct and incorrect answers ("true" or "not true") within the concrete answers.

The only distinct differences can be observed in the uncertainty in answering the question whether osteopaths focus on the dysfunction during their treatment. These differences were significant between the doctors with a professional experience of 10 to 20 years and those with more than 20 years.

The answers of the medical doctors to these statements are therefore illustrated in more detail in the following section.

Variable 'dysfunction' classified by professional experience

Fig. 19 and Table 68 show the distribution of valid values of the variable 'dysfunction' ("During treatment, an osteopath concentrates only on the dysfunction"), classified by the variable 'professional experience'.

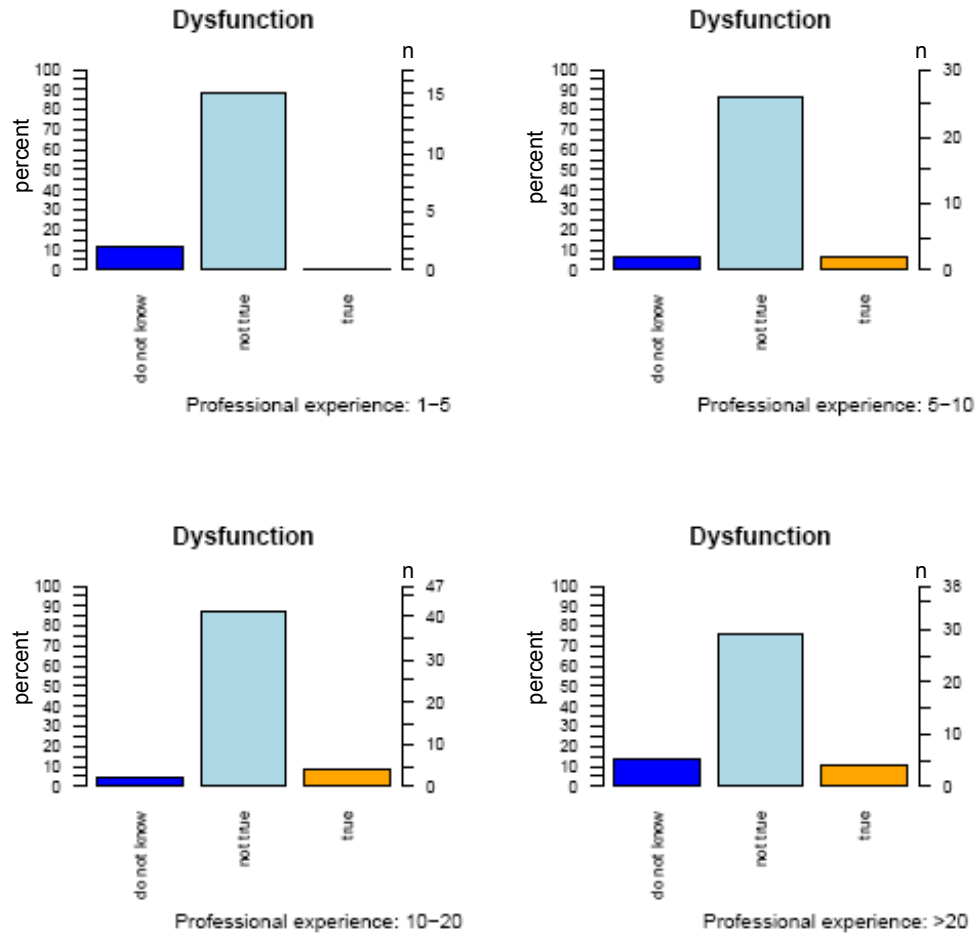

Fig. 19: Valid results regarding the variable 'dysfunction' ("During treatment, an osteopath concentrates only on the dysfunction"), classified by the variable 'professional experience' (left axis: %, right axis: n).

		1-5		5-10		10-20		>20	
Professional experience	Dysfunction	n	% valid	n	% valid	n	% valid	n	% valid
	Do not know	2	11.76	2	6.66	2	4.25	5	13.15
1-5	Not true	15	88.23	26	86.66	41	87.23	29	76.31
1-5	True	0	0.00	2	6.66	4	8.51	4	10.52

Table 68: Overview of the values in the variable 'dysfunction' ("During treatment, an osteopath concentrates only on the dysfunction"), classified by the variable 'professional experience' (in percent and in absolute numbers).

Overall, 141 of the 149 values (94.6%) of the dependent variable are valid; seven values are missing. In one case (0.7%) no unambiguous classification was possible due to a missing value in the independent variable. The medical doctors with 10 to 20 years of professional experience showed the lowest level of uncertainty in answering this question; only 4.3% of their answers indicated that they "do not know". This answer was most frequently found among doctors with more than 20 years of professional experience (13.2%), followed by doctors with less than 5 years of professional experience (11.8%). 6.7% of the group of doctors with 5 to 10 years of professional experience provided an answer in this category.
The lowest number of correct answers was given by the group of doctors with more than 20 years of professional experience (76.3%); the percentages of the other groups lie between 86.6% and 88.3%.

7.1.8. Knowledge about indications and contraindications for osteopathic treatment

On average, 65.1% (SD: 25.0) of the nine questions of the section about indications and contraindications were answered correctly. Mean value and standard deviation of the percent of right answers grouped by independent variables are summarized in Table 69; results of the according Wilcoxon tests are summarized in Table 70.

Ind. var.	Sex		Age			Professional experience				class_prof		
Group	Female	Male	20-40	40-50	>50	1-5	5-10	10-20	>20	GP	Dent	Other
n	68	78	24	65	56	19	33	48	48	73	29	47
Mean ind_kn [%]	69.4	61.7	62.0	66.5	64.1	69.0	65.0	65.7	62.3	67.6	62.8	62.6
SD ind_kn	22.3	26.2	26.0	24.3	25.9	23.9	20.8	26.1	27.1	22.2	26.4	28.2

Table 69: Relative frequencies of right answers in this section of the questionnaire, grouped by independent variables.

	Sex		Age						class_prof					
Group	Female	Male	20-40	40-50	20-40	>50	40-50	>50	GP	Dent	GP	Other	Dent	Other
	W	p	W	p	W	p	W	p	W	p	W	p	W	p
ind_kn	3091.5	0.08	704	0.48	640	0.74	1903	0.66	965.5	0.49	1583.5	0.47	676	0.96

	Professional experience											
Group	1-5	5-10	1-5	10-20	1-5	>20	5-10	10-20	5-10	>20	10-20	>20
	W	p	W	p	W	p	W	p	W	p	W	p
ind_kn	369.5	0.28	488.5	0.65	514.5	0.41	747	0.67	818	0.80	1238.5	0.52

Table 70: Group differences of relative frequencies of right answers in this section of the questionnaire (results of the Wilcoxon tests).

There are no significant differences in knowledge depending on any independent variable; only a distinct difference between female and male doctors could be observed.

7.1.8.1 Level of knowledge in relation to the sex of the medical doctors

Table 71 shows the results of the χ^2 tests and the Fisher's exact tests for the analysis of the knowledge level in relation to the sex of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	Sex		Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)				'true' vs. 'not true'			
Statement	Cat. 1	Cat. 2	Test	chi2	df	p	Test	chi2	df	p
There are contraindications for osteopathic treatment.	Female	Male	Fisher's exact p			1.00	Chi-square/Yates	0.1284	1	0.72
Osteopathy is suitable for treatment of chronic and acute musculoskeletal pain.	Female	Male	Fisher's exact p			0.72				
Osteopathy is suitable for treatment of health problems after accidents.	Female	Male	Chi-square/Yates	0.0297	1	0.86	Fisher's exact p			**0.01**
Osteopathy is suitable for treatment of afflictions of the digestive system.	Female	Male	Chi-square/Yates	1.6701	1	0.20	Chi-square/Yates	0.1751	1	0.68
Osteopathy is suitable for treatment of headache, migraine and vertigo.	Female	Male	Chi-square/Yates	0.9035	1	0.34	Fisher's exact p			0.12
Osteopathy is suitable for treatment of dysfunctions of the masticatory apparatus.	Female	Male	Chi-square/Yates	1.8638	1	0.17	Chi-square/Yates	2.7404	1	**0.10**
Osteopathy is suitable for treating pregnancy-related problems and medical conditions related to birth.	Female	Male	Chi-square/Yates	0.0621	1	0.80	Chi-square/Yates	2.6264	1	0.11
Osteopathy is suitable for treating problems of the urogenital tract (PMS, incontinence,…).	Female	Male	Chi-square/Yates	0.4851	1	0.49	Chi-square/Yates	2.2325	1	0.14
A patient can be treated osteopathically in spite of taking medication.	Female	Male	Fisher's exact p			1.00	Fisher's exact p			0.22

Table 71: Results of the χ^2 tests of the answers to the questions, classified by sex. First the ratio between concrete answers and non-concrete answers was examined; second only the correct and incorrect answers were taken into account.

Significant differences between male and female doctors could be identified regarding the question whether osteopathy is suitable for the treatment of health problems caused by an accident. There were also distinct differences in terms of the sex of the doctors regarding the question whether osteopathy is suitable for the treatment of dysfunctions of the masticatory apparatus; however they were not significant according to the defined level of significance.

Variable 'health problems after accidents' classified by sex

Fig. 20 and Table 72 show the distribution of valid values of the variable 'health problems after accidents' ("Osteopathy is suitable for treatment of health problems after accidents"), classified by the variable 'sex'.

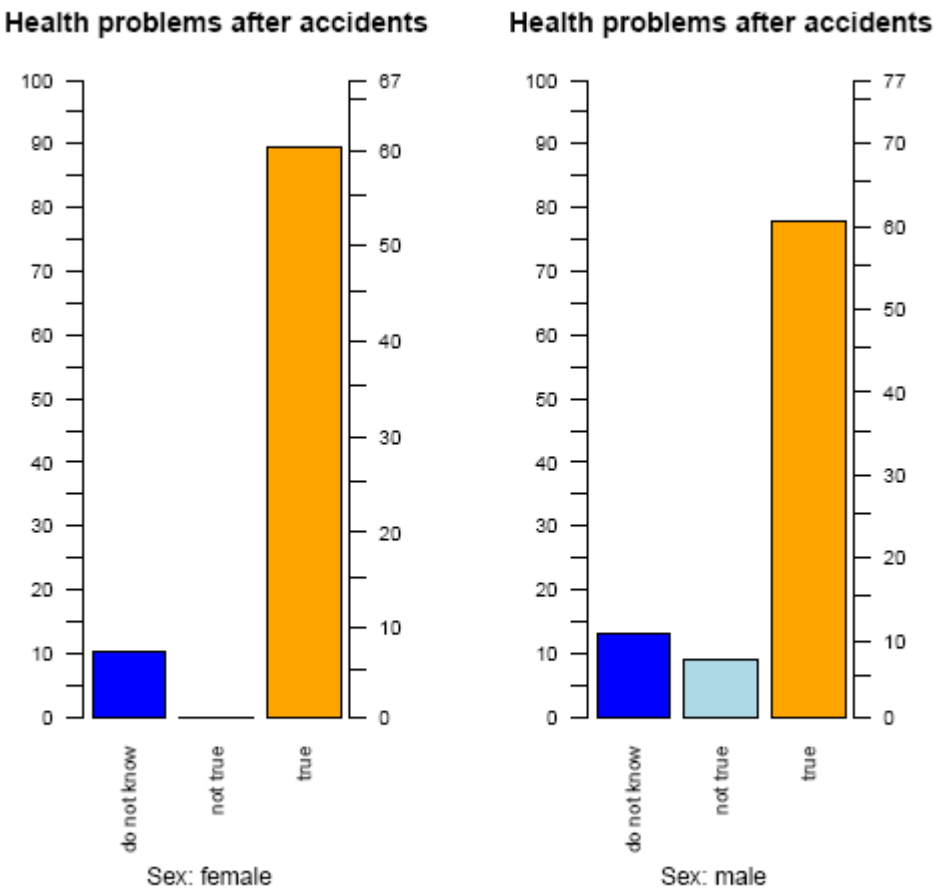

Fig. 20: Valid results regarding the variable 'health problems after accidents' ("Osteopathy is suitable for treatment of health problems after accidents"), classified by the variable 'sex' (left axis: %, right axis: n).

	Female		Male	
Health problems after accidents	n	% valid	n	% valid
Do not know	7	10.44	10	12.98
Not true	0	0.00	7	9.09
True	60	89.55	60	77.92

Table 72: Overview of the values in the variable 'health problems after accidents' ("Osteopathy is suitable for treatment of health problems after accidents"), classified by the variable 'sex' (in percent and in absolute numbers).

Overall, 144 of the 149 values (96.6%) of the dependent variable are valid; two values are missing. In two cases (1.3%) no unambiguous classification was possible due to

missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable has a value.
89.6% of the female doctors found this statement to be "true", the remaining 10.4% declared not to be able to answer the question. 77.9% of the male doctors agreed with this statement and 9.1% found it to be "not true".

Variable 'jaw bones' classified by sex

Table 73 summarizes the percentages of the answers regarding the statement "Osteopathy is suitable for treatment of dysfunctions of the masticatory apparatus" (variable 'jaw bones'), classified by the variable 'sex'.

	Female			Male	
Jaw bones	n	% valid	% total	n	% valid
Do not know	9	13.63	6.04	17	22.97
Not true	2	3.03	1.34	8	10.81
True	55	83.33	36.91	49	66.21

Table 73: Overview of the values in the variable 'jaw bones' ("Osteopathy is suitable for treatment of dysfunctions of the masticatory apparatus"), classified by the variable 'sex' (in percent and in absolute numbers).

Overall, 140 of the 149 values (94.0%) of the dependent variable are valid; six values are missing. In two cases (1.3%) no unambiguous classification was possible due to missing values in the independent variable. In one case (0.7%) neither the dependent nor the independent variable has a value.
83.3% of the female doctors agreed with the statement "Osteopathy is suitable for treatment of dysfunctions of the masticatory apparatus", 13.6% were uncertain and only 3.0% believed it to be not true. Their male counterparts showed a higher degree of uncertainty (23.0%) and disagreement (10.8%).

7.1.9. Knowledge about osteopathic training in Austria

On average, 67.1% (SD: 26.2) of the six questions of the section about knowledge about osteopathic training in Austria were answered correctly. Mean value and standard deviation of the percent of right answers grouped by independent variables are summarized in Table 74; results of the according Wilcoxon tests are summarized in Table 75.

Ind. var.	Sex		Age			Professional experience				class_prof		
Group	Female	Male	20-40	40-50	>50	1-5	5-10	10-20	>20	GP	Dent	Other
n	68	78	24	65	56	19	33	48	48	73	29	47
Mean train_kn [%]	69.7	64.9	60.8.0	68.0	68.6	69.5	66.1	64.2	69.2	71.5	59.3	65.1
SD train_kn	23.8	28.1	27.3	28.5	23.2	23.4	27.1	29.5	23.3	24.9	25.3	27.8

Table 74: Relative frequencies of right answers in this section of the questionnaire, grouped by independent variables.

	Sex		Age						class_prof					
Group	Female	Male	20-40	40-50	20-40	>50	40-50	>50	GP	Dent	GP	Other	Dent	Other
	W	p	W	p	W	p	W	p	W	p	W	p	W	p
train_kn	2878	0.36	648	0.21	567.5	0.26	1876.5	0.76	762	0.02	1491.5	0.22	587.5	0.3

	Professional experience											
Group	1-5	5-10	1-5	10-20	1-5	>20	5-10	10-20	5-10	>20	10-20	>20
	W	p	W	p	W	p	W	p	W	p	W	p
train_kn	328.5	0.78	492.5	0.61	461.5	0.94	809.5	0.87	756	0.72	1073.5	0.56

Table 75: Group differences of relative frequencies of right answers in this section of the questionnaire (results of the Wilcoxon tests).

There is a significant difference concerning the knowledge about osteopathic training in Austria between general practitioners and dentists. On average, the knowledge of dentists is significantly lower than the knowledge of general practitioners.

7.1.9.1 Level of knowledge in relation to the specialty of the medical doctors

Table 76 shows the results of the χ^2 tests and the Fisher's exact tests for the analysis of the knowledge level in relation to the specialty of the doctors for the questions of this section. First the ratio between concrete answers ("true", "not true") and non-concrete answers (missing values, "do not know") was examined; second only the correct and incorrect answers ("true", "not true") were taken into account.

Independent variable	class_prof		Concrete ('true'/'not true') vs. non-concrete ('do not know'/missing)				'true' vs. 'not true'			
Statement	Cat. 1	Cat. 2	Test	chi2	df	p	Test	chi2	df	p
Osteopathic training in Austria lasts 2/4/6.5 years.	Dent	Other	Fisher's exact p			0.49	Fisher's exact p			0.49
	Dent	GP	Fisher's exact p			0.53	Fisher's exact p			0.53
	Other	GP	Fisher's exact p			0.27	Fisher's exact p			0.27
In Austria, in order to be admitted to part-time osteopathic training, basic training in medicine, odontology, veterinary medicine, physiotherapy, occupationaltherapy or midwifery is required.	Dent	Other	Chi-square/Yates	0.2169	1	0.64	Fisher's exact p			1.00
	Dent	GP	Chi-square/Yates	1.4356	1	0.23	Fisher's exact p			1.00
	Other	GP	Chi-square/Yates	0.2645	1	0.61	Chi-square/Yates	0.2581	1	0.61
In Austria, no basic training in a medical profession is required for becoming an osteopath.	Dent	Other	Chi-square/Yates	1.4156	1	0.23	Fisher's exact p			1.00
	Dent	GP	Chi-square/Yates	0.7287	1	0.39	Fisher's exact p			0.29
	Other	GP	Chi-square/Yates	0.1149	1	0.73	Chi-square/Yates	0.7597	1	0.38
For practising osteopathy it is necessary to have well founded basic knowledge of anatomy, physiology and pathology.	Dent	Other	Fisher's exact p			1.00				
	Dent	GP	Fisher's exact p			0.14				
	Other	GP	Fisher's exact p			0.21				
For practising osteopathy, it is necessary to have undergone thorough training of palpatory skills.	Dent	Other	Fisher's exact p			0.73	Fisher's exact p			1.00
	Dent	GP	Fisher's exact p			0.71				
	Other	GP	Fisher's exact p			0.37	Fisher's exact p			0.37
For practising osteopathy, it is necessary to have knowledge about the 'five elements'.	Dent	Other	Chi-square/Yates	1.0324	1	0.31	Chi-square/Yates	8.064	1	**0.005**
	Dent	GP	Chi-square/Yates	0.1927	1	0.66	Chi-square/Yates	9.3917	1	**0.002**
	Other	GP	Chi-square/Yates	0.3847	1	0.54	Fisher's exact p			1.00

Table 76: Results of the χ^2 tests of the answers to the questions, classified by specialty. First the ratio between concrete answers and non-concrete answers was examined; second only the correct and incorrect answers were taken into account.

The only statement which showed significant differences between the doctors depending on their specialty was the statement on osteopaths having to have knowledge about the "five elements".
The answers of the medical doctors to these statements will therefore be illustrated in more detail in the following section.

Variable '5 elements' classified by profession

Fig. 21 and Table 77 show the distribution of valid values of the variable '5 elements' ("For practising osteopathy, it is necessary to have knowledge about the 'five elements'."), classified by the variable 'profession'.

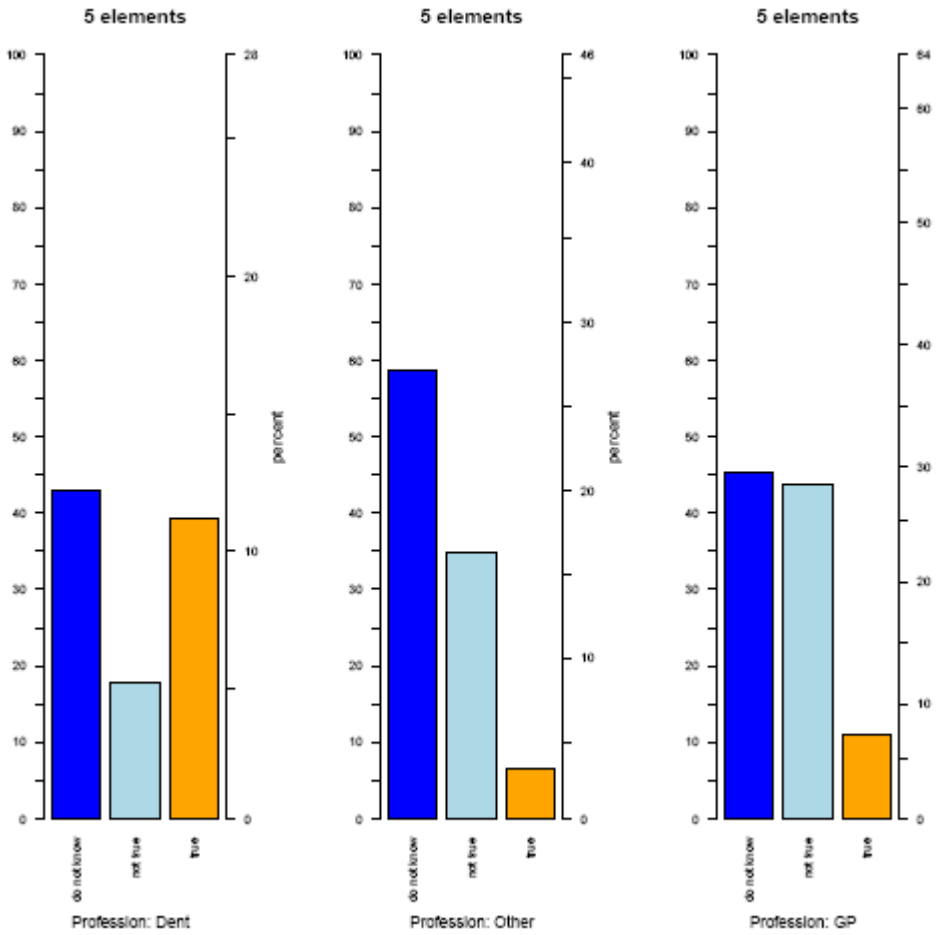

Fig. 21: Valid results regarding the variable '5 elements' ("For practising osteopathy, it is necessary to have knowledge about the 'five elements'"), classified by the variable 'profession' (left axis: %, right axis: n).

	Dent		Other		GP	
5 elements	n	% valid	n	% valid	n	% valid
Do not know	12	42.85	27	58.69	29	45.31
Not true	5	17.85	16	34.78	28	43.75
True	11	39.28	3	6.52	7	10.93

Table 77: Overview of the values in the variable '5 elements' ("For practising osteopathy, it is necessary to have knowledge about the 'five elements'"), classified by the variable 'profession' (in percent and in absolute numbers).

Overall, 138 of the 149 values (92.6%) of the dependent variable are valid. The level of uncertainty (frequency of the answer "do not know") was very high independently of the specialty of the medical doctors (ranging from 42.9% among dentists to 58.7% among other specialists). The majority of the dentists that gave a concrete answer thought that the statement was true (39.3% of the whole group). Only 17.9% thought that the statement was not true.
The highest number of correct answers was given by the GPs (43.7%); however, also among this group 45.3% declared not to know the answer and 10.9% gave an incorrect answer.

7.1.10. Knowledge about how to find information about osteopaths

On average, 40.3% (SD: 26.6) of the three questions of the section about the knowledge about how to find information about osteopaths were answered correctly. Mean value and standard deviation of the percent of right answers grouped by independent variables are summarized in Table 78; results of the according Wilcoxon tests are summarized in Table 79.

Ind. var.	Sex		Age			Professional experience				class_prof		
Group	Female	Male	20-40	40-50	>50	1-5	5-10	10-20	>20	GP	Dent	Other
n	68	78	24	65	56	19	33	48	48	73	29	47
Mean inf_kn [%]	44.1	36.3	38.9	40.5	40.5	42.1	38.4	41.0	40.3	43.8	35.6	37.6
SD inf_kn	27.3	25.9	32.1	24.6	26.8	21.8	31.3	25.0	27.5	28.3	25.1	24.7

Table 78: Relative frequencies of right answers in this section of the questionnaire, grouped by independent variables.

	Sex		Age						class_prof					
Group	Female	Male	20-40	40-50	20-40	>50	40-50	>50	GP	Dent	GP	Other	Dent	Other
	W	p	W	p	W	p	W	p	W	p	W	p	W	p
inf_kn	3028.5	0.11	752	0.78	644	0.76	1784	0.84	887	0.17	1517.5	0.25	646.5	0.69

	Professional experience											
Group	1-5	5-10	1-5	10-20	1-5	>20	5-10	10-20	5-10	>20	10-20	>20
	W	p	W	p	W	p	W	p	W	p	W	p
inf_kn	353.5	0.42	475	0.78	476	0.77	723	0.48	738	0.58	1161	0.95

Table 79: Group differences of relative frequencies of right answers in this section of the questionnaire (results of the Wilcoxon tests).

There are no significant differences in the knowledge about how to find information about osteopaths depending on any of the independent variables. The most distinct difference can be observed between male and female doctors (W=3029, p=0.11).

7.1.11. What is the doctors' estimate concerning the number of osteopathic treatments needed?

Questions 16-1/2/3: "How many units of osteopathic treatment do you think are necessary (on average) to lead to a healing process? 1-5 / 5-10 / 10-30 units."
49% of the doctors thought that on average 5 to 10 osteopathic treatment units were necessary to lead to a healing process; 37% said 1 to 5 and 13% said 10 to 30.

7.1.12. What is the doctors' estimate concerning the costs of osteopathic treatment?

Questions 17-1/2/3: "On average, what do you think are the costs of osteopathic treatment per hour? <60€ / 60-90€ / >90€."
17% of the doctors thought that one hour of osteopathic treatment cost less than 60€, 79% said 60 to 90€, and only 4% said more than 90€.

7.2. Statements of the doctors in the survey

Several doctors made additional statements in relation to some questions or the whole questionnaire. These statements are summarized below (the number of statements in relation to the according questions is indicated in brackets):

Statement (ST) 2: Osteopathy is preventive as well as curative (1).
ST8: For one doctor the expression "forceful" was problematic (1).
ST 12: Osteopathic training at an Austrian school other than the WSO lasts five years (2).
ST 14: One doctor stresses the additional need of exact knowledge about neurology (1).
ST 15: One doctor mentioned word-of-mouth advertising and another one mentioned business cards (2).
ST 16: It is not possible to indicate a concrete number of treatment units (3).
ST 17: Three doctors complained about the ambiguity of the question about costs *per hour* (3).
Part A in general: One doctor complained about an insufficient differentiation; another one thought that the osteopathic method was generally overvalued by patients without medical experience; and a third one stated that there was also no co-operation with other disciplines. Lastly, two doctors asked for the results of this survey.

8. Summary of results

The total response rate for the posted questionnaire was approximately 25% (149/563 posted questionnaires).
On average, the doctors answered 62.7% (SD: 18.4) of all questions correctly. The highest score is 89.3% of right answers.

The doctors have a good **general knowledge** about osteopathy (on average 76.6% right answers, SD: 25.1). They know that osteopaths work manually (93% right answers, 95%-confidence interval (95% CI): 87.6-96.2%) and holistically (89.7% right answers, 95% CI: 83.7-93.7%) and that they stimulate the self-healing capacity of the body (75.9% right answers, 95% CI: 68.3-82.1%).
But on the other hand, 70% of the doctors do not feel confident concerning their knowledge about osteopathy and 75% would like to have more information about osteopathy.

On average, 71.8% (SD: 30.9) of the questions concerning the **aims of osteopathy** were answered correctly. There is a high level of uncertainty about whether osteopaths use only energetic treatment or not (31.2%, 95% CI: 24.1-39.3%).

On average, 66.4% (SD: 28.9) of the five questions of the section "**Knowledge about structures treated by osteopaths**" of the questionnaire were answered correctly. The doctors know that osteopaths treat the musculoskeletal system (91.9%: 95% CI: 86.5-95.3%) and that they do not treat the spine exclusively (81.2%: 95% CI: 74.2-86.7%). They are less sure whether osteopaths treat the fasciae (61.7%: 95% CI: 53.7-69.2%) and the cranial bones (63.1%: 95% CI: 55.1-70.4%); and there is a high level of uncertainty about whether osteopaths treat the inner organs (34.2%: 95% CI: 27.1-42.2%)

Some doctors are well informed about the structural **techniques used in osteopathy** (52.8% right answers, SD: 23.7). They do not know that muscle energy techniques do not have anything in common with energetic treatment (30.9%: 95% CI: 24-38.7%) and that osteopaths use reflex zones for their work (28.2%: 95% CI: 21.6-35.9%). The doctors think that osteopaths use more passive techniques than active therapy such as active relaxation techniques (21.5%: 95% CI: 15.6-28.7%) for treatment.

The doctors think that mainly soft techniques (87.9% right answers, 95% CI: 81.7-92.2%) and no painful (4.7%: 95% CI: 2.3-9.4%) or forceful techniques (18.8%: 95% CI: 13.3-25.8%) are used in osteopathy.
The older patients are, the clearer it is for the doctors that osteopaths can treat them. There is a lack of knowledge about the fact that osteopaths also treat newborn babies (47.0% right answers, 95% CI: 39.1-55.0%).

On average, 65.1% (SD: 25.0) of the nine questions of the section about **indications for osteopathic treatment** were answered correctly. The doctors know that osteopaths mainly treat problems of the musculoskeletal system, acute and chronic pain (94.0%: 95% CI: 88.9-96.8%), health problems after accidents, headache, migraine and vertigo (82.6%: 95% CI: 75.7-87.8%) and dysfunctions of the masticatory apparatus (71.1%: 95% CI: 63.4-77.8%). They are not well informed about the fact that osteopaths can also treat problems of the urogenital tract (40.3%: 95% CI: 32.7-48.3%), pregnancy-related problems (47.0%: 95% CI: 39.1-55.0%) and afflictions of the digestive system (47.7%: 95% CI: 39.1-55.0%).
They also have a lack of knowledge about contraindications for osteopathic treatment (27.5%: 95% CI: 21.0-35.2%).

On average, 67.1% (SD: 26.2) of the six questions of the section about **osteopathic training** were answered correctly.
The doctors are informed about the duration of the osteopathic training (68.1% right answers, 95% CI: 60.1-75.1%) and about the fact that the training is established and based on a medical profession and that not everybody is allowed to attend basic osteopathic training (68.1%: 95% CI: 60.1-75.1%).
78.6% of the doctors (95% CI: 69.1-82.6%) know that they can find an osteopath via the websites of the osteopathy schools.
The cost of one hour of osteopathic treatment (60€ to 90€) seems appropriate for 79% of the doctors.

Most of the doctors (71.1%) co-operate with physiotherapists, 52.3% with homeopaths and 40.3% with osteopaths. This is the second lowest value for the specified professional groups.
Neither significant nor distinct influences of sex, age, professional experience and specialty on the number of co-operations with osteopaths can be observed.

General practitioners (GP) co-operate most frequently with physiotherapists (87.7 valid percent), dentists with homeopaths and osteopaths (34.5 valid percent), and other specialists with physiotherapists (78.7 valid percent).

Considering all answers of the questionnaire, female doctors are better informed about osteopathy than male doctors (65.9%, SD: 16.3 versus 59.9%, SD: 19.8; Wilcoxon test: W=3109, p=0.07). Doctors aged 40 to 50 have the highest level of knowledge about osteopathy (65.3% right answers, SD: 17.4), while doctors older than 50 have the lowest level of knowledge (Wilcoxon test: W=2143, p=0.09). General practitioners are better informed than dentists (65.5%, SD: 17.1 versus 59.1%, SD: 19.5; Wilcoxon test: W=838, p=0.10).

9. Discussion

In this chapter the data of the returned questionnaires are interpreted and discussed in relation to the central questions and the results are compared with the existing studies by Eppensteiner (2007) and Seewald (2007). Subsequently the limitations of this study will be examined critically and key aspects for future studies attempting to answer the question "What do medical doctors know about osteopathy?" will be identified.

The data presented in this study were collected by means of the questionnaire developed by Maria Eppensteiner (Eppensteiner, 2007) entitled "Knowledge of medical doctors about osteopathy". This title demands that the term "knowledge" as well as the assessment of knowledge be defined.
There are two forms of knowledge: first, there is personal, subjective knowledge ("somebody knows something") and second, there are external, objective representations of such personal knowledge ("something contains knowledge") (Gottschalk-Mazouz, 2007).
In the present study, knowledge is defined as "correct statements", i.e. statements that are marked "true". These are answers that correspond to the opinion of a majority of osteopaths (Eppensteiner, 2007). But also "incorrect statements" that are judged as "not true" form part of knowledge. These are answers that do not correspond to the view of a majority of osteopaths (Eppensteiner, 2007). They are considered an assessment by the doctors, irrespective of whether this assessment is correct or not. Missing answers, wrong answers or "do not know" answers are defined as "lack of knowledge".
A group of osteopaths (Eppensteiner, 2007) determined in advance what are true and not true statements in terms of the questionnaire in the framework of Eppensteiner's study (2006). Eppensteiner collected their opinions and defined the statements that this group of osteopaths considered to be true. However, we cannot draw definite conclusions concerning the correctness of the statements. We can only state that the true statements in versions one, which was designed in 2006 (Eppensteiner, 2007), and two (Eppensteiner, 2007) are true for a certain group of osteopaths, but a generalization of their correctness must be made with caution.
The assessment of the knowledge of the medical doctors about osteopathy took place by means of the assessment criteria of a traditional grading system (Glabionat, 2006), using the five grading levels of the Austrian school system (BGBl. n^{o}. 371/1974, 1974, last amended by BGBl. II n^{o}. 35/1997, 1997). Grade "five" (*insufficient*) reflects a knowledge of 50% and less, grade "four" (*sufficient*) between 50.1% and 63.9%, grade "three" (*satisfactory*) between 64% and 79.9%, grade "two" (*good*) between 80 and

89.9% and grade "one" (*very good*) between 90% and 100% (Federal Ministry for Science and Research, 2010).
It must be considered, however, that the traditional Austrian school grading system can only be used for a momentary performance assessment and only allows for limited conclusions regarding the medical doctors' actual knowledge (Glaboniat, 2006). Hence, the grading system used for the results of this study constitutes a simplified way of categorizing knowledge. On the other hand, however, its year-long tradition makes it easily understandable and usable. Other assessment schemes such as portfolios and verbal assessments are more complex in their use and therefore not convenient for the framework of this study (Glaboniat, 2006).

The response rates of the questionnaires were 25.9% (149/563) in the small-town and rural Weinviertel region and 16.3% (40/245) in the town of Bregenz (Seewald 2007). These response rates are considerably lower than those of comparable studies on an international level, which yielded response rates of more than 50% (Schmidt, Jacobs and Barton, 2002; Perry and Dowrick, 2000; Emslie, Campbell and Walker, 2002). At 95.35% (41/43), Eppensteiner's pilot study (Epppensteiner, 2007) produced a particularly high response rate.
The response rate should be increased. A disadvantage of impersonal questionnaires is that the participants are more inclined not to return them. In line, one way to increase the response rate could be to establish personal contact with the doctors in their practice, but this requires a lot of time and effort when dealing with a large amount of data. Another option to be able to address a larger number of doctors in person would be to target events designed for this professional group, where questionnaires could be handed out and collected on location.
Additionally, it could be investigated why the medical doctors did not fill in and return the questionnaire which was sent to them. One possibility to investigate this would be to select a number of doctors who have not returned the questionnaire corresponding to the response rate and establish personal contact with them to find out both whether they have knowledge about osteopathy and why they did not return the completed questionnaire. This form of questioning is very time-consuming and would only be possible with a considerable financial and personal effort.

As the number of questionnaires which was sent to the medical doctors in private practice in the Weinviertel region was relatively small (cf. Schmidt, Jacobs and Barton, 2002; Perry and Dowrick, 2000; Emslie, Campbell and Walker, 2002), the numbers of medical doctors in the three different groups (especially the number of dentists) were also

quite small. Accordingly the statistical analysis and the interpretation of "significant" results were rather problematic; as a consequence, no general conclusions can be drawn from the results. In conclusion, the number of surveyed medical doctors should be increased to include the other three regions of Lower Austria in order to increase the number of doctors in the various groups.

As to the questionnaire itself, the three existing versions of the questionnaire (version one (2006) and two by Eppensteiner (2007) and the version by Seewald (2007)) should be revised and combined into one uniform questionnaire which would be independent of the basic discipline in order to promote the osteopathic profession more effectively. Such a questionnaire could then be used by any osteopath, independent of his or her basic discipline, to both convey osteopathic knowledge to a larger number of doctors and identify their level of knowledge about osteopathic treatment.

Such an adapted questionnaire could then be sent to medical doctors in other regions of Austria. A survey of this size would yield a larger amount of data, which in turn would allow for a more extensive statistical analysis. Moreover, the regions could be compared more easily and conclusions could be drawn regarding the differences between urban and rural regions.

In addition, such a survey would allow for a meaningful comparison of groups of medical doctors, as the number of specialists would be more substantial and thus more representative for the purposes of a statistical analysis.

As there were mistakes in the medical doctors' contact data, it has to be concluded that the registers of the Medical Associations are not always up to date: 43 emails did not reach their recipient and six of the medical doctors listed had already retired from practice. In order to facilitate the easier and more cost-efficient mailing by email, the contact data could be enhanced by data from other lists.

Other registers such as the "Arztverzeichnis" (medical register) (2006) could complement the lists of the Lower Austrian Medical Association (Lower Austrian Medical Association, 2006) and the Dentists' Association (Lower Austrian Dentists' Association, 2006). It must be taken into consideration, however, that those lists are not official lists and that they do not entail a registration obligation for the medical doctors. These unofficial lists should then also be mentioned as a selection criterion.

Another aspect to be considered was that the cover letter sent to the doctors together with the questionnaire did not indicate a deadline for returning the completed questionnaire. Replies were sent until 29/09/2006; after that no further questionnaire was returned. In order to set a clearer time limit for returning the questionnaire and to thereby provide a tighter time management indication, a deadline could be established.

Furthermore, the title of the questionnaire included the term "level of knowledge"; this might have caused a feeling of insecurity among the medical doctors, who seem to have avoided giving the answer "do not know" when answering the questionnaire and instead preferred not to answer the question at all. This strategy occurred both when the doctors had knowledge and when they had a lack of knowledge (Gottschalk-Mazouz, 2007).
To avoid this conflict, maybe the term "level of knowledge" should therefore be substituted by the word "familiarity". This more innocuous term could lead to a better chance of collecting and imparting information than when asking about somebody's "knowledge". The readiness to obtain more information about osteopathy is given (Cateuuw, 2003). It is essential that medical doctors have knowledge about osteopathy (Schmidt, 2006), because then they will refer to or prescribe osteopathy. When both professional groups, osteopaths and medical doctors, have increased knowledge about each other, the dialogue between the groups can be improved (Philippi, 2004).
A further point of criticism concerns the wording of the questions, which leaves too much room for interpreting the answers during the analysis of data. It is not possible to determine whether the answers of the doctors are based on their knowledge or lack of knowledge, or whether they are mere assumptions (believing they know something) (Gottschalk-Mazouz, 2007). The reliability of results is therefore questionable.
In conclusion, the questions should be expressed clearly through precise use of language (Ayer, 1956) and the time frame for completing the questionnaire should be optimized (Hicks, 2000). The questionnaire should furthermore be designed to give members of time-consuming professions an incentive to complete it (Kirchhoff et al., 2000), as this type of survey is still the means of choice for obtaining a great amount of information from a large number of people and for transmitting information (Bortz and Döring, 1995).
Closed questions allow for a better standardization and evaluation of the questionnaire (Hicks, 2000), whereby the comparability between the regions, between the different groups of doctors as well as between the individual doctors is increased.

To a limited extent, it is possible to compare the questionnaire used in this study, which was designed by Eppensteiner in 2006, with version two of Eppensteiner's questionnaire (2007) and Seewald's questionnaire (2007). They only overlap regarding some questions; see questions 12, 15, 16 in the respective questionnaires (Eppensteiner, 2007, Seewald, 2007).
A further reason for the limited comparability of the study at hand with Sven Seewald's study (2007) lies in the fact that the results of the town Bregenz cannot be directly compared to the small-town, rural Weinviertel region.

Moreover, the distribution of educational backgrounds within the groups of doctors differs from the one in Seewald's study (Seewald, 2007).

The questionnaire consists of two parts. The demographic, personal part B contains eight questions. The general part A consists of 25 questions, which were categorized into nine groups. For the evaluation of results, the mean values of these nine groups were used and assessed.

The total score of knowledge (mean) shows that the surveyed doctors have "sufficient" knowledge about osteopathy (62.7% correct answers, SD: 18.4). The maximum value of the evaluated questionnaires shows "good" knowledge (89.3%).
Both in Bregenz (Seewald, 2007) and in the Weinviertel region, the general knowledge of medical doctors about osteopathy shows "satisfactory" correspondence with the correct answers as elaborated by Eppensteiner (Eppensteiner, 2007).

The common features of the various definitions of osteopathy, namely that osteopathy is a manual and holistic treatment method which supports the self-healing capacity of the body and which is not a synonym for chiropractic, were recognized both in the western Austrian town of Bregenz (Seewald, 2007) and in eastern Austria (Eppensteiner, 2007; present study) by the majority of the medical doctors between levels "sufficient" and "very good".

A more detailed evaluation of the answers shows that the medical doctors have "satisfactory" knowledge about general questions regarding osteopathy (76.6% correct answers, SD: 25.1). Answers to the question whether energetic treatments form part of osteopathic treatment reveal a higher degree of uncertainty (48.3%: 95% CI: 40.4-56.3%). The doctors regard anything related to alternative medicine (Ernst et al., 1995) such as the "five elements" (32.9% correct answers) as belonging to osteopathy. Osteopathy is classified as complementary medicine (Ernst and Dixon, 2004). The borderlines are not clear.

On average, "sufficient" knowledge (66.4% correct answers, SD: 28.9) could be identified in the answers to the five questions regarding body structures. Broken down, the knowledge of the doctors is "very good" or "good" with respect to osteopaths treating the musculoskeletal system (91.9%, 95% CI: 86.5-95.3%) and the spine (81.2%, 95% CI: 74.2-86.7%). Their knowledge about the fact that fasciae (61.7% correct answers, 95% CI: 53.7-69.2%) and cranial bones can be treated osteopathically (63.1%, 95% CI:

55.1-70.4%) is "sufficient". However, their knowledge regarding the fact that inner organs can also be treated by means of osteopathy is insufficient (34.2% correct answers, 95% CI: 27.1-42.2%).
Similarly, the medical doctors' knowledge regarding the fact that osteopathic Muscle Energy Techniques have nothing in common with energetic treatment methods (30.9% correct answers, 95% CI: 24-38.7%), that osteopathy also includes active techniques (21.5%, 95% CI: 15.6-28.7%) and that reflex zones form part of osteopathic treatment (28.2% correct answers, 95% CI: 21.6-35.9%) was insufficient. "Satisfactory" knowledge was identified regarding the fact that osteopathy contains craniosacral techniques (79.9%: 95% CI: 72.7-85.5%). Both in Bregenz (Seewald, 2007) and in the Weinviertel region the technical terms Muscle Energy Techniques and reflex zones led to uncertainty in answering the questions. Additionally, the medical doctors generally regarded osteopathy as a passive treatment method.

The medical doctors considered it more likely that elderly people formed part of the target group of osteopathic treatment (87.9% correct answers, 95% CI: 81.7-92.2%) than children and newborn babies (47% correct answers, 95% CI: 39.1-55%).

The study further shows that osteopathy is seen as a gentle treatment method by the medical doctors (87.9%, 95% CI: 81.7-92.2%). They do not regard forceful (18.8%, 95% CI: 13.3-25.8%) or painful techniques (4.7%, 95% CI: 2.3-9.4%) as part of osteopathy. This corresponds to an "insufficient" level of knowledge with regard to these aspects. For one doctor the expression "forceful" was problematic.

The knowledge among the medical doctors about indications and contraindications is very diverse (on average 65.1% correct answers, SD: 25.0). Broken down, the knowledge about the fact that osteopaths treat mainly problems of the musculoskeletal system, acute and chronic pain (94.0%, 95% CI: 88.9-96.8%), health problems after accidents (81.9%, 95% CI: 74.9-87.2%), headache, migraine and vertigo (82.6%, 95% CI: 75.7-87.8%) and dysfunctions of the masticatory apparatus (71.1%, 95% CI: 63.4-77.8%) ranges from "very good" to "satisfactory". They are insufficiently informed about the fact that osteopaths can also treat problems of the urogenital tract (40.3%, 95% CI: 32.7-48.3%), pregnancy-related problems (47.0%, 95% CI: 39.1-55%) and afflictions of the digestive system (47.7%, 95% CI: 39.8-55.6%). They also have a lack of knowledge about contraindications (27.5% correct answers, 95% CI: 21-35.2%).
Seewald (2007) and Eppensteiner (2007) recommend dividing the indications for osteopathic treatment into acute and chronic problems, as the number of treatment units

depends on the duration of the ailment. Neither the WSO (Vienna School of Osteopathy, 2009) nor the OEGO (Austrian Society for Osteopathy, 2009) provide precise data regarding the number of treatment units necessary per indication. Regardless of all considerations, it therefore remains difficult to define an exact number of treatment units; after all, every organism reacts differently to the therapeutic stimulus and pain, and physical complaints are subjective perceptions (Groß, 2009). The additional comments of three medical doctors confirm the considerations that it is not possible to determine a concrete number of treatment units.

The Bregenz-based medical doctors seem to have more faith in the efficiency of osteopathic treatment (Seewald, 2007). 60% of the Bregenz-based doctors (compared to 49% of the medical doctors active in the Weinviertel region) answered the corresponding question correctly. Bregenz-based doctors think that it takes 5 to 10 osteopathic treatment units to heal a patient; Weinviertel-based doctors think that it takes 10 to 30.
Due to the not exactly defined duration of treatment, the question "how many osteopathic treatment units are necessary on average to lead to a healing process" led to misunderstandings. This issue raises the question whether treatment success should be defined depending on treatment duration or treatment efficiency.

The knowledge among the medical doctors about where to find a fully trained osteopath is insufficient (40.3%, SD: 26.6). An additional aspect should be added to the question "How do I find a fully trained osteopath?". Nowadays the internet plays a very important role in the search for information. "To google" has a special meaning in today's language use and the yellow pages are also very frequently consulted via the internet. Therefore the lists of osteopaths of the official websites of the WSO (Vienna School of Osteopathy, 2009), the IAO (The International Academy of Osteopathy, 2010) and the OEGO (Austrian Society for Osteopathy, 2009) play an essential role when it comes to finding an appropriately trained osteopath. The fact that an osteopath is included in one or more of these official lists should be a sign of quality. In Austria, these three organizations are of key importance for the clients' knowledge processes. They provide the knowledge for a knowledge check and, at the same time, perform such a check themselves (Gottschalk-Mazouz, 2007). By imparting knowledge about osteopathy to other professional groups and patients, osteopathy positions itself within the Austrian health system and thereby also within the health system of the European Community. It is therefore essential to draw a clear line between osteopathy and purely energetic treatment methods, as in today's science-based culture (Petit, 2000), efficacy (Perry and

Dowrick, 2000) and scientific verifiability are key aspects of legitimate, conventional diagnosis and treatment methods for both doctors (White, Resch and Ernst, 1997) and patients.

The medical doctors show "satisfactory" knowledge regarding the required medical discipline to practise osteopathy (65.8% correct answers) and regarding general knowledge about osteopathic treatment (67% correct answers, SD: 26.2).

Differences in the answers could be found regarding the duration of the osteopathic training (27% correct answers among the Bregenz-based doctors, Seewald, 2007, and 54% among the Weinviertel-based doctors). A possible reason for this is that osteopaths who practise in Vorarlberg may undergo training in one of the neighbouring countries such as Germany or Switzerland. Possibly these countries offer osteopathic training that entails a lower number of training hours and hence does not correspond to the standards of the OEGO.
As mentioned by Maria Eppensteiner in version 2 of her questionnaire (Eppensteiner, 2007), this point should be amended by adding "five years" (The International Academy of Osteopathy, 2010). The academic further training leading to a BSc and MSc in osteopathy could also be added to the selection (The International Academy of Osteopathy, 2010, Vienna School of Osteopathy, 2009).

Summing up, the key question regarding the level of knowledge about osteopathy of medical doctors in private practice in the rural and small-town Weinviertel region reveals "satisfactory" to "very good" knowledge regarding some of the questions. However the knowledge regarding the questions that require more specific osteopathic knowledge was poor.

From the results of the answers to the question "To what extent do medical doctors view osteopathy as an option for diagnosis and therapy in their daily work?" we conclude that most doctors most frequently co-operate with physiotherapists (71.1%). In terms of multiprofessional co-operation, osteopaths are in the second-to-last position (40%). The same tendency can be observed in Bregenz (87% of the doctors indicated that they co-operated with physiotherapists and 40% with osteopaths, cf. Seewald, 2007).
Neither significant nor distinct influences of sex, age, professional experience or specialty on the number of co-operations with osteopaths can be observed. General practitioners (GP) co-operate most frequently with physiotherapists (87.7%), dentists

with homeopaths and osteopaths (34.5%) and other specialists with physiotherapists (78.7%).
The co-operation with osteopaths is most commonly initiated by medical doctors of the age group '40 to 50' and doctors with '5 to 10' years of professional experience.
One doctor criticized the insufficient differentiation of the question "What other professional groups do you co-operate with?". One option to more specifically express the question could be: "What medical professional groups other than your own do you co-operate with?" This way a more exact definition of the professional groups would be given in the wording of the question.
With regard to the question whether there are differences concerning the knowledge of the medical doctors depending on their sex, age, professional experience or specialty, the results show that female medical doctors are better informed about osteopathy than their male counterparts (65.9% (SD: 16.3) versus 59.9% (SD: 19.8), Wilcoxon test: W=3109, p=0.07). Medical doctors in the age group '40 to 50' have the highest level of knowledge (65.3% correct answers, SD: 17.4), older doctors the lowest level of knowledge (Wilcoxon test: W=2143, p=0.09). In correspondence with their training, general practitioners are better informed than dentists (65.5% (SD: 17.1) versus 59.1% (SD: 19.5), Wilcoxon test: W=838, p=0.10).

These data confirm that there are differences regarding sex, age, professional experience and specialty.
Sven Seewald's study (Seewald, 2007) did not enable an analysis of the differences in the knowledge about osteopathy among the medical doctors regarding sex, age, professional experience or specialty, as these factors were not linked to every question in the evaluation.

In general it can be stated that medical doctors both in Bregenz and in the Weinviertel region feel badly informed about osteopathy (70 valid percent) and would like to have more information (75 valid percent). While medical doctors are informed about general questions regarding osteopathy, the more specific knowledge is too poor to refer to or prescribe osteopathy also coming from other fields such as visceral diagnoses, paediatrics, or pregnancy care.
Meetings and training events for medical doctors could be used to inform them about osteopathy and raise their awareness with respect to this discipline, thereby reducing the uncertainties among the best informed medical doctors of the age group '40 to 50' with professional experience with regard to their knowledge about osteopathy. Young doctors with little professional experience should receive knowledge about osteopathy already

during their training in order to be well-informed about the possible spectrum of osteopathic treatment.

Accordingly, the OEGO could issue a revised flyer to competently inform medical doctors about osteopathy and at the same time provide an overview of the possibilities offered by osteopathy.

10. Conclusion

In Austria, the practice of osteopathy is not legally regulated. Osteopaths treat patients in their basic discipline as medical doctors, dentists or physiotherapists, while initial patient contact is reserved for medical doctors and dentists. Osteopaths with physiotherapy as a basic discipline may therefore only treat patients if osteopathic treatment is prescribed by a medical doctor. It is thus of interest to investigate the level of knowledge about osteopathy among the medical doctors in private practice in the Weinviertel region.

By means of an empirical, quantitative questionnaire, which was developed by Eppensteiner in 2006 and tested in a pilot study, the medical doctors in private practice in the Weinviertel region were questioned about osteopathy. The following questions were answered on the basis of the results provided by the survey.

- What is the current level of knowledge about osteopathy among medical doctors in private practice in the Weinviertel, a small-town and rural Austrian region?
- To what extent do medical doctors view osteopathy as an option for diagnosis and therapy in their daily work?
- Are there differences concerning the knowledge of the medical doctors depending on their sex, age, professional experience and specialty?

The response rate was approximately 25% (149/563 answers).

On average, medical doctors have sufficient general knowledge about osteopathy.

Insufficient knowledge could be identified regarding more specific questions such as the option of osteopathic treatment of problems of the urogenital system, pregnancy-related problems, problems of the gastrointestinal tract or the possibility of treatment of children and newborn babies.

On the other hand, the doctors demonstrated "good" knowledge about the possibility of treatment of problems of the musculoskeletal system and the spine and about elderly people as a target group.

Osteopathy is regarded as a gentle treatment method by the medical doctors. They also classify osteopathy as a form of CAM; however, they also regard any other methods that bear an energy-related reputation as forming part of osteopathic treatment.

Medical doctors co-operate more frequently with physiotherapists (70%) than with osteopaths (40%).

The age group '40 to 50' showed the highest level of knowledge (average of correct answers: 65.3%, SD: 17.4); female doctors are better informed than male doctors (65.9%, SD: 16.3 versus 59.9%, SD: 19.8) and GPs have more knowledge than dentists (65.5%, SD: 17.1 versus 59.1%, SD: 19.5).

In spite of their general knowledge about osteopathy, the medical doctors feel not sufficiently informed about osteopathy (70%).
This indicates an existing interest of the medical doctors in obtaining more information about osteopathy. It is essential for medical doctors to have more specific knowledge about osteopathy in order to be able to make more targeted referrals to or prescriptions of osteopathic treatment. The dialogue between the professional groups can only be improved if they know more about each other's work.

11. Bibliography

American Academy of Osteopathy (AAO): http://www.academyofosteopathy.org/consumers, accessed: 2009-10-21

Australian Osteopathic Association (AOA-Aust): http://www.osteopathic.com.au/index.php/what_is_osteopathy, accessed: 2009-10-21

Austrian Social Security (Österreichische Sozialversicherung): http://www.sozialversicherung.at, accessed: 2008-09-11

Austrian Social Security Institutions (Österreichische Sozialversicherungsanstalten): information request by e-mail sent to 20 health insurance companies in Austria on 2009-02-04

Austrian Society of Osteopathy (Österreichische Gesellschaft für Osteopathie (OEGO) http://www.oego.org, accessed: 2009-10-13

Austrian Society of Osteopathy (Österreichische Gesellschaft für Osteopathie): Verhaltenscodex der Mitglieder der Österreichischen Gesellschaft für Osteopathie (ÖGO) Mai 2005: Der osteopathische Standard 2005, Österreichische Gesellschaft für Osteopathie. Vienna. 2005

Ayer, A.J.: The problem of knowledge. Macmillan. London. 1956

Belgian Society of Osteopathy: http://www.osteopathie.be/EN/Osteopathy-Belgium-SBO-BVO-Organisation/Osteopathy-Belgium-Recognised-Professional-Union.html, accessed: 2009-10-15

BGBl. I N°. 126/2005c, 2005: Federal Law of 18 November 2005: Zahnärztegesetz 2005 (ZÄG), Bundesgesetz über die Ausübung des zahnärztlichen Berufs und des Dentistenberufs. 2005

BGBl. I N°. 169/1998: Federal Law of 11 October 1998: Ärztegesetz 1998 (ÄrzteG), Ärztegesetz und Änderung des Ausbildungsvorbehaltsgesetzes. 1998

BGBl. N°. 371/1974, last amended by **BGBl. II N°. 35/1997:** Verordnung des Bundesministers für Unterricht und Kunst vom 24. Juni 1974 über die Leistungsbeurteilung in Pflichtschulen sowie mittleren und höheren Schulen (Leistungsbeurteilungsverordnung) §14. 1974

BGBl. N°. 460/1992 last amended by **BGBl. N°. 327/1996**: Federal Law of 31 July 1992: Regelung der gehobenen medizinisch-technischen Dienste (MTD-Gesetz), Bundesgesetz über die Regelung der gehobenen medizinisch-technischen Dienste. 1992

Bieri, P.: Generelle Einführung. In: Analytische Philosophie der Erkenntnis, P. Bieri (Ed.). Wernheim. 1997. p. 75-84

Bortz, J.; Döring, N.: Forschungsmethoden und Evaluation für Sozialwissenschaftler. Springer Verlag. Berlin. 1995

Cateuuw, T.M.J.: Die Zusammenarbeit zwischen Osteopathen und Personen aus anderen Gesundheitsberufen in Österreich: Eine Pilotstudie mittels Fragebogen unter Osteopathen. IAO. 2003

Craig, E.: Was wir wissen können. Pragmatische Untersuchungen zum Wissensbegriff. Suhrkamp Verlag. Frankfurt/Main. 1993

Davidson, D.: Subjektiv, intersubjektiv, objektiv. Suhrkamp Verlag. Frankfurt/Main. 2004

Dresden University of Technology: http://www.tu-dresden.de/ioer/__PLAIN(er_wein1.htm, accessed: 2006-06-30

Eppensteiner, M.: Development of a questionnaire to analyse the knowledge of medical doctors about osteopathy. WSO. Danube University Krems. 2007

Emslie, M.J.; Campbell, M.K.; Walker, K.A.: Changes in awareness of, attitudes to, and use of complementary therapy in North East Scotland: survey in 1993 and 1999. Complementary therapies in medicine. Great Britain. 2002 Sept; 10(3): 148-153

Engel, R.: Osteopathie in Europa, Stand Juli 2006. Skriptum der Österreichischen Gesellschaft für Osteopathie. May 2007. Chapter 7. 2007

Ernst, E.; Resch, K.L.; Mills, S. et al.: Complementary medicine, a definition. Br. J. Gen. Pr. 45:506. 1995

Ernst, E.; Dixon, A.: Regulating pharmaceuticals in Europe striving for efficiency, equity and quality. Open University Press. WHO. Chapter 18. 2004

Federal Ministry for Education, Art and Culture: http://www.bmukk.gv.at/schulen/recht/gvo/lb_vo.xml#11, accessed: 2010-07-31

Forum for Osteopathic Regulation in Europe (FORE): http://www.forewards.eu, accessed: 2010-05-13

Franke, H.: Muscle Energy Technique. Osteopathische Medizin. Issue 3/2005. Elsevier GmbH, Urban & Fischer. p. 19-24. 2005

General Osteopathic Council (GOsC) a: http://www.osteopathy.org.uk/resources/press-office/faqs/, accessed: 2009-10-02

General Osteopathic Council (GOsC) b: http://www.osteopathy.org.uk/information/about-osteopathy/, accessed: 2009-10-02

German Osteopathic Association (Verband der Osteopathen Deutschland e.V. (VOD)): http://www.osteopathie.de/de-osteopathie.html, accessed: 2009-10-21

German Osteopathic Association (Deutsche Gesellschaft für Osteopathische Medizin e.V. (DGOM)): http://www.dgom.info/osteopath_medizin.html, accessed: 2009-10-21

Gevitz, N.: Osteopathic medicine in America. Second edition. The Johns Hopkins University Press. Baltimore. Maryland. p. 22. 2004

Gilliar, W.G. et al.: Neurologic basis of manual medicine. Physical Medicine and Rehabilitation Clinics of North America. Volume 7. 4 November 1996

Glaboniat, M.: Das Papier nicht wert. Zum Problem schulischer Leistungsbeurteilung und neue Chancen durch Qualitäts- und Leistungsstandards. In: ide 4/2006

Gottschalk-Mazouz, N.: Risiko. In: Handbuch Ethik, M. Düwell, C. Hübenthal and M.H. Werner (Eds.). Stuttgart. p. 485-491. 2002

Gottschalk-Mazouz, N.: Auf dem Weg in die Wissensgesellschaft? Anforderungen an einen interdisziplinär brauchbaren Wissensbegriff. In: Kreativität. XX. Deutscher Kongress für Philosophie, September 26-30 2005 in Berlin. Sektionsbeiträge. Vol. 2. G. Abel (Ed.). Berlin. p. 349-360. 2005

Gottschalk-Mazouz, N.: Was ist Wissen? Überlegungen zu einem Komplexbegriff an der Schnittstelle von Philosophie und Sozialwissenschaften. In: Wissen in Bewegung. Dominanz, Synergien und Emanzipation in den Praxen der "Wissensgesellschaft". Weilerswist. Velbrück. p. 21-40. 2007

Greenman, Philip E.: Lehrbuch der osteopathischen Medizin. 3rd edition. Haug. Stuttgart. 2005

Groß, H.: Einfluss manueller Therapie an der oberen HWS auf die Schmerz-empfindlichkeit der Kaumuskulatur bei CMD. Manuelle Therapie. 13: 1-7. Georg Thieme Verlag KG Stuttgart. New York. 2009

Hahnemann, S.: Reine Arzneimittellehre. Vol. 2. Dresden. Leipzig. 1833

Hartmann, Ch.: Das große Sutherland-Kompendium. Jolandos. Unterwössen. p. I-Vii. 2004

Hartmann, Ch.: Das große Still-Kompendium. 2nd edition. Jolandos. Unterwössen. p. 41-45. 2005

Hartmann, Ch.: EFO Almanac 2006. 1st edition. Jolandos. Unterwössen. 2006

Hicks, C.M.: Research methods for clinical therapists. Churchill Livingstone. UK. 2000

International Academy of Osteopathy (IAO): http://www.iao.be, accessed: 2010-05-13

Jolandos: http://www.jolandos.de, accessed: 2008-03-25

Jütte, R.: Geschichte der alternativen Medizin: Von der Volksmedizin zu den unkonventionellen Therapien von heute. Verlag C.H. Beck. Munich. 1996

Kern, A.: Quellen des Wissens. Zum Begriff vernünftiger Erkenntnisfähigkeiten. Suhrkamp Verlag. Frankfurt/Main. 2006

Kirchhoff, S.; Kuhnt, S.; Lipp, P.; Schlawin, S.: Machen wir doch einen Fragebogen. Leske und Budrich. Opladen. 2000

Krönke, K.: A questionnaire to evaluate the professional field of osteopathy in Austria. WSO. 2003

Liem, T.; Dobler, T.K.: Leitfaden Osteopathie – Parietale Techniken. Urban & Fischer Verlag. Munich, Jena. 2002

Ligner, B.; Van Assche, R.: Gelenke der unteren Extremität – Mobilisation und Korrektur. Verlag für Osteopathie Dr. Erich Wühr. Bad Kötzting/Bayer. Wald. 1993

Lower Austrian Dentists' Association (Landeszahnärztekammer Niederösterreich): http://www.noe.zahnaerztekammer.at, accessed: 2006-06-30

Lower Austrian Medical Association (Ärztekammer für Niederösterreich): http://cms.arztnoe.at/cms/ziel/100969/DE/, accessed: 2006-06-30

Mayer, J.: Wo steht die Osteopathische Medizin? Schlangenbad 26-28. October 2001. p. 46-51. 2001

McGovern, J.: Das bedeutende Vermächtnis der Prinzipien. Osteopathische Medizin. Issue 1/2006. Elsevier GmbH, Urban & Fischer. p. 13-18. 2006

Medical register (Arztverzeichnis): http://www.arztverzeichnis.at, accessed: 2006-06-30

Merkur: http://www.merkur.at/cms/news/1914.htm, accessed: 2008-09-16

Muki: http://www.muki.com, accessed: 2010-05-13

Nonaka, I.; Takeuchi, H.: Die Organisation des Wissens. Wie japanische Unternehmen eine brachliegende Ressource nutzbar machen. (Original title: The knowledge-creating company, 1995). Frankfurt/Main. 1997

Osteopathic European Academic Network (OSEAN): http://www.osean.com/index.php?option=com_content&view=category&layout=blog&id=81&Itemid=3, accessed: 2009-10-21

Osteopathic International Alliance: http://www.oiallance.org, accessed: 2008-08-17

http://www.osteopathie.be, accessed: 2009-10-15

Physio Austria – Federal Association of Austrian Physiotherapists (Bundesverband der Physiotherapeuten Österreichs): http://www.physioaustria.at/, accessed: 2008-09-11

Osteopathic Society of New Zealand (OSNZ): http://www.osnz.org/go/index.php/what_is_osteopathy/, accessed: 2009-10-21

Perry, R.; Dowrick, C.F.: Complementary medicine and general practice: an urban perspective, Complementary therapies in medicine. Volume 8. Issue 2. p. 71-75. 2000

Petit, **T.:** What influences primary care groups decisions to purchase osteopathy? BSO. UK. 2000

Philippi, H.: Aspekte des Dialogs zwischen Kinderarzt und Osteopath. DO. Deutsche Zeitschrift für Osteopathie. 2/2004. Hippokrates Verlag. p. 24-25. 2004

Plato: Theätet. Greek/German. Transl. and ed. Ekkehard Martens. Stuttgart. 1981

Regionalmanagement: http://www.regionalmanagement-noe.at/uploads/_perspektiven_weinviertel.pdf, accessed: 2008-09-12

Schandl, T.: Secretariat of the WSO: Personal notification. 2007-10-18. Vienna. 2007

Schmidt, K.; Jacobs, P.A.; Barton, A.: Cross-cultural differences in GPs' attitudes towards complementary and alternative medicine: a survey comparing regions of the UK and Germany. Complement Therapy Medicine. September. 10 (3): 141-7. 2002

Schmidt, S.: Osteopathie und Zahnmedizin, Interview with Dr. med. dent. Erich Wühr. Osteopathische Medizin. Issue 1/2002. Urban & Fischer. 2002. p. 28-29

Seewald, S.: Doctors' knowledge of osteopathy in the district of Bregenz. WSO. Danube University Krems. 2007

Sommerauer, S.; Starzer, M.; Teml, M.: Noten nicht zu ersetzen? Entwicklungs-psychologie. Linz. 2006

Stellamor, K.; Steiner, W.: Handbuch des österreichischen Arztrechts. Volume II: Arzt und Ethik. Manz'sche Verlags- u. Universitätsbuchhandlung. Vienna. p. 105. 1999

Umbrella Organisation of Austrian Doctors for Holistic Medicine (Dachverband österreichischer Ärztinnen und Ärzte für Ganzheitsmedizin):
http://www.ganzheitsmed.at, accessed: 2008-09-11

Uniqua: http://www.uniqua.at, accessed: 2008-09-17

Vienna School of Osteopathy (Wiener Schule für Osteopathie (WSO)): http://www.wso.at, accessed: 2009-10-14

Vienna School of Osteopathy (Wiener Schule für Osteopathie (WSO)): http://www.wso.at/aerzte/index.html, accessed: 2009-10-14

Vierlinger, R.: Leistung spricht für sich selbst. Direkte Leistungsvorlage (Portfolios) statt Ziffernzensuren und Notenfetischismus. Heinsberg. Dieck. 1999

Weinviertel: http://www.weinviertel.at, accessed: 2008-07-18

Wernheim, J.: Osteopathy. Maidstone College of Osteopathy. Maidstone. 2005

White, A.R.; Resch, K.L.; Ernst, E.: Complementary medicine: use and attitudes among GPs. Family practice. 14. p. 302-306. 1997

WHO: http://www.euro.who.int/AboutWHO/Policy/20010827_1, accessed: 2008-09-20

WHO: Policy perspectives on medicines No. 2 May 2002. World Health Organization Geneva. 2002a

WHO: Traditional Medicine Strategy 2002-2005. Geneva. 2002b

Wilfling, E: Survey, systematisation and comparison of professional, advanced and continuing training programs for osteopathy available in Austria in the winter term 2006/2007. WSO. Vienna. 2007

World Osteopathic Health Organisation (WOHO):

http://www.woho.org/index.php?option=com_content&task=view&id=5&Itemid=31, accessed: 2009-10-21

Wölfing, A.: Entstehung und Bedeutung des Begriffs "Schulmedizin": Die Auseinandersetzung zwischen der naturwissenschaftlichen Medizin und Vertretern anderer Heilmethoden im 19. und 20. Jahrhundert. Diss. Med. Freiburg. 1974

12. List of abbreviations

AAO	American Academy of Osteopathy
aims_kn	aims of osteopathic treatment
AOA-Aust	Australian Osteopathic Association
ASO	American School of Osteopathy
BSc	Bachelor of Science
BSc (Hons)	Bachelor of Science with Honours in Osteopathy
BSO	British School of Osteopathy
CAM	complementary alternative medicine
CI	confidence interval
class_prof	classification of profession
CW	calendar week
Dents	dentists
DO	Doctor of Osteopathy
D.O.	*Diplom-Osteopath*
Dr.	Doctor
DUK	Danube University Krems
EFO	European Federation of Osteopaths
EU	European Union
FORE	Forum for Osteopathic Regulation in Europe
GB	Great Britain
gen_kn	general knowledge
GF	Gänserndorf district
GOsC	General Osteopathic Council
GP	general practitioner
HL	Hollabrunn district
IAO	International Academy of Osteopathy
ind_kn	indications and contraindications
inf_kn	information about osteopathy
KO	Korneuburg district
MD	medical doctor
MI	Mistelbach district
MSc	Master of Science
MScOSt	Master of Science in Osteopathy
n	frequency
NHS	National Health System

p	probability value
proc_kn	procedure of osteopathic treatment
ÖÄGO	Austrian Association of Doctors for Osteopathy
OEGO	Austrian Society of Osteopathy
OSEAN	Osteopathic European Academic Network
OSNZ	Osteopathic Society of New Zealand
SD	standard deviation
struct_kn	structures treated
targ_kn	target groups of osteopathy
TCM	traditional Chinese medicine
techn_kn	techniques used
TM	traditional medicine
total_kn	total knowledge
train_kn	osteopathic training
TU	Tulln district
UK	United Kingdom
VOD	German Osteopathic Society
WHO	World Health Organization
WOHO	World Osteopathic Health Organisation
WSO	Vienna School of Osteopathy

13. List of tables

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15. Appendix

15.1. Appendix 1 Questionnaire

	Master thesis by Stefan Wotruba			
	LEVEL OF KNOWLEDGE OF MEDICAL DOCTORS ABOUT OSTEOPATHY			
	Questionnaire by Maria Eppensteiner			
	Part A			
		True	**Not true**	**Do not know**
1. An osteopath works				
►	only with his hands	X	o	o
►	with his hands, homeopathy and medicinal herbs	o	X	o
2. Osteopathy				
►	is a holistic method	X	o	o
►	stimulates the self-healing capacity of the body	X	o	o
►	is another name for chiropractic	o	X	o
►	is predominantly preventive	o	X	o
3. The aim of osteopathy is to re-establish physical and psychological well-being by				
►	correcting movement restrictions of structures and tissues	X	o	o
►	treating osteoporotic bones	o	X	o
►	performing energetic treatment, exclusively	o	X	o

		True	Not true	Do not know
4. An osteopath examines and treats				
►	the spine, exclusively	o	X	o
►	the whole musculoskeletal system	X	o	o
►	fasciae	X	o	o
►	the cranial bones	X	o	o
►	the inner organs	X	o	o
5. An osteopath uses the following techniques				
►	Myofascial techniques	X	o	o
►	Craniosacral techniques	X	o	o
►	Techniques for mobilization and manipulation	X	o	o
►	Active relaxation techniques	X	o	o
►	Acupuncture	o	X	o
►	Muscle energy techniques	X	o	o
►	Reflex zones	X	o	o
6. Target group of ostepathic treatment				
►	Newborn babies	X	o	o
►	Infants and children younger than six years	X	o	o
►	Children older than six years	X	o	o
►	Adults	X	o	o
►	Elderly people	X	o	o

		True	Not true	Do not know
7. An osteopath treats				
►	only the dysfunctional part of the body	o	X	o
►	the whole body	X	o	o
8. An osteopath uses				
►	painful techniques	X	o	o
►	forceful techniques	X	o	o
►	gentle techniques	X	o	o
9. The following are indications for osteopathic treatment				
►	Chronic and acute musculoskeletal pain	X	o	o
►	Health problems after accidents	X	o	o
►	Afflictions of the digestive system	X	o	o
►	Headache, migraine and vertigo	X	o	o
►	Dysfunctions of the masticatory apparatus	X	o	o
►	Pregnancy-related problems and medical conditions related to birth	X	o	o
►	Problems of the urogenital tract (PMS, incontinence...)	X	o	o
10. There are contraindications for osteopathic treatment		X	o	o
	If yes, give a maximum of three examples:			
	……			

		True	Not true	Do not know
11. A patient can receive osteopathic treatment				
►	when taking medication	X	o	o
12. Osteopathic training in Austria lasts				
►	2 years	o	X	o
►	4 years	o	X	o
►	6.5 years	X	o	o
13. In Austria				
►	in order to be admitted to part-time osteopathic training, basic training in medicine, odontology, veterinary medicine, physiotheraphy, occupationaltherapy or midwifery is required.	X	o	o
►	no basic training in a medical profession is required for becoming an osteopath.	o	X	o
14. For practising osteopathy,				
►	it is necessary to have well founded basic knowledge of anatomy, physiology and pathology	X	o	o
►	it is necessary to have undergone thorough training of palpatory skills	X	o	o
►	it is necessary to have knowledge about the 'five elements'	o	X	o

		True	Not true	Do not know
15. How can your patient find a fully trained osteopath?				
►	On the webpages of the schools which offer a complete training programme in osteopathy	X	o	o
►	In the Yellow Pages	o	X	o
►	In a register available from the health insurance	o	X	o
16. How many units of osteopathic treatment do you think are necessary (on average) to lead to a healing process?				
►	1-5	o	X	o
►	5-10	X	o	o
►	10-30	o	X	o
17. On average, what do you think are the costs of osteopathic treatment per hour?				
►	Less than 60	o	X	o
►	60-90	X	o	o
►	90 or more	o	X	o
Questions, comments or criticism related to the questions in part A				
……				
……				

	Part B - Personal information			
	The data are strictly confidential and are gathered anonymously for statistical purposes only			
18. Professional training		**Please mark the correct option**		
►	General practitioner	O		
►	Specialist for ……	O		
►	I work in a hospital	O		
►	I work in my own practice	O		
19. How long have you been practising as a doctor?				
►	1-5 years	O		
►	5-10 years	O		
►	10-20 years	O		
►	More than 20 years	O		
20. What other professional groups do you co-operate with?				
►	Homeopaths	O		
►	Osteopaths	O		
►	Physiotherapists	O		
►	Occupationaltherapists	O		
►	Alternative medicine practitioners	O		
►	Nutrition specialists	O		
►	Other, e.g. ……..	O		

		Yes	No	
21. Have you ever undergone osteopathic treatment yourself?		O	O	
►	If yes, was your personal experience positive?	O	O	
	Reason: ……..……			
22. Have you ever referred patients to an osteopath?		O	O	
►	If yes, was your experience positive?	O	O	
►	Did the patients give positive feedback?	O	O	
	Comment ……..……..			
23. Personal level of knowledge				
►	Do you feel well informed about osteopathy?	O	O	
►	Would you like to have more information about osteopathy?	O	O	
	Comment ……..……			
24. Age group				
►	20-40	O		
►	40-50	O		
►	50 plus	O		
		Female	**Male**	
►	**25. Sex**	O	O	
	Thank you very much for your time and support!			

15.2. Frequency of answers

Statement	Answer	n	%	% total	missing	inconcrete	concrete
Statement 1-1: "An osteopaths works with his hands, singly"	true	133	97,08	89,26	6		
	not true	4	2,91	2,68			
	don't know	6		4,02		12	137
Statement 1-2: "An osteopaths works with his hands, homeopathy and medicinal herbs".	true	10	9,7	6,71	22		
	not true	93	90,29	62,41			
	don't know	24		16,1		46	103
Statement 2-1: "Osteopathy is a holistic method"	true	131	97,03	87,91	3		
	not true	4	2,96	2,68			
	don't know	11		7,38		14	135
Statement 2-2: "Osteopathy stimulates the self healing capacity of the body".	true	110	90,16	73,82	4		
	not true	12	9,83	8,05			
	don't know	23		15,43		27	122
Statement 2-3: "Osteopathy is another name for chiropractic".	true	8	6,4	5,36	11		
	not true	117	93,6	78,52			
	don't know	13		8,72		24	125
Statement 2-4: "Osteopathy predominantly works preventive".	true	17	14,4	11,4	13		
	not true	101	85,59	67,78			
	don't know	18		12,08		31	118
Statement 3-1: "Aim of osteopathy is to re-establish physical and psychical well-being by the correction of movement restrictions of structures and tissues"	true	135	98,54	90,6	4		
	not true	2	1,45	1,34			
	don't know	8		5,36		12	137
Statement 3-2: "Aim of osteopathy is to re-establish physical and psychical well-being by treating osteoporotic bones"	true	6	5,00	4,02	12		
	not true	114	95,00	76,51			
	don't know	17		11,4		29	120
Statement 3-3: "Aim of osteopathy is to re-establish physical and psychical well-being by energetic treatment, exclusively"	true	44	37,93	29,53	8		
	not true	72	62,06	48,32			
	don't know	25		16,77		33	116
Statement 4-1: "An osteopath examines and treats the spine, exclusively"	true	6	4,72	4,02	12		
	not true	121	95,27	81,2			
	don't know	10		6,71		22	127

Statement	Answer	n	%	% total	missing	inconcrete	concrete
Statement 4-2: "An osteopath examines and treats the whole musculoskeletal system"	true	137	97,85	91,94	0		
	not true	3	2,14	2,01			
	don't know	9		6,04		9	140
Statement 4-3: "An osteopath examines and treats fasciae"	true	92	82,88	61,74	11		
	not true	19	17,11	12,75			
	don't know	27		18,12		38	111
Statement 4-4: "An osteopath examines and treats the cranial bones"	true	94	78,99	63,08	9		
	not true	25	21,00	16,77			
	don't know	21		14,09		30	119
Statement 4-5: "An osteopath examines and treats the inner organs"	true	51	50,00	34,22	13		
	not true	51	50,00	34,22			
	don't know	34		22,81		47	102
Statement 5-1: "An osteopath uses myofascial techniques".	true	98	89,09	65,77	6		
	not true	12	10,9	8,05			
	don't know	33		22,14		39	110
Statement 5-2: "An osteopath uses craniosacral techniques"	true	119	95,96	79,86	5		
	not true	5	4,03	3,35			
	don't know	20		13,42		25	124
Statement 5-3: "An osteopath uses techniques for mobilisation and manipulation"	true	110	90,9	73,82	5		
	not true	11	9,09	7,38			
	don't know	23		15,43		28	121
Statement 5-4: "An osteopath uses active relaxation techniques"	true	65	67,01	43,62	13		
	not true	32	32,98	21,47			
	don't know	39		26,17		52	97
Statement 5-5: "An osteopath uses acupuncture"	true	6	5,45	4,02	14		
	not true	104	94,54	69,79			
	don't know	25		16,77		39	110
Statement 5-6: "An osteopath uses muscle energy techniques"	true	46	60,52	30,87	10		
	not true	30	39,47	20,13			
	don't know	63		42,28		73	76

Statement	Answer	n	%	% total	missing	inconcrete	concrete
Statement 5-7: "An osteopath uses reflex zones"	true	42	50,6	28,18	11		
	not true	41	49,39	27,51			
	don't know	55		36,91		66	83
Statement 6-1: "Newborn belong to the target group of osteopathy"	true	70	72,16	46,97	13		
	not true	27	27,83	18,12			
	don't know	39		26,17		52	97
Statement 6-2: "Infants younger than six years belong to the target group of osteopathy"	true	84	80,00	56,37	10		
	not true	21	20,00	14,09			
	don't know	34		22,81		44	105
Statement 6-3: "Children older than six years belong to the target group of osteopathy"	true	101	89,38	67,78	8		
	not true	12	10,61	8,05			
	don't know	28		18,79		36	113
Statement 6-4: "Adults belong to the target group of osteopathy"	true	131	98,49	87,91	8		
	not true	2	1,5	1,34			
	don't know	8		5,36		16	133
Statement 6-5: "Old people belong to the target group of osteopathy"	true	121	96,8	81,2	5		
	not true	4	3,2	2,68			
	don't know	19		12,75		24	125
Statement 7-1: "During treatment, an osteopath concentrates at the dysfunction, only"	true	10	8,19	6,71	16		
	not true	112	91,8	75,16			
	don't know	11		7,38		27	122
Statement 7-2: "During treatment, an osteopath works at the whole body"	true	139	98,58	93,28	0		
	not true	2	1,41	1,34			
	don't know	8		5,36		8	141
Statement 8-1: "An osteopath uses painful techniques"	true	7	6,6	4,69	14		
	not true	99	93,39	66,44			
	don't know	29		19,46		43	106
Statement 8-2: "An osteopath uses forceful techniques"	true	28	28,86	18,79	17		
	not true	69	71,13	46,3			
	don't know	35		23,48		52	97

Statement	Answer	n	%	% total	missing	inconcrete	concrete
Statement 8-3: "An osteopath uses gentle techniques"	true	131	99,24	87,91	3		
	not true	1	0,75	0,67			
	don't know	14		9,39		17	132
Statement 9-1: "Osteopathy is suitable for treatment of chronic and acute musculosceletal pain"	true	140	100,00	93,95	1		
	not true	0					
	don't know	8		5,36		9	140
Statement 9-2: "Osteopathy is suitable for treatment of health problems after accidents"	true	122	94,57	81,87	3		
	not true	7	5,42	4,69			
	don't know	17		11,4		20	129
Statement 9-3: "Osteopathy is suitable for treatment of afflictions of the digestive system"	true	71	72,44	47,65	6		
	not true	27	27,55	18,12			
	don't know	45		30,2		51	98
Statement 9-4: "Osteopathy is suitable for treatment of headache, migraine and vertigo"	true	123	94,61	82,55	5		
	not true	7	5,38	4,69			
	don't know	14		9,39		19	130
Statement 9-5: "Osteopathy is suitable for treatment of dysfunctions of the masticatory apparatus"	true	106	91,37	71,14	7		
	not true	10	8,62	6,71			
	don't know	26		17,44		33	116
Statement 9-6: "Osteopathy is suitable for treating pregnancy-related problems and medical issues around birth"	true	70	73,68	46,97	6		
	not true	25	26,31	16,77			
	don't know	48		32,21		54	95
Statement 9-7: "Osteopathy is suitable for treating problems of the urogenital tract (PMS, incontinence,…)"	true	60	66,66	40,26	7		
	not true	30	33,33	20,13			
	don't know	52		34,89		59	90
Statement 10: "There are contraindications for osteopathic treatment"	true	41	73,21	27,51	22		
	not true	15	26,78	10,06			
	don't know	71		47,65		93	56
Statement 11: "A patient can be treated osteopathically, in spite of taking drugs"	true	140	98,59	93,95	0		
	not true	2	1,4	1,34			
	don't know	7		4,69		7	142

Statement	Answer	n	%	% total	missing	inconcrete	concrete
Statement 12-1/2/3: "Osteopathic training in Austria takes 2/4/6.5 years"							
2 years	true	14	25,92	9,39	34		
	not true	40	74,07	26,84			
	don't know	61		40,93			
4 years	true	21	38,88	14,09	33		
	not true	33	61,11	22,14			
	don't know	62		41,61			
6.5 years	true	46	71,87	30,87	24		
	not true	18	28,12	12,08			
	don't know	61		40,93			
Statement 13-1: "In Austria, for extra occupational osteopathic training a basic training in medicine, dental medicine, veterinary medicine, physiotherapy, occupational therapy or midwifery is needed"	true	98	84,48	65,77	5		
	not true	18	15,51	12,08			
	don't know	28		18,79		33	116
Statement 13-2: "In Austria, no basic training in a medical profession is needed for becoming osteopath"	true	22	21,35	14,76	8		
	not true	81	78,64	54,36			
	don't know	38		25,5		46	103
Statement 14-1: "You need to have a well founded basic knowledge in anatomy, physiology and pathology for osteopathy"	true	140	100,00	93,95	1		
	not true	0					
	don't know	8		5,36		9	140
Statement 14-2: "For osteopathy, a thorough training of palpatory skills is necessary"	true	132	99,24	88,59	3		
	not true	1	0,75	0,67			
	don't know	13		8,72		16	133
Statement 14-3: "For osteopathy, it is necessary to have a knowledge of the 'Five elements'"	true	21	30,00	14,09	11		
	not true	49	70,00	32,88			
	don't know	68		45,63		79	70
Statement 15-1: "Your patient finds a graduated osteopath via the web-pages of the schools, which offer a complete training in osteopathy"	true	114	100,00	76,51	4		
	not true	0					
	don't know	31		20,8		35	114

Statement	Answer	n	%	% total	missing	inconcrete	concrete
Statement 15-2: "Your patient finds a graduated osteopath via the yellow pages"	true	25	45,45	16,77	13		
	not true	30	54,54	20,13			
	don't know	81		54,36		94	55
Statement 15-3: "Your patient finds a graduated osteopath via a register available at the health insurances"	true	18	30,5	12,08	13		
	not true	41	69,49	27,51			
	don't know	77		51,67		90	59
Questions 16-1/2/3: "How many osteopathic treatments, do you think, are necessary (on average), until a healing process takes place? 1-5 / 5-10 / 10-30 treatments"							
1-5	true	46	61,33	30,87	35		
	not true	29	38,66	19,46			
	don't know	39		26,17			
5-10	true	66	70,96	44,29	28		
	not true	27	29,03	18,12			
	don't know	28		18,79			
10-30	true	19	28,78	12,75	39		
	not true	47	71,21	31,54			
	don't know	44		29,53			
Questions 17-1/2/3: "What do you think, are the costs (on average per hour) of an osteopathic treatment? <60€, 60-90€, >90€"							
< 60€	true	23	33,33	15,43	43		
	not true	46	66,66	30,87			
	don't know	37		24,83			
60-90€	true	102	87,93	68,45	8		
	not true	14	12,06	9,39			
	don't know	25		16,77			
>90€	true	8	13,33	5,36	47		
	not true	52	86,66	34,89			
	don't know	42		28,18			

Statement	Answer	n	%	% total	missing	inconcrete	concrete
Question 18-1: "Professional training"	Dent	29	19,46	19,46	0		
	else	47	31,54	31,54			
	GP	73	48,99	48,99			
Q 18-2: "Job Location"							
hospital	yes	33	100,00	22,14			
own praxis	yes	143	100,00	95,97			
Question 19: "For how long have you been practising as a doctor?"							
1-5 years	yes	19	100,00	12,75			
5-10 years	yes	35	100,00	23,48			
10-20 years	yes	50	100,00	33,55			
>20 years	yes	48	100,00	32,21			
Question 20: "With what professional groups do you co-operate?"							
Homeopaths	yes	78	100,00	52,34			
Osteopaths	yes	60	100,00	40,26			
Physiotherapists	yes	106	100,00	71,14			
Occupationaltherapists	yes	71	100,00	47,65			
Alternative medicine	yes	62	100,00	41,61			
Nutrition scientists	yes	43	100,00	28,85			
Others	yes	15	100,00	10,06			
Question 21-1: "Have you had an osteopathic treatment, yet?"	yes	35	25,54	23,48	12		
	no	102	74,45	68,45			
Question 21-2: If you have had an osteopathic treatment - was your personal experience positive?	yes	34	80,95	22,81	107		
	no	8	19,04	5,36			
Question 22-1: "Have you allotted patients to an osteopath, yet?"	yes	60	44,77	40,26	15		
	no	74	55,22	49,66			
Question 22-2: "If you have allotted patients to an osteopath - was your experience positive?"	yes	66	97,05	44,29	81		
	no	2	2,94	1,34			
Question 22-3: "If you have allotted patients to an osteopath - did the patients give a positive feed-back?"	yes	59	95,16	39,59	87		
	no	3	4,83	2,01			

Statement	Answer	n	%	% total	missing	inconcrete	concrete
Question 23-1: "Do you feel well informed about osteopathy?"	yes	40	29,62	26,84	14		
	no	95	70,37	63,75			
Question 23-2: Would you like to have more information about osteopathy?	yes	86	74,78	57,71	34		
	no	29	25,21	19,46			
Question 24: "Age Group"	yes	24	100,00	16,1	4		
	yes	65	100,00	43,62			
	yes	56	100,00	37,58			
Question 25: "Sex"	female	68	46,57	45,63	3		
	male	78	53,42	52,34			

15.3. χ^2 age

independent:	Age		concrete(yes/no) vs. inconcrete (don't know/missing)				Age		yes vs. no			
dependent:	Wert 1	Wert 2	Test	chi2	df	p	Wert 1	Wert 2	Test	chi2	df	p
Statement 1-1: "An osteopaths works with his hands, singly"	20-40	>50	Fisher's exact p			0,67	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Fisher's exact p			1,00	20-40	40-50	Fisher's exact p			0,48
	40-50	>50	Fisher's exact p			0,51	40-50	>50	Fisher's exact p			0,59
Statement 1-2: "An osteopaths works with his hands, homeopathy and medicinal herbs".	20-40	>50	Chi-square/Yates	0,0958	1	0,76	20-40	>50	Fisher's exact p			0,41
	20-40	40-50	Chi-square/Yates	0,0659	1	0,80	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	0,3202	1	0,57	40-50	>50	Fisher's exact p			0,13
Statement 2-1: "Osteopathy is a holistic method"	20-40	>50	Fisher's exact p			1,00	20-40	>50	Fisher's exact p			**0,08**
	20-40	40-50	Fisher's exact p			0,68	20-40	40-50	Fisher's exact p			0,28
	40-50	>50	Chi-square/Yates	0,0673	1	0,80	40-50	>50	Fisher's exact p			0,50
Statement 2-2: "Osteopathy stimulates the self healing capacity of the body".	20-40	>50	Fisher's exact p			0,55	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Fisher's exact p			0,35	20-40	40-50	Fisher's exact p			0,63
	40-50	>50	Chi-square/Yates	0,0143	1	0,90	40-50	>50	Fisher's exact p			0,51
Statement 2-3: "Osteopathy is another name for chiropractic".	20-40	>50	Fisher's exact p			1,00	20-40	>50	Fisher's exact p			**0,09**
	20-40	40-50	Fisher's exact p			0,73	20-40	40-50	Fisher's exact p			**0,001**
	40-50	>50	Chi-square/Yates	0,7314	1	0,39	40-50	>50	Fisher's exact p			**0,08**
Statement 2-4: "Osteopathy predominantly works preventive".	20-40	>50	Chi-square/Yates	0,0131	1	0,91	20-40	>50	Fisher's exact p			0,74
	20-40	40-50	Fisher's exact p			0,38	20-40	40-50	Fisher's exact p			0,36
	40-50	>50	Chi-square/Yates	0,4054	1	0,52	40-50	>50	Chi-square/Yates	3,6698	1	**0,06**
Statement 3-1: "Aim of osteopathy is to re-establish physical and psychical well-being by the correction of movement restrictions of structures and tissues"	20-40	>50	Fisher's exact p			1,00	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Fisher's exact p			1,00	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Fisher's exact p			0,75	40-50	>50	Fisher's exact p			1,00

independent:	Age		concrete(yes/no) vs. inconcrete (don't know/missing)				Age		yes vs. no			
Statement 3-2: "Aim of osteopathy is to re-establish physical and psychical well-being by treating osteoporotic bones"	20-40	>50	Fisher's exact p			1,00	20-40	>50	Fisher's exact p			0,31
	20-40	40-50	Fisher's exact p			0,77	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	0,0045	1	0,95	40-50	>50	Fisher's exact p			**0,09**
Statement 3-3: "Aim of osteopathy is to re-establish physical and psychical well-being by energetic treatment, exclusively"	20-40	>50	Chi-square/Yates	0,003	1	0,96	20-40	>50	Chi-square/Yates	0,987	1	0,32
	20-40	40-50	Fisher's exact p			0,24	20-40	40-50	Chi-square/Yates	0,7486	1	0,39
	40-50	>50	Chi-square/Yates	1,1992	1	0,27	40-50	>50	Chi-square/Yates	0,0018	1	0,97
Statement 4-1: "An osteopath examines and treats the spine, exclusively"	20-40	>50	Fisher's exact p			0,54	20-40	>50	Fisher's exact p			0,55
	20-40	40-50	Fisher's exact p			1,00	20-40	40-50	Fisher's exact p			0,56
	40-50	>50	Chi-square/Yates	1,2355	1	0,27	40-50	>50	Fisher's exact p			1,00
Statement 4-2: "An osteopath examines and treats the whole musculoskeletal system"	20-40	>50	Fisher's exact p			0,58	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Fisher's exact p			1,00						
	40-50	>50	Fisher's exact p			0,45	40-50	>50	Fisher's exact p			0,22
Statement 4-3: "An osteopath examines and treats fasciae"	20-40	>50	Chi-square/Yates	0,0465	1	0,83	20-40	>50	Fisher's exact p			0,73
	20-40	40-50	Chi-square/Yates	0,0037	1	0,95	20-40	40-50	Fisher's exact p			0,50
	40-50	>50	Chi-square/Yates	0,8085	1	0,37	40-50	>50	Chi-square/Yates	0	1	1,00
Statement 4-4: "An osteopath examines and treats the cranial bones"	20-40	>50	Chi-square/Yates	0,0034	1	0,95	20-40	>50	Chi-square/Yates	1,1146	1	0,29
	20-40	40-50	Fisher's exact p			0,77	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	0,1753	1	0,68	40-50	>50	Chi-square/Yates	3,1696	1	**0,08**
Statement 4-5: "An osteopath examines and treats the inner organs"	20-40	>50	Chi-square/Yates	1,5873	1	0,21	20-40	>50	Chi-square/Yates	0,6974	1	0,40
	20-40	40-50	Chi-square/Yates	4,1269	1	**0,04**	20-40	40-50	Chi-square/Yates	0,8155	1	0,37
	40-50	>50	Chi-square/Yates	0,5122	1	0,47	40-50	>50	Chi-square/Yates	0,0312	1	0,86
Statement 5-1: "An osteopath uses myofascial techniques".	20-40	>50	Chi-square/Yates	1,0778	1	0,30	20-40	>50	Fisher's exact p			0,36
	20-40	40-50	Chi-square/Yates	0,8733	1	0,35	20-40	40-50	Fisher's exact p			0,38
	40-50	>50	Chi-square/Yates	0,0011	1	0,97	40-50	>50	Fisher's exact p			1,00

independent:	Age		concrete(yes/no) vs. inconcrete (don't know/missing)				Age		yes vs. no			
Statement 5-2: "An osteopath uses craniosacral techniques"	20-40	>50	Chi-square/Yates	1,9841	1	0,16	20-40	>50	Fisher's exact p			0,56
	20-40	40-50	Fisher's exact p			**0,002**	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	2,7751	1	**0,10**	40-50	>50	Fisher's exact p			0,16
Statement 5-3: "An osteopath uses techniques for mobilisation and manipulation"	20-40	>50	Fisher's exact p			0,75	20-40	>50	Fisher's exact p			0,62
	20-40	40-50	Fisher's exact p			1,00	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	0,1039	1	0,75	40-50	>50	Fisher's exact p			0,49
Statement 5-4: "An osteopath uses active relaxation techniques"	20-40	>50	Chi-square/Yates	1,978	1	0,16	20-40	>50	Fisher's exact p			**0,08**
	20-40	40-50	Chi-square/Yates	0,1486	1	0,70	20-40	40-50	Fisher's exact p			0,20
	40-50	>50	Chi-square/Yates	1,3631	1	0,24	40-50	>50	Chi-square/Yates	0,3168	1	0,57
Statement 5-5: "An osteopath uses acupuncture"	20-40	>50	Chi-square/Yates	0	1	1,00	20-40	>50	Fisher's exact p			0,53
	20-40	40-50	Chi-square/Yates	0,4011	1	0,53	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	1,7341	1	0,19	40-50	>50	Fisher's exact p			0,39
Statement 5-6: "An osteopath uses muscle energy techniques"	20-40	>50	Chi-square/Yates	0,9675	1	0,33	20-40	>50	Fisher's exact p			0,12
	20-40	40-50	Chi-square/Yates	3,9887	1	**0,05**	20-40	40-50	Fisher's exact p			0,45
	40-50	>50	Chi-square/Yates	1,2435	1	0,26	40-50	>50	Chi-square/Yates	0,7947	1	0,37
Statement 5-7: "An osteopath uses reflex zones"	20-40	>50	Chi-square/Yates	1,1531	1	0,28	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Chi-square/Yates	4,2174	1	**0,04**	20-40	40-50	Fisher's exact p			0,73
	40-50	>50	Chi-square/Yates	1,0988	1	0,29	40-50	>50	Chi-square/Yates	0,0571	1	0,81
Statement 6-1: "Newborn belong to the target group of osteopathy"	20-40	>50	Chi-square/Yates	0,0025	1	0,96	20-40	>50	Fisher's exact p			**0,10**
	20-40	40-50	Chi-square/Yates	0,2385	1	0,63	20-40	40-50	Fisher's exact p			0,48
	40-50	>50	Chi-square/Yates	1,3753	1	0,24	40-50	>50	Chi-square/Yates	1,018	1	0,31
Statement 6-2: "Infants younger than six years belong to the target group of osteopathy"	20-40	>50	Chi-square/Yates	0,0244	1	0,88	20-40	>50	Fisher's exact p			**0,08**
	20-40	40-50	Chi-square/Yates	0,1625	1	0,69	20-40	40-50	Fisher's exact p			0,43
	40-50	>50	Chi-square/Yates	0,274	1	0,60	40-50	>50	Chi-square/Yates	1,8731	1	0,17
Statement 6-3: "Children older than six years belong to the target group of osteopathy"	20-40	>50	Chi-square/Yates	0,1389	1	0,71	20-40	>50	Fisher's exact p			0,16
	20-40	40-50	Fisher's exact p			0,38	20-40	40-50	Fisher's exact p			0,18
	40-50	>50	Chi-square/Yates	3,0344	1	**0,08**	40-50	>50	Fisher's exact p			1,00

independent:	Age		concrete(yes/no) vs. inconcrete (don't know/missing)				Age		yes vs. no			
Statement 6-4: "Adults belong to the target group of osteopathy"	20-40	>50	Fisher's exact p			0,49	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Fisher's exact p			0,66	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	2,138	1	0,14	40-50	>50	Fisher's exact p			1,00
Statement 6-5: "Old people belong to the target group of osteopathy"	20-40	>50	Fisher's exact p			1,00	20-40	>50	Fisher's exact p			0,51
	20-40	40-50	Fisher's exact p			0,29	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	1,2355	1	0,27	40-50	>50	Fisher's exact p			1,00
Statement 7-1: "During treatment, an osteopath concentrates at the dysfunction, only"	20-40	>50	Chi-square/Yates	0,0794	1	0,78	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Fisher's exact p			0,16	20-40	40-50	Fisher's exact p			0,63
	40-50	>50	Chi-square/Yates	5,2975	1	**0,02**	40-50	>50	Fisher's exact p			0,71
Statement 7-2: "During treatment, an osteopath works at the whole body"	20-40	>50	Fisher's exact p			1,00	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Fisher's exact p			0,29	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Fisher's exact p			0,41	40-50	>50	Fisher's exact p			1,00
Statement 8-1: "An osteopath uses painful techniques"	20-40	>50	Chi-square/Yates	0,0958	1	0,76	20-40	>50	Fisher's exact p			**0,10**
	20-40	40-50	Chi-square/Yates	0,0987	1	0,75	20-40	40-50	Fisher's exact p			0,64
	40-50	>50	Chi-square/Yates	1,7626	1	0,18	40-50	>50	Fisher's exact p			0,14
Statement 8-2: "An osteopath uses forceful techniques"	20-40	>50	Chi-square/Yates	0,0219	1	0,88	20-40	>50	Fisher's exact p			0,50
	20-40	40-50	Chi-square/Yates	1,7088	1	0,19	20-40	40-50	Fisher's exact p			0,20
	40-50	>50	Chi-square/Yates	3,7367	1	**0,05**	40-50	>50	Chi-square/Yates	0,0112	1	0,92
Statement 8-3: "An osteopath uses gentle techniques"	20-40	>50	Fisher's exact p			1,00	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Fisher's exact p			0,70						
	40-50	>50	Chi-square/Yates	0,3385	1	0,56	40-50	>50	Fisher's exact p			0,45
Statement 9-1: "Osteopathy is suitable for treatment of chronic and acute musculosceletal pain"	20-40	>50	Fisher's exact p			0,63						
	20-40	40-50	Fisher's exact p			0,61						
	40-50	>50	Fisher's exact p			1,00						
Statement 9-2: "Osteopathy is suitable for treatment of health problems after accidents"	20-40	>50	Fisher's exact p			1,00	20-40	>50	Fisher's exact p			0,17
	20-40	40-50	Fisher's exact p			1,00	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	0,0026	1	0,96	40-50	>50	Fisher's exact p			**0,05**

independent:	Age		concrete(yes/no) vs. inconcrete (don't know/missing)				Age		yes vs. no			
Statement 9-3: "Osteopathy is suitable for treatment of afflictions of the digestive system"	20-40	>50	Chi-square/Yates	0,133	1	0,72	20-40	>50	Fisher's exact p			0,51
	20-40	40-50	Chi-square/Yates	0,0389	1	0,84	20-40	40-50	Fisher's exact p			0,74
	40-50	>50	Chi-square/Yates	0,3229	1	0,57	40-50	>50	Chi-square/Yates	0,1525	1	0,70
Statement 9-4: "Osteopathy is suitable for treatment of headache, migraine and vertigo"	20-40	>50	Fisher's exact p			0,44	20-40	>50	Fisher's exact p			0,31
	20-40	40-50	Fisher's exact p			1,00	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	0,6366	1	0,42	40-50	>50	Fisher's exact p			0,26
Statement 9-5: "Osteopathy is suitable for treatment of dysfunctions of the masticatory apparatus"	20-40	>50	Chi-square/Yates	0,0123	1	0,91	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Fisher's exact p			0,38	20-40	40-50	Fisher's exact p			0,64
	40-50	>50	Chi-square/Yates	1,1992	1	0,27	40-50	>50	Fisher's exact p			0,72
Statement 9-6: "Osteopathy is suitable for treating pregnancy-related problems and medical issues around birth"	20-40	>50	Chi-square/Yates	0,7842	1	0,38	20-40	>50	Fisher's exact p			0,73
	20-40	40-50	Chi-square/Yates	0,0536	1	0,82	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	1,6783	1	0,20	40-50	>50	Chi-square/Yates	0,012	1	0,91
Statement 9-7: "Osteopathy is suitable for treating problems of the urogenital tract (PMS, incontinence,…)"	20-40	>50	Chi-square/Yates	1,2138	1	0,27	20-40	>50	Fisher's exact p			0,49
	20-40	40-50	Chi-square/Yates	0,224	1	0,64	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	0,4516	1	0,50	40-50	>50	Chi-square/Yates	0,3224	1	0,57
Statement 10: "There are contraindications for osteopathic treatment"	20-40	>50	Chi-square/Yates	3,9796	1	**0,05**	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Chi-square/Yates	3,2903	1	**0,07**	20-40	40-50	Fisher's exact p			0,12
	40-50	>50	Chi-square/Yates	0,0177	1	0,89	40-50	>50	Chi-square/Yates	3,2981	1	**0,07**
Statement 11: "A patient can be treated osteopathically, in spite of taking drugs"	20-40	>50	Fisher's exact p			0,36						
	20-40	40-50	Fisher's exact p			**0,06**	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Fisher's exact p			0,34	40-50	>50	Fisher's exact p			0,50
Statement 12-1/2/3: "Osteopathic training in Austria takes 2/4/6.5 years"	20-40	>50	Fisher's exact p			**0,05**	20-40	>50	Fisher's exact p			**0,05**
	20-40	40-50	Fisher's exact p			**0,07**	20-40	40-50	Fisher's exact p			**0,07**
	40-50	>50	Fisher's exact p			**0,06**	40-50	>50	Fisher's exact p			**0,06**

independent:	Age		concrete(yes/no) vs. inconcrete (don't know/missing)				Age		yes vs. no			
Statement 13-1: "In Austria, for extra occupational osteopathic training a basic training in medicine, dental medicine, veterinary medicine, physiotherapy, occupationaltherapy or midwifery is needed"	20-40	>50	Chi-square/Yates	0,0794	1	0,78	20-40	>50	Fisher's exact p			**0,01**
	20-40	40-50	Chi-square/Yates	0,6437	1	0,42	20-40	40-50	Fisher's exact p			0,17
	40-50	>50	Chi-square/Yates	0,1753	1	0,68	40-50	>50	Chi-square/Yates	1,354	1	0,24
Statement 13-2: "In Austria, no basic training in a medical profession is needed for becoming osteopath"	20-40	>50	Chi-square/Yates	0,0026	1	0,96	20-40	>50	Fisher's exact p			0,15
	20-40	40-50	Chi-square/Yates	0,1625	1	0,69	20-40	40-50	Fisher's exact p			0,20
	40-50	>50	Chi-square/Yates	0,8841	1	0,35	40-50	>50	Chi-square/Yates	0,0402	1	0,84
Statement 14-1: "You need to have a well founded basic knowledge in anatomy, physiology and pathology for osteopathy"	20-40	>50	Fisher's exact p			0,58						
	20-40	40-50	Fisher's exact p			1,00						
	40-50	>50	Fisher's exact p			0,45						
Statement 14-2: "For osteopathy, a thorough training of palpatory skills is necessary"	20-40	>50	Fisher's exact p			1,00						
	20-40	40-50	Fisher's exact p			0,72	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Fisher's exact p			0,77	40-50	>50	Fisher's exact p			1,00
Statement 14-3: "For osteopathy, it is necessary to have a knowledge of the 'Five elements'"	20-40	>50	Chi-square/Yates	0,3431	1	0,56	20-40	>50	Fisher's exact p			0,28
	20-40	40-50	Chi-square/Yates	0,0001	1	0,99	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	0,3657	1	0,55	40-50	>50	Chi-square/Yates	2,0139	1	0,16
Statement 15-1: "Your patient finds a graduated osteopath via the web-pages of the schools, which offer a complete training in osteopathy"	20-40	>50	Chi-square/Yates	0,1046	1	0,75						
	20-40	40-50	Chi-square/Yates	1,9188	1	0,17						
	40-50	>50	Chi-square/Yates	1,1992	1	0,27						

independent:	Age		concrete(yes/no) vs. inconcrete (don't know/missing)				Age		yes vs. no			
Statement 15-2: "Your patient finds a graduated osteopath via the yellow pages"	20-40	>50	Chi-square/Yates	0,4814	1	0,49	20-40	>50	Fisher's exact p			0,10
	20-40	40-50	Chi-square/Yates	0,0266	1	0,87	20-40	40-50	Fisher's exact p			0,21
	40-50	>50	Chi-square/Yates	1,4543	1	0,23	40-50	>50	Chi-square/Yates	0,0294	1	0,86
Statement 15-3: "Your patient finds a graduated osteopath via a register available at the health insurances"	20-40	>50	Chi-square/Yates	0	1	1,00	20-40	>50	Fisher's exact p			0,26
	20-40	40-50	Chi-square/Yates	0,4284	1	0,51	20-40	40-50	Fisher's exact p			0,46
	40-50	>50	Chi-square/Yates	0,4275	1	0,51	40-50	>50	Chi-square/Yates	0,0081	1	0,93
Questions 16-1/2/3: "How many osteopathic treatments, do you think, are necessary (on average), until a healing process takes place? 1-5 / 5-10 / 10-30 treatments"	20-40	>50	Fisher's exact p			0,72	20-40	>50	Fisher's exact p			0,72
	20-40	40-50	Fisher's exact p			1,00	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square	1,2514	2	0,53	40-50	>50	Chi-square	1,2514	2	0,53
Questions 17-1/2/3: "What do you think, are the costs (on average per hour) of an osteopathic treatment? <60€, 60-90€, >90€"	20-40	>50	Fisher's exact p			0,40	20-40	>50	Fisher's exact p			0,40
	20-40	40-50	Fisher's exact p			1,00	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Fisher's exact p			0,18	40-50	>50	Fisher's exact p			0,18
Question 18-1: "Professional training"	20-40	>50	Fisher's exact p			1,00	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Fisher's exact p			0,35	20-40	40-50	Fisher's exact p			0,35
	40-50	>50	Chi-square	3,5555	2	0,17	40-50	>50	Chi-square	3,5555	2	0,17
Question 19: "For how long have you been practising as a doctor?"	20-40	>50	Fisher's exact p			**<0,0001**	20-40	>50	Fisher's exact p			**<0,0001**
	20-40	40-50	Fisher's exact p			**0,0001**	20-40	40-50	Fisher's exact p			**0,0001**
	40-50	>50	Fisher's exact p			**<0,0001**	40-50	>50	Fisher's exact p			**<0,0001**
Question 21-1: "Have you had an osteopathic treatment, yet?"	20-40	>50	Fisher's exact p			0,32	20-40	>50	Chi-square/Yates	0,3089	1	0,58
	20-40	40-50	Fisher's exact p			0,32	20-40	40-50	Chi-square/Yates	0,7	1	0,40
	40-50	>50	Fisher's exact p			1,00	40-50	>50	Chi-square/Yates	0,0148	1	0,90
Question 21-2: If you have had an osteopathic treatment - was your personal experience positive?	20-40	>50	Chi-square/Yates	0,7143	1	0,40	20-40	>50	Fisher's exact p			0,27
	20-40	40-50	Chi-square/Yates	1,4192	1	0,23	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	0,061	1	0,81	40-50	>50	Fisher's exact p			**0,06**

independent:	Age		concrete(yes/no) vs. inconcrete (don't know/missing)				Age		yes vs. no			
Question 22-1: "Have you allotted patients to an osteopath, yet?"	20-40	>50	Fisher's exact p			0,27	20-40	>50	Chi-square/Yates	0,0243	1	0,88
	20-40	40-50	Fisher's exact p			1,00	20-40	40-50	Chi-square/Yates	0,4191	1	0,52
	40-50	>50	Chi-square/Yates	3,2299	1	**0,07**	40-50	>50	Chi-square/Yates	0,6391	1	0,42
Question 22-2: "If you have allotted patients to an osteopath - was your experience positive?"	20-40	>50	Chi-square/Yates	0,7039	1	0,40	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Chi-square/Yates	1,5004	1	0,22	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	0,0864	1	0,77	40-50	>50	Fisher's exact p			1,00
Question 22-3: "If you have allotted patients to an osteopath - did the patients give a positive feed-back?"	20-40	>50	Chi-square/Yates	0,0635	1	0,80	20-40	>50	Fisher's exact p			1,00
	20-40	40-50	Chi-square/Yates	0,9427	1	0,33	20-40	40-50	Fisher's exact p			1,00
	40-50	>50	Chi-square/Yates	0,5559	1	0,46	40-50	>50	Fisher's exact p			1,00
Question 23-1: "Do you feel well informed about osteopathy?"	20-40	>50	Fisher's exact p			0,42	20-40	>50	Chi-square/Yates	1,3876	1	0,24
	20-40	40-50	Fisher's exact p			0,68	20-40	40-50	Chi-square/Yates	0,1623	1	0,69
	40-50	>50	Fisher's exact p			1,00	40-50	>50	Chi-square/Yates	0,8459	1	0,36
Question 23-2: Would you like to have more information about osteopathy?	20-40	>50	Chi-square/Yates	0,0131	1	0,91	20-40	>50	Chi-square/Yates	0,016	1	0,90
	20-40	40-50	Fisher's exact p			1,00	20-40	40-50	Fisher's exact p			0,53
	40-50	>50	Chi-square/Yates	0,1934	1	0,66	40-50	>50	Chi-square/Yates	0,6698	1	0,41
Question 25: "Sex"	20-40	>50	Chi-square/Yates	2,6525	1	0,10	20-40	>50	Chi-square/Yates	2,6525	1	0,10
	20-40	40-50	Chi-square/Yates	0,107	1	0,74	20-40	40-50	Chi-square/Yates	0,107	1	0,74
	40-50	>50	Chi-square/Yates	2,4333	1	0,12	40-50	>50	Chi-square/Yates	2,4333	1	0,12

15.4. χ^2 sex

independent:	Sex		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Sex		**yes vs. no**			
dependent:	Wert 1	Wert 2	Test	chi2	df	p	Wert 1	Wert 2	Test	chi2	df	p
Statement 1-1: "An osteopaths works with his hands, singly"	female	male	Chi-square/Yates	0,0561	1	0,81	female	male	Fisher's exact p			0,12
Statement 1-2: "An osteopaths works with his hands, homeopathy and medicinal herbs".	female	male	Chi-square/Yates	0,0272	1	0,87	female	male	Fisher's exact p			0,49
Statement 2-1: "Osteopathy is a holistic method"	female	male	Chi-square/Yates	1,2963	1	0,25	female	male	Fisher's exact p			0,35
Statement 2-2: "Osteopathy stimulates the self healing capacity of the body".	female	male	Chi-square/Yates	5,1322	1	**0,02**	female	male	Chi-square/Yates	0,0457	1	0,83
Statement 2-3: "Osteopathy is another name for chiropractic".	female	male	Chi-square/Yates	0,0094	1	0,92	female	male	Fisher's exact p			0,47
Statement 2-4: "Osteopathy predominantly works preventive".	female	male	Chi-square/Yates	0,3656	1	0,55	female	male	Chi-square/Yates	0,0237	1	0,88
Statement 3-1: "Aim of osteopathy is to re-establish physical and psychical well-being by the correction of movement restrictions of structures and tissues"	female	male	Chi-square/Yates	0,0029	1	0,96	female	male	Fisher's exact p			1,00

independent:	Sex		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Sex		**yes vs. no**			
Statement 3-2: "Aim of osteopathy is to re-establish physical and psychical well-being by treating osteoporotic bones"	female	male	Chi-square/Yates	0,0374	1	0,85	female	male	Fisher's exact p			0,21
Statement 3-3: "Aim of osteopathy is to re-establish physical and psychical well-being by energetic treatment, exclusively"	female	male	Chi-square/Yates	0,0027	1	0,96	female	male	Chi-square/Yates	0,2097	1	0,65
Statement 4-1: "An osteopath examines and treats the spine, exclusively"	female	male	Chi-square/Yates	0,0176	1	0,89	female	male	Fisher's exact p			0,68
Statement 4-2: "An osteopath examines and treats the whole musculoskeletal system"	female	male	Fisher's exact p			0,50	female	male	Fisher's exact p			0,25
Statement 4-3: "An osteopath examines and treats fasciae"	female	male	Chi-square/Yates	0,2054	1	0,65	female	male	Chi-square/Yates	0,1075	1	0,74
Statement 4-4: "An osteopath examines and treats the cranial bones"	female	male	Chi-square/Yates	0,3656	1	0,55	female	male	Chi-square/Yates	2,601	1	0,11
Statement 4-5: "An osteopath examines and treats the inner organs"	female	male	Chi-square/Yates	1,5445	1	0,21	female	male	Chi-square/Yates	0,8039	1	0,37
Statement 5-1: "An osteopath uses myofascial techniques".	female	male	Chi-square/Yates	0,2508	1	0,62	female	male	Chi-square/Yates	1,7003	1	0,19

independent:	Sex		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Sex		**yes vs. no**			
Statement 5-2: "An osteopath uses craniosacral techniques"	female	male	Chi-square/Yates	0,8915	1	0,35	female	male	Fisher's exact p			0,67
Statement 5-3: "An osteopath uses techniques for mobilisation and manipulation"	female	male	Chi-square/Yates	0,0374	1	0,85	female	male	Chi-square/Yates	0,0878	1	0,77
Statement 5-4: "An osteopath uses active relaxation techniques"	female	male	Chi-square/Yates	0,0055	1	0,94	female	male	Chi-square/Yates	0,4235	1	0,52
Statement 5-5: "An osteopath uses acupuncture"	female	male	Chi-square/Yates	0,0056	1	0,94	female	male	Fisher's exact p			0,68
Statement 5-6: "An osteopath uses muscle energy techniques"	female	male	Chi-square/Yates	1,2975	1	0,25	female	male	Chi-square/Yates	0,0023	1	0,96
Statement 5-7: "An osteopath uses reflex zones"	female	male	Chi-square/Yates	1,5238	1	0,22	female	male	Chi-square/Yates	0,0502	1	0,82
Statement 6-1: "Newborn belong to the target group of osteopathy"	female	male	Chi-square/Yates	3,3423	1	**0,07**	female	male	Chi-square/Yates	6,7681	1	**0,01**
Statement 6-2: "Infants younger than six years belong to the target group of osteopathy"	female	male	Chi-square/Yates	4,0475	1	**0,04**	female	male	Chi-square/Yates	10,1628	1	**0,001**
Statement 6-3: "Children older than six years belong to the target group of osteopathy"	female	male	Chi-square/Yates	2,1824	1	0,14	female	male	Chi-square/Yates	3,754	1	**0,05**
Statement 6-4: "Adults belong to the target group of osteopathy"	female	male	Chi-square/Yates	1,8459	1	0,17	female	male	Fisher's exact p			0,50

independent:	Sex		concrete(yes/no) vs. inconcrete (don't know/missing)				Sex		yes vs. no			
Statement 6-5: "Old people belong to the target group of osteopathy"	female	male	Chi-square/Yates	0,0208	1	0,89	female	male	Fisher's exact p			0,62
Statement 7-1: "During treatment, an osteopath concentrates at the dysfunction, only"	female	male	Chi-square/Yates	0,0287	1	0,87	female	male	Fisher's exact p			0,19
Statement 7-2: "During treatment, an osteopath works at the whole body"	female	male	Fisher's exact p			1,00	female	male	Fisher's exact p			1,00
Statement 8-1: "An osteopath uses painful techniques"	female	male	Chi-square/Yates	0,1514	1	0,70	female	male	Fisher's exact p			0,71
Statement 8-2: "An osteopath uses forceful techniques"	female	male	Chi-square/Yates	0,5983	1	0,44	female	male	Chi-square/Yates	0,0128	1	0,91
Statement 8-3: "An osteopath uses gentle techniques"	female	male	Chi-square/Yates	3,1254	1	**0,08**	female	male	Fisher's exact p			1,00
Statement 9-1: "Osteopathy is suitable for treatment of chronic and acute musculosceletal pain"	female	male	Fisher's exact p			0,72						
Statement 9-2: "Osteopathy is suitable for treatment of health problems after accidents"	female	male	Chi-square/Yates	0,0297	1	0,86	female	male	Fisher's exact p			**0,01**
Statement 9-3: "Osteopathy is suitable for treatment of afflictions of the digestive system"	female	male	Chi-square/Yates	1,6701	1	0,20	female	male	Chi-square/Yates	0,1751	1	0,68

independent:	Sex		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Sex		**yes vs. no**			
Statement 9-4: "Osteopathy is suitable for treatment of headache, migraine and vertigo"	female	male	Chi-square/Yates	0,9035	1	0,34	female	male	Fisher's exact p			0,12
Statement 9-5: "Osteopathy is suitable for treatment of dysfunctions of the masticatory apparatus"	female	male	Chi-square/Yates	1,8638	1	0,17	female	male	Chi-square/Yates	2,7404	1	**0,10**
Statement 9-6: "Osteopathy is suitable for treating pregnancy-related problems and medical issues around birth"	female	male	Chi-square/Yates	0,0621	1	0,80	female	male	Chi-square/Yates	2,6264	1	0,11
Statement 9-7: "Osteopathy is suitable for treating problems of the urogenital tract (PMS, incontinence,…)"	female	male	Chi-square/Yates	0,4851	1	0,49	female	male	Chi-square/Yates	2,2325	1	0,14
Statement 10: "There are contraindications for osteopathic treatment"	female	male	Chi-square/Yates	0,0016	1	0,97	female	male	Chi-square/Yates	0,1284	1	0,72
Statement 11: "A patient can be treated osteopathically, in spite of taking drugs"	female	male	Fisher's exact p			1,00	female	male	Fisher's exact p			0,22
Statement 12-1/2/3: "Osteopathic training in Austria takes 2/4/6.5 years"	female	male	Chi-square	0,3095	2	0,86	female	male	Chi-square	0,3095	2	0,86

independent:	Sex		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Sex		**yes vs. no**			
Statement 13-1: "In Austria, for extra occupational osteopathic training a basic training in medicine, dental medicine, veterinary medicine, physiotherapy, occupationaltherapy or midwifery is needed"	female	male	Chi-square/Yates	1,8638	1	0,17	female	male	Chi-square/Yates	0,066	1	0,80
Statement 13-2: "In Austria, no basic training in a medical profession is needed for becoming osteopath"	female	male	Chi-square/Yates	0,129	1	0,72	female	male	Chi-square/Yates	0,2651	1	0,61
Statement 14-1: "You need to have a well founded basic knowledge in anatomy, physiology and pathology for osteopathy"	female	male	Fisher's exact p			0,50						
Statement 14-2: "For osteopathy, a thorough training of palpatory skills is necessary"	female	male	Fisher's exact p			0,29	female	male	Fisher's exact p			1,00
Statement 14-3: "For osteopathy, it is necessary to have a knowledge of the 'Five elements'"	female	male	Chi-square/Yates	0,5215	1	0,47	female	male	Chi-square/Yates	0,0003	1	0,99
Statement 15-1: "Your patient finds a graduated osteopath via the web-pages of the schools, which offer a complete training in osteopathy"	female	male	Chi-square/Yates	0,4901	1	0,48						

independent:	Sex		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Sex		**yes vs. no**			
Statement 15-2: "Your patient finds a graduated osteopath via the yellow pages"	female	male	Chi-square/Yates	1,3249	1	0,25	female	male	Chi-square/Yates	2,0567	1	0,15
Statement 15-3: "Your patient finds a graduated osteopath via a register available at the health insurances"	female	male	Chi-square/Yates	0,0272	1	0,87	female	male	Chi-square/Yates	0,2503	1	0,62
Questions 16-1/2/3: "How many osteopathic treatments, do you think, are necessary (on average), until a healing process takes place? 1-5 / 5-10 / 10-30 treatments"	female	male	Chi-square	2,6251	2	0,27	female	male	Chi-square	2,6251	2	0,27
Questions 17-1/2/3: "What do you think, are the costs (on average per hour) of an osteopathic treatment? <60€, 60-90€, >90€"	female	male	Fisher's exact p			**0,07**	female	male	Fisher's exact p			**0,07**
Question 18-1: "Professional training"	female	male	Chi-square	2,8238	2	0,24	female	male	Chi-square	2,8238	2	0,24
Q 18-2: "Job Location" - hospital	female	male	Chi-square/Yates	3,7316	1	**0,05**						
Q 18-2: "Job Location" - own praxis	female	male	Fisher's exact p			0,66						
Question 19: "For how long have you been practising as a doctor?"	female	male	Chi-square	2,9302	3	0,40	female	male	Chi-square	2,9302	3	0,40

independent:	Sex		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Sex		**yes vs. no**			
Question 20: "With what professional groups do you co-operate?"												
Homeopaths	female	male	Chi-square/Yates	3,5092	1	**0,06**						
Osteopaths	female	male	Chi-square/Yates	0,4667	1	0,49						
Physiotherapists	female	male	Chi-square/Yates	1,3559	1	0,24						
Occupationaltherapists	female	male	Chi-square/Yates	0,0356	1	0,85						
Alternative medicine	female	male	Chi-square/Yates	1,0798	1	0,30						
Nutrition scientists	female	male	Chi-square/Yates	0,8099	1	0,37						
Others	female	male	Chi-square/Yates	0,0788	1	0,78						
Question 21-2: If you have had an osteopathic treatment - was your personal experience positive?	female	male	Fisher's exact p			0,75	female	male	Chi-square/Yates	0,0394	1	0,84
Question 22-1: "Have you allotted patients to an osteopath, yet?"	female	male	Chi-square/Yates	0,2687	1	0,60	female	male	Fisher's exact p			1,00
Question 22-2: "If you have allotted patients to an osteopath - was your experience positive?"	female	male	Chi-square/Yates	0,0673	1	0,80	female	male	Chi-square/Yates	3,0557	1	0,08
Question 22-3: "If you have allotted patients to an osteopath - did the patients give a positive feed-back?"	female	male	Chi-square/Yates	2,0445	1	0,15	female	male	Fisher's exact p			1,00
Question 23-1: "Do you feel well informed about osteopathy?"	female	male	Chi-square/Yates	0,4939	1	0,48	female	male	Fisher's exact p			0,61

independent:	Sex		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Sex		**yes vs. no**			
Question 23-2: Would you like to have more information about osteopathy?	female	male	Chi-square/Yates	0,0561	1	0,81	female	male	Chi-square/Yates	0,0024	1	0,96
Question 24: "Age Group"	female	male	Chi-square/Yates	0,0006	1	0,98	female	male	Chi-square/Yates	0,0026	1	0,96
Question 25: "Sex"	female	male	Chi-square	4,6285	2	**0,10**	female	male	Chi-square	4,6285	2	0,10

15.5. χ^2 profession

independent:	Sex		concrete(yes/no) vs. inconcrete (don't know/missing)				Sex		yes vs. no			
dependent:	Wert 1	Wert 2	Test	chi2	df	p	Wert 1	Wert 2	Test	chi2	df	p
Statement 1-1: "An osteopaths works with his hands, singly"	Dent	else	Fisher's exact p			0,67	Dent	else	Fisher's exact p			1,00
	Dent	GP	Fisher's exact p			0,71	Dent	GP	Fisher's exact p			0,56
	else	GP	Fisher's exact p			1,00	else	GP	Fisher's exact p			1,00
Statement 1-2: "An osteopaths works with his hands, homeopathy and medicinal herbs".	Dent	else	Chi-square/Yates	0,9709	1	0,32	Dent	else	Fisher's exact p			0,25
	Dent	GP	Chi-square/Yates	0,9872	1	0,32	Dent	GP	Fisher's exact p			1,00
	else	GP	Chi-square/Yates	0,0058	1	0,94	else	GP	Fisher's exact p			0,14
Statement 2-1: "Osteopathy is a holistic method"	Dent	else	Fisher's exact p			1,00	Dent	else	Fisher's exact p			0,28
	Dent	GP	Fisher's exact p			0,68	Dent	GP	Fisher's exact p			1,00
	else	GP	Fisher's exact p			0,34	else	GP	Fisher's exact p			0,15
Statement 2-2: "Osteopathy stimulates the self healing capacity of the body".	Dent	else	Chi-square/Yates	0,8645	1	0,35	Dent	else	Fisher's exact p			1,00
	Dent	GP	Fisher's exact p			1,00	Dent	GP	Fisher's exact p			0,68
	else	GP	Chi-square/Yates	1,4015	1	0,24	else	GP	Fisher's exact p			0,72
Statement 2-3: "Osteopathy is another name for chiropractic".	Dent	else	Fisher's exact p			0,47	Dent	else	Fisher's exact p			0,35
	Dent	GP	Chi-square/Yates	0,4301	1	0,51	Dent	GP	Fisher's exact p			0,36
	else	GP	Chi-square/Yates	2,798	1	**0,09**	else	GP	Fisher's exact p			1,00
Statement 2-4: "Osteopathy predominantly works preventive".	Dent	else	Chi-square/Yates	0,0523	1	0,82	Dent	else	Fisher's exact p			0,10
	Dent	GP	Chi-square/Yates	0,0171	1	0,90	Dent	GP	Fisher's exact p			**0,02**
	else	GP	Chi-square/Yates	0,0022	1	0,96	else	GP	Fisher's exact p			0,51

independent:	Sex		concrete(yes/no) vs. inconcrete (don't know/missing)				Sex		yes vs. no			
Statement 3-1: "Aim of osteopathy is to re-establish physical and psychical well-being by the correction of movement restrictions of structures and tissues"	Dent	else	Fisher's exact p			0,47	Dent	else	Fisher's exact p			1,00
	Dent	GP	Fisher's exact p			0,22	Dent	GP	Fisher's exact p			0,27
	else	GP	Fisher's exact p			0,71	else	GP	Fisher's exact p			0,38
Statement 3-2: "Aim of osteopathy is to re-establish physical and psychical well-being by treating osteoporotic bones"	Dent	else	Chi-square/Yates	1,1106	1	0,29	Dent	else	Fisher's exact p			1,00
	Dent	GP	Chi-square/Yates	0,4415	1	0,51	Dent	GP	Fisher's exact p			1,00
	else	GP	Chi-square/Yates	0,1273	1	0,72	else	GP	Fisher's exact p			0,65
Statement 3-3: "Aim of osteopathy is to re-establish physical and psychical well-being by energetic treatment, exclusively"	Dent	else	Chi-square/Yates	0,0419	1	0,84	Dent	else	Chi-square/Yates	0,0503	1	0,82
	Dent	GP	Chi-square/Yates	0,0653	1	0,80	Dent	GP	Chi-square/Yates	0,423	1	0,52
	else	GP	Chi-square/Yates	0,1716	1	0,68	else	GP	Chi-square/Yates	0,5737	1	0,45
Statement 4-1: "An osteopath examines and treats the spine, exclusively"	Dent	else	Chi-square/Yates	1,2591	1	0,26	Dent	else	Fisher's exact p			**0,07**
	Dent	GP	Fisher's exact p			1,00	Dent	GP	Fisher's exact p			0,35
	else	GP	Chi-square/Yates	2,4548	1	0,12	else	GP	Fisher's exact p			0,55
Statement 4-2: "An osteopath examines and treats the whole musculoskeletal system"	Dent	else	Fisher's exact p			0,70						
	Dent	GP	Fisher's exact p			0,32	Dent	GP	Fisher's exact p			0,56
	else	GP	Fisher's exact p			0,11	else	GP	Fisher's exact p			0,29
Statement 4-3: "An osteopath examines and treats fasciae"	Dent	else	Chi-square/Yates	0,4304	1	0,51	Dent	else	Fisher's exact p			0,52
	Dent	GP	Chi-square/Yates	0,0171	1	0,90	Dent	GP	Fisher's exact p			0,17
	else	GP	Chi-square/Yates	2,0588	1	0,15	else	GP	Fisher's exact p			0,36

independent:	Sex		concrete(yes/no) vs. inconcrete (don't know/missing)				Sex		yes vs. no			
Statement 4-4: "An osteopath examines and treats the cranial bones"	Dent	else	Chi-square/Yates	2,249	1	0,13	Dent	else	Chi-square/Yates	0,024	1	0,88
	Dent	GP	Fisher's exact p			1,00	Dent	GP	Chi-square/Yates	0,0005	1	0,98
	else	GP	Chi-square/Yates	3,8399	1	**0,05**	else	GP	Chi-square/Yates	0,0003	1	0,99
Statement 4-5: "An osteopath examines and treats the inner organs"	Dent	else	Chi-square/Yates	0,1568	1	0,69	Dent	else	Chi-square/Yates	3,2543	1	**0,07**
	Dent	GP	Chi-square/Yates	0,0154	1	0,90	Dent	GP	Chi-square/Yates	4,6137	1	**0,03**
	else	GP	Chi-square/Yates	1,1067	1	0,29	else	GP	Chi-square/Yates	0,0116	1	0,91
Statement 5-1: "An osteopath uses myofascial techniques".	Dent	else	Chi-square/Yates	2,8995	1	**0,09**	Dent	else	Fisher's exact p			1,00
	Dent	GP	Chi-square/Yates	0,0031	1	0,96	Dent	GP	Fisher's exact p			**0,09**
	else	GP	Chi-square/Yates	7,5837	1	**0,01**	else	GP	Fisher's exact p			0,10
Statement 5-2: "An osteopath uses craniosacral techniques"	Dent	else	Chi-square/Yates	0,2631	1	0,61	Dent	else	Fisher's exact p			0,38
	Dent	GP	Fisher's exact p			1,00	Dent	GP	Fisher's exact p			**0,02**
	else	GP	Chi-square/Yates	0,3938	1	0,53	else	GP	Fisher's exact p			0,14
Statement 5-3: "An osteopath uses techniques for mobilisation and manipulation"	Dent	else	Chi-square/Yates	0,4647	1	0,50	Dent	else	Fisher's exact p			0,15
	Dent	GP	Chi-square/Yates	3,7929	1	**0,05**	Dent	GP	Fisher's exact p			0,33
	else	GP	Chi-square/Yates	1,1119	1	0,29	else	GP	Fisher's exact p			0,53
Statement 5-4: "An osteopath uses active relaxation techniques"	Dent	else	Chi-square/Yates	0,104	1	0,75	Dent	else	Chi-square/Yates	1,4669	1	0,23
	Dent	GP	Chi-square/Yates	1,7406	1	0,19	Dent	GP	Fisher's exact p			0,36
	else	GP	Chi-square/Yates	0,7893	1	0,37	else	GP	Chi-square/Yates	0,2917	1	0,59
Statement 5-5: "An osteopath uses acupuncture"	Dent	else	Chi-square/Yates	0,2169	1	0,64	Dent	else	Fisher's exact p			0,29
	Dent	GP	Chi-square/Yates	0,0703	1	0,79	Dent	GP	Fisher's exact p			0,61
	else	GP	Chi-square/Yates	0,0117	1	0,91	else	GP	Fisher's exact p			0,65

independent:	Sex		concrete(yes/no) vs. inconcrete (don't know/missing)				Sex		yes vs. no			
Statement 5-6: "An osteopath uses muscle energy techniques"	Dent	else	Chi-square/Yates	0,1642	1	0,69	Dent	else	Chi-square/Yates	1,573	1	0,21
	Dent	GP	Chi-square/Yates	0,5675	1	0,45	Dent	GP	Chi-square/Yates	0,0013	1	0,97
	else	GP	Chi-square/Yates	0,0215	1	0,88	else	GP	Chi-square/Yates	1,5623	1	0,21
Statement 5-7: "An osteopath uses reflex zones"	Dent	else	Chi-square/Yates	0,6693	1	0,41	Dent	else	Chi-square/Yates	1,1432	1	0,29
	Dent	GP	Chi-square/Yates	0,7934	1	0,37	Dent	GP	Chi-square/Yates	0,1313	1	0,72
	else	GP	Chi-square/Yates	0,0264	1	0,87	else	GP	Chi-square/Yates	4,201	1	**0,04**
Statement 6-1: "Newborn belong to the target group of osteopathy"	Dent	else	Chi-square/Yates	0,0004	1	0,98	Dent	else	Fisher's exact p			1,00
	Dent	GP	Chi-square/Yates	0,0001	1	0,99	Dent	GP	Chi-square/Yates	0,001	1	0,97
	else	GP	Chi-square/Yates	0,1387	1	0,71	else	GP	Chi-square/Yates	0,0723	1	0,79
Statement 6-2: "Infants younger than six years belong to the target group of osteopathy"	Dent	else	Chi-square/Yates	0,0661	1	0,80	Dent	else	Fisher's exact p			1,00
	Dent	GP	Chi-square/Yates	0,0224	1	0,88	Dent	GP	Fisher's exact p			0,74
	else	GP	Chi-square/Yates	0,06	1	0,81	else	GP	Chi-square/Yates	0,0002	1	0,99
Statement 6-3: "Children older than six years belong to the target group of osteopathy"	Dent	else	Chi-square/Yates	0,5777	1	0,45	Dent	else	Fisher's exact p			1,00
	Dent	GP	Chi-square/Yates	0,2979	1	0,59	Dent	GP	Fisher's exact p			**0,07**
	else	GP	Chi-square/Yates	0,0234	1	0,88	else	GP	Fisher's exact p			**0,05**
Statement 6-4: "Adults belong to the target group of osteopathy"	Dent	else	Fisher's exact p			1,00	Dent	else	Fisher's exact p			0,52
	Dent	GP	Fisher's exact p			1,00						
	else	GP	Chi-square/Yates	0,0604	1	0,81	else	GP	Fisher's exact p			0,15
Statement 6-5: "Old people belong to the target group of osteopathy"	Dent	else	Fisher's exact p			1,00	Dent	else	Fisher's exact p			1,00
	Dent	GP	Fisher's exact p			1,00	Dent	GP	Fisher's exact p			0,50
	else	GP	Chi-square/Yates	0,028	1	0,87	else	GP	Fisher's exact p			0,56

independent:	Sex		concrete(yes/no) vs. inconcrete (don't know/missing)				Sex		yes vs. no			
Statement 7-1: "During treatment, an osteopath concentrates at the dysfunction, only"	Dent	else	Fisher's exact p			1,00	Dent	else	Fisher's exact p			0,19
	Dent	GP	Chi-square/Yates	0,0031	1	0,96	Dent	GP	Fisher's exact p			0,22
	else	GP	Chi-square/Yates	0,0032	1	0,96	else	GP	Fisher's exact p			1,00
Statement 7-2: "During treatment, an osteopath works at the whole body"	Dent	else	Fisher's exact p			1,00	Dent	else	Fisher's exact p			0,38
	Dent	GP	Fisher's exact p			0,62	Dent	GP	Fisher's exact p			0,48
	else	GP	Fisher's exact p			0,68	else	GP	Fisher's exact p			1,00
Statement 8-1: "An osteopath uses painful techniques"	Dent	else	Chi-square/Yates	0,0661	1	0,80	Dent	else	Fisher's exact p			0,55
	Dent	GP	Chi-square/Yates	0,0224	1	0,88	Dent	GP	Fisher's exact p			1,00
	else	GP	Chi-square/Yates	0,1149	1	0,73	else	GP	Fisher's exact p			0,64
Statement 8-2: "An osteopath uses forceful techniques"	Dent	else	Chi-square/Yates	0,0439	1	0,83	Dent	else	Chi-square/Yates	1,4922	1	0,22
	Dent	GP	Chi-square/Yates	0,0435	1	0,83	Dent	GP	Chi-square/Yates	0,2812	1	0,60
	else	GP	Chi-square/Yates	0,0178	1	0,89	else	GP	Chi-square/Yates	0,4743	1	0,49
Statement 8-3: "An osteopath uses gentle techniques"	Dent	else	Chi-square/Yates	0,4975	1	0,48						
	Dent	GP	Fisher's exact p			**0,01**	Dent	GP	Fisher's exact p			1,00
	else	GP	Fisher's exact p			**0,05**	else	GP	Fisher's exact p			1,00
Statement 9-1: "Osteopathy is suitable for treatment of chronic and acute musculosceletal pain"	Dent	else	Fisher's exact p			1,00						
	Dent	GP	Fisher's exact p			0,62						
	else	GP	Fisher's exact p			0,43						
Statement 9-2: "Osteopathy is suitable for treatment of health problems after accidents"	Dent	else	Fisher's exact p			0,52	Dent	else	Fisher's exact p			0,64
	Dent	GP	Fisher's exact p			1,00	Dent	GP	Fisher's exact p			1,00
	else	GP	Chi-square/Yates	0,2038	1	0,65	else	GP	Fisher's exact p			0,67

independent:	Sex		concrete(yes/no) vs. inconcrete (don't know/missing)				Sex		yes vs. no			
Statement 9-3: "Osteopathy is suitable for treatment of afflictions of the digestive system"	Dent	else	Chi-square/Yates	0,0439	1	0,83	Dent	else	Chi-square/Yates	1,9133	1	0,17
	Dent	GP	Chi-square/Yates	0,006	1	0,94	Dent	GP	Chi-square/Yates	5,3833	1	**0,02**
	else	GP	Chi-square/Yates	0,0004	1	0,98	else	GP	Chi-square/Yates	0,2938	1	0,59
Statement 9-4: "Osteopathy is suitable for treatment of headache, migraine and vertigo"	Dent	else	Fisher's exact p			1,00	Dent	else	Fisher's exact p			0,29
	Dent	GP	Fisher's exact p			0,74	Dent	GP	Fisher's exact p			0,34
	else	GP	Chi-square/Yates	0,1249	1	0,72	else	GP	Fisher's exact p			1,00
Statement 9-5: "Osteopathy is suitable for treatment of dysfunctions of the masticatory apparatus"	Dent	else	Chi-square/Yates	1,7305	1	0,19	Dent	else	Fisher's exact p			0,69
	Dent	GP	Chi-square/Yates	0,2586	1	0,61	Dent	GP	Fisher's exact p			0,63
	else	GP	Chi-square/Yates	0,8754	1	0,35	else	GP	Fisher's exact p			0,13
Statement 9-6: "Osteopathy is suitable for treating pregnancy-related problems and medical issues around birth"	Dent	else	Chi-square/Yates	0,336	1	0,56	Dent	else	Chi-square/Yates	0,0461	1	0,83
	Dent	GP	Chi-square/Yates	0,0435	1	0,83	Dent	GP	Chi-square/Yates	0,0681	1	0,79
	else	GP	Chi-square/Yates	0,1143	1	0,74	else	GP	Chi-square/Yates	0,0498	1	0,82
Statement 9-7: "Osteopathy is suitable for treating problems of the urogenital tract (PMS, incontinence,…)"	Dent	else	Chi-square/Yates	0,5793	1	0,45	Dent	else	Chi-square/Yates	0,2602	1	0,61
	Dent	GP	Chi-square/Yates	0,5146	1	0,47	Dent	GP	Chi-square/Yates	1,108	1	0,29
	else	GP	Chi-square/Yates	0,001	1	0,97	else	GP	Chi-square/Yates	0,0459	1	0,83
Statement 10: "There are contraindications for osteopathic treatment"	Dent	else	Chi-square/Yates	0,791	1	0,37	Dent	else	Fisher's exact p			0,62
	Dent	GP	Chi-square/Yates	0,8502	1	0,36	Dent	GP	Fisher's exact p			1,00
	else	GP	Chi-square/Yates	0,0131	1	0,91	else	GP	Chi-square/Yates	1,1949	1	0,27

independent:	Sex		concrete(yes/no) vs. inconcrete (don't know/missing)				Sex		yes vs. no			
Statement 11: "A patient can be treated osteopathically, in spite of taking drugs"	Dent	else	Fisher's exact p			1,00	Dent	else	Fisher's exact p			0,39
	Dent	GP	Fisher's exact p			0,19	Dent	GP	Fisher's exact p			0,47
	else	GP	Fisher's exact p			**0,08**	else	GP	Fisher's exact p			1,00
Statement 12-1/2/3: "Osteopathic training in Austria takes 2/4/6.5 years"	Dent	else	Fisher's exact p			0,49	Dent	else	Fisher's exact p			0,49
	Dent	GP	Fisher's exact p			0,53	Dent	GP	Fisher's exact p			0,53
	else	GP	Fisher's exact p			0,27	else	GP	Fisher's exact p			0,27
Statement 13-1: "In Austria, for extra occupational osteopathic training a basic training in medicine, dental medicine, veterinary medicine, physiotherapy, occupationaltherapy or midwifery is needed"	Dent	else	Chi-square/Yates	0,2169	1	0,64	Dent	else	Fisher's exact p			1,00
	Dent	GP	Chi-square/Yates	1,4356	1	0,23	Dent	GP	Fisher's exact p			1,00
	else	GP	Chi-square/Yates	0,2645	1	0,61	else	GP	Chi-square/Yates	0,2581	1	0,61
Statement 13-2: "In Austria, no basic training in a medical profession is needed for becoming osteopath"	Dent	else	Chi-square/Yates	1,4156	1	0,23	Dent	else	Fisher's exact p			1,00
	Dent	GP	Chi-square/Yates	0,7287	1	0,39	Dent	GP	Fisher's exact p			0,29
	else	GP	Chi-square/Yates	0,1149	1	0,73	else	GP	Chi-square/Yates	0,7597	1	0,38
Statement 14-1: "You need to have a well founded basic knowledge in anatomy, physiology and pathology for osteopathy"	Dent	else	Fisher's exact p			1,00						
	Dent	GP	Fisher's exact p			0,14						
	else	GP	Fisher's exact p			0,21						
Statement 14-2: "For osteopathy, a thorough training of palpatory skills is necessary"	Dent	else	Fisher's exact p			0,73	Dent	else	Fisher's exact p			1,00
	Dent	GP	Fisher's exact p			0,71						
	else	GP	Fisher's exact p			0,37	else	GP	Fisher's exact p			0,37

independent:	Sex		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Sex		**yes vs. no**			
Statement 14-3: "For osteopathy, it is necessary to have a knowledge of the 'Five elements'"	Dent	else	Chi-square/Yates	1,0324	1	0,31	Dent	else	Chi-square/Yates	8,064	1	0,00
	Dent	GP	Chi-square/Yates	0,1927	1	0,66	Dent	GP	Chi-square/Yates	9,3917	1	0,00
	else	GP	Chi-square/Yates	0,3847	1	0,54	else	GP	Fisher's exact p			1,00
Statement 15-1: "Your patient finds a graduated osteopath via the web-pages of the schools, which offer a complete training in osteopathy"	Dent	else	Chi-square/Yates	0,005	1	0,94						
	Dent	GP	Chi-square/Yates	0,0171	1	0,90						
	else	GP	Chi-square/Yates	0,4597	1	0,50						
Statement 15-2: "Your patient finds a graduated osteopath via the yellow pages"	Dent	else	Chi-square/Yates	0,885	1	0,35	Dent	else	Fisher's exact p			0,24
	Dent	GP	Chi-square/Yates	0,006	1	0,94	Dent	GP	Fisher's exact p			0,44
	else	GP	Chi-square/Yates	0,9124	1	0,34	else	GP	Chi-square/Yates	0,0109	1	0,92
Statement 15-3: "Your patient finds a graduated osteopath via a register available at the health insurances"	Dent	else	Chi-square/Yates	0,5003	1	0,48	Dent	else	Fisher's exact p			0,40
	Dent	GP	Chi-square/Yates	1,9975	1	0,16	Dent	GP	Fisher's exact p			0,02
	else	GP	Chi-square/Yates	0,3114	1	0,58	else	GP	Fisher's exact p			0,18
Questions 16-1/2/3: "How many osteopathic treatments, do you think, are necessary (on average), until a healing process takes place? 1-5 / 5-10 / 10-30 treatments"	Dent	else	Fisher's exact p			0,54	Dent	else	Fisher's exact p			0,54
	Dent	GP	Fisher's exact p			**0,08**	Dent	GP	Fisher's exact p			**0,08**
	else	GP	Chi-square	2,3567	2	0,31	else	GP	Chi-square	2,3567	2	0,31
Questions 17-1/2/3: "What do you think, are the costs (on average per hour) of an osteopathic treatment? <60€, 60-90€, >90€"	Dent	else	Fisher's exact p			0,60	Dent	else	Fisher's exact p			0,60
	Dent	GP	Fisher's exact p			0,41	Dent	GP	Fisher's exact p			0,41
	else	GP	Fisher's exact p			**0,04**	else	GP	Fisher's exact p			**0,04**

independent:	Sex		concrete(yes/no) vs. inconcrete (don't know/missing)				Sex		yes vs. no			
Question 19: "For how long have you been practising as a doctor?"	Dent	else	Fisher's exact p			0,72	Dent	else	Fisher's exact p			0,72
	Dent	GP	Fisher's exact p			**0,07**	Dent	GP	Fisher's exact p			**0,07**
	else	GP	Chi-square	6,5397	3	**0,09**	else	GP	Chi-square	6,5397	3	**0,09**
Question 20: "With what professional groups do you co-operate?"												
Homeopaths	Dent	else	Chi-square/Yates	0,4077	1	0,52						
	Dent	GP	Chi-square/Yates	6,3626	1	**0,01**						
	else	GP	Chi-square/Yates	3,7533	1	**0,05**						
Osteopaths	Dent	else	Chi-square/Yates	0,0095	1	0,92						
	Dent	GP	Chi-square/Yates	0,5883	1	0,44						
	else	GP	Chi-square/Yates	0,6246	1	0,43						
Physiotherapists	Dent	else	Chi-square/Yates	24,9902	1	**0,00**						
	Dent	GP	Chi-square/Yates	43,8774	1	**0,00**						
	else	GP	Chi-square/Yates	1,1119	1	0,29						
Occupationaltherapists	Dent	else	Chi-square/Yates	12,5174	1	**0,00**						
	Dent	GP	Chi-square/Yates	24,0306	1	**0,00**						
	else	GP	Chi-square/Yates	1,7784	1	0,18						
Alternative medicine	Dent	else	Chi-square/Yates	1,2522	1	0,26						
	Dent	GP	Chi-square/Yates	0,7088	1	0,40						
	else	GP	Chi-square/Yates	0,078	1	0,78						

independent:	Sex		concrete(yes/no) vs. inconcrete (don't know/missing)				Sex		yes vs. no			
Nutrition scientists	Dent	else	Chi-square/Yates	5,1039	1	**0,02**						
	Dent	GP	Chi-square/Yates	7,2144	1	**0,01**						
	else	GP	Chi-square/Yates	0,0485	1	0,83						
Others	Dent	else	Fisher's exact p			1,00						
	Dent	GP	Fisher's exact p			0,72						
	else	GP	Chi-square/Yates	0,1268	1	0,72						
Question 21-1: "Have you had an osteopathic treatment, yet?"	Dent	else	Fisher's exact p			0,70	Dent	else	Chi-square/Yates	0,023	1	0,88
	Dent	GP	Fisher's exact p			1,00	Dent	GP	Chi-square/Yates	1,0868	1	0,30
	else	GP	Fisher's exact p			0,51	else	GP	Chi-square/Yates	0,5278	1	0,47
Question 21-2: If you have had an osteopathic treatment - was your personal experience positive?	Dent	else	Chi-square/Yates	0,0302	1	0,86	Dent	else	Fisher's exact p			0,55
	Dent	GP	Chi-square/Yates	0,5732	1	0,45	Dent	GP	Fisher's exact p			1,00
	else	GP	Chi-square/Yates	0,1671	1	0,68	else	GP	Fisher's exact p			0,20
Question 22-1: "Have you allotted patients to an osteopath, yet?"	Dent	else	Fisher's exact p			0,14	Dent	else	Chi-square/Yates	0,0109	1	0,92
	Dent	GP	Fisher's exact p			0,43	Dent	GP	Chi-square/Yates	1,3878	1	0,24
	else	GP	Chi-square/Yates	0,3508	1	0,55	else	GP	Chi-square/Yates	0,9034	1	0,34
Question 22-2: "If you have allotted patients to an osteopath - was your experience positive?"	Dent	else	Chi-square/Yates	0,2095	1	0,65						
	Dent	GP	Chi-square/Yates	1,9154	1	0,17	Dent	GP	Fisher's exact p			1,00
	else	GP	Chi-square/Yates	0,6882	1	0,41	else	GP	Fisher's exact p			0,54
Question 22-3: "If you have allotted patients to an osteopath - did the patients give a positive feed-back?"	Dent	else	Chi-square/Yates	1,4521	1	0,23	Dent	else	Fisher's exact p			1,00
	Dent	GP	Chi-square/Yates	4,4122	1	**0,04**	Dent	GP	Fisher's exact p			1,00
	else	GP	Chi-square/Yates	0,5872	1	0,44	else	GP	Fisher's exact p			0,27

independent:	Sex		concrete(yes/no) vs. inconcrete (don't know/missing)				Sex		yes vs. no			
Question 23-1: "Do you feel well informed about osteopathy?"	Dent	else	Fisher's exact p			0,67	Dent	else	Chi-square/Yates	1,0624	1	0,30
	Dent	GP	Fisher's exact p			1,00	Dent	GP	Chi-square/Yates	1,5799	1	0,21
	else	GP	Fisher's exact p			0,52	else	GP	Chi-square/Yates	0,0083	1	0,93
Question 23-2: Would you like to have more information about osteopathy?	Dent	else	Chi-square/Yates	1,2015	1	0,27	Dent	else	Fisher's exact p			1,00
	Dent	GP	Chi-square/Yates	4,328	1	**0,04**	Dent	GP	Chi-square/Yates	0,8193	1	0,37
	else	GP	Chi-square/Yates	1,4573	1	0,23						

15.6. χ^2 praxis

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
dependent:	Wert 1	Wert 2	Test	chi2	df	p	Wert 1	Wert 2	Test	chi2	df	p
Statement 1-1: "An osteopaths works with his hands, singly"	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			0,28
	1-5	>20	Fisher's exact p			0,42	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Fisher's exact p			1,00	5-10	10-20	Fisher's exact p			0,40
	5-10	>20	Fisher's exact p			0,30	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Fisher's exact p			0,16	10-20	>20	Fisher's exact p			0,22
Statement 1-2: "An osteopaths works with his hands, homeopathy and medicinal herbs".	1-5	5-10	Chi-square/Yates	0,0624	1	0,80	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Chi-square/Yates	0,0045	1	0,95	1-5	10-20	Fisher's exact p			0,29
	1-5	>20	Chi-square/Yates	0,3406	1	0,56	1-5	>20	Fisher's exact p			0,40
	5-10	10-20	Chi-square/Yates	0,0042	1	0,95	5-10	10-20	Fisher's exact p			0,17
	5-10	>20	Chi-square/Yates	0,5178	1	0,47	5-10	>20	Fisher's exact p			0,27
	10-20	>20	Chi-square/Yates	0,4219	1	0,52	10-20	>20	Fisher's exact p			**0,003**
Statement 2-1: "Osteopathy is a holistic method"	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			0,38
	1-5	10-20	Fisher's exact p			0,67	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Fisher's exact p			0,67	1-5	>20	Fisher's exact p			0,30
	5-10	10-20	Fisher's exact p			1,00	5-10	10-20	Fisher's exact p			0,26
	5-10	>20	Fisher's exact p			1,00						
	10-20	>20	Chi-square/Yates	0,1116	1	0,74	10-20	>20	Fisher's exact p			0,24

independent:	Praxis		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Praxis		**yes vs. no**			
Statement 2-2: "Osteopathy stimulates the self healing capacity of the body".	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Fisher's exact p			1,00	1-5	>20	Fisher's exact p			0,66
	5-10	10-20	Chi-square/Yates	0,0148	1	0,90	5-10	10-20	Fisher's exact p			1,00
	5-10	>20	Chi-square/Yates	0,0148	1	0,90	5-10	>20	Fisher's exact p			0,69
	10-20	>20	Chi-square/Yates	0,0684	1	0,79	10-20	>20	Fisher's exact p			1,00
Statement 2-3: "Osteopathy is another name for chiropractic".	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			0,64
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			0,49
	1-5	>20	Fisher's exact p			0,32	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Fisher's exact p			0,73	5-10	10-20	Fisher's exact p			**0,08**
	5-10	>20	Chi-square/Yates	0,627	1	0,43	5-10	>20	Fisher's exact p			0,39
	10-20	>20	Chi-square/Yates	2,5733	1	0,11	10-20	>20	Fisher's exact p			0,59
Statement 2-4: "Osteopathy predominantly works preventive".	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Fisher's exact p			0,53	1-5	>20	Fisher's exact p			0,70
	5-10	10-20	Chi-square/Yates	0,0513	1	0,82	5-10	10-20	Fisher's exact p			0,71
	5-10	>20	Chi-square/Yates	0,4384	1	0,51	5-10	>20	Fisher's exact p			0,74
	10-20	>20	Chi-square/Yates	0,5307	1	0,47	10-20	>20	Chi-square/Yates	0,721	1	0,40

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Statement 3-1: "Aim of osteopathy is to re-establish physical and psychical well-being by the correction of movement restrictions of structures and tissues"	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			1,00						
	1-5	>20	Fisher's exact p			1,00	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Fisher's exact p			1,00	5-10	10-20	Fisher's exact p			0,41
	5-10	>20	Fisher's exact p			1,00	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Fisher's exact p			1,00	10-20	>20	Fisher's exact p			1,00
Statement 3-2: "Aim of osteopathy is to re-establish physical and psychical well-being by treating osteoporotic bones"	1-5	5-10	Fisher's exact p			0,50	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			0,27	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Fisher's exact p			1,00	1-5	>20	Fisher's exact p			0,57
	5-10	10-20	Fisher's exact p			0,53	5-10	10-20	Fisher's exact p			1,00
	5-10	>20	Chi-square/Yates	0,2055	1	0,65	5-10	>20	Fisher's exact p			0,38
	10-20	>20	Chi-square/Yates	1,7094	1	0,19	10-20	>20	Fisher's exact p			0,18
Statement 3-3: "Aim of osteopathy is to re-establish physical and psychical well-being by energetic treatment, exclusively"	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			0,13	1-5	10-20	Chi-square/Yates	0,7556	1	0,38
	1-5	>20	Chi-square/Yates	0,0103	1	0,92	1-5	>20	Chi-square/Yates	0,1401	1	0,71
	5-10	10-20	Chi-square/Yates	1,8431	1	0,17	5-10	10-20	Chi-square/Yates	1,5557	1	0,21
	5-10	>20	Chi-square/Yates	0,1905	1	0,66	5-10	>20	Chi-square/Yates	0,3908	1	0,53
	10-20	>20	Chi-square/Yates	5,1158	1	**0,02**	10-20	>20	Chi-square/Yates	0,1498	1	0,70

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Statement 4-1: "An osteopath examines and treats the spine, exclusively"	1-5	5-10	Fisher's exact p			0,40	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			0,66	1-5	10-20	Fisher's exact p			0,51
	1-5	>20	Fisher's exact p			0,16	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Fisher's exact p			0,75	5-10	10-20	Fisher's exact p			0,56
	5-10	>20	Chi-square/Yates	0,1266	1	0,72	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Chi-square/Yates	0,675	1	0,41	10-20	>20	Fisher's exact p			0,60
Statement 4-2: "An osteopath examines and treats the whole musculoskeletal system"	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			0,38
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			0,29
	1-5	>20	Fisher's exact p			1,00	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Fisher's exact p			0,68						
	5-10	>20	Fisher's exact p			0,39	5-10	>20	Fisher's exact p			0,52
	10-20	>20	Fisher's exact p			1,00	10-20	>20	Fisher's exact p			0,49
Statement 4-3: "An osteopath examines and treats fasciae"	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			0,63
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			0,25
	1-5	>20	Chi-square/Yates	0,2852	1	0,59	1-5	>20	Fisher's exact p			0,65
	5-10	10-20	Chi-square/Yates	0,0165	1	0,90	5-10	10-20	Chi-square/Yates	0,2227	1	0,64
	5-10	>20	Chi-square/Yates	0,1905	1	0,66	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Chi-square/Yates	0,4747	1	0,49	10-20	>20	Chi-square/Yates	0,4336	1	0,51

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Statement 4-4: "An osteopath examines and treats the cranial bones"	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			0,28
	1-5	10-20	Fisher's exact p			0,73	1-5	10-20	Fisher's exact p			**0,09**
	1-5	>20	Fisher's exact p			1,00	1-5	>20	Fisher's exact p			**0,01**
	5-10	10-20	Chi-square/Yates	0,0513	1	0,82	5-10	10-20	Fisher's exact p			0,75
	5-10	>20	Chi-square/Yates	0,0082	1	0,93	5-10	>20	Chi-square/Yates	2,1039	1	0,15
	10-20	>20	Chi-square/Yates	0,2625	1	0,61	10-20	>20	Chi-square/Yates	1,5223	1	0,22
Statement 4-5: "An osteopath examines and treats the inner organs"	1-5	5-10	Chi-square/Yates	0,2286	1	0,63	1-5	5-10	Fisher's exact p			0,45
	1-5	10-20	Fisher's exact p			0,36	1-5	10-20	Chi-square/Yates	4,7407	1	**0,03**
	1-5	>20	Chi-square/Yates	0,0002	1	0,99	1-5	>20	Chi-square/Yates	1,988	1	0,16
	5-10	10-20	Chi-square/Yates	3,398	1	**0,07**	5-10	10-20	Chi-square/Yates	1,5052	1	0,22
	5-10	>20	Chi-square/Yates	0,164	1	0,69	5-10	>20	Chi-square/Yates	0,1307	1	0,72
	10-20	>20	Chi-square/Yates	1,8551	1	0,17	10-20	>20	Chi-square/Yates	0,5202	1	0,47
Statement 5-1: "An osteopath uses myofascial techniques".	1-5	5-10	Chi-square/Yates	2,397	1	0,12	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Chi-square/Yates	0,8147	1	0,37	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Chi-square/Yates	1,1728	1	0,28	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Chi-square/Yates	0,4384	1	0,51	5-10	10-20	Fisher's exact p			0,45
	5-10	>20	Chi-square/Yates	0,2055	1	0,65	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Chi-square/Yates	0	1	1,00	10-20	>20	Fisher's exact p			0,31

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Statement 5-2: "An osteopath uses craniosacral techniques"	1-5	5-10	Fisher's exact p			0,71	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			0,45	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Fisher's exact p			1,00	1-5	>20	Fisher's exact p			0,55
	5-10	10-20	Fisher's exact p			0,75	5-10	10-20	Fisher's exact p			1,00
	5-10	>20	Chi-square/Yates	0,1266	1	0,72	5-10	>20	Fisher's exact p			0,63
	10-20	>20	Chi-square/Yates	0,675	1	0,41	10-20	>20	Fisher's exact p			0,34
Statement 5-3: "An osteopath uses techniques for mobilisation and manipulation"	1-5	5-10	Fisher's exact p			0,32	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			0,33	1-5	10-20	Fisher's exact p			0,63
	1-5	>20	Fisher's exact p			0,17	1-5	>20	Fisher's exact p			0,24
	5-10	10-20	Chi-square/Yates	0,0513	1	0,82	5-10	10-20	Fisher's exact p			1,00
	5-10	>20	Chi-square/Yates	0,0157	1	0,90	5-10	>20	Fisher's exact p			0,38
	10-20	>20	Chi-square/Yates	0,075	1	0,78	10-20	>20	Fisher's exact p			0,43
Statement 5-4: "An osteopath uses active relaxation techniques"	1-5	5-10	Chi-square/Yates	0,013	1	0,91	1-5	5-10	Fisher's exact p			0,15
	1-5	10-20	Chi-square/Yates	0,0075	1	0,93	1-5	10-20	Chi-square/Yates	0,582	1	0,45
	1-5	>20	Chi-square/Yates	0,4471	1	0,50	1-5	>20	Fisher's exact p			**0,03**
	5-10	10-20	Chi-square/Yates	0,0007	1	0,98	5-10	10-20	Chi-square/Yates	0,1275	1	0,72
	5-10	>20	Chi-square/Yates	1,2841	1	0,26	5-10	>20	Chi-square/Yates	0,1037	1	0,75
	10-20	>20	Chi-square/Yates	2,2969	1	0,13	10-20	>20	Chi-square/Yates	1,4555	1	0,23

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Statement 5-5: "An osteopath uses acupuncture"	1-5	5-10	Chi-square/Yates	0,8081	1	0,37	1-5	5-10	Fisher's exact p			0,54
	1-5	10-20	Fisher's exact p			0,20	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Chi-square/Yates	0,0002	1	0,99	1-5	>20	Fisher's exact p			0,48
	5-10	10-20	Chi-square/Yates	0,0001	1	0,99	5-10	10-20	Fisher's exact p			0,64
	5-10	>20	Chi-square/Yates	0,8798	1	0,35	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Chi-square/Yates	1,947	1	0,16	10-20	>20	Fisher's exact p			0,62
Statement 5-6: "An osteopath uses muscle energy techniques"	1-5	5-10	Chi-square/Yates	0,0242	1	0,88	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Chi-square/Yates	1,5504	1	0,21	1-5	10-20	Fisher's exact p			0,71
	1-5	>20	Chi-square/Yates	0,0228	1	0,88	1-5	>20	Fisher's exact p			0,67
	5-10	10-20	Chi-square/Yates	1,0463	1	0,31	5-10	10-20	Chi-square/Yates	0,0148	1	0,90
	5-10	>20	Chi-square/Yates	0,0374	1	0,85	5-10	>20	Chi-square/Yates	0,3728	1	0,54
	10-20	>20	Chi-square/Yates	2,6771	1	0,10	10-20	>20	Chi-square/Yates	1,0226	1	0,31
Statement 5-7: "An osteopath uses reflex zones"	1-5	5-10	Chi-square/Yates	1,327	1	0,25	1-5	5-10	Fisher's exact p			0,66
	1-5	10-20	Chi-square/Yates	3,8268	1	**0,05**	1-5	10-20	Fisher's exact p			0,24
	1-5	>20	Chi-square/Yates	0,7301	1	0,39	1-5	>20	Fisher's exact p			0,40
	5-10	10-20	Chi-square/Yates	0,358	1	0,55	5-10	10-20	Chi-square/Yates	0,1051	1	0,75
	5-10	>20	Chi-square/Yates	0,0679	1	0,79	5-10	>20	Chi-square/Yates	0	1	1,00
	10-20	>20	Chi-square/Yates	1,5547	1	0,21	10-20	>20	Chi-square/Yates	0,0027	1	0,96

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Statement 6-1: "Newborn belong to the target group of osteopathy"	1-5	5-10	Chi-square/Yates	0,0022	1	0,96	1-5	5-10	Fisher's exact p			0,37
	1-5	10-20	Chi-square/Yates	0,0103	1	0,92	1-5	10-20	Fisher's exact p			0,14
	1-5	>20	Chi-square/Yates	0,2358	1	0,63	1-5	>20	Fisher's exact p			0,13
	5-10	10-20	Chi-square/Yates	0,1932	1	0,66	5-10	10-20	Chi-square/Yates	0,1385	1	0,71
	5-10	>20	Chi-square/Yates	0,0617	1	0,80	5-10	>20	Chi-square/Yates	0,3383	1	0,56
	10-20	>20	Chi-square/Yates	1,1385	1	0,29	10-20	>20	Chi-square/Yates	0,0001	1	0,99
Statement 6-2: "Infants younger than six years belong to the target group of osteopathy"	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			0,64
	1-5	10-20	Chi-square/Yates	0,0707	1	0,79	1-5	10-20	Fisher's exact p			0,40
	1-5	>20	Chi-square/Yates	0,0103	1	0,92	1-5	>20	Fisher's exact p			0,24
	5-10	10-20	Chi-square/Yates	0,4004	1	0,53	5-10	10-20	Fisher's exact p			0,74
	5-10	>20	Chi-square/Yates	0,1905	1	0,66	5-10	>20	Chi-square/Yates	0,4922	1	0,48
	10-20	>20	Chi-square/Yates	0	1	1,00	10-20	>20	Chi-square/Yates	0,0471	1	0,83
Statement 6-3: "Children older than six years belong to the target group of osteopathy"	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			0,53	1-5	10-20	Fisher's exact p			0,42
	1-5	>20	Chi-square/Yates	0,9626	1	0,33	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Chi-square/Yates	0,2055	1	0,65	5-10	10-20	Fisher's exact p			0,45
	5-10	>20	Chi-square/Yates	1,1251	1	0,29	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Chi-square/Yates	0,2061	1	0,65	10-20	>20	Fisher's exact p			0,48

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Statement 6-4: "Adults belong to the target group of osteopathy"	1-5	5-10	Fisher's exact p			1,00						
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Fisher's exact p			0,26						
	5-10	10-20	Fisher's exact p			1,00	5-10	10-20	Fisher's exact p			0,51
	5-10	>20	Fisher's exact p			0,19						
	10-20	>20	Chi-square/Yates	1,4235	1	0,23	10-20	>20	Fisher's exact p			0,50
Statement 6-5: "Old people belong to the target group of osteopathy"	1-5	5-10	Fisher's exact p			0,71						
	1-5	10-20	Fisher's exact p			0,26	1-5	10-20	Fisher's exact p			0,56
	1-5	>20	Fisher's exact p			1,00	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Fisher's exact p			0,73	5-10	10-20	Fisher's exact p			0,27
	5-10	>20	Chi-square/Yates	0,1266	1	0,72	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Chi-square/Yates	1,2642	1	0,26	10-20	>20	Fisher's exact p			0,62
Statement 7-1: "During treatment, an osteopath concentrates at the dysfunction, only"	1-5	5-10	Fisher's exact p			0,71	1-5	5-10	Fisher's exact p			0,53
	1-5	10-20	Fisher's exact p			**0,09**	1-5	10-20	Fisher's exact p			0,56
	1-5	>20	Chi-square/Yates	0,2852	1	0,59	1-5	>20	Fisher's exact p			0,29
	5-10	10-20	Fisher's exact p			0,26	5-10	10-20	Fisher's exact p			1,00
	5-10	>20	Chi-square/Yates	1,9285	1	0,16	5-10	>20	Fisher's exact p			0,68
	10-20	>20	Chi-square/Yates	8,2735	1	**0,004**	10-20	>20	Fisher's exact p			0,72

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Statement 7-2: "During treatment, an osteopath works at the whole body"	1-5	5-10	Fisher's exact p			1,00						
	1-5	10-20	Fisher's exact p			1,00						
	1-5	>20	Fisher's exact p			1,00	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Fisher's exact p			1,00						
	5-10	>20	Fisher's exact p			0,64	5-10	>20	Fisher's exact p			0,51
	10-20	>20	Fisher's exact p			0,68	10-20	>20	Fisher's exact p			0,24
Statement 8-1: "An osteopath uses painful techniques"	1-5	5-10	Chi-square/Yates	0,1596	1	0,69	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Chi-square/Yates	0,723	1	0,40	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Chi-square/Yates	0,0745	1	0,78	5-10	10-20	Fisher's exact p			0,64
	5-10	>20	Chi-square/Yates	0,0575	1	0,81	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Chi-square/Yates	0,7905	1	0,37	10-20	>20	Fisher's exact p			0,36
Statement 8-2: "An osteopath uses forceful techniques"	1-5	5-10	Chi-square/Yates	0,8678	1	0,35	1-5	5-10	Fisher's exact p			0,38
	1-5	10-20	Chi-square/Yates	1,7032	1	0,19	1-5	10-20	Fisher's exact p			0,25
	1-5	>20	Chi-square/Yates	0,0946	1	0,76	1-5	>20	Fisher's exact p			0,40
	5-10	10-20	Chi-square/Yates	0,0042	1	0,95	5-10	10-20	Chi-square/Yates	0,0441	1	0,83
	5-10	>20	Chi-square/Yates	0,3846	1	0,54	5-10	>20	Chi-square/Yates	0,0655	1	0,80
	10-20	>20	Chi-square/Yates	1,1719	1	0,28	10-20	>20	Chi-square/Yates	0,0562	1	0,81

independent:	Praxis		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Praxis		**yes vs. no**			
Statement 8-3: "An osteopath uses gentle techniques"	1-5	5-10	Fisher's exact p			1,00						
	1-5	10-20	Fisher's exact p			1,00						
	1-5	>20	Fisher's exact p			1,00	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Fisher's exact p			0,73						
	5-10	>20	Fisher's exact p			0,73	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Chi-square/Yates	0,0952	1	0,76	10-20	>20	Fisher's exact p			1,00
Statement 9-1: "Osteopathy is suitable for treatment of chronic and acute musculosceletal pain"	1-5	5-10	Fisher's exact p			0,55						
	1-5	10-20	Fisher's exact p			0,62						
	1-5	>20	Fisher's exact p			0,62						
	5-10	10-20	Fisher's exact p			0,64						
	5-10	>20	Fisher's exact p			0,64						
	10-20	>20	Fisher's exact p			1,00						
Statement 9-2: "Osteopathy is suitable for treatment of health problems after accidents"	1-5	5-10	Fisher's exact p			**0,08**						
	1-5	10-20	Fisher's exact p			0,27	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Fisher's exact p			0,30	1-5	>20	Fisher's exact p			0,32
	5-10	10-20	Fisher's exact p			0,46	5-10	10-20	Fisher's exact p			1,00
	5-10	>20	Fisher's exact p			0,30	5-10	>20	Fisher's exact p			**0,03**
	10-20	>20	Chi-square/Yates	0	1	1,00	10-20	>20	Fisher's exact p			**0,06**

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Statement 9-3: "Osteopathy is suitable for treatment of afflictions of the digestive system"	1-5	5-10	Chi-square/Yates	1,5806	1	0,21	1-5	5-10	Fisher's exact p			0,67
	1-5	10-20	Chi-square/Yates	0,723	1	0,40	1-5	10-20	Fisher's exact p			0,28
	1-5	>20	Chi-square/Yates	0,4816	1	0,49	1-5	>20	Fisher's exact p			0,17
	5-10	10-20	Chi-square/Yates	0,164	1	0,69	5-10	10-20	Chi-square/Yates	0,2831	1	0,59
	5-10	>20	Chi-square/Yates	0,358	1	0,55	5-10	>20	Chi-square/Yates	0,4785	1	0,49
	10-20	>20	Chi-square/Yates	0	1	1,00	10-20	>20	Chi-square/Yates	0,0079	1	0,93
Statement 9-4: "Osteopathy is suitable for treatment of headache, migraine and vertigo"	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Fisher's exact p			1,00	1-5	>20	Fisher's exact p			0,31
	5-10	10-20	Fisher's exact p			1,00	5-10	10-20	Fisher's exact p			1,00
	5-10	>20	Fisher's exact p			0,73	5-10	>20	Fisher's exact p			0,39
	10-20	>20	Chi-square/Yates	0,0952	1	0,76	10-20	>20	Fisher's exact p			0,20
Statement 9-5: "Osteopathy is suitable for treatment of dysfunctions of the masticatory apparatus"	1-5	5-10	Fisher's exact p			0,26	1-5	5-10	Fisher's exact p			0,54
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Fisher's exact p			1,00	1-5	>20	Fisher's exact p			0,30
	5-10	10-20	Chi-square/Yates	1,3144	1	0,25	5-10	10-20	Fisher's exact p			0,65
	5-10	>20	Chi-square/Yates	1,3144	1	0,25	5-10	>20	Fisher's exact p			0,72
	10-20	>20	Chi-square/Yates	0,0556	1	0,81	10-20	>20	Fisher's exact p			0,43

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Statement 9-6: "Osteopathy is suitable for treating pregnancy-related problems and medical issues around birth"	1-5	5-10	Chi-square/Yates	0,0985	1	0,75	1-5	5-10	Fisher's exact p			0,36
	1-5	10-20	Chi-square/Yates	0,0299	1	0,86	1-5	10-20	Fisher's exact p			0,24
	1-5	>20	Chi-square/Yates	0,0227	1	0,88	1-5	>20	Fisher's exact p			0,24
	5-10	10-20	Chi-square/Yates	0,458	1	0,50	5-10	10-20	Chi-square/Yates	0,0549	1	0,81
	5-10	>20	Chi-square/Yates	1,1377	1	0,29	5-10	>20	Chi-square/Yates	0,0175	1	0,89
	10-20	>20	Chi-square/Yates	0,0469	1	0,83	10-20	>20	Chi-square/Yates	0,0264	1	0,87
Statement 9-7: "Osteopathy is suitable for treating problems of the urogenital tract (PMS, incontinence,…)"	1-5	5-10	Chi-square/Yates	1,2187	1	0,27	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Chi-square/Yates	0,1092	1	0,74	1-5	10-20	Fisher's exact p			**0,09**
	1-5	>20	Chi-square/Yates	0,0002	1	0,99	1-5	>20	Fisher's exact p			0,17
	5-10	10-20	Chi-square/Yates	0,6961	1	0,40	5-10	10-20	Chi-square/Yates	2,0279	1	0,15
	5-10	>20	Chi-square/Yates	1,4723	1	0,23	5-10	>20	Chi-square/Yates	1,1253	1	0,29
	10-20	>20	Chi-square/Yates	0,0444	1	0,83	10-20	>20	Chi-square/Yates	0,0477	1	0,83
Statement 10: "There are contraindications for osteopathic treatment"	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			0,13
	1-5	10-20	Chi-square/Yates	3,5744	1	**0,06**	1-5	10-20	Fisher's exact p			0,25
	1-5	>20	Chi-square/Yates	2,1062	1	0,15	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Chi-square/Yates	7,1802	1	**0,01**	5-10	10-20	Fisher's exact p			0,55
	5-10	>20	Chi-square/Yates	4,6598	1	**0,03**	5-10	>20	Fisher's exact p			0,14
	10-20	>20	Chi-square/Yates	0,1673	1	0,68	10-20	>20	Chi-square/Yates	0,8929	1	0,34

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Statement 11: "A patient can be treated osteopathically, in spite of taking drugs"	1-5	5-10	Fisher's exact p			0,29						
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Fisher's exact p			0,55	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Fisher's exact p			0,30	5-10	10-20	Fisher's exact p			1,00
	5-10	>20	Fisher's exact p			0,68	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Fisher's exact p			0,62	10-20	>20	Fisher's exact p			1,00
Statement 12-1/2/3: "Osteopathic training in Austria takes 2/4/6.5 years"	1-5	>20	Fisher's exact p			0,33	1-5	>20	Fisher's exact p			0,33
	5-10	10-20	Fisher's exact p			0,75	5-10	10-20	Fisher's exact p			0,75
	5-10	>20	Fisher's exact p			**0,02**	5-10	>20	Fisher's exact p			**0,02**
	10-20	>20	Fisher's exact p			**0,05**	10-20	>20	Fisher's exact p			**0,05**
	1-5	5-10	Fisher's exact p			0,52	1-5	5-10	Fisher's exact p			0,52
	1-5	10-20	Fisher's exact p			0,32	1-5	10-20	Fisher's exact p			0,32
Statement 13-1: "In Austria, for extra occupational osteopathic training a basic training in medicine, dental medicine, veterinary medicine, physiotherapy, occupationaltherapy or midwifery is needed"	1-5	5-10	Fisher's exact p			0,17	1-5	5-10	Fisher's exact p			0,43
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Fisher's exact p			0,13	1-5	>20	Fisher's exact p			**0,09**
	5-10	10-20	Chi-square/Yates	2,0432	1	0,15	5-10	10-20	Fisher's exact p			0,51
	5-10	>20	Chi-square/Yates	0,0189	1	0,89	5-10	>20	Fisher's exact p			0,38
	10-20	>20	Chi-square/Yates	2,1943	1	0,14	10-20	>20	Fisher's exact p			**0,10**

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Statement 13-2: "In Austria, no basic training in a medical profession is needed for becoming osteopath"	1-5	5-10	Chi-square/Yates	0,0001	1	0,99	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			0,73
	1-5	>20	Chi-square/Yates	0,545	1	0,46	1-5	>20	Fisher's exact p			0,66
	5-10	10-20	Chi-square/Yates	0,0745	1	0,78	5-10	10-20	Chi-square/Yates	0,0454	1	0,83
	5-10	>20	Chi-square/Yates	0,3846	1	0,54	5-10	>20	Fisher's exact p			0,49
	10-20	>20	Chi-square/Yates	1,7151	1	0,19	10-20	>20	Chi-square/Yates	1,1233	1	0,29
Statement 14-1: "You need to have a well founded basic knowledge in anatomy, physiology and pathology for osteopathy"	1-5	5-10	Fisher's exact p			1,00						
	1-5	10-20	Fisher's exact p			0,67						
	1-5	>20	Fisher's exact p			0,49						
	5-10	10-20	Fisher's exact p			0,69						
	5-10	>20	Fisher's exact p			0,56						
	10-20	>20	Fisher's exact p			0,20						
Statement 14-2: "For osteopathy, a thorough training of palpatory skills is necessary"	1-5	5-10	Fisher's exact p			0,62	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			0,72						
	1-5	>20	Fisher's exact p			0,62						
	5-10	10-20	Fisher's exact p			0,19	5-10	10-20	Fisher's exact p			0,44
	5-10	>20	Fisher's exact p			1,00	5-10	>20	Fisher's exact p			0,41
	10-20	>20	Fisher's exact p			0,12						

independent:	Praxis		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Praxis		**yes vs. no**			
Statement 14-3: "For osteopathy, it is necessary to have a knowledge of the 'Five elements'"	1-5	5-10	Chi-square/Yates	0,2356	1	0,63	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Chi-square/Yates	0,025	1	0,87	1-5	10-20	Fisher's exact p			0,68
	1-5	>20	Chi-square/Yates	0,0533	1	0,82	1-5	>20	Fisher's exact p			0,69
	5-10	10-20	Chi-square/Yates	0,3837	1	0,54	5-10	10-20	Fisher's exact p			0,43
	5-10	>20	Chi-square/Yates	1,8252	1	0,18	5-10	>20	Fisher's exact p			0,44
	10-20	>20	Chi-square/Yates	0,375	1	0,54	10-20	>20	Chi-square/Yates	0,0312	1	0,86
Statement 15-1: "Your patient finds a graduated osteopath via the web-pages of the schools, which offer a complete training in osteopathy"	1-5	5-10	Fisher's exact p			0,17						
	1-5	10-20	Fisher's exact p			0,49						
	1-5	>20	Fisher's exact p			0,20						
	5-10	10-20	Chi-square/Yates	0,5026	1	0,48						
	5-10	>20	Chi-square/Yates	0,0042	1	0,95						
	10-20	>20	Chi-square/Yates	0,2287	1	0,63						
Statement 15-2: "Your patient finds a graduated osteopath via the yellow pages"	1-5	5-10	Chi-square/Yates	0,0314	1	0,86	1-5	5-10	Fisher's exact p			**0,06**
	1-5	10-20	Chi-square/Yates	0,0529	1	0,82	1-5	10-20	Fisher's exact p			0,66
	1-5	>20	Chi-square/Yates	0,0075	1	0,93	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Chi-square/Yates	0,1862	1	0,67	5-10	10-20	Fisher's exact p			0,11
	5-10	>20	Chi-square/Yates	0,6504	1	0,42	5-10	>20	Chi-square/Yates	3,75	1	**0,05**
	10-20	>20	Chi-square/Yates	0,0436	1	0,83	10-20	>20	Chi-square/Yates	0,0688	1	0,79

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Statement 15-3: "Your patient finds a graduated osteopath via a register available at the health insurances"	1-5	5-10	Chi-square/Yates	0,3122	1	0,58	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Chi-square/Yates	0,0228	1	0,88	1-5	10-20	Fisher's exact p			1,00
	1-5	>20	Chi-square/Yates	0,0585	1	0,81	1-5	>20	Fisher's exact p			0,37
	5-10	10-20	Chi-square/Yates	0,9817	1	0,32	5-10	10-20	Fisher's exact p			1,00
	5-10	>20	Chi-square/Yates	0,6504	1	0,42	5-10	>20	Fisher's exact p			0,66
	10-20	>20	Chi-square/Yates	0	1	1,00	10-20	>20	Chi-square/Yates	0,8641	1	0,35
Questions 16-1/2/3: "How many osteopathic treatments, do you think, are necessary (on average), until a healing process takes place? 1-5 / 5-10 / 10-30 treatments"	1-5	>20	Fisher's exact p			0,52	1-5	>20	Fisher's exact p			0,52
	5-10	10-20	Fisher's exact p			0,83	5-10	10-20	Fisher's exact p			0,83
	5-10	>20	Fisher's exact p			1,00	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Chi-square	0,9566	2	0,62	10-20	>20	Chi-square	0,9566	2	0,62
	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			1,00
Questions 17-1/2/3: "What do you think, are the costs (on average per hour) of an osteopathic treatment? <60€, 60-90€, >90€"	1-5	>20	Fisher's exact p			0,35	1-5	>20	Fisher's exact p			0,35
	5-10	10-20	Fisher's exact p			0,90	5-10	10-20	Fisher's exact p			0,90
	5-10	>20	Fisher's exact p			0,25	5-10	>20	Fisher's exact p			0,25
	10-20	>20	Fisher's exact p			0,44	10-20	>20	Fisher's exact p			0,44
	1-5	5-10	Fisher's exact p			0,72	1-5	5-10	Fisher's exact p			0,72
	1-5	10-20	Fisher's exact p			**0,0001**	1-5	10-20	Fisher's exact p			**0,00**

independent:	Praxis		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Praxis		**yes vs. no**			
Question 18-1: "Professional training"	1-5	>20	Fisher's exact p			0,39	1-5	>20	Fisher's exact p			0,39
	5-10	10-20	Chi-square	2,1869	2	0,34	5-10	10-20	Chi-square	2,1869	2	0,34
	5-10	>20	Chi-square	2,2098	2	0,33	5-10	>20	Chi-square	2,2098	2	0,33
	10-20	>20	Chi-square	9,4063	2	**0,01**	10-20	>20	Chi-square	9,4063	2	**0,01**
	1-5	5-10	Chi-square/Yates	0,5376	1	0,46	1-5	5-10	Chi-square/Yates	0,5376	1	0,46
	1-5	10-20	Chi-square/Yates	1,1825	1	0,28	1-5	10-20	Chi-square/Yates	1,1825	1	0,28
Q 18-2: "Job Location" - hospital	1-5	5-10	Fisher's exact p			1,00						
	1-5	10-20	Chi-square/Yates	0,1366	1	0,71						
	1-5	>20	Fisher's exact p			0,49						
	5-10	10-20	Chi-square/Yates	0,0554	1	0,81						
	5-10	>20	Chi-square/Yates	0,6537	1	0,42						
	10-20	>20	Chi-square/Yates	2,1943	1	0,14						
Q 18-2: "Job Location" - own praxis	1-5	5-10	Fisher's exact p			1,00						
	1-5	10-20	Fisher's exact p			0,28						
	1-5	>20	Fisher's exact p			0,49						
	5-10	10-20	Fisher's exact p			**0,06**						
	5-10	>20	Fisher's exact p			0,30						
	10-20	>20	Fisher's exact p			1,00						
Question 20: "With what professional groups do you co-operate?"												

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Homeopaths	1-5	>20	Chi-square/Yates	0,0533	1	0,82						
	5-10	10-20	Chi-square/Yates	0,1978	1	0,66						
	5-10	>20	Chi-square/Yates	0,0058	1	0,94						
	10-20	>20	Chi-square/Yates	0,0417	1	0,84						
	1-5	5-10	Chi-square/Yates	0,0985	1	0,75						
	1-5	10-20	Chi-square/Yates	0,0075	1	0,93						
Osteopaths	1-5	>20	Chi-square/Yates	0,0529	1	0,82						
	5-10	10-20	Chi-square/Yates	0,0121	1	0,91						
	5-10	>20	Chi-square/Yates	0,236	1	0,63						
	10-20	>20	Chi-square/Yates	0,0436	1	0,83						
	1-5	5-10	Chi-square/Yates	0,0624	1	0,80						
	1-5	10-20	Chi-square/Yates	0,0103	1	0,92						
Physiotherapists	1-5	>20	Chi-square/Yates	0,0585	1	0,81						
	5-10	10-20	Chi-square/Yates	0,0189	1	0,89						
	5-10	>20	Chi-square/Yates	0,0554	1	0,81						
	10-20	>20	Chi-square/Yates	0,0504	1	0,82						
	1-5	5-10	Chi-square/Yates	0,0031	1	0,96						
	1-5	10-20	Chi-square/Yates	0,0228	1	0,88						

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Occupationaltherapists	1-5	>20	Chi-square/Yates	0,2927	1	0,59						
	5-10	10-20	Chi-square/Yates	0,026	1	0,87						
	5-10	>20	Chi-square/Yates	1,3965	1	0,24						
	10-20	>20	Chi-square/Yates	2,0417	1	0,15						
	1-5	5-10	Chi-square/Yates	0,0242	1	0,88						
	1-5	10-20	Chi-square/Yates	0,2171	1	0,64						
Alternative medicine	1-5	>20	Chi-square/Yates	0,0228	1	0,88						
	5-10	10-20	Chi-square/Yates	0,236	1	0,63						
	5-10	>20	Chi-square/Yates	0,0121	1	0,91						
	10-20	>20	Chi-square/Yates	0,0436	1	0,83						
	1-5	5-10	Fisher's exact p			0,17						
	1-5	10-20	Chi-square/Yates	2,5363	1	0,11						
Nutrition scientists	1-5	>20	Fisher's exact p			0,12						
	5-10	10-20	Chi-square/Yates	0,002	1	0,96						
	5-10	>20	Chi-square/Yates	0,0238	1	0,88						
	10-20	>20	Chi-square/Yates	0	1	1,00						
	1-5	5-10	Fisher's exact p			0,28						
	1-5	10-20	Fisher's exact p			0,18						

independent:	Praxis		concrete(yes/no) vs. inconcrete (don't know/missing)				Praxis		yes vs. no			
Others	1-5	>20	Fisher's exact p			0,57						
	5-10	10-20	Fisher's exact p			1,00						
	5-10	>20	Fisher's exact p			0,71						
	10-20	>20	Chi-square/Yates	0,4107	1	0,52						
	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Fisher's exact p			1,00
Question 21-1: "Have you had an osteopathic treatment, yet?"	1-5	>20	Fisher's exact p			0,67	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Fisher's exact p			1,00	5-10	10-20	Chi-square/Yates	0,0329	1	0,86
	5-10	>20	Fisher's exact p			0,69	5-10	>20	Chi-square/Yates	0,0614	1	0,80
	10-20	>20	Fisher's exact p			0,71	10-20	>20	Chi-square/Yates	0,0161	1	0,90
	1-5	5-10	Chi-square/Yates	0,0001	1	0,99	1-5	5-10	Fisher's exact p			0,52
	1-5	10-20	Chi-square/Yates	0,0585	1	0,81	1-5	10-20	Fisher's exact p			1,00
Question 21-2: If you have had an osteopathic treatment - was your personal experience positive?	1-5	>20	Chi-square/Yates	0,0045	1	0,95	1-5	>20	Fisher's exact p			0,26
	5-10	10-20	Chi-square/Yates	0,0042	1	0,95	5-10	10-20	Fisher's exact p			0,56
	5-10	>20	Chi-square/Yates	0,0189	1	0,89	5-10	>20	Fisher's exact p			0,65
	10-20	>20	Chi-square/Yates	0	1	1,00	10-20	>20	Fisher's exact p			0,16
	1-5	5-10	Fisher's exact p			1,00	1-5	5-10	Chi-square/Yates	0,0621	1	0,80
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Chi-square/Yates	0,0012	1	0,97

independent:	Praxis		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Praxis		**yes vs. no**			
Question 22-1: "Have you allotted patients to an osteopath, yet?"	1-5	>20	Fisher's exact p			0,26	1-5	>20	Chi-square/Yates	0,0021	1	0,96
	5-10	10-20	Fisher's exact p			1,00	5-10	10-20	Chi-square/Yates	0	1	1,00
	5-10	>20	Fisher's exact p			0,19	5-10	>20	Chi-square/Yates	0,0109	1	0,92
	10-20	>20	Chi-square/Yates	3,6963	1	**0,05**	10-20	>20	Chi-square/Yates	0,1677	1	0,68
	1-5	5-10	Chi-square/Yates	0,2747	1	0,60	1-5	5-10	Fisher's exact p			1,00
	1-5	10-20	Chi-square/Yates	0,3016	1	0,58						
Question 22-2: "If you have allotted patients to an osteopath - was your experience positive?"	1-5	>20	Chi-square/Yates	0,1568	1	0,69	1-5	>20	Fisher's exact p			1,00
	5-10	10-20	Chi-square/Yates	0,031	1	0,86	5-10	10-20	Fisher's exact p			0,41
	5-10	>20	Chi-square/Yates	0,0001	1	0,99	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Chi-square/Yates	0	1	1,00	10-20	>20	Fisher's exact p			0,49
	1-5	5-10	Chi-square/Yates	0,0985	1	0,75	1-5	5-10	Fisher's exact p			0,32
	1-5	10-20	Chi-square/Yates	0,0585	1	0,81	1-5	10-20	Fisher's exact p			0,44
Question 22-3: "If you have allotted patients to an osteopath - did the patients give a positive feed-back?"	1-5	>20	Chi-square/Yates	0,005	1	0,94	1-5	>20	Fisher's exact p			0,47
	5-10	10-20	Chi-square/Yates	0,0058	1	0,94	5-10	10-20	Fisher's exact p			1,00
	5-10	>20	Chi-square/Yates	0,0882	1	0,77	5-10	>20	Fisher's exact p			1,00
	10-20	>20	Chi-square/Yates	0,0429	1	0,84	10-20	>20	Fisher's exact p			1,00
	1-5	5-10	Fisher's exact p			0,62	1-5	5-10	Fisher's exact p			0,73
	1-5	10-20	Fisher's exact p			1,00	1-5	10-20	Chi-square/Yates	0,6608	1	0,42

independent:	Praxis		**concrete(yes/no) vs. inconcrete (don't know/missing)**				Praxis		**yes vs. no**			
Question 23-1: "Do you feel well informed about osteopathy?"	1-5	>20	Fisher's exact p			1,00	1-5	>20	Fisher's exact p			0,75
	5-10	10-20	Fisher's exact p			1,00	5-10	10-20	Chi-square/Yates	2,3378	1	0,13
	5-10	>20	Fisher's exact p			0,69	5-10	>20	Chi-square/Yates	0,6196	1	0,43
	10-20	>20	Fisher's exact p			1,00	10-20	>20	Chi-square/Yates	0,3587	1	0,55
	1-5	5-10	Fisher's exact p			0,29	1-5	5-10	Fisher's exact p			0,44
	1-5	10-20	Fisher's exact p			0,32	1-5	10-20	Fisher's exact p			0,30
Question 23-2: Would you like to have more information about osteopathy?	1-5	>20	Fisher's exact p			0,32	1-5	>20	Fisher's exact p			0,18
	5-10	10-20	Chi-square/Yates	0,0165	1	0,90	5-10	10-20	Chi-square/Yates	0,0008	1	0,98
	5-10	>20	Chi-square/Yates	0,034	1	0,85	5-10	>20	Chi-square/Yates	0,0736	1	0,79
	10-20	>20	Chi-square/Yates	0	1	1,00	10-20	>20	Chi-square/Yates	0,0055	1	0,94
	1-5	5-10	Chi-square/Yates	0,0724	1	0,79						
	1-5	10-20	Fisher's exact p			**0,00**						

15.7. Pre-test on knowledge

			Shapiro Wilk-test			Bartlett-test			
dependent	independent	value	W	p	norm. distrib.	K^2	df	p	homogeneous variances
Aims_kn	total		0,7988	<0,001					
	AGE	20-40	0,7541	<0,001	no	0,1917	2	0,9086	yes
		40-50	0,7541	<0,001	no				
		>50	0,7541	<0,001	no				
	CLASS_PROF	MD	0,7838	<0,001	no	1,2255	2	0,5419	yes
		Dent	0,8225	<0,001	no				
		else	0,8093	<0,001	no				
	PRAXIS	1-5	0,7775	<0,001	no	1,3408	3	0,7195	yes
		5-10	0,7671	<0,001	no				
		10-20	0,7626	<0,001	no				
		>20	0,8401	<0,001	no				
	Sex	female	0,7879	<0,001	no	0,4833	1	0,4869	yes
		male	0,7879	<0,001	no				
gen_kn	total		0,8373	<0,001					
	AGE	20-40	0,8655	0,004	no	1,7894	2	0,4087	yes
		40-50	0,8655	0,004	no				
		>50	0,8655	0,004	no				
	CLASS_PROF	MD	0,8051	<0,001	no	0,3011	2	0,8602	yes
		Dent	0,8681	0,002	no				
		else	0,7679	<0,001	no				
	PRAXIS	1-5	0,7893	<0,001	no	1,3422	3	0,7191	yes
		5-10	0,791	<0,001	no				
		10-20	0,7931	<0,001	no				
		>20	0,8991	<0,001	no				
	Sex	female	0,8087	<0,001	no	1,0978	1	0,2948	yes
		male	0,8436	<0,001	no				

			Shapiro Wilk-test			Bartlett-test			
dependent	independent	value	W	p	norm. distrib.	K^2	df	p	homogeneous variances
ind_kn	total		0,93	<0,001					
	AGE	20-40	0,9228	0,067	no	0,2696	2	0,8739	yes
		40-50	0,9312	0,001	no				
		>50	0,9312	0,001	no				
	CLASS_PROF	MD	0,9303	<0,001	no	3,4904	2	0,1746	yes
		Dent	0,9325	0,064	no				
		else	0,9262	0,006	no				
	PRAXIS	1-5	0,8112	0,002	no	2,7717	3	0,4282	yes
		5-10	0,9296	0,034	no				
		10-20	0,9323	0,008	no				
		>20	0,9309	0,007	no				
	Sex	female	0,9237	<0,001	no	1,7696	1	0,1834	yes
		male	0,9273	<0,001	no				
inf_kn	total		0,8563	<0,001					
	AGE	20-40	0,8557	<0,001	no	2,5191	2	0,2838	yes
		40-50	0,8557	<0,001	no				
		>50	0,8557	<0,001	no				
	CLASS_PROF	MD	0,8697	<0,001	no	1,2084	2	0,5465	yes
		Dent	0,8382	<0,001	no				
		else	0,8406	<0,001	no				
	PRAXIS	1-5	0,7843	<0,001	no	3,5023	3	0,3205	yes
		5-10	0,8403	<0,001	no				
		10-20	0,8455	<0,001	no				
		>20	0,8606	<0,001	no				
	Sex	female	0,8552	<0,001	no	0,2021	1	0,653	yes
		male	0,8468	<0,001	no				

			Shapiro Wilk-test			Bartlett-test			
dependent	independent	value	W	p	norm. distrib.	K^2	df	p	homogeneous variances
progr_kn	total		0,8366	<0,001					
	AGE	20-40	0,8494	<0,001	no	8,5621	2	0,01383	yes
		40-50	0,717	<0,001	no				
		>50	0,8494	<0,001	no				
	CLASS_PROF	MD	0,8211	<0,001	no	4,3662	2	0,1127	yes
		Dent	0,9262	0,044	no				
		else	0,7885	<0,001	no				
	PRAXIS	1-5	0,7463	<0,001	no	0,8597	3	0,8351	yes
		5-10	0,8432	<0,001	no				
		10-20	0,7826	<0,001	no				
		>20	0,8538	<0,001	no				
	Sex	female	0,8487	<0,001	no	1,7293	1	0,1885	yes
		male	0,8487	<0,001	no				
struct_kn	total		0,8888	<0,001					
	AGE	20-40	0,866	0,004	no	0,4938	2	0,7812	yes
		40-50	0,866	0,004	no				
		>50	0,866	0,004	no				
	CLASS_PROF	MD	0,8676	<0,001	no	1,2832	2	0,5265	yes
		Dent	0,892	0,006	no				
		else	0,8996	<0,001	no				
	PRAXIS	1-5	0,789	<0,001	no	0,5651	3	0,9044	yes
		5-10	0,8541	<0,001	no				
		10-20	0,8922	<0,001	no				
		>20	0,9176	0,002	no				
	Sex	female	0,8701	<0,001	no	1,2624	1	0,2612	yes
		male	0,9021	<0,001	no				

			Shapiro Wilk-test			Bartlett-test			
dependent	independent	value	W	p	norm. distrib.	K²	df	p	homogeneous variances
targ_kn	total		0,8472	<0,001					
	AGE	20-40	0,7899	<0,001	no	0,799	2	0,6707	yes
		40-50	0,7899	<0,001	no				
		>50	0,8713	<0,001	no				
	CLASS_PROF	MD	0,8522	<0,001	no	1,0791	2	0,583	yes
		Dent	0,8538	<0,001	no				
		else	0,8322	<0,001	no				
	PRAXIS	1-5	0,748	<0,001	no	0,9973	3	0,8019	yes
		5-10	0,8479	<0,001	no				
		10-20	0,8429	<0,001	no				
		>20	0,8727	<0,001	no				
	Sex	female	0,7423	<0,001	no	0,1973	1	0,657	yes
		male	0,9044	<0,001	no				
techn_kn	total	0,9441	1,176e-05	<0,001					
	AGE	20-40	0,9181	0,053	no	1,3886	2	0,4994	yes
		40-50	0,9284	0,001	no				
		>50	0,9509	0,023	no				
	CLASS_PROF	MD	0,9399	0,002	no	1,415	2	0,4929	yes
		Dent	0,9399	0,002	no				
		else	0,948	0,036	no				
	PRAXIS	1-5	0,9358	**0,221**	**yes**	0,28	3	0,9637	yes
		5-10	0,9107	0,010	no				
		10-20	0,9434	0,022	no				
		>20	0,9434	0,022	no				
	Sex	female	0,9477	0,006	no	0,3748	1	0,5404	yes
		male	0,929	<0,001	no				

			Shapiro Wilk-test			Bartlett-test			
dependent	independent	value	W	p	norm. distrib.	K²	df	p	homogeneous variances
total_kn	total	0,9193	2,078e-07	<0,001					
	AGE	20-40	0,8854	0,011	no	1,0731	2	0,5848	yes
		40-50	0,8878	<0,001	no				
		>50	0,9518	0,026	no				
	CLASS_PROF	MD	0,8938	<0,001	no	1,0904	2	0,5797	yes
		Dent	0,8983	0,009	no				
		else	0,8938	<0,001	no				
	PRAXIS	1-5	0,9213	0,120	no	0,799	3	0,8497	yes
		5-10	0,8828	0,002	no				
		10-20	0,8828	0,002	no				
		>20	0,9546	0,061	no				
	Sex	female	0,9263	<0,001	no	2,6053	1	0,1065	yes
		male	0,9171	<0,001	no				
train_kn	total		0,8943	<0,001					
	AGE	20-40	0,9152	0,046	no	2,5245	2	0,283	yes
		40-50	0,9152	0,046	no				
		>50	0,8783	<0,001	no				
	CLASS_PROF	MD	0,8754	<0,001	no	0,7119	2	0,7005	yes
		Dent	0,898	0,009	no				
		else	0,9067	0,001	no				
	PRAXIS	1-5	0,9136	0,086	no	3,0194	3	0,3886	yes
		5-10	0,8824	0,002	no				
		10-20	0,888	<0,001	no				
		>20	0,8828	<0,001	no				
	Sex	female	0,8924	<0,001	no	1,9543	1	0,1621	yes
		male	0,8945	<0,001	no				