

An investigation of selected factors influencing the job satisfaction of physiotherapists

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ABSTRACT

In this study, the job satisfaction of physiotherapists in private practice in South Africa was examined.

The primary objective of the research was twofold. Firstly, the objective was to investigate the influence that organisational commitment and entrepreneurial orientation have on the job satisfaction of the specific group of healthcare professionals. Secondly, the objective was to make practical recommendations and suggest action plans to enhance job satisfaction and entrepreneurial behaviour among these individuals and within the physiotherapy industry.

A literature study was conducted where the concepts of job satisfaction, organisational commitment and entrepreneurial orientation were explored. The three variables of organisational commitment and five variables that constitute entrepreneurial orientation were further investigated.

The empirical study was conducted among owners or partners of physiotherapy practices in South Africa. Questionnaires were sent to 129 potential respondents in the target population whereafter a total of 70 usable questionnaires were received back.

Data was analysed and descriptive statistics were used to conclude on the demographic characteristics of the participants. The mean values and standard deviations of the variables were also calculated. The reliability of the measuring instruments was determined by calculation of the Cronbach's alpha coefficients. Furthermore, the differences among genders with regard to the individual variables were determined by calculation of effect sizes and multiple regression analyses were used to determine the influence of organisational commitment and entrepreneurial orientation on job satisfaction.

Results demonstrated that affective commitment had a statistical significant influence on job satisfaction, whereas continuance commitment and normative commitment showed no relationship with the dependent variable. Even though autonomy was the closest

related to job satisfaction among the five dimensions of entrepreneurial orientation, none of the dimensions were shown to have a significant influence on the job satisfaction of physiotherapists.

No differences existed between males and females with regard to job satisfaction and organisational commitment. However, significant differences were seen in four of the five dimensions of entrepreneurial orientation. Male physiotherapists displayed higher levels of innovativeness, risk-taking, pro-activeness and competitive aggressiveness in their practices than their female counterparts.

Based on the results above, recommendations and action plans were formulated. The action plans focused on increasing affective commitment and ultimately job satisfaction of physiotherapists. Furthermore, plans were derived to improve entrepreneurial orientation within the industry and specifically among female physiotherapists. Males can play an imperative role to augment entrepreneurial behaviour among these professionals.

The study was concluded by assessing the achievement of the set objectives and suggestions for future research were made.

Keywords: Physiotherapy; job satisfaction; organisational commitment; entrepreneurship; entrepreneurial orientation.

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CHAPTER 1

NATURE AND SCOPE OF THE STUDY

1.1. INTRODUCTION

According to Ries (2011: 22), there is currently a vast growth potential for the physiotherapy profession in South Africa. The demand for physical therapy is rising, due to population growth and demographic alterations (Ries, 2011: 22). The need for therapists is obvious as revealed by the numbers. In a country with a population of roughly 50 million people, there were only 5683 physiotherapists registered in South Africa in 2009. That equates to one physiotherapist for every 8798 patients. Only 3694 of these therapists had membership with the South African Society of Physiotherapy (SASP). Of those, merely 24% worked in the public sector whereas approximately 60.5% served more or less seven million people who possessed private insurance (Ries, 2011: 28; Diener, 2009: 5-7).

Physiotherapists occupy three major employment functions in the country namely: the state employee who works in the public sector, the educator who is involved in training at tertiary institutions and the private practice practitioner that works in the private sector (Bowerbank, 2000: 5). According to Havemann and van der Berg (2003: 20-21), patients who seek medical attention in South Africa prefer private healthcare above public healthcare. One of the reasons for the preference is the fact that patients perceive service delivery to be better in the private sector. Another reason is the reality that more financial- and human resources are available in the private sector (Havemann & van der Berg, 2003: 20-21).

Organisational behaviour concepts such as job satisfaction and organisational commitment, have become gradually more important in healthcare organisations (Top, Akdere & Tarcan, 2015: 1260). These dynamics may have positive effects on workplace performance (Carmeli & Freund, 2004: 303). Furthermore, Atkins, Marshall and Javalgi (1996: 15) demonstrated a positive relationship between employee satisfaction and the

quality of patient care. Employee attitude data and its relationship with profitability, productivity, as well as customer loyalty, have received some attention in previous research (Harter, Schmidt & Hayes, 2002: 268).

High levels of organisational commitment may contribute positively to the work and family lives of employees, thereby attenuating negative effects of work stressors on employees' job satisfaction (Namasivayam & Zhao, 2007: 1220). Several studies have shown a positive relationship between the construct of organisational commitment and job satisfaction (Top & Gider, 2013: 667; Thamrin, 2012: 569; Marais, 2005: 76). However, studies that investigate the factors influencing the job satisfaction of physiotherapists, are limited and need to be investigated (Alkassabi, Alsobayel & Aleisa, 2015: 62-63).

Entrepreneurs within the healthcare sector are important to the economy for several reasons. They are the people who create job opportunities, improve living standards and generate wealth. They are also the individuals who notice the need for new services and technologies (Garaj, 2010: 146).

Entrepreneurship has expanded further than the previously confined idea of individuals generating new businesses (Low & MacMillan, 1988: 141). The growing interest of management scholars to understand the entrepreneurial process is indicative thereof (Covin & Slevin, 1991: 7). Nowadays, professionals such as attorneys and medical doctors, build more successful practices as they become more skilled to think entrepreneurially, and consequently more innovative societies are developing around the globe (Henricks, 2004: 1). Specifically, entrepreneurial orientation has become a fundamental focus within the area of entrepreneurship (Covin & Wales, 2012: 677).

The key dimensions of entrepreneurial orientation include "a propensity to act autonomously, a willingness to innovate and take risks, and a tendency to be aggressive towards competitors and pro-active relative to marketplace opportunities" (Lumpkin & Dess, 1996: 137). Wolfe and Shepherd (2015: 677) argued that many different situations exist wherein businesses could potentially gain from entrepreneurially oriented activities. Entrepreneurial orientation was found to enhance the performance of religious

institutions (Pearce, Fritz & Davis, 2010: 240) and entrepreneurial orientation was advantageous in non-profit organisations too (Austin, Stevenson & Wei-Skillern, 2006: 8). A literature review performed by Kirkman and Ogilvie (2014: 84) revealed that entrepreneurial orientation is frequently investigated in established industries such as banking, retail and manufacturing, as well as in small to medium-sized firms.

Therefore, by investigating other organisational structures and the influence that autonomy, innovativeness, pro-activeness, risk-taking and competitive aggressiveness may potentially have in different contexts, our overall comprehension of entrepreneurial orientation could be enhanced.

This chapter discussed the nature and scope of the study, clarified the motivation for the study and explained the problems which the study was based on. It further discussed the primary- and secondary objectives, elucidated on the scope of the study, presented an outline of the research methodology that was used and discussed the limitations to the study. The chapter concluded with a brief layout of the study.

1.2. PROBLEM STATEMENT

As mentioned in the introduction, research with regard to the job satisfaction of physiotherapists is fairly limited. Alkassabi *et al.* (2015: 62-63) highlighted how important it is to study the factors that may positively affect job satisfaction among this specific group of healthcare professionals. These results can be helpful to recommend interventions that may enhance organisational performance and patient outcomes, as well as job satisfaction (Alkassabi *et al.*, 2015: 62-63).

According to Ford, Sivo, Fottler, Dickson, Bradley & Johnson (2006), low levels of organisational commitment and job satisfaction among employees, may have an detrimental effect on the quality of health care, leading to decreased patient loyalty and eventually hospital profitability (cited by Top & Gider, 2013: 667). If the relationship between organisational commitment and job satisfaction proves to be significant in this particular study, enhancing commitment among physiotherapists might indeed improve

their job satisfaction and ultimately the quality of healthcare, patient loyalty and practice profitability.

In the subject discipline of Organisational Behaviour and Change Management, there is an abundance of studies determining the relationship between organisational commitment and job satisfaction (Farzanjoo, 2015: 349; Sirin & Sirin, 2013: 181; Syauta, Troena, Setiawan & Solimun, 2012: 75; Thamrin, 2012: 569). Research confirmed a positive relationship between organisational commitment and job satisfaction in several healthcare practitioners such as nurses and radiologists (Li, Early, Mahrer, Klaristenfeld & Gold, 2014: 94; Moneke & Umeh, 2014: 155; Lin, Lin & Cheng, 2013: 162; Top & Gider, 2013: 679; Lu, Barriball, Zhang & While, 2012: 1029). However, literature to demonstrate the positive relationship between organisational commitment and job satisfaction among physiotherapists, remains to a great extent elusive. Therefore, organisational commitment was included in this study as one of the factors under investigation, to determine whether it influenced the job satisfaction of physiotherapists.

The field of Entrepreneurship in the tertiary education of healthcare workers is a fairly young discipline (Garaj, 2010: 145). Entrepreneurship education needs to include elements such as the importance of entrepreneurs in the healthcare sector, as well as the preparation of students for career success (Garaj, 2010: 145-146). Owners and partners of physiotherapy practices need to integrate various dimensions of entrepreneurial organisations to identify and seize opportunities, preserve high levels of performance and service and continuously stay informed about the newest innovations and treatment options. Only relying on clinical knowledge and expertise, and not exhibiting business skills and entrepreneurial characteristics, could cause the downfall of the practice. Moreover, due to extensive focus put on the therapeutic- and clinical knowledge during their tertiary education, and possibly less emphasis that is put on entrepreneurial skills training, the concept of entrepreneurial orientation might be completely unfamiliar to these professionals. Entrepreneurial orientation might even demonstrate to have a significant influence on how they feel about their job.

On the one side, there is immense potential for growth in the Physiotherapy profession in South Africa (Ries, 2011: 22). On the other side, an Achilles' heel is lurking, due to the

lack of management and business skills (Rossouw, 2007: 22-23). Furthermore, research with regard to entrepreneurship, specifically in the field of physiotherapy, is limited. In particular, the influence that entrepreneurial orientation may have on the job satisfaction of physiotherapists working in private practice in South Africa is largely unexplored.

The concept of entrepreneurial orientation had been researched in-depth in various industries in South Africa. Specifically, the relationship between entrepreneurial orientation and perceived business success and firm performance were studied extensively (Venter, 2014: 58; Dafel, 2012: 109; Rauch, Wiklund, Lumpkin & Frese, 2009: 778; Wiklund, 1999: 44). Entrepreneurial orientation and corporate entrepreneurship are generally closely related, and research suggests that entrepreneurship at organisational level can be measured by entrepreneurial orientation (Covin & Miller, 2014: 13; Antoncic & Hisrich, 2001: 496). The relationship between corporate entrepreneurship and job satisfaction had not gained much attention in previous research (Adonisi, 2003: 72), but in later years a significant relationship between corporate entrepreneurship and job satisfaction was determined (Adonisi, 2003: 137; Rutherford & Holt, 2007: 442; Adonisi & van Wyk, 2008: 403). However, literature that investigated the relationship between entrepreneurial orientation and job satisfaction could not be ascertained. Therefore, entrepreneurial orientation was included as another factor under investigation to determine its influence on the job satisfaction of physiotherapists.

The question was posed whether therapists who decided to enter the private practice arena and became owners or partners of private practices, are satisfied with their jobs and whether job satisfaction is influenced by selected factors. Firstly, does organisational commitment have an influence on the job satisfaction of physiotherapists? Secondly, does entrepreneurial orientation demonstrate to have a significant influence on the job satisfaction of this group of healthcare professionals?

Considering the above problem statement, the research objectives for the study were established.

1.3. RESEARCH OBJECTIVES

The research objectives of the study were divided into primary- and secondary objectives.

1.3.1. Primary objective

The primary objective of this research was to investigate the influence of organisational commitment and entrepreneurial orientation on the job satisfaction of physiotherapists in South Africa. Practical recommendations to enhance job satisfaction and entrepreneurial behaviour in the industry were also formulated.

1.3.2. Secondary objectives

The following secondary objectives were formulated to address the primary objective:

- To gain insight in the field of physiotherapy through a literature study.
- To obtain insight in the variables of job satisfaction and organisational commitment by means of a literature study.
- To define the concept of entrepreneurship.
- To obtain insight in the variables of entrepreneurial orientation by means of a literature study.
- To assess the job satisfaction, organisational commitment and entrepreneurial orientation of physiotherapists in the industry by means of a questionnaire.
- To validate the reliability of the questionnaire measuring job satisfaction, organisational commitment and entrepreneurial orientation by using Cronbach's alpha analysis.
- To investigate the differences in gender with regards to job satisfaction, organisational commitment and entrepreneurial orientation by determining effect sizes.
- To investigate the influence of organisational commitment and entrepreneurial orientation variables on job satisfaction of physiotherapists by using multiple regression analyses.

- To give practical recommendations and action plans to increase job satisfaction of physiotherapists and develop organisational commitment and entrepreneurial orientation within the industry.

1.4. SCOPE OF THE STUDY

This section discussed the field of study, as well as the geographical location where the study was executed.

1.4.1. Field of the study

The field of the study fell primarily within the subject discipline of Entrepreneurship, Organisational Behaviour and Organisational Development and Change Management. Job satisfaction (dependent variable) and organisational commitment (first independent variable) are important constructs in the discipline of Organisational Behaviour and Development and Change Management, respectively. Entrepreneurial orientation acted as the second independent variable and fell within the subject discipline of Entrepreneurship. Furthermore the study included the discipline of health sciences as the physiotherapy industry was also investigated.

1.4.2. The industry under investigation

The study was conducted within the healthcare industry, and specifically the physiotherapy industry in South Africa.

Physiotherapists that were registered as private practice owners at the HPCSA and were therefore in possession of a practice number were targeted to participate in the study. The private practice owners could own or partly own a practice/s in any of the nine provinces in South Africa.

1.4.2.1. History and overview of the physiotherapy industry

As pointed out in the introduction, physiotherapists perform mainly three roles in the context of South Africa. State employees deliver services in the public sector, educators are responsible for the training of graduate and postgraduate students at tertiary

institutions and private practice physiotherapists deliver services directly to their individual clients (Bowerbank, 2000: 5).

Physiotherapists received First Line Practitioner status in South Africa in 1985 (Diener, 2010: 2). The Health Professions Council of South Africa (HPCSA) which act as the regulating body of Physiotherapists and other health care professionals, verified this status in 1997 (Diener, 2010: 2). This suggests that patients who visit a physiotherapist registered with the HPCSA, do not have to be referred by a general practitioner and can be self-referred (Ries, 2011: 28; Diener, 2010: 2). Provided that a condition falls within the scope of practice of the practitioner, he/she has the autonomy to diagnose and treat the condition independently, without intervention from another practitioner.

This clearly carries huge responsibility. Autonomy in decision-making and treatment is based on knowledge, skills and professional standards set out by the profession, but also rest on the honesty and integrity of the individual. If a condition falls outside the scope of the practitioner, the patient should be referred to the relevant healthcare practitioner (Diener, 2010: 2). In case of any misconduct or malpractice from a practitioner, the public is protected by the Board for Physiotherapy, Podiatry and Biokinetics of the HPCSA. The board is also in control of the standards of education and training for the physiotherapy profession. On the other hand, the SASP protects its members and guards their political-, financial-, legal- and social interest.

Autonomous practice puts a legal and professional obligation on practitioners to continuously update current knowledge and keep up to date with the newest developments and evidence based research (Diener, 2010: 2).

1.4.2.2. Treatment/Services

Various injuries and ailments are treated by physiotherapists. The physiotherapist first assesses the patient and once evaluated, decides on a suitable treatment programme. Ailments and injuries treated by Physiotherapists include those from the fields of neurology, respiratory and thoracic, geriatrics, obstetrics, orthopaedics, cardio-vascular, general rehabilitation, sports medicines and intensive care units. Many physiotherapists

are also involved in community care, treat chronic pain or have a special interest in animal physiotherapy (South African Society of Physiotherapy, 2015; Health Professions Council of South Africa, 2013).

Patients who receive treatment from physiotherapists can generally be divided into two groups (Alford, 2009: 318-319). The first group are patients that underwent surgery or experienced trauma to the skeletal system, usually experience loss of range in certain joints and would require therapy to restore joint range of motion and increase the mobility of affected tissues. A progressive rehabilitation programme is generally introduced. Strength training and stretching are necessary to regain optimal function. The second group usually includes patients who suffer from degenerative conditions, overuse disorders and spinal pain and may be more difficult to treat than the first group. These conditions are often subject to complications beyond the primary condition (Alford, 2009: 318-319).

Therapeutic options used by physiotherapists include general and specific exercises, taping and bracing, lifestyle advice, soft tissue mobilisation and massage, joint mobilisation, electrotherapy, dry-needling, ergonomic advice and management, manipulation and massage. Symptomatic relieve can be obtained from a variety of modalities and techniques, but passive therapy will only ensure improvement in the short-term. To obtain long-term improvement, the patient must be actively involved in the treatment process and a change in lifestyle should be incorporated (Alford, 2009: 318-319).

1.5. RESEARCH METHODOLOGY

According to Welman, Kruger and Mitchell (2010: 2), research is a procedure that utilises methods to obtain scientific knowledge in a specific field of study. Neuman (2000: 2) described research as a method of finding answers to particular questions. Salkind (2008: 2) agreed by stating that research is a process during which new information and facts are discovered. Research methodology explains the reason why certain methods or techniques are used (Welman *et al.*, 2010: 2).

This study was conducted in two phases, with the aim to address the study objectives. A literature study was conducted to gain insight into the different variables under investigation (Chapter 2). An empirical study was performed to determine the influence of the independent variables on the dependent variable (Chapter 3). Based on the results from the empirical study, limitations were identified and consequently recommendations and action plans were provided (Chapter 4).

1.5.1. Literature review

The physiotherapy industry in South Africa gained interest during the execution of the literature review. The concepts of job satisfaction and organisational commitment were extensively reviewed. Furthermore, publications on entrepreneurship and specifically entrepreneurial orientation, were studied comprehensively.

The literature review therefore included the following concepts:

- The history and background of the physiotherapy industry and treatment offered by physiotherapists.
- The definition and explanation of job satisfaction, job satisfaction among healthcare professionals and job satisfaction among physiotherapists.
- The organisational commitment construct and its dimensions: affective commitment, normative commitment and continuance commitment and how the construct is related to job satisfaction.
- The entrepreneurial orientation construct and its dimensions: autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness and the possible influence on job satisfaction.

The following sources were consulted to obtain extensive and relevant information:

- Internet sources
- Scientific journal articles
- Theses and/or dissertations and/or mini-dissertations
- Textbooks and e-Books

1.5.2. Empirical research

Empirical research was done by means of the administration of a questionnaire that contained applicable questions to gain information from the target population.

The questionnaire was distributed among physiotherapists (specifically private practice owners or partners) practicing in South Africa. Questionnaires were e-mailed or hand-delivered to chosen respondents and gathered similarly.

This section included a discussion on the research design (quantitative) and the specific measurement instruments (questionnaire) that were used. It further considered the study population, data gathering methods, statistical data analysis, ethical considerations and contributions made by the study.

1.5.2.1. Research design and sampling

A good research study is built on a solid research design (Anderson, Ones, Sinangil & Viswesvaran, 2001: 24). The research design specifies how respondents were selected, discusses the techniques used for data gathering and stipulates how the data analysis was done (Welman *et al.*, 2010: 52).

Quantitative data promote objectivity, thus the researcher remains distant from the research (Whitley, 2002: 32-33). It identifies and isolates variables and measures relationships between the variables, thereby controlling the investigation. The research is limited solely to what can be observed and measured objectively (Welman *et al.*, 2010: 8-9). In the present study, the quantitative research design was used. Non-experimental, hypothesis-testing research was performed and therefore no random assignment of subjects or planned intervention occurred. The aim was to investigate the relationship between selected variables (Welman *et al.*, 2010: 93; Maree, 2007: 152; Trochim & Donnelly, 2007: 9).

Surveys provide a picture of what numerous people think and believe about a specific topic (Neuman, 2000: 34). The survey design was employed to collect information from

the sample population by the use of a survey questionnaire (Neuman, 2000: 34; Anderson *et al.*, 2001: 15).

The census technique is a method that can be used to gather information from the entire population (Kothari, 2004: 55). On the other hand, the sampling technique gathers information from a sample that represents the target population. In that case, the characteristics of the total population are reflected in the sample (Kothari, 2004: 55; Saunders, Lewis & Thornhill, 2009: 210-211). In this study, the sampling technique was used to select and identify the respondents. Non-probability sampling and specifically convenience- and snowball sampling were performed (Welman *et al.*, 2010: 56). The convenience sampling method allowed for the random selection of cases that were easy to obtain for participation in the study (Welman *et al.*, 2010: 69; Maree, 2007: 177). The selection process continued until the required sample size was reached (Welman *et al.*, 2010: 69). The setback with this technique is that it can be prone to bias (Welman *et al.*, 2010: 69-70). Snowball sampling was further employed, as the technique is ideal to use in complicated situations when members of a desired population need to be identified (Saunders *et al.*, 2009: 240; Maree, 2007: 177). In this study, the researcher wanted to specifically include physiotherapists who own or partly own a private practice/s. Participants were not included unless they formed part of the above mentioned group. Therefore, snowball sampling allowed for identification of potential respondents from referrals received by respondents who were already recruited.

1.5.2.2. The questionnaire

Job satisfaction was measured by using the Minnesota Satisfaction Questionnaire (MSQ) that was compiled by Weiss, Dawis, England and Lofquist (1967: 2). This questionnaire measured extrinsic-, intrinsic-, and general satisfaction. The scale developed by Diener, Emmons, Larson and Griffin (1985: 72) was used to measure the respondents' satisfaction with life. This scale is one of most widely-used measures of general well-being (Goetz, Ehret, Jullien, & Hall, 2006: 178). Organisational commitment was measured by using the instrument that was compiled by Allen and Meyer (1990a: 6). Furthermore, entrepreneurial orientation was measured by using part of a questionnaire that was compiled by Lotz (2009: 324). The measurements of job

satisfaction, life satisfaction, organisational commitment and entrepreneurial orientation were subsequently combined into one single questionnaire which constituted Section A to Section D.

The last section (Section E) was customised to gain specific information with regard to demographics, educational background and structure of the practice. Subsequently, the questionnaire contained five sections:

Section A

The therapists' organisational commitment was measured by using 24 statements. Affective commitment was measured by questions A1 to A8, normative commitment was measured by questions A9 to A16 and continuance commitment was measured by questions A17 to A24 respectively.

Section B

Section B assessed the construct of entrepreneurial orientation and measured autonomy (B1 - B5), innovativeness (B6 – B14), risk-taking (B15 - B19), pro-activeness (B20 - B23) and competitive aggressiveness (B24 - B27) within the private practices.

Section C and D

Satisfaction of respondents was measured in Section C and D. Section C measured the therapists' job satisfaction and consisted of 20 statements (C1 – C20). Section D measured their satisfaction with life (D1 – D7).

Section A to D used a five-point Likert scale. The respondents had to indicate whether they agreed, disagreed or felt neutral to the different statements. The scale varied between 1 and 5 (where 1 = Strongly disagree and 5 = Strongly agree).

Section E

The focus of Section E was to gain information with regard to the respondents' demographics, educational background, as well as the structure of the practice. In this

case, the respondents simply had to indicate the correct statement and therefore no scale was used.

Reliability is the consistency of the measuring instrument. A measurement is reliable if the instrument would produce nearly identical results, should the same variable be tested at a different time under the same conditions (De Vos, Strydom, Fouche & Delpont, 2005: 162-163). The reliability of the measuring instrument was tested in chapter three with the use of the Cronbach's alpha analysis.

1.5.2.3. Study population

The target population is the population that the researcher wants to generalise the findings to (Welman *et al.*, 2010: 126). The target population for the purpose of this study, included physiotherapists who were owners or partners of private practices and/or physiotherapists who were in the possession of a practice number. The sampling frame specifically included the above professionals who were situated in any of the nine provinces in South Africa.

The researcher attempted to obtain a sample size of 80 physiotherapists to complete the constructed questionnaires. A total number of 129 physiotherapists were invited to participate in the study. A total of 74 questionnaires were received back. Of those, four questionnaires were excluded as the respondents of those questionnaires were neither in the possession of a practice number nor the owner or partner of the practice.

The total number of questionnaires that were usable amounted to 70 and was used in the data analysis and interpretation. The response rate was therefore calculated to be 54.26%.

1.5.2.4. Data gathering

For the purpose of this research, primary- as well as secondary data was collected. Primary data is unique data that was gathered by the researcher specifically to be used for the study at hand and consisted of the information received from the chosen research participants through the completed questionnaires. Secondary data is data that

was gathered by other individuals or institutions (Welman *et al.*, 2010: 149). Secondary data was used to compile the literature review. The data was collected via academic articles and journals, dissertations, databases, scholarly search engines and the internet.

The collection of primary data was obtained by the chosen questionnaire. The survey questionnaire was either e-mailed or hand-delivered to the chosen respondents. A cover letter that explained the purpose of the research and content of the questionnaire, accompanied each questionnaire. Information regarding the respondents' job satisfaction, life satisfaction, organisational commitment and entrepreneurial orientation was gathered. Demographical data was also obtained through the questionnaire. The survey method is relatively low in cost and has the benefit of ease. However, a drawback of this method is the fact that the researcher does not have direct control over the response rate.

1.5.2.5. Statistical data analysis

Data gathered for any research process can be analysed and interpreted to achieve the chosen study objectives and draw conclusions from the results (Babbie, 2010: 467). The Statistical Consultation Services of the North-West University (Potchefstroom Campus) was consulted to capture and analyse the completed questionnaires. Analyses were done by utilisation of descriptive statistics and Cronbach's Alpha coefficients (Welman *et al.*, 2010: 147, 231). Effect sizes and multiple linear regression analyses were also performed to investigate the differences among genders and the influence of selected factors on the dependent variable, respectively (Welman *et al.*, 2010: 237; Anderson *et al.*, 2001: 19).

1.5.2.6. Ethical considerations

Ethical considerations were taken into account during all stages of the research study. The privacy of respondents was respected and information received was treated with confidentiality. All subjects freely took part in the study and could withdraw from the study at any stage. Honesty was practiced in reporting of results and misleading reporting of obtained results was avoided. Data and results were not knowingly

distorted. A thorough literature review was executed to make sure that current research was not duplicated. Plagiarism was avoided and the use of other researchers' ideas or data was acknowledged (Walliman, 2011: 240-241; Welman *et al.*, 2010: 182).

1.5.2.7. Contributions

The researcher came to the conclusion that there is currently limited research with regard to the factors that influence the job satisfaction of physiotherapists (Alkassabi *et al.*, 2015: 62-63). Specifically, no literature could be found to demonstrate the influence of organisational commitment and entrepreneurial orientation on the job satisfaction of physiotherapists. Therefore, the outcome of this study added significant value.

The relationship between organisational commitment and job satisfaction had been demonstrated among various healthcare professionals (Moneke & Umeh, 2014: 155; Lin *et al.*, 2013: 162; Top & Gider, 2013: 679). Organisational commitment may be identified as a factor that influences physiotherapists' job satisfaction. If this relationship can be established, it will contribute to existing literature that demonstrated a positive relationship between the two constructs among other healthcare professionals. Consequently, recommendations can be provided to enhance job satisfaction among physiotherapists.

Another factor that might have an influence on the job satisfaction of physiotherapists, is entrepreneurial orientation. However, the relationship between entrepreneurial orientation and job satisfaction is far less researched compared to the other selected factor, namely organisational commitment. The only association between entrepreneurial orientation and job satisfaction that was found in existing literature, were studies that found a significant relationship between corporate entrepreneurship (which is narrowly associated with entrepreneurial orientation) and job satisfaction (Adonisi & van Wyk, 2008: 403; Rutherford & Holt, 2007: 442).

In the South African context, where unemployment is in the order of the day (Le Cordeur, 2015: 1), entrepreneurial activities are highly encouraged. Being a physiotherapist in South Africa, one can deliver services in different settings, i.e. public

hospitals and clinics, as well as in the private sector and educational institutions. Therapists who are more inclined towards entrepreneurially oriented activities within their private practices, might be more satisfied in private practice than their counterparts who focus on these activities to a lesser extent.

By determining whether the selected factors, i.e. organisational commitment and entrepreneurial orientation, significantly influenced the job satisfaction of physiotherapists in South Africa, the researcher contributed to the current gap in the literature.

1.6. LIMITATIONS TO THE STUDY

Certain limitations with regard to the literature review, as well as the empirical study, existed and are mentioned below:

The study included research participants only from South Africa. Therefore, the findings might not be generalisable to other countries. It is thus possible that, if other countries would be included in the same study, the results might have altered.

Limited responses were received. This could have been due to time constraints, as these professionals usually have an extremely demanding workload. Therefore, the sample that was obtained from the population was fairly small. The same study could be repeated, but a larger sample is recommended. This may lead to a variation in results.

Furthermore, the convenience sampling method was used to recruit participants. A more representative method would have been to access a database of all physiotherapists owning a private practice and select the participants via a random selection process, thus using the simple random sampling method.

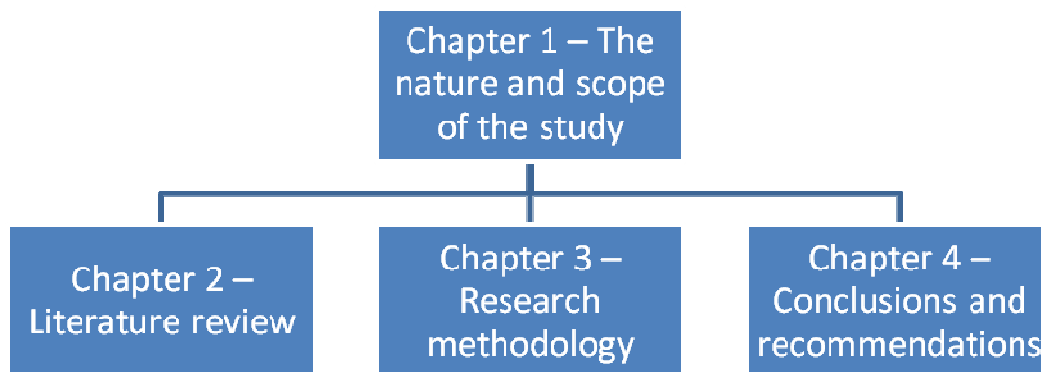
The differences among gender regarding job satisfaction, organisational commitment and entrepreneurial orientation were investigated by calculation of effect sizes. It should be noted that the distribution of males and females were skewed (20% vs. 80%), and may have affected the results of the effect sizes.

Factors that were specifically selected by the researcher (organisational commitment and entrepreneurial orientation) were considered in the study. Additional variables need to be investigated to depict a more comprehensible understanding with regard to factors influencing the job satisfaction of physiotherapists.

1.7. LAYOUT OF THE STUDY

The study's layout is graphically presented in **Figure 1.1**.

Figure 1.1: Layout of the study



Chapter 1 – Nature and scope of the study

Chapter 1 contained the introduction and background to the study. The problem statement gave the reader information as to why the researcher chose to investigate the topic, and flowed into the primary- and secondary objectives as set out by the researcher. The chapter gave a history and overview of the physiotherapy industry, as well as the treatment offered by physiotherapists. It was stated that there is a lot of potential for growth in this industry in South Africa but more emphasis needs to be placed on management and business skills-training (Rossouw, 2007: 22-23). Physiotherapists in private practices are obliged to act as entrepreneurs, but might not have the entrepreneurial skills or orientation to perform this task successfully.

Furthermore, the research methodology followed to explain where and how the research was planned to be executed. It further discussed the history and overview of the physiotherapy industry, as well as treatment offered by physiotherapists. Chapter one concluded with ethical considerations, the study's contributions and limitations, as well as a layout of the study.

Chapter 2 – Literature review of job satisfaction, organisational commitment and entrepreneurial orientation

Chapter 2 focused on the review of literature with specific reference to constructs peculiar to the study disciplines of Entrepreneurship, Organisational Behaviour and Change Management. The concept of job satisfaction was explained as well as the influence of selected factors on job satisfaction. The selected factors namely organisational commitment (affective-, normative- and continuance commitment) and entrepreneurial orientation and its dimensions (autonomy, innovativeness, risk taking, pro-activeness and competitive aggressiveness) were reviewed in depth. Furthermore, the hypotheses models were explained. The chapter concluded with a summary.

Chapter 3 – Research methodology

The research methodology was explained in Chapter 3. Data gathering methods were described, as well as the research design and instruments that were utilised. Also included in this chapter was the description of the study population and sampling technique. The analysis, presentation and discussion of the results followed. The remainder of the chapter discussed the statistical procedure, ethical considerations, as well as the contribution of the study.

Chapter 4 - Conclusions and recommendations

In the closing chapter, the results of the research and findings from the literature study were used to draw conclusions. The goal was to respond to the problem statement and objectives that were set out in chapter one. Practical recommendations and action plans were given in terms of the outcome of whether the selected variables (organisational

commitment and entrepreneurial orientation) had an influence on job satisfaction of physiotherapists. Finally, recommendations for future research were discussed.

CHAPTER 2

LITERATURE REVIEW ON JOB SATISFACTION, ORGANISATIONAL COMMITMENT AND ENTREPRENEURIAL ORIENTATION

2.1. INTRODUCTION

Dhammika, Ahmad & Sam (2012: 8) argued that job satisfaction as work related outcome, has been researched extensively in previous years. Alkassabi *et al.* (2015: 62-63) investigated the job satisfaction of a very specific group of healthcare professionals, namely physiotherapists. They highlighted how important it is to study the factors that may positively affect job satisfaction among this specific group of healthcare professionals. These results can be helpful to recommend interventions that may enhance organisational performance and patient outcomes, as well as job satisfaction.

According to Gong, Law, Chang and Xin (2009: 272), a committed workforce is an advantage which may result in more productive organisations. Organisational commitment therefore remains an important construct in the fields of Organisational behaviour and Development. The relationship between organisational commitment and job satisfaction has been demonstrated in various sectors, such as the banking-, insurance- and information technology industry (Fu & Deshpande, 2014: 346; Kanwar, Singh & Kodwani, 2012: 32; Dirani & Kuchinke, 2011: 1195). In the health industry, organisational commitment has shown to positively influence the job satisfaction of nurses, radiologists and psychologists (Moneke & Umeh, 2014: 155; Lin *et al.*, 2013: 162; Top & Gider, 2013: 679).

Considering research that demonstrates the influence of entrepreneurial orientation on job satisfaction, Adonisi and van Wyk (2008: 403) revealed a positive relationship between corporate entrepreneurship and job satisfaction among top- and middle managers. This research did not specifically focus on entrepreneurial orientation, but

rather on corporate entrepreneurship. However, entrepreneurial orientation is important for firms which want to successfully engage in corporate entrepreneurship activities (Dess & Lumpkin, 2005: 147). Thus, even though literature remains vague with regard to the relationship between entrepreneurial orientation and job satisfaction, the conclusion was drawn that there might indeed exist a relationship between entrepreneurial orientation and job satisfaction due to the positive relationship that corporate entrepreneurship had shown to have with job satisfaction (Adonisi & van Wyk, 2008: 403; Rutherford & Holt, 2007: 442; Adonisi, 2003: 137).

In 1983, Miller proposed the entrepreneurial orientation construct as a composition of three dimensions, namely innovativeness, pro-activeness and risk-taking (Miller, 1983: 770). According to research, these separate dimensions tend to show a strong and positive relationship towards one another (Rauch *et al.*, 2009: 775). The term innovativeness refers to a firm pursuing new opportunities and being prepared to let go of proven practices, risk-taking is related to resource commitment and debt, and pro-activeness refers to the initiative of pursuing fresh opportunities and participating in emerging markets (Lumpkin & Dess, 1996: 142-147). Lumpkin and Dess added two dimensions to the construct of entrepreneurial orientation in 1996, namely autonomy and competitive aggressiveness (Lumpkin & Dess, 1996: 139-140). Autonomy refers to action taken by either an individual or a team to create new concepts or ideas and performing these actions until they are completed. Competitive aggressiveness refers to the ventures that a business undertakes to compete with its rivals (Lumpkin & Dess, 1996: 139-140; 2001: 431).

The researcher only came upon one study that investigated the concepts of job satisfaction, organisational commitment and entrepreneurial orientation concurrently. In the study by Okta, Umar, Musadiq and Hamidah (2015: 55), the influence of entrepreneurial orientation and organisational culture on the job satisfaction, organisational commitment and performance of employees were explored. Job satisfaction had a significant influence on organisational commitment of employees. The higher the level of the job satisfaction of the employees, the higher levels of organisational commitment were expected. Furthermore, entrepreneurial orientation

showed a significant relationship with organisational commitment. Consequently, the higher the entrepreneurial orientation possessed by those in charge of the companies, the higher the levels of organisational commitment of employees were expected. Unfortunately, the direct relationship between entrepreneurial orientation and job satisfaction were not tested in the study. However, due to the positive relationships that were determined between job satisfaction and organisational commitment, and entrepreneurial orientation and organisational commitment, respectively (Okta *et al.*, 2015: 60), the conclusion can be drawn that a positive relationship between entrepreneurial orientation and job satisfaction might have existed.

It was therefore hypothesised that the organisational commitment and entrepreneurial orientation of physiotherapists would positively influence their overall job satisfaction. The different constructs of organisational commitment were discussed and measured against job satisfaction individually. Furthermore, the dimensions of entrepreneurial orientation were investigated, as well as the possible influence that these constructs might have on the job satisfaction of physiotherapists in the private sector in South Africa.

2.2. JOB SATISFACTION

Kanwar *et al.* (2012: 27) argued that job satisfaction is an essential topic and for sure one of the most researched subjects in the Organisational Behaviour field. Büssing (1992: 239) contradicted this statement and noted that even though academics and practitioners developed the construct of job satisfaction, it has received little attention in previous years. Nevertheless, job satisfaction possibly remains the most widely investigated job attitude (Giauque, Resenterra & Siggen, 2014: 207).

Job satisfaction can be described as the feelings that a person has about his or her work, and can be either positive or negative (Spector, 1997: 2). Locke (1976) defined job satisfaction as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (cited by Arnold & Randall, 2010: 260). Price (2001: 608) agreed with the above definitions by indicating that job satisfaction is the extent to which employees enjoy their jobs. People are generally satisfied with their career when they

enjoy the work they do (Millán, Hessels, Thurik & Aguado, 2013: 653). Employees who experience job satisfaction perceive that “their job fulfils or allows for the fulfilment of values that are important to them” (Taylor 2007: 939). Bhuian and Menguc (2002: 8-9) mentioned that internal- or external aspects of a job contribute to an individual being satisfied or not and that job satisfaction explains the degree of the satisfaction or dissatisfaction. An individual’s experience of a sense of competence describes his or her intrinsic satisfaction, while the contentment that is obtained from external rewards describes the individual’s extrinsic satisfaction (Baylor, 2010: 20). In this study, job satisfaction was investigated in the broader sense and thus referred to the individual’s general feeling towards dimensions of the job (Knoop, 1995: 643).

Job satisfaction exists if factors such as mentally challenging work, equitable rewards, supportive working conditions, supportive colleagues and genetic factors are present (Antoniou, Cooper, Chrousos, Spielberger & Eysenck, 2009: 159). On the other hand, job dissatisfaction can be caused by factors such as the social environment, the physical environment, behavioural settings, organisational tasks and roles and characteristics of the person (Antoniou *et al.*, 2009: 160-161).

Job satisfaction further had an influence on various health professionals’ intentions to change careers (Seston, Hassell, Ferguson & Hann, 2009: 129; Parry, 2008: 163; Carless & Bernath, 2007: 194). Bride and Kintzle (2011: 23) argued that job satisfaction is essential to ensure that healthcare practitioners, including those who own businesses or practices, remain in their jobs and ensure survival of their businesses. A positive relationship was also determined between job satisfaction and effectiveness of organisations (Millán *et al.*, 2013: 651). Not only does job satisfaction positively relate to organisation effectiveness, but individual dissatisfaction may also be linked to poor mental health (Faragher, Cass & Cooper, 2005: 111; Cooper, Rout & Faragher, 1989: 70), and specifically with anxiety and stress (Seston *et al.*, 2009: 122). According to Millán *et al.* (2013: 653), it is important to understand which factors may have an influence on job satisfaction.

Consequently, it is of utmost importance to study the factors that may positively affect job satisfaction of physiotherapists, as these professionals render invaluable services in

the hospitals and practices where they work (Alkassabi *et al.*, 2015: 62-63; Ogiwara, 2006: 127). An effort was made to review literature regarding the job satisfaction among physiotherapists in South Africa, but only studies that had been performed among physiotherapists in other countries could be found (Ogiwara, 2006: 127; Eker, Tüzün, Daskapan & Sürenkök, 2004: 500; Speakman, Pleasant & Sutton, 1996: 253). In a study among physical therapists in Texas in the United States of America, the participants indicated that they experienced their jobs challenging, but in a positive way (Speakman *et al.*, 1996: 253). The therapists felt that they were given sufficient autonomy and independence in their decisions and also experienced improvement in their work. On the other hand, they were of the opinion that their jobs were mentally stressful and physically very demanding (Speakman *et al.*, 1996: 253). Physiotherapists in Japan also experienced their jobs to be physically and mentally stressful (Ogiwara, 2006: 127). The study among physiotherapists in Turkey revealed leadership, interpersonal relationships, advancement and salary to be the most significant predictors of job satisfaction (Eker *et al.*, 2004: 500).

The job satisfaction among a different healthcare profession in South Africa was determined by Vorster (2010: 91). Results indicated that pharmacists in both the private and public sectors demonstrated a moderate level of job satisfaction (Vorster, 2010: 91). Another study investigated the job satisfaction among primary healthcare nurses in South Africa and revealed that nurses were generally satisfied with their content of work, but less satisfied with their conditions of work and remuneration (Delobelle, Rawlinson, Ntuli, Malatsi, Decock & Depoorter, 2010: 380).

It is not necessarily happy people who become self-employed, but rather self-employment that makes people happy (Blanchflower, 2004: 22). In earlier years, Katz (1993: 48) also mentioned that the self-employed enjoy higher levels of satisfaction than salaried employees. Research showed that individuals that are self-employed are in general more satisfied with their jobs than those employed by another person or organisation (Millán *et al.*, 2013: 664; Benz & Frey, 2004: 122; Bradley & Roberts, 2004: 50).

There are numerous measures for job satisfaction that were formulated during the years and therefore no universally accepted measurement for job satisfaction exists (Giauque *et al.*, 2014: 208; Dhammika *et al.*, 2012: 8). The Minnesota Satisfaction Questionnaire to assess job satisfaction was developed in 1967 by Weiss *et al.* (1967: 2). This questionnaire was used in the current study to measure and assess the job satisfaction of physiotherapists in private practice in South Africa. It is consequently of essence to test the reliability of the measurement that one intends to use for a specific study (Welman *et al.*, 2010: 145). The reliability of the measuring instrument was determined by Cronbach's alpha analysis (see Chapter 3).

2.3. THE ORGANISATIONAL COMMITMENT CONSTRUCT

There is a vast body of knowledge on organisational commitment as the construct has been scrutinised in research over recent years (Dhammika *et al.*, 2012: 10; Meyer & Herscovitch, 2001: 299). It has been studied regularly as a mediating- and outcome variable in various situations (Nguni, Slegers & Denessen, 2006: 150). However, neither a universal description, nor a universal means of measurement for the organisational commitment construct exists (Meyer & Herscovitch, 2001: 299-300).

Mowday, Steers and Porter (1979: 4) defined organisational commitment as "a strong belief in and acceptance of organisational goals and values, a willingness to exert considerable effort on behalf of the organisation, and a strong desire to remain as a member of the organisation". Allen and Meyer (1990a: 14) described organisational commitment as a psychological attachment of an employee towards the organisation. O'Reilly and Chatman (1986: 493) cited that the psychological attachment "will reflect the degree to which the individual internalises or adopts characteristics or perspectives of the organisation".

Three dimensions of commitment were suggested by O'Reilly and Chatman (1986: 492). These dimensions were termed compliance, identification and internalisation. Balfour and Wechsler (1996: 272) classified three different dimensions of organisational commitment namely: identification-, affiliation-, and exchange commitment.

Meyer and Allen (1984: 373) initially proposed organisational commitment to consist of two components i.e. affective commitment and continuance commitment. Affective commitment indicates an emotional involvement in, and attachment to the organisation, whereas continuance commitment explains the perceived costs that are associated with leaving the organisation. In later years Meyer and Allen (1991: 63-64) proposed a third component. Normative commitment describes the commitment of an employee, due to the perceived obligation to remain in the organisation. According to Dello Russo, Vecchione and Borgogni (2013: 702), the concept of organisational commitment as conceptualised by Meyer and Allen (1991: 63-64) is the most popular among the different schools of thoughts and has achieved the greatest empirical support. Huang, You and Tsai (2012: 515) agreed by stating that during the preceding ten years, this three-component model offered the most important framework for research pertaining to organisational commitment. Based on this, the current study intended to use Allen and Meyer's measure of organisational commitment.

There still exists conflict with regard to the specific causal relationship between the constructs of organisational commitment and job satisfaction (Kanwar *et al.*, 2012: 29). Several researchers concurred that job satisfaction precedes organisational commitment (Dirani & Kuchinke, 2011: 1180; Williams & Hazer, 1986: 228) while others support the reverse ordering, recognising organisational commitment as the predecessor of job satisfaction (Bhuiyan & Menguc, 2002: 9; Vandenberg & Lance, 1992: 164). Nevertheless, the positive relationship between these constructs has been established in various studies (Kanwar *et al.*, 2012: 31; Syauta *et al.*, 2012: 75; Dirani & Kuchinke, 2011: 1195).

According to Syauta *et al.* (2012: 75), employee performance is significantly influenced by organisational commitment, with job satisfaction mediating the relationship. Therefore, higher organisational commitment will result in higher job satisfaction and will ultimately cause higher employee performance. The study by Dirani and Kuchinke (2011: 1195) in the banking sector revealed similar results. A positive and significant relationship between organisational commitment and job satisfaction was established. This supports findings from research by Kanwar *et al.* (2012: 31) that showed a positive

relationship between these two constructs in the information technology industry. An effort was made to acquire literature to demonstrate the positive relationship between organisational commitment and job satisfaction among physiotherapists, but no literature could be found.

However, a study aimed at critical care nurses, a population similar to the population under investigation in terms of healthcare delivery, revealed similar findings. The researchers found a statistically significant relationship between organisational commitment and overall job satisfaction among critical care nurses (Moneke & Umeh, 2014: 157-158). In another study organisational commitment played an important function to promote job satisfaction among nurse residents (Li *et al.*, 2014: 95). Ulrich, Krozek, Early, Africa and Carman (2010: 373) also demonstrated organisational commitment's correlation with work satisfaction in the nursing profession.

A questionnaire for assessing organisational commitment was developed by Natalie Allen and John Meyer in 1990 (Allen & Meyer, 1990a: 6). This questionnaire was used in the current study to measure and assess the organisational commitment of physiotherapists in private practice in South Africa.

To summarise the difference between the three components: "employees with strong affective commitment remain in an organisation because they want to, those with strong continuance commitment stay because they need to, and those with strong normative commitment stay because they feel obliged" (Drucker-Godard, Fouque, Gollety & Le Flanchec, 2015: 338). It remains of essence to differentiate between the three different components; however, affective commitment has shown to be the most consistent measure to explain the correlation between organisational commitment and different performance indexes (Heffner & Rentsch, 2001: 475).

2.3.1. Affective commitment

Affective commitment is the emotional attachment that an employee has with his or her organisation, that makes him or her emotionally involved in the organisation (Patrick & Sonia, 2012: 24; Allen & Meyer, 1990a: 2). According to Ketchand and Strawser (2001:

223), goal identification and the willingness to achieve organisational goals are part of the concept. They defined affective commitment as “an individual’s emotional attachment to an organisation formed because that individual identifies with the goals of the organisation and is willing to assist the organisation in achieving these goals” (Ketchand & Strawser, 2001: 223).

Affective commitment is characterised by a yearning to remain with the organisation (Luchak & Gellatly, 2007: 786; Meyer & Herscovitch, 2001: 312). Therefore, employees that possess strong affective commitment do not merely stay at the organisation due to the need for occupation. These employees eagerly and voluntarily work because they want to (Nagar, 2012: 47; Meyer, Allen & Smith, 1993: 539). In such cases, the interaction between the organisation and individual is positive (Shore and Tetrick, 1991: 640-641).

Previous research identified various predecessors of affective commitment (Karatepe, 2011: 87; Eisenberger, Stinglhamber, Becker, Karagonlar, Neves & Gonzalez-Morales, 2010: 1098; Armeli, Eisenberger, Fasolo & Lynch, 1998: 295). Karatepe (2011: 870) indicated that organisational tenure influenced affective commitment, while Eisenberger *et al.* (2010: 1098) identified leader-member exchanges as a predecessor of affective commitment. Armeli *et al.* (1998: 295) recognised an organisation’s positive appraisal of its employees as an antecedent.

Affective commitment has been explored in more detail in the literature, compared to the continuance- and normative components (Eisenberger *et al.* 2010: 1085; Rhoades & Eisenberger 2002: 701; Liden, Wayne & Sparrowe, 2000: 410). Therefore the literature is currently more acquainted with this element of organisational commitment than with the other two counterparts (Gutierrez, Candela & Carver, 2012: 1603).

Meyer, Stanley, Herscovitch and Topolnytsky (2002: 32) found a significant correlation between affective commitment and job satisfaction which was much stronger than the correlation with normative commitment and continuance commitment. In later years, in a study among private and public sector employees in Greece, Markovits, Davis and van Dick (2007: 93) confirmed the findings. They found that the highest levels of job

satisfaction were shown in groups that possessed high affective commitment. This was irrespective of high or low continuance commitment and was found in both the public- and private sectors. The groups that possessed the lowest levels of affective commitment also demonstrated the lowest levels of job satisfaction.

The above findings were substantiated by Sirin and Sirin (2013: 176) who examined the relationships between affective commitment, normative commitment and continuance commitment on job satisfaction of instructors at Universities in Turkey. Even though significant relationships were determined between affective commitment, normative commitment and continuance commitment, the most powerful relationship was seen between affective commitment and job satisfaction. Hence, as commitment and faith in the organisational values and goals increased, so did the job satisfaction of the employees.

More research proved that employees exhibiting higher levels of affective commitment, are more likely to take pleasure in their jobs (Buonocore & Russo, 2013: 97; Namasivayam & Zhao, 2007: 1219). Considering the above, employees who really want to belong to their organisation (comprising high affective commitment) will find more satisfaction in their jobs, compared to employees who remain at the organisation as a necessity or purely due to perceived obligation (Sirin & Sirin, 2013: 180).

Conversely, a study focusing on the relationship between affective commitment and job satisfaction among police officers, opposed this view and found no significant relationship between the two constructs (Brunetto, Teo, Shacklock, Farr-Wharton, 2012: 431). Brunetto *et al.* (2012: 437) further stated that more research is required to study the relationship between job satisfaction and affective commitment across different occupations to understand the relationships between the constructs better.

With this in mind, the following hypothesis was formulated:

H^{A1}: *Affective commitment* has a significant influence on the *job satisfaction* of physiotherapists.

2.3.2. Continuance commitment

When employees personally invested a lot in their jobs and there exists a lack of other employment alternatives, and they therefore feel that they have too much to lose if they leave the organisation, continuance commitment occurs (Allen & Meyer, 1990a: 3). These employees typically feel trapped (Namasivaman & Zhao, 2007: 1216). Meyer, Allen and Smith (1993: 539) pointed out that continuance commitment reflects “a perceived cost associated with leaving the organisation”. Therefore, it is extremely difficult for an individual with high continuance commitment to leave the organisation because of the fear of the opportunity cost associated with leaving the organisation. Consequently, the employee remains in the organisation because he or she needs to (Nagar, 2012: 47).

In contrast to employees who have high levels of affective commitment, the experience of emotional attachment to the organisation is lacking when continuance commitment exists (Namasivayam & Zhao, 2007: 1216). These individuals often experience negative attitudes towards their work (Namasivayam & Zhao, 2007: 1216; Meyer *et al.*, 2002: 37).

As stated by Meyer and Allen (1991: 72), predecessors of continuance commitment can be described in two broad categories, namely alternatives and investments. Alternatives can be explained as the perception of the individual regarding alternative employment options that are available to him (or otherwise not). Investments describe those aspects that the individual believes to have invested in already, such as money, time and effort (Meyer & Allen, 1997: 57). Before these factors can be considered predecessors of continuance commitment, the individual needs to be cognitively aware of them. This means that two employees may be in two quite similar situations, but the extent to which they experience continuance commitment may differ (Meyer & Allen, 1997: 58).

Sirin and Sirin (2013: 180) demonstrated a significant relationship between continuance commitment and job satisfaction, yet the correlation was low. This confirmed findings by Meyer *et al.* (2002: 32) and Yang (2008: 439) who showed that continuance commitment had a weaker relationship with job satisfaction compared to affective commitment. Buonocore and Russo (2013: 97) held an opposing view and reported that

continuance commitment demonstrated a negative association with job satisfaction among Italian nurses. Meyer *et al.* (2002: 21) argued that it is expected that continuance commitment is unrelated or negatively related to work behaviours such as performance and attendance. Namasivayam and Zhao (2007: 1219) hypothesised that continuance commitment and job satisfaction would show a negative relationship. However, the data did not support the hypothesis.

The continuance commitment component of organisational commitment had not been comprehensively examined by researchers in the past (Gutierrez *et al.* 2012: 1603). For this reason, it showed consistent poor performance when it was compared to the affective commitment and normative commitment components. Consequently, future research is recommended to investigate the processes that are engaged in continuance commitment in more detail (Gutierrez *et al.*, 2012: 1609).

Based on this background, the hypothesis below will further be tested:

H^{A2}: *Continuance commitment* has a significant influence on the *job satisfaction* of physiotherapists.

2.3.3. Normative commitment

According to Meyer *et al.* (2002: 21), normative commitment “reflects perceived obligation to remain in the organisation”. Employees with high normative commitment believe that they should remain as a member of the organisation as “it is the ‘right’ and moral thing to do” (Meyer & Allen, 1991: 66; Wiener, 1982: 421). The employee experiences the emotion of gratitude for incentives (such as personal growth) provided for him or her by the organisation and this commitment prevents the employee from exploring other alternatives (Meyer *et al.*, 2002: 40).

The normative commitment experienced, can increase when an individual feels that he or she has a responsibility to pay the organisation back for benefits received from it. The individual might feel indebted towards the organisation and therefore “believes that he or she should stay in the job (Nagar, 2012: 48; Meyer *et al.*, 1993: 539). Normative commitment might occur due to socialisation experiences, which cause the employee to

believe that it is appropriate to remain at the organisation. It can further develop through the receipt of benefits (such as tuition fees) that create the sense of obligation to remain (Meyer *et al.*, 1993: 539). In the study by Gutierrez *et al.* (2012: 1609), normative commitment preceded affective commitment among employees in a nursing faculty. This meant that feelings of obligation were established prior to the founding of an emotional attachment.

In their study among Italian nurses, normative commitment was positively linked to job satisfaction (Buonocore & Russo, 2013: 95-97). A moderate relationship between normative commitment and job satisfaction were shown in the study by Sirin and Sirin (2013: 180).

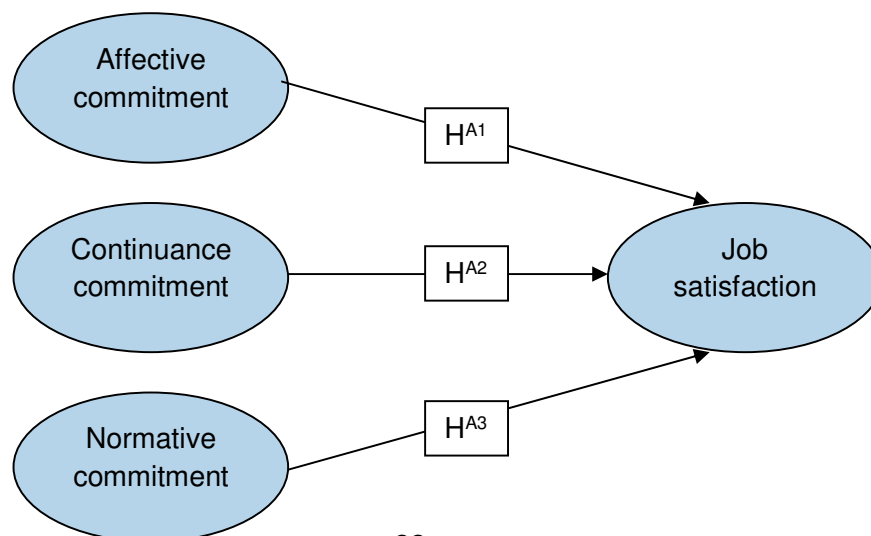
Considering the above statements, it is hypothesised that:

H^{A3}: *Normative commitment* has a significant influence on the *job satisfaction* of physiotherapists.

2.4. HYPOTHESIS MODEL A

Figure 2.1 displays the dependent variable i.e. job satisfaction as influenced by the three dimensions of organisational commitment, namely affective-, continuance-, and normative commitment.

Figure 2.1: Hypothesis model A



The summarised hypotheses as demonstrated by Hypotheses Model A are:

- H^{A1}: *Affective commitment* has a significant influence on the *job satisfaction* of physiotherapists.
- H^{A2}: *Continuance commitment* has a significant influence on the *job satisfaction* of physiotherapists.
- H^{A3}: *Normative commitment* has a significant influence on the *job satisfaction* of physiotherapists.

2.5. ENTREPRENEURSHIP AND ENTREPRENEURIAL ORIENTATION

2.5.1. Defining an entrepreneur

Different definitions of entrepreneurship exist and no consensus on the definition has been reached (Berglann, Moen, Roed & Skogstorm, 2011: 180). Several decades ago, Schumpeter (1947: 151) stated that the entrepreneur is responsible for “doing of new things or the doing of things that are already being done in a new way”. A popular definition of the entrepreneur in the literature is someone who “perceives an opportunity, and creates an organisation to pursue it” (Bygrave & Hofer, 1991: 14). Several studies simply portray the entrepreneur as someone who is self-employed (Van der Sluis, Van Praag & Vijverberg, 2008: 820; Hamilton, 2000: 608).

The entrepreneur has the dual task of employing financial- as well as human capital in the business (Berglann *et al.*, 2011: 180-181). Therefore, an entrepreneur is neither an investor or capitalist, nor the employee or Chief Executive Officer. The entrepreneur owns the business and faces all risks associated with all aspects of running the business. According to this consideration, a self-employed person is an entrepreneur, whether he or she operates as the sole proprietor or as a partner (Berglann *et al.*, 2011: 180-181). It is also with regard to this statement to which entrepreneurship in this study will be referred to. An entrepreneur in the context of this study, is a person who runs his or her own practice and is therefore self-employed. It does not necessarily mean that the

entrepreneur is the founder of the practice or that the practice does “new” things “in a new way” (Schumpeter, 1947: 151).

2.5.2. Defining entrepreneurship

Joubert (2007: 14) defined entrepreneurship as the ability to establish a business and is further a recognised description for self-employment. Entrepreneurship is “a way of thinking, reasoning, and acting that is opportunity obsessed, holistic in approach, and leadership balanced for the purpose of value creation and capture” (Spinelli & Adams, 2012: 87). Entrepreneurship is a multi-faceted phenomenon and appears in enterprises and sectors of all sizes. However, entrepreneurship in Micro, Small and Medium Enterprises (MSME) is especially important as it assists in securing socio-economic development. It does so by increasing productivity and employment (Krishnan & Kamalanabhan, 2013: 40).

Entrepreneurial orientation involves entrepreneurial processes such as methods and decision-making styles that cause businesses to perform tasks in an entrepreneurial way (Lumpkin & Dess, 1996: 136). Miller (2011: 874-875) agreed with this statement and pointed out that the construct of entrepreneurial orientation was developed to understand what it means for a firm to “be entrepreneurial”. Moreover, an entrepreneurial firm “engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with ‘pro-active’ innovations, beating competitors to the punch” (Dess & Lumpkin, 2005: 147; Miller, 1983: 771).

Lumpkin and Dess (1996: 136) pointed out that dissimilarity exists between entrepreneurship and entrepreneurial orientation, as entrepreneurship addresses *what* is undertaken (the content of decision), while entrepreneurial orientation attends to *how* new and innovative ventures are initiated (key entrepreneurial processes).

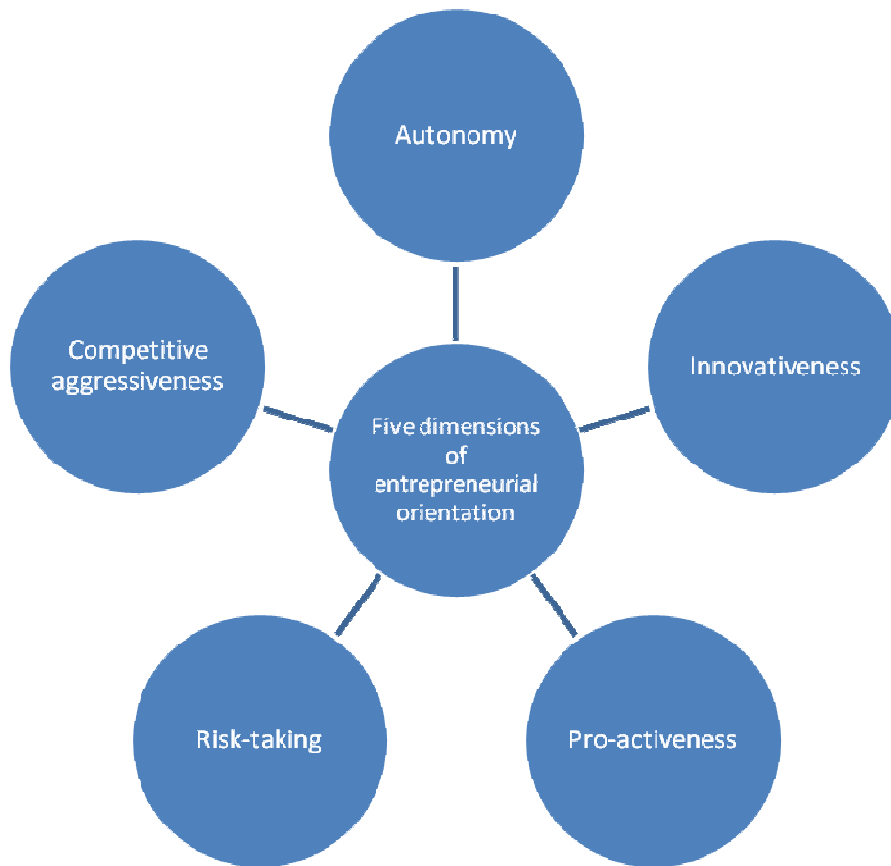
2.5.3. The entrepreneurial orientation construct

Entrepreneurial orientation was introduced to the literature in 1983 by Miller who conceptualised the construct as a three dimensional model that consisted of innovativeness, pro-activeness and risk-taking (Miller, 1983: 770). It was only in later

years that Lumpkin and Dess further developed and extended the construct to a five dimensional model by including the dimensions of autonomy and competitive aggressiveness (Lumpkin & Dess, 1996: 136).

Collectively, entrepreneurial orientation leads businesses to develop innovative products, exercise autonomy, take risks and act in a pro-active and competitive aggressive manner (Dess & Lumpkin, 2005: 147; Miller, 1983: 771). The five dimensions of the entrepreneurial orientation construct, as classified by Dess and Lumpkin (2005: 147), is displayed in Figure 2.2.

Figure 2.2: The five dimensions of the entrepreneurial orientation construct



Source: Dafel (2012: 26)

Entrepreneurial orientation focuses on identification of opportunities and exploration of resources and can be indicative of the organisational strategy of a business (Bhuian,

Menguc & Bell, 2005: 10). Entrepreneurial orientation is believed to be the “driving force behind the organisational pursuit of entrepreneurial activities” (Covin & Wales, 2012: 677) and is related to methods, practices, as well as decision-making approaches that managers use to operate in an entrepreneurial way (Lumpkin & Dess, 1996: 136). It establishes the decision-making style of a business and alters the behaviour and attitudes of its individual associates (Covin & Slevin, 1989: 83). Even though entrepreneurial orientation is often associated with entrepreneurial behaviour, it is important to make a distinction between the two concepts (Kollmann & Stöckmann, 2014: 1002-1003). Kollmann and Stöckmann (2014: 1002-1003) considered entrepreneurial orientation an antecedent to entrepreneurial behaviour and not a direct measure of entrepreneurial behaviour.

Although the five dimensions can occur in several diverse combinations, they are essential to comprehend the entrepreneurial process (Lumpkin & Dess, 1996: 137). However, in the study by Covin, Green and Slevin (2006: 57), the different dimensions of entrepreneurial orientation were displayed compositely. A dissimilar perspective affirms that the different dimensions should be treated as a multidimensional construct and therefore be treated and studied independently, as they may demonstrate unique relationships to other significant variables (Kreiser & Davis, 2010: 48; Hughes & Morgan, 2007: 657; Lumpkin & Dess, 1996: 137). Rather than signifying a competing perspective on the same construct, the two views of entrepreneurial orientation (composite and multidimensional) represent distinct constructs (Covin & Lumpkin, 2011: 863). The construct can further be used as a measure to determine how businesses realise and develop new opportunities (Wiklund & Shepherd, 2003: 1313).

In recent years, research with regard to entrepreneurial orientation has increased immensely and the construct became one of the most recognised and established constructs in the literature of entrepreneurship. One of the foremost theories is that organisations with a strong tendency towards entrepreneurial orientation will most likely demonstrate superior performance compared to other firms (Madsen, 2007: 188). Yamada and Eshima (2009:1), Rauch *et al.* (2009: 778) as well as Engelen, Kube, Schmidt & Flatten (2014: 1353) agreed with this statement and affirmed that

entrepreneurial orientation can be considered a key to success for superior performance of businesses. Numerous fast growing organisations' successes can be attributed to entrepreneurial orientation (Dess & Lumpkin, 2005: 148). Even if a firm is strong in only some of the dimensions of entrepreneurial orientation, success can be accomplished (Lumpkin & Dess, 2001: 445).

Business success has proven to give small business owners a sense of self-satisfaction and pride and in some cases led to an enhanced living standard among employees. The perfect combination of competencies and attitude brought about entrepreneurial success and increased business owners' satisfaction with life (Krishnan & Kamalanabhan, 2013: 40).

Existing literature that examined the relationship between entrepreneurial orientation and job satisfaction among healthcare organisations or professionals could not be established. A study by de Nobrega (2012: 93) explored the entrepreneurial orientation of pharmacists and the perceived success of the industry wherein they operate. The results showed that the average rating of entrepreneurial orientation of corporate pharmacists and their perceived success, was lower than those of independent pharmacists (de Nobrega, 2012: 93). However, the study examined entrepreneurial orientation and perceived success and did not investigate entrepreneurial orientation's relationship with job satisfaction.

According to Burgelman (1984: 154), corporate entrepreneurship is involved with "extending the firm's domain of competence and corresponding opportunity set through internally generated new resource combinations". There seems to be an increase in interest with regard to the practice of corporate entrepreneurship, which indicates that more individuals are willing to think and learn about the entrepreneurial process (Covin & Slevin, 1991: 7). In many instances, entrepreneurial orientation is associated with corporate entrepreneurship (Covin & Miller, 2014: 13). Dess and Lumpkin (2005: 147) were of the opinion that businesses need to be entrepreneurially orientated, should they wish to engage in corporate entrepreneurship that succeeds. According to Antoncic and Hisrich (2001: 496), previous research even used entrepreneurial orientation to measure entrepreneurship at organisational level. Correspondingly, autonomy, innovativeness,

risk-taking, pro-activeness and competitive aggressiveness were recognised as behaviours that reveal corporate entrepreneurship (Lumpkin & Dess, 1996: 136).

Numerous studies confirmed the significant relationship between corporate entrepreneurship and job satisfaction (Van Wyk & Adonisi, 2008: 403; Rutherford & Holt, 2007: 442; Adonisi, 2003: 137). Consequently, as mentioned in the introduction, it can be hypothesised that there exists a positive relationship between entrepreneurial orientation and job satisfaction.

In this study, the five dimensions of entrepreneurial orientation will be discussed independently and how each of them is hypothesised to influence job satisfaction.

2.5.3.1. Autonomy

According to Lassen, Gertsen and Riis (2006: 361), autonomy refers to the self-determined or autonomous actions that are brought about by an individual or team that creates a new vision or idea. The new idea is then carried through from beginning to end, therefore until completion (Lumpkin and Dess, 1996: 140).

For entrepreneurship to prosper, “the exercise of autonomy by strong leaders, unfettered teams, or creative individuals who are disengaged from organisational constraints” is required (Lumpkin & Dess, 1996: 140). In 1996, Lumpkin and Dess recommended that autonomy be included as a dimension of entrepreneurial orientation, but several studies still exclude the dimension from the construct of entrepreneurial orientation (Lumpkin, Cogliser & Schneider, 2009: 47). This might be due to the fact that autonomy was not part of the organically identified and developed construct of entrepreneurial orientation that included innovativeness, risk-taking and pro-activeness. Another reason for the exclusion is that many others view autonomy as a predecessor of entrepreneurial behaviour and not necessarily as an essential construct (Lumpkin *et al.*, 2009: 47).

However, Lumpkin *et al.* (2009: 47) highlighted that autonomy does indeed play a central role in a business’s entrepreneurial orientation. Autonomy allows employees the flexibility to develop and increase entrepreneurial ideas and can further present

opportunities to accomplish entrepreneurial outcomes and offer strategic advantages (Lumpkin *et al.*, 2009: 47). In previous years, Burgelman (1984: 156) stated that autonomous strategic initiatives are necessary for new ideas to surface and develop.

As stated by Morris, van Vuuren, Cornwall and Scheepers (2009: 435), different types of entrepreneurship are sought after by different organisations, and therefore the nature of autonomy also varies from one organisation to another. In organisations where innovation is discontinued, considerable autonomy is required. More restrained autonomy is needed where incremental innovation occurs, while considerable autonomy is required in the midst of discontinuous innovation (Morris *et al.*, 2009: 435). Self-employed workers frequently lack motivation to initiate new products or services and often demonstrate no autonomy to alter the characteristics of goods produced or services delivered (Romero & Martínez-Román, 2012: 186).

Arnold *et al.* (2010: 263) mentioned that autonomy is one of the major determinants of job satisfaction. Furthermore, Dawson (2012: 4-7) stated that business success and quality of life can be improved by giving employees autonomy and involving them in the business. This research implies that there may exist a relationship between autonomy and employee job satisfaction.

Considering the above, the following hypothesis was formulated:

H^{B1}: *Autonomy* has a significant influence on the *job satisfaction* of physiotherapists.

2.5.3.2. Innovativeness

According to research, innovativeness echoes the desire of a business to encourage creativeness and promote unique suggestions when new products or processes are developed (Walter, Auer & Ritter, 2006: 549; McFadzean, O'Loughlin & Shaw, 2005: 353). It further describes the willingness of the business to deliver value-added originality (Kirkman & Ogilvie, 2014: 86; Walter *et al.*, 2006: 549; Lumpkin & Dess, 1996: 142) and focuses on the pursuit of innovative solutions to widespread challenges such as operational and individual problems that occur in the industry (Darling, Gabrielsson &

Seristö, 2007: 5; Knight, 1997: 214). Lumpkin and Dess (1996: 142) stated that businesses that show a tendency to employ creative processes that may bring about the origination of new products and services, demonstrate innovativeness.

Lumpkin and Dess (1996: 143) emphasised the importance of the innovativeness dimension and pointed out that it is a very important dimension of entrepreneurial orientation that every entrepreneurial business needs to employ. If innovativeness is neglected, there can be no business level entrepreneurship (Gürbüz & Aykol, 2009: 323; Covin & Miles, 1999: 49).

According to Antoncic and Hisrich (2001: 498), innovation can be classified into two major categories, namely product- and service innovation. Product innovation occurs when the redeveloping of existing products or introduction of new products takes place. On the other hand, service innovation happens when the current model for service is improved or when a new model is created (Kusiak, 2007; cited by Basson, 2014: 14). Antoncic and Hisrich (2001: 498) and Covin and Slevin (1991: 7-8) specifically emphasised technology development and innovation in technology.

Dess and Lumpkin (2005: 150) described innovativeness as a key component of the entrepreneurial strategy. A firm that is innovative moves away from current technologies and nurtures new ideas and practices, even though benefits are still unclear. Nowadays, rapid change is in the order of the day and therefore producing and exploiting new initiatives might be an opportunity to achieve competitive advantages (Dess & Lumpkin, 2005: 150; Goosen, de Coning & Smit, 2002: 22). Innovativeness is a fundamental part of entrepreneurship and has shown to enhance strategic competitiveness and financial returns (Dess & Lumpkin, 2005: 150). Consensus has been reached in various studies to show the relationship between innovativeness and firm performance (Casillas & Moreno, 2010: 269; Rauch *et al.*, 2009: 774; Wiklund & Shepherd, 2005: 85).

Innovativeness is certainly an essential aspect to consider when entrepreneurial orientation is examined (Weismeier-Sammer, 2011: 131). Rutherford and Holt (2007: 442) investigated the relationship between innovation and job satisfaction and determined a positive relationship between the constructs.

Considering the above, the following hypothesis was formulated:

H^{B2}: *Innovativeness* has a significant influence on the *job satisfaction* of physiotherapists.

2.5.3.3. Risk-taking

As stated by Lumpkin and Dess (1996: 144-145), risk-taking is the willingness to consign significant resources to projects and opportunities and take calculated business risks. The risky projects potentially generate high rates of return. Risk taking further indicates that a firm is aggressive to exploit promising opportunities and acts boldly to accomplish goals (Wiklund & Shepherd, 2003: 1309, Covin & Slevin, 1991: 7-8). There is a high price to pay for failure and results cannot necessarily be depicted (Lumpkin & Dess, 1996: 144; Covin & Slevin, 1991: 10).

Three nominal levels of risk have been recognised by Lumpkin and Dess (1996: 145) namely: “safe risks, highly risky actions or bringing new products into new markets”. Additionally, Dess and Lumpkin (2005: 152) identified three types of risks faced by executives and their firms, i.e. business-, financial-, and personal risk.

Business risk is typically associated with the commitment to unverified technologies and unproven markets. This type of risk-taking involves an unknown venture and the probability of success remains unknown (Dess & Lumpkin, 2005: 152). Financial risk-taking requires an organisation to utilise a lot of its resources to allow organisational growth. This type of risk refers to a term “risk/return trade-off” and is commonly used in financial analysis (Dess & Lumpkin, 2005: 152). Personal risk-taking is typically performed by an executive of the organisation who decides on a strategic action plan for the organisation. These risks will significantly influence the organisation’s way forward, as well as the executive who made the decision’s future career (Dess & Lumpkin, 2005: 152).

Risk-taking is not gambling, even though it entails to take chances and involves potential dangers (Dess & Lumpkin, 2005: 152). Risk that is managed cautiously has the potential to create competitive advantages for the organisation involved. On the other hand, it can

turn out to be extremely costly if activities were to be performed without adequate research and planning (Dess & Lumpkin, 2005: 152). Scheepers, Hough and Bloom (2008: 58) pointed out that relative risk-taking propensity is measured by three items, namely: the project's degree of risk (high or low), the organisation's strategic posture (aggressive or 'wait and see what happens') and the behavioural type that is applied to achieve goals (bold or cautious).

Dess and Lumpkin (2005: 152) are further of the opinion that the goal of the best-run companies, is to lessen riskiness in making business decisions. They identify opportunities and investigate the possible consequences and outcomes of these opportunities. Two methods can be used to ensure a stronger competitive position compared to the risk involved. Firstly, an organisation needs to research and assess the possible risk factors to lessen uncertainty. Secondly, "tried-and-true" techniques and practices can be used that have proven to work in other settings (Dess & Lumpkin, 2005: 152).

Doms, Lewis and Robb (2010: 70) argued that it involves risk-taking to make the decision to be self-employed. Drucker (2011: 127) and Zampetakis and Moustakis (2007: 23) disagreed with this statement and mentioned that entrepreneurship does not automatically involve risk-taking, but is rather opportunity-driven. The literature does not reach consensus about the degree of risk-taking that is present in the entrepreneurial process, however, empirical studies have shown that entrepreneurs are indeed risk-takers (Altinay, Madanoglu, Daniele & Lashley, 2012: 491, Gürol & Atsan, 2006: 30). While calculated economic risk is taken by the entrepreneur, the opportunity for maximum profit exists while uncertainty looms due to the possibility that success may not be achieved (Vesala, Peura & McElwee, 2007: 52).

Considering the above, the following hypothesis was formulated:

H^{B3}: *Risk-taking* has a significant influence on the *job satisfaction* of physiotherapists.

2.5.3.4. Pro-activeness

Pro-activeness entails paying attention to the future and “seeking new opportunities which may or may not be related to the present line of operations, introductions of new products and brands ahead of competition” (Venkatraman, 1989: 949). Dess and Lumpkin (2005: 150) agreed with this and mentioned that “pro-activeness involves not only recognising changes, but also being willing to act on those insights ahead of the competition”.

Pro-activeness further refers to the effort a firm exerts to seize new opportunities (Dess and Lumpkin, 2005: 150). A business that is pro-active will not follow, but rather lead, by having the will to grasp these opportunities (Gürbüz & Aykol, 2009: 323; Lumpkin & Dess, 1996: 147). Pro-activeness enables a business to create the first-mover advantage by anticipating future marketplace needs (Madsen, 2007: 187; Lumpkin & Dess, 1996: 146). Competitive advantages are created as competitors need to respond to initiatives successfully implemented by the organisation (Dess & Lumpkin, 2005: 151). Lumpkin and Dess (1996: 147) also suggested that passiveness is the opposite of pro-activeness, which constitutes the inability to seize opportunities in the market.

Organisations that wield pro-activeness typically demonstrate three characteristics: they monitor trends, identify existing customers’ future needs and foresee changes in up-and-coming problems that have the potential to become new opportunities (Dess & Lumpkin, 2005: 150). Kropp, Lindsay and Shoham (2008: 104) agreed and stated that identifying and evaluating new opportunities, identifying and monitoring market trends, as well as venture team formation, are activities that are associated with pro-activeness.

Pro-active strategic managers look into the future to search for possibilities that can foster organisational growth and development (Dess & Lumpkin, 2005: 150). Casillas and Moreno (2010: 283) indicated that superior performance was revealed by businesses that demonstrated pro-activeness. According to Rauch *et al.* (2009: 778), risk-taking, innovativeness and pro-activeness are equally important when business performance is explained. Entrepreneurs will aim to exploit business opportunities instead of witnessing the opportunities remaining redundant. Therefore, the dimension

of pro-activeness is included in the entrepreneurial orientation construct (Botha, 2012: 50; Kollmann, Christofer & Kuckertz, 2007: 12).

The pro-activeness dimension is closely related to the dimension of competitive aggressiveness which will be discussed in the following section (Lumpkin & Dess, 1996: 147).

Even though literature did not focus on job satisfaction but rather paid attention to the relationship between pro-activeness and business performance, the following hypothesis was formulated to address the objective of the current study:

H^{B4}: *Pro-activeness* has a significant influence on the *job satisfaction* of physiotherapists.

2.5.3.5. Competitive aggressiveness

Competitive aggressiveness refers to the efforts of a business to outperform its industry rivals. The business may act offensively by overcoming its competitors, or reactively by aggressively defending its market position (Rauch *et al.*, 2009: 764; Lumpkin & Dess, 2001: 433). It further reflects the eagerness of a firm to not only rely on traditional methods in competing with rivals, but also to employ unconventional competitive methods (Lumpkin & Dess, 1996: 149). How the business reacts to demands in the market also shows how competitively aggressive the business is, compared to its competitors (Chang, Lin, Chang & Chen, 2007: 1005).

Organisations that demonstrate competitive aggressiveness may be very assertive to leverage on the results of other entrepreneurial orientation dimensions, such as pro-activeness and innovativeness which may enhance organisational development and growth (Dess & Lumpkin, 2005: 151). Organisations that exploit opportunities and establish their competitive stance aggressively may preserve their competitive advantages better over the long run, if the goal is to exceed rather than destroy the competitors (Dess & Lumpkin, 2005: 152).

Knight (1997: 218) and Antoncic and Hisrich (2001: 499) were of the opinion that risk-taking and competitive aggressiveness need to be incorporated in the dimension of pro-activeness when entrepreneurial orientation is assessed. Competitive aggressiveness had not frequently been investigated as a separate dimension of entrepreneurial orientation, as this dimension (as the autonomy dimension) was only later added to the construct of entrepreneurial orientation by Lumpkin and Dess (1996: 140). Some research has not distinguished between the dimensions of pro-activeness and competitive aggressiveness (Knight, 1997: 218). However, as mentioned by Lumpkin and Dess (1996: 147), there is an important difference between the two dimensions and it needs to be explained. Pro-activeness relates to seizing of new opportunities, influencing market trends and creating demand, whereas competitive aggressiveness relates to how the business responds to and competes with trends that are already present in the market (Lumpkin & Dess, 1996: 147).

To address the goal of the study at hand, the following hypothesis was formulated:

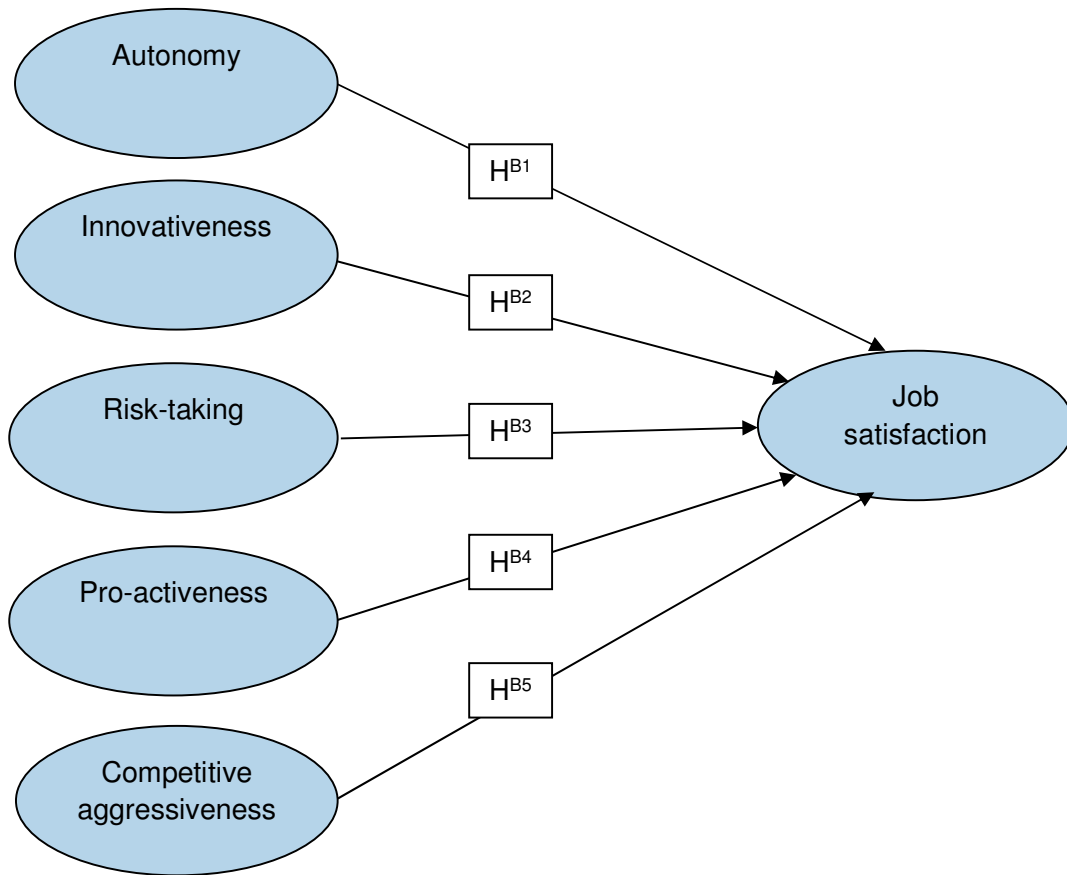
H^{B5}: *Competitive aggressiveness* has a significant influence on the *job satisfaction* of physiotherapists.

2.6. HYPOTHESIS MODEL B

As mentioned earlier, corporate entrepreneurship has narrowly been associated with entrepreneurial orientation in previous research (Covin & Miller, 2014: 13; Antoncic & Hisrich, 2001: 496). Several studies confirmed the relationship between corporate entrepreneurship and job satisfaction (van Wyk & Adonisi, 2008: 403; Rutherford & Holt, 2007: 442; Adonisi, 2003: 137). Therefore, even though previous literature focused on the link between entrepreneurial orientation and business performance (Dess & Lumpkin, 2005: 147), the hypotheses that entrepreneurial orientation and its separate dimensions influences job satisfaction, were formulated and tested.

Figure 2.3 displays the dependent variable, namely job satisfaction as influenced by the five dimensions of entrepreneurial orientation, namely: autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness.

Figure 2.3: Hypothesis model B



Based on this and the foregoing literature of entrepreneurial orientation, the summarised hypotheses for hypothesis model B are:

- HB^{B1}: *Autonomy* has a significant influence on the *job satisfaction* of physiotherapists.
- HB^{B2}: *Innovativeness* has a significant influence on the *job satisfaction* of physiotherapists.
- HB^{B3}: *Risk-taking* has a significant influence on the *job satisfaction* of physiotherapists.
- HB^{B4}: *Pro-activeness* has a significant influence on the *job satisfaction* of physiotherapists.

H^{B5}: *Competitive aggressiveness* has a significant influence on the *job satisfaction* of physiotherapists.

2.7. CHAPTER SUMMARY

Chapter 2 discussed the literature with regard to the dependent and independent variables under investigation. Job satisfaction, the three variables of organisational commitment, as well as the five dimensions of entrepreneurial orientation, were explored and hypotheses were formulated to assess the relationships between the variables.

Job satisfaction possibly remains the most widely investigated job attitude (Giauque *et al.*, 2014: 207) and can be described as the feelings that a person has about his or her work (Spector, 1997: 2). Research revealed that it is important to study the factors that influence the job satisfaction of physiotherapists, as these professionals render invaluable services in the hospitals and practices where they work (Alkassabi *et al.*, 2015: 62-63; Ogiwara, 2006: 127).

The concept of organisational commitment as conceptualised by Meyer and Allen (1991: 63-64) is the most popular among the different schools of thoughts. They proposed organisational commitment to consist of three components, namely affective commitment, continuance commitment and normative commitment. According to Drucker-Godard *et al.* (2014: 338), “employees with strong affective commitment remain in an organisation because they want to, those with strong continuance commitment stay because they need to, and those with strong normative commitment stay because they feel obliged“. The current study used Allen and Meyer’s measure of organisational commitment and investigated how it might influence job satisfaction.

The chapter further introduced the reader to entrepreneurship and entrepreneurial orientation. The construct of entrepreneurial orientation was introduced to the literature in 1983 by Miller who conceptualised the construct as a three dimensional model that consisted of innovativeness, pro-activeness and risk-taking (Miller, 1983: 770). In later years, Lumpkin and Dess further extended the construct to a five dimensional model and included the dimensions of autonomy and competitive aggressiveness (Lumpkin &

Dess, 1996: 136). In the current study, the five dimensions of entrepreneurial orientation namely: autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness were described, as well as its possible influence on the dependent variable namely job satisfaction.

Hypotheses models A and B demonstrated how each of the variables of organisational commitment (affective-, continuance- and normative commitment) and entrepreneurial orientation (autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness) were expected to influence job satisfaction, respectively.

The data that was collected from physiotherapists in the private practice sector in South Africa is presented and discussed in the following chapter.

CHAPTER 3

RESULTS AND DISCUSSION OF EMPIRICAL STUDY

3.1. INTRODUCTION

The primary purpose of the study was to determine the influence of selected factors on the job satisfaction of physiotherapists in South Africa. Hence, the constructs of organisational commitment (affective-, continuance- and normative commitment), as well as the entrepreneurial orientation constructs, namely autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness (independent variables) and their influence on the dependent variable namely job satisfaction, were investigated in this chapter.

The chapter described the instrument used and procedure followed to obtain the data. The data gathering process and discussion of research results were explained, specifically bearing in mind the specific objectives of the study as set out in Chapter 1.

A formal questionnaire was utilised to conduct the empirical research study. Participants consisted of physiotherapists who were owners or partners of private practices in South Africa. The quantitative research method was used to test the hypotheses as set out in Chapter 2. Data retrieved from the questionnaires was transformed to usable and accurate information with support of statistical methods. Cronbach's alpha coefficients were used to determine the reliability of the measuring instrument. The influence of the different constructs of organisational commitment and entrepreneurial orientation on job satisfaction, was determined by utilising multiple linear regressions. The researcher presented and discussed the significance of the relationship between the variables and concluded the chapter with a summary of the findings.

3.2. DATA GATHERING

3.2.1. Questionnaire development and construction

The measuring instrument for the study at hand was a questionnaire that was distributed among potential respondents. The questionnaire was customised for the physiotherapist working as an owner or partner in a private practice in South Africa. The first four sections of the questionnaire aimed to measure job satisfaction, life satisfaction, organisational commitment and entrepreneurial orientation, respectively. The fifth and final section (Section E) aimed to gather demographical information from the research participants. The content of the five sections are described below:

Section A

Organisational commitment: Section A contained the questionnaire that was developed by Meyer and Allen (1990a: 6) in order to measure organisational commitment, and consisted of 24 statements. Eight questions measured affective commitment, another eight questions addressed continuance commitment and the final eight questions of Section A determined the normative commitment of the respondents. By using the five point Likert scale, the respondents indicated to what extent they agreed or disagreed with the statements. The scale ranged from 1 (strongly disagree) to 5 (strongly agree).

Section B

Entrepreneurial orientation: Section B contained part of a questionnaire that was developed by Lotz (2009: 324). This section consisted of 27 statements, measuring the entrepreneurial orientation of the respondents in their respective practices. The five dimensions of entrepreneurial orientation were measured namely: autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness. Once again, the respondents indicated their extent of agreement by using the five point Likert scale.

Section C

Job satisfaction: Section C contained the Minnesota Satisfaction Questionnaire developed by Weiss *et al.* (1967: 2). The section consisted of 20 statements and aimed to determine the level of job satisfaction that the respondents currently experience in their practices. The respondents selected the number on the five point Likert scale (1 to 5) that indicated their level of agreement with the corresponding statement.

Section D

Satisfaction with life: The scale that was developed by Diener *et al.* (1985: 72) was used to measure the respondents' satisfaction with life. As with Section A to C, the statements were measured on the Likert scale. However, the influence of organisational commitment and entrepreneurial orientation on life satisfaction was not the objective of this current study and therefore the results of Section D were not included in the discussion of empirical data. Job satisfaction (measured in Section C) was identified as the only dependent variable.

Section E

Demographic information: Section E included the demographical information of the respondents and their practices (biographical and educational information of the participants, as well as information with regard to the structure of the practice). The purpose of the questions contained in Section E, was to perform statistical comparisons between different groups and to verify whether the participants qualified to be included in the study. The participants responded to the following questions in the final section by indicating their answers with an x or by highlighting the appropriate option:

- Age
- Gender
- Race
- Marital status
- Level of education

- Years of experience (as physiotherapist and as owner or partner in private practice)
- Number of employees (physiotherapists and other employees)
- Possession of practice number
- Current position in practice
- Areas of interest
- Geographical location of practice

Every questionnaire was accompanied by a covering letter that explained the purpose of and instructions for completing the questionnaire (see Annexure A). The five sections discussed above were combined into a single questionnaire which were completed by the participants and formed the quantitative component of the study.

3.2.2. Data collection and study population

The convenience sampling technique was used in the study. The sample was obtained from physiotherapists who own, or partly own, a private practice in South Africa and/or physiotherapists in South Africa who are in the possession of a practice number. This specific group was chosen for sampling as it would provide the information that was needed to answer the research questions.

The aim was to target as many physiotherapists (owners or partners) as possible working in private practice in South Africa. The questionnaires were e-mailed or hand-delivered to the potential respondents. In most instances, the physiotherapist or receptionist of the practice was personally contacted and informed about the study before the questionnaire was e-mailed.

Respondents who did not respond to the survey on or before the set due date, were reminded via e-mail to complete the questionnaire. Several participants responded and returned their completed questionnaires. Yet again, one more reminder was sent to non-respondents. Eventually, 74 completed questionnaires were received back.

Most of the questionnaires were obtained via e-mail, six questionnaires were received back via mobile phone and three questionnaires were returned via hard copy.

3.2.3. Confidentiality

The participants received cover letters explaining that the information that was to be disclosed by them would be treated confidentially. All individual and personal information that was received were displayed anonymously. Confidentiality and anonymity were therefore ensured throughout the study.

3.2.4. Statistical analysis

The collected information was captured and transformed to data by the Statistical Consultation Services of the North-West University (Potchefstroom campus) with the use of SPSS Statistics Version 22 (SPSS Inc., 2015). The mean values and standard deviations, as well as the Cronbach's alpha coefficients of the different variables, were calculated. Descriptive statistics, effect sizes and multiple regression analyses were further performed.

3.3. Response to the survey

Table 3.1 illustrates the response to the survey questionnaire:

Table 3.1: Response to the survey questionnaire

Number of questionnaires distributed, received, omitted and used	Frequency	Percentage
Number of questionnaires distributed to potential participants	129	100
Number of questionnaires received back from participants	74	57.36
Number of received questionnaires that were omitted	4	3.10
Number of questionnaires that were included in the study (response rate)	70	54.26

The questionnaires were distributed among 129 physiotherapists and 74 questionnaires were completed and collected. Questionnaires were included in the study if the respondents indicated either being in the possession of a practice number or being the owner or partner of a practice. If a respondent indicated that they neither possessed a

practice number, nor was the owner or partner, the questionnaire was omitted. This way the researcher ensured that the questionnaire was only completed by current or previous owners or partners of physiotherapy practices.

Of the 74 questionnaires that were received back, four questionnaires were omitted due to the reason stated above. Therefore, 70 usable questionnaires were included in the study.

3.4. RESULTS OF DEMOGRAPHICAL INFORMATION

In Section E of the questionnaire, the respondents indicated their age group, gender, race group, marital status and academic qualifications. The respondents also supplied information with regard to their years of experience in the profession and the number of employees employed by the practice. They further indicated whether they were in the possession of a practice number, their current position in the practice, areas of interest, as well as the province in which the practice was located.

In the following sections, the geographical information of the respondents, as well as information with regard to the structure of the practice will be discussed. The purpose of the question will be stated and results will be obtained by means of frequency and percentage distributions. Consequently, the obtained results will be analysed and discussed.

3.4.1. Age group classification of respondents

Purpose

The purpose of the first question in Section E (see Annexure A), was to establish the respondents' age group classification. Respondents indicated their age by selecting any of the following groups: younger than 25 years, 25 to 29 years, 30 to 39 years, 40 to 49 years or 50 years and older.

Results

The age group classification of the physiotherapists who participated in the study is presented in Table 3.2.

Table 3.2: Age group classification of physiotherapists

Age	Frequency	Percentage
≤ 25	0	0
25 – 29	13	18.57
30 – 39	36	51.43
40 – 49	10	14.29
50+	11	15.71
Total	70	100%

Analysis

More than half of the respondents (51.43%) were between 30 and 39 years of age. None of the respondents was 25 years or younger. The rest of the respondents were fairly evenly distributed in the remaining age groups (25 to 29 years at 18.57%, 40 to 49 at 14.29% and 50 years or older at 15.71%).

3.4.2. Gender of respondents

Purpose

The purpose of the second question in Section E (see Annexure A) was to:

- Capture the number of male and female respondents.
- To determine whether differences exist between the job satisfaction of males and females (comparing the gender variable to the variable of job satisfaction).
- To determine whether differences exist between the organisational commitment of males and females (comparing the gender variable to the variables of organisational commitment).
- To determine whether differences exist between the entrepreneurial orientation of males and females (comparing the gender variable to the variables of entrepreneurial orientation).

The respondents indicated their gender by either selecting male or female.

Results

The frequency and percentage distribution of the gender of the participating physiotherapists are indicated below (Table 3.3):

Table 3.3: Gender distribution of physiotherapists

Gender	Frequency	Percentage
Male	14	20.00
Female	56	80.00
Total	70	100%

Analysis

Only 20% of the respondents were male, with the majority of the respondents being female (80%).

3.4.3. Racial classification of respondents

Purpose

The purpose of question E3 in Section E (see Annexure A), was to establish the respondents' racial group classification. The respondents had to select one of the following categories: Black, Coloured, White, Indian or Other.

Results

Table 3.4 displays the frequency and percentage distribution of the race of the respondents.

Table 3.4: Racial group classification of physiotherapists

Race	Frequency	Percentage
Black	1	1.43
Coloured	1	1.43
White	63	90.00
Indian	2	2.86
Other	1	1.43
Missing	2	2.85
Total	70	100%

Analysis

In terms of racial classification, the sample was not very representative. Exactly 90% of the respondents were from the White racial group. Only two respondents represented the Indian racial group. The Black- and Coloured racial groups had the smallest race representation, where only one respondent represented each group. Two respondents did not indicate their racial group classification.

3.4.4. Marital status of respondents

Purpose

The purpose of question E4 in Section E (see Annexure A), was to determine the marital status of the respondents. Respondents had to indicate whether they were single, married, divorce or a widow/widower.

Results

The table below (Table 3.5) indicates the respondents' marital status.

Table 3.5: Marital status of physiotherapists

Marital status	Frequency	Percentage
Single	12	17.14
Married	55	78.57
Divorce	2	2.86
Widow/er	0	0.00
Missing	1	1.43
Total	70	100%

Analysis

More than 95% of the respondents indicated to be either married or single (78.57% and 17.14%, respectively). None of the respondents were widowed, while 2.86% of the respondents indicated that they were divorced. One respondent did not indicate his/her marital status.

3.4.5. Level of tertiary education of respondents

Purpose

The purpose of question E5 in Section E (see Annexure A), was to establish the level of tertiary education of the participants. Respondents had to indicate whether they held a Bachelors- or Post Graduate degree to determine the relationship between job satisfaction and the level of tertiary education.

Results

The level of tertiary education of the participating physiotherapists, are indicated in Table 3.6.

Table 3.6: Level of tertiary education of physiotherapists

Level of tertiary education	Frequency	Percentage
B.PhysT, B.Sc Physio, B.Physio	58	82.86
Post Graduate degree	8	11.43
Other	1	1.43
Missing	3	4.28
Total	70	100%

Analysis

With regard to the level of tertiary education obtained by the participants, more than 80% of the respondents indicated that they had a Bachelors degree in B.PhysT, B.Sc Physio or B.Physio. Eight of the respondents acquired a Post Graduate degree. Unfortunately, 4.28% of the questionnaires had missing data with regard to the respondents' level of tertiary education.

3.4.6. Years of experience of respondents

Purpose

The purpose of questions E6 and E7 of Section E (see Annexure A) was to determine the respondents' years of experience as a physiotherapist and years of experience as the owner or partner of a private practice, respectively. E7 was further indicative in determining the relationship between the dependent and independent variables (job satisfaction, organisational commitment and entrepreneurial orientation) and the variable of years of experience as owner or partner of a private practice. In questions E6 and E7, the respondents had to select between the following options: 1 to 5 years, 6 to 10 years, 11 to 15 years or more than 15 years.

Results

Table 3.7 indicated the classification of years of experience as a physiotherapist. The classification of years of experience as the owner or partner of a private practice is demonstrated in Table 3.8.

Table 3.7: Classification of years of experience as a physiotherapist

Years of experience as physiotherapist	Frequency	Percentage
1 – 5	2	2.86
6 – 10	27	38.57
11 – 15	15	21.43
> 15	25	35.71
Missing	1	1.43
Total	70	100%

Table 3.8: Classification of years of experience as the owner or partner of a private practice

Years of experience as the owner or partner	Frequency	Percentage
1 – 5	30	42.86
6 – 10	11	15.71
11 – 15	10	14.29
> 15	15	21.43
Missing	4	5.71
Total	70	100%

Analysis

According to Table 3.7, 38.57% of the respondents indicated that they had 6 to 10 years experience as a physiotherapist. Slightly fewer respondents (35.71%) specified that they have been practicing physiotherapy for more than 15 years, while 21.43% had between 11 and 15 years' experience in the field of physiotherapy. Only 2.86% of respondents had between 1 and 5 years' experience.

In Table 3.8, it was apparent that more than 40% of the respondents had only between 1 and 5 years experience as an owner or partner in private practice. Approximately 30% of respondents owned or partly owned a private practice between 6 and 15 years, whereas 21.43% had more than 15 years' experience as owners or partners in private practice.

3.4.7. Number of permanent employees

Purpose

The purpose of questions E8 and E9 of Section E (see Annexure A) was to determine the number of employees employed by the practice. In question E8, the respondents had to indicate how many other physiotherapists (excluding themselves) were employed by the practice. On the other hand, question E9 asked the respondents to indicate the number of any other permanent employees (excluding themselves and other physiotherapists) who were employed by the practice.

In questions E8 and E9, the respondents had to select between the following options: 1, 2, 3 or 4+. If no other member of staff was employed by the practice, the respondents were asked to leave the blocks open.

Results

Table 3.9 indicates the number of additional physiotherapists (excluding the owner or partner) employed by the practice. The number of any other permanent employees (excluding the physiotherapists) is demonstrated in Table 3.10.

Table 3.9: Number of additional physiotherapists employed by the practice

Number of additional physiotherapists employed	Frequency	Percentage
0	20	28.57
1	21	30.00
2	14	20.00
3	7	10.00
≥ 4	8	11.43
Total	70	100%

Table 3.10: Number of any other permanent employees employed by the practice

Number of other permanent employees employed	Frequency	Percentage
0	15	21.43
1	26	37.14
2	14	20.00
3	7	10.00
≥ 4	8	11.43
Total	70	100%

Analysis

Analysing Table 3.9, it was noted that more than 70% of the respondents employed at least one more physiotherapist in their practices. A total of 50% employed one or two additional physiotherapists, whilst 21.43% employed three or more physiotherapists. Only 28.57% of the respondents did not employ any additional physiotherapists.

Table 3.10 illustrates that 21.43% of respondents did not employ any other permanent employees (other than physiotherapists) whereas 57.14% employed one or two other employees. The percentage respondents that employed three or more other employees equated to 21.43%.

3.4.8. Possession of a practice number

Purpose

The purpose of question 10 of Section A (see Annexure A), was to determine whether the respondents had a registered practice number for their practices. The respondents merely had to answer “yes” or “no” to the question whether they had a practice number. This question, together with question 11 of Section E, determined whether the participants could be included in the study. Respondents who indicated that they possessed a practice number (question 10), and/or being the owner or partner of a private practice (question 11), were eligible to be included in the study.

Results

Table 3.11 indicates the number of participants in the possession of a practice number.

Table 3.11: Indication of practice numbers for private practices

Possession of practice number	Frequency	Percentage
Yes	66	94.29
No	3	4.28
Missing	1	1.43
Total	70	100%

Analysis

The majority of the respondents (94.29%) indicated that they were in the possession of a practice number. One respondent did not answer the question and three respondents answered “no”. Yet, these four participants were included in the study, as they indicated being an owner or partner in the question that followed.

3.4.9. Current position of respondent in practice

Purpose

The purpose of question 11 of Section E (see Annexure A) was to determine the current position of the respondents in private practice. The participants indicated their position by selecting one of three options namely: owner, partner or other.

Results

The current position of the physiotherapists that responded is demonstrated in Table 3.12.

Table 3.12: Current position of respondents

Current position of respondent	Frequency	Percentage
Owner	61	87.14
Partner	6	8.57
Other	2	2.86
Missing	1	1.43
Total	70	100

Analysis

Most of the respondents indicated that they were current owners in their respective practices, at 87.14%. Only 8.57% pointed out that they were partners. Two respondents chose the “Other” option, but indicated in the prior question that they were in the possession of a practice number. Therefore it was reasoned that these two respondents were either practice managers or directors of private practices and were included in the study. One respondent selected both owner and partner, and was consequently portrayed in the data as missing.

3.4.10. Areas of interest of respondents

Purpose

In question E12 of Section E (see Annexure A), the purpose was to determine the areas of interest of the respondents. The participants were asked to indicate in which area/areas of physiotherapy they had a specific interest by selecting the appropriate block/s.

Results

The different areas of interest are presented in Table 3.13.

It is of importance to note that the respondents could indicate more than one area of interest. Therefore, the total in the table was not calculated as the percentages would not add up to 100.

Table 3.13: Areas of interest of respondent

Areas of interest	Frequency	Percentage
Neurology	17	24.29
Orthopaedics	55	78.57
Women's health	8	11.43
Sport	45	64.29
Respiratory	20	28.57
Geriatrics	11	15.71
Paediatrics	13	18.57
Pain management	38	54.29
Animal physiotherapy	3	4.29
Aquatic physiotherapy	4	5.71
Other	10	14.29

Analysis

The two major areas of interest were orthopaedics and sport, where almost 80% and 65% of respondents indicated an interest in the two areas, respectively. Pain management is an important treatment area for 54.29% of respondents. Less than 5% indicated an interest in animal physiotherapy and just over 5% specified that aquatic physiotherapy is an area of interest. The areas of neurology and respiratory were selected by 24.29% and 28.57% of respondents, respectively.

3.4.11. Geographical distribution of practices

Purpose

The purpose of the final question of Section E (see Annexure A), was to determine the distribution of the representative practices in the nine different provinces in South Africa. Respondents had to indicate in which of the nine provinces their practice was located.

Results

Table 3.14 indicates the geographical distribution of the practices of the respondents in South Africa.

Table 3.14: Geographical distribution of practices

Geographical distribution	Frequency	Percentage
Gauteng	31	44.29
Limpopo	1	1.43
Mpumalanga	1	1.43
North-West	4	5.71
KwaZulu-Natal	4	5.71
Eastern Cape	12	17.14
Western Cape	11	15.72
Northern Cape	1	1.43
Free State	5	7.14
Total	70	100%

Analysis

Most of the respondents' practices were located in Gauteng at 44.29%. The Eastern Cape and Western Cape had fairly similar number of respondents, representing 17.14% and 15.72% of the population, respectively. Only one practice was located in each of the following provinces: Limpopo, Mpumalanga and the Northern Cape. Five practices were located in the Free State (7.14%) while four practices were located both in KwaZulu-Natal and the North-West province (5.71%).

3.5. RELIABILITY OF THE MEASURING INSTRUMENT

The reliability of a measuring instrument can be determined by assessing the internal consistency between the various items of the measuring instrument (Brymann & Bell, 2007: 164; Struwig & Stead, 2004: 132). To accomplish this, Cronbach's alpha coefficients can be calculated (Welman *et al.*, 2010: 147). In the current study, the Cronbach's alpha coefficients were determined to indicate consistency between the items that measured job satisfaction, organisational commitment and entrepreneurial orientation, respectively. A higher internal consistency means that there is a higher degree of generalisability between the different items in the measuring instrument (Welman *et al.*, 2010: 147). The index of reliability is determined by taking every item in the measuring instrument and correlating it with every other item in the same measuring

instrument. An average inter-item correlation is then determined. The values of the coefficients can range between 0 and 1 (Bryman & Bell, 2007: 164; Struwig & Stead, 2007: 131). A value closer to 1 indicates more reliable results as it means that the internal consistency is higher. A value of 0 indicates no reliability and means that the items were inadequately formulated (Bryman; & Bell, 2007: 164). According to Bryman and Bell (2007: 164), the reliability is acceptable if the Cronbach's alpha coefficients are equal to or greater than 0.8. Nunnally and Bernstein (1994: 265) argued that modest reliability of a measuring instrument is achieved with a Cronbach alpha value of 0.7.

The interpretations for the Cronbach's alpha coefficients are indicated in Table 3.15 below.

Table 3.15: Measurement for internal consistency by using the Cronbach's alpha coefficients

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Source: George and Mallery (2003) (cited by Gliem & Gliem, 2003: 87)

Table 3.16 reveals the Cronbach' alpha values for the dependent- and independent variables in the measuring instrument in this specific study.

Table 3.16: Cronbach's alphas for variables in the measuring instrument

Variables	Cronbach's alpha coefficient
Job satisfaction	
Overall job satisfaction	0.923
Life satisfaction	
Overall life satisfaction	0.881
Organisational commitment	
Affective commitment	0.826
Continuance commitment	0.845
Normative commitment	0.848
Entrepreneurial orientation	
Autonomy	0.809
Innovativeness	0.871
Risk-taking	0.756
Pro-activeness	0.857
Competitive aggressiveness	0.832

Reliability of the items was determined by using the responses of all 70 participants. In the current study, the measuring instrument that was used to measure job satisfaction, organisational commitment and entrepreneurial orientation, had acceptable to excellent reliability. In fact, only one variable of entrepreneurial orientation, namely risk-taking, had a Cronbach's alpha between 0.7 and 0.8, showing acceptable reliability. The other four variables measuring entrepreneurial orientation, as well as the three items measuring organisational commitment, demonstrated good reliability. The Cronbach's alpha coefficient for the job satisfaction variable was 0.923, which indicates excellent reliability of the measuring instrument.

3.6. ASSESSMENT OF THE DEPENDENT AND INDEPENDENT VARIABLES

The purpose of the questions, the results obtained, as well as the analysis of the results of the dependent variable (job satisfaction) and independent variables (organisational commitment and entrepreneurial orientation), will be discussed in the following three sections.

The five point Likert scale was introduced to the respondents before they answered the questionnaire. The respondents used this scale to indicate to what extent they agreed or

disagreed with each statement. The values on the scale varied from one to five; one indicated strong disagreement, while five indicated strong agreement with the particular statement. The five point Likert scale is introduced in Table 3.17 below.

Table 3.17: Five point Likert scale

1	2	3	4	5
Strongly disagree	Disagree	Neutral	Agree	Strongly agree

A respondent recognised the statement as true within his or her environment in the case where he or she agreed or strongly agreed to the question.

The results obtained, demonstrated the average or mean values and standard deviations for the variable and its separate dimensions and/or statements.

The mean value is calculated by adding a complete list of values and dividing the obtained total by the number of values. The mean indicates the extent of the agreement or disagreement of the sample group towards the particular statement. Higher mean values indicate more agreement among the respondents towards a specific statement. Lower mean values point towards greater disagreement (Welman *et al*, 2010: 233; Bryman & Bell, 2007: 359; Neuman, 2000: 319).

The standard deviations calculate the spread of the respondents' responses. Higher values indicate more varied responses, while lower values indicate that more respondents shared the same perspective of a specific statement (Welman *et al*, 2010: 233; Neuman, 2000: 320).

The analysis of the results will explain and summarise the obtained results.

The questionnaire that was used to measure the different variables or constructs is contained in Annexure A.

The constructs as measured by different statements are explained in Annexure B.

3.7. ASSESSMENT OF JOB SATISFACTION

Purpose

The 20 questions in Section C of the questionnaire (see Annexure A) measured **job satisfaction** of physiotherapists working as owners or partners in the private practice environment in South Africa. The respondents used the five point Likert scale (as discussed above) to rate each statement.

The results of each of the statements, as well as the combined results, were discussed. The results were used to determine whether **job satisfaction** is significantly influenced by the selected independent variables.

Results

The separate statements' and overall **job satisfaction's** means and standard deviations are indicated in Table 3.18. The separate statements were sorted from the highest to the lowest mean value, and the average mean value was indicated at the bottom of the table.

Table 3.18: Assessment of statements and overall job satisfaction

Question number	Statement	n	\bar{x}	s
C7	Being able to do things that don't go against my conscience.	70	4.614	0.666
C9	The chance to do things for other people.	70	4.614	0.687
C20	The feeling of accomplishment I get from my job.	70	4.586	0.648
C11	The chance to do something that makes use of my abilities.	70	4.529	0.653
C15	The freedom to use my own judgement.	70	4.529	0.696
C17	The working conditions.	70	4.443	0.773
C3	The chance to do different things from time to time.	70	4.414	0.712
C16	The chance to try my own methods of doing the job.	70	4.400	0.750
C6	My competence in making decisions.	70	4.343	0.657
C8	The way my job provides for steady employment.	70	4.214	0.815
C18	The way my co-workers get along with each other.	70	4.171	0.868
C4	The chance to be "somebody" in the community.	70	4.143	0.856
C5	The way I handle the co-workers (or subordinates).	70	4.129	0.797
C1	Being able to keep busy all the time.	70	4.114	0.894
C19	The praise or satisfaction I get for doing a job.	70	4.071	0.822
C2	The chance to work alone on the job.	70	3.914	0.989
C14	The chances for advancement or growth on the job.	70	3.843	0.911
C12	The way the practice policies are put into practice.	70	3.800	0.827
C13	My pay and the amount of work I do.	70	3.757	0.924
C10	The chances to tell people what to do.	70	3.300	1.095
Average		70	4.196	0.516

Analysis

Within the dependent variable, **job satisfaction**, the respondents rated 20 statements on the five point Likert scale. The mean value obtained for the overall job satisfaction of respondents was $\bar{x} = 4.196$. Therefore, on average the respondents experienced a relatively high level of job satisfaction. The two highest mean averages were obtained for statements C7 and C9 – being able to do things that **don't go against ones conscience** and the chance to **do things for other people**. Other items that scored mean values above 4.5 included **the feeling of accomplishment I get from my job** ($\bar{x} = 4.586$), **the chance to do something that makes use of my abilities** ($\bar{x} = 4.529$) and **the freedom to use my own judgement** ($\bar{x} = 4.529$).

The four statements that received the lowest mean values included: **the chances for advancement or growth on the job** ($\bar{x} = 3.843$); **the way the practice policies are put into practice** ($\bar{x} = 3.800$), **pay and the amount of work that is done** ($\bar{x} = 3.757$) and **the chances to tell people what to do** ($\bar{x} = 3.300$).

Fifteen of the statements' averages were rated above 4, while the averages of five statements were between 3 and 4. It is very fascinating to note that neither of the statements received an average ranking below 3.

The overall standard deviation was calculated to be 0.516. Statement C10 (the chance to **tell people what to do**) obtained the largest standard deviation (1.095). Therefore, of all the statements contained in Section C, the responses with regards to statement C10 varied the most. The same statement received the lowest mean average value.

3.8. ASSESSMENT OF ORGANISATIONAL COMMITMENT

Section A that measured organisational commitment consisted of 24 statements that evaluated three independent variables namely: **affective commitment**, **continuance commitment** and **normative commitment**. As with the previous section, the respondents used the five point Likert scale to indicate their level of agreement.

The results of each of the individual variables will be presented, whereafter the combined results will be discussed.

3.8.1. Assessment of the individual variables that measure organisational commitment

3.8.1.1. Affective commitment

Purpose

The purpose of statements A1 to A8 (see Annexure A) was to determine the level of **affective commitment** that physiotherapists as owners or partners of private practices possess. The respondents indicated their agreement or disagreement towards the statements by using the five point Likert scale that ranged from 1 to 5.

Results

Table 3.19 summarises the responses to the statements that measured **affective commitment**. The mean values for statements A1 to A8 are sorted in a descending manner.

Table 3.19: Results of affective commitment

Question number	Statement	n	\bar{x}	s
A7	The practice has personal meaning for me.	70	4.643	0.682
A8	I feel a strong sense of belonging to the practice.	70	4.614	0.597
A5	I feel like “part of the family” at the practice.	70	4.600	0.623
A1	I would be happy to spend the rest of my career with the practice.	70	4.343	0.883
A6	I feel emotionally attached to the practice.	69	4.333	1.010
A3	I feel as if the practice’s problems are my own.	70	4.271	0.900
A2	I enjoy discussing the practice with people outside it.	70	4.014	0.909
A4	I do not think I could become as attached to another practice as I am to the practice.	70	3.614	1.231
Average		70	4.304	0.585

Analysis

An average mean value of $\bar{x} = 4.304$ was obtained for the variable **affective commitment**. Five of the statements obtained a mean value above that of the average mean. The statement with the highest average mean was related to the **practice having personal meaning** to the respondent. The other four statements were: **I feel a strong sense of belonging to the practice** ($\bar{x} = 4.614$), **I feel like “part of the family” at the practice** ($\bar{x} = 4.600$), **I would be happy to spend the rest of my career with the practice** ($\bar{x} = 4.343$) and **I feel emotionally attached to the practice** ($\bar{x} = 4.333$). All these statements scored values above 4, indicating a high level of agreement from the respondents. The lowest mean value was obtained for statement A4 ($\bar{x} = 3.614$). The respondents therefore agreed to a lesser extent (compared to the other statements) that they would not be able to become attached to another practice as they are to their

current practices. Seven of the statements ranged from agree to strongly agree, only one of the statements ranged between neutral and agree, while none of the statements ranged between neutral and disagree or strongly disagree. This means that no level of disagreement was measured on average with regard to any of the statements measuring the **affective commitment** of the respondents. The standard deviation ranged between 0.597 and 1.231.

3.8.1.2. Continuance commitment

Purpose

The purpose of statements A9 to A16 of Section A (see Annexure A) was to determine the level of **continuance commitment** that the respondents displayed towards their practices. The respondents indicated their level of agreement by selecting one number between 1 and 5 on the Likert scale.

Results

Table 3.20 reveals the responses to the statements that measure **continuance commitment**. The mean values for statements A9 to A15 were sorted from the highest to the lowest.

Table 3.20: Results of continuance commitment

Question number	Statement	n	\bar{x}	s
A9	It would be hard for me to leave the practice right now even if I wanted to.	70	4.229	0.981
A12	It would be costly for me to leave the practice now.	70	4.071	1.081
A10	My life would be disrupted if I decided I wanted to leave the practice now.	70	3.943	1.102
A16	One of the major reasons I continue with the practice is that leaving would require personal sacrifice – another business may not match the overall benefits I have.	70	3.800	1.187
A13	Right now, staying with the practice is a matter of necessity as much as desire.	70	3.771	1.206
A11	I am afraid of what might happen if I quit my job (leaving the practice) without having another one lined up.	70	3.514	1.380
A14	I feel that I have few options to consider leaving the practice.	70	3.171	1.179
A15	One of the serious consequences of leaving the practice would be scarcity of available alternatives.	70	2.871	1.262
Average		70	3.671	0.815

Analysis

Eight statements were used to determine the level of **continuance commitment** of the participating physiotherapists. An average mean value of $\bar{x} = 3.671$ was obtained. This variable's rating is noticeably lower than the preceding two variables (job satisfaction and affective commitment). Two of the eight variables had a mean value above 4. **The participants agreed that it would be hard for them to leave the practice right now even if they wanted to** ($\bar{x} = 4.229$). They further agreed **that it would be costly to leave the practice now** ($\bar{x} = 4.071$). Another five variables measured between 3 and 4

(neutral to agree). A15 was the only statement that scored below 3 and indicated a level of disagreement among the respondents. The respondents did not feel that **scarcity of available alternatives would be a serious consequence when leaving the practice.**

The higher average standard deviation showed that there were more varied responses with regard to **continuance commitment** compared to affective- and normative commitment respectively.

3.8.1.3. Normative commitment

Purpose

The purpose of the last 8 statements of Section A (see Annexure A) was to determine the level of **normative commitment** that the respondents displayed. The respondents rated the statements from 1 to 5; 1 indicated that the respondent “strongly disagreed”, while 5 showed that the respondent “strongly agreed” with the statement.

Results

The responses to the statements that measure **normative commitment** are summarised in the table below. The mean values for statements A18 to A23 were sorted in a descending manner.

Table 3.21: Results of normative commitment

Question number	Statement	n	\bar{x}	s
A18	I believe that a person must always be loyal to his/her organisation.	70	3.943	0.931
A22	I was taught to believe in the value of remaining loyal to one organisation.	70	3.671	0.944
A17	I think that people these days move from organisation to organisation too often.	70	3.543	0.988
A20	I believe that loyalty is important and therefore I feel a strong sense of moral obligation to remain.	70	3.443	0.911
A24	I think that wanting to be “a company man” or “company women” is sensible.	70	3.143	1.026
A19	Jumping from organisation to organisation seems unethical to me.	70	3.129	1.141
A21	If I get another offer for a better job elsewhere I would not feel it was right to leave the practice.	70	2.871	1.076
A23	Things were better in the days when people stayed with one organisation for most of their careers.	70	2.714	0.887
Average			3.307	0.690

Analysis

An average mean of $\bar{x} = 3.307$ was measured for the variable **normative commitment**. None of the statements obtained an average mean value above 4. The highest value was scored for the statement **I believe that a person must always be loyal to his/her organisation** ($\bar{x} = 3.943$) while **things were better in the days when people stayed with one organisation for most of their careers** scored the lowest mean value ($\bar{x} = 2.714$). The respondents felt fairly neutral regarding the **sensibility of wanting to be a “company man” or “company women”** and that **jumping from organisation to organisation seemed unethical** ($\bar{x} = 3.143$). Four of the statements acquired a mean

higher than the average mean, while the other four statements had a mean lower than the average mean of 3.307.

The standard deviations for the statements ranged between 0.887 and 1.141.

3.8.2. Assessment of overall organisational commitment (combined results)

Purpose

The purpose of statements A1 to A24 in Section A (see Annexure A), was to determine the respondents' overall organisational commitment, taking into account and combining the three separate variables discussed above.

Results

Table 3.22 shows the results of the overall organisational commitment by indicating the mean and standard deviation of the combined variables.

Table 3.22: Results of overall organisational commitment

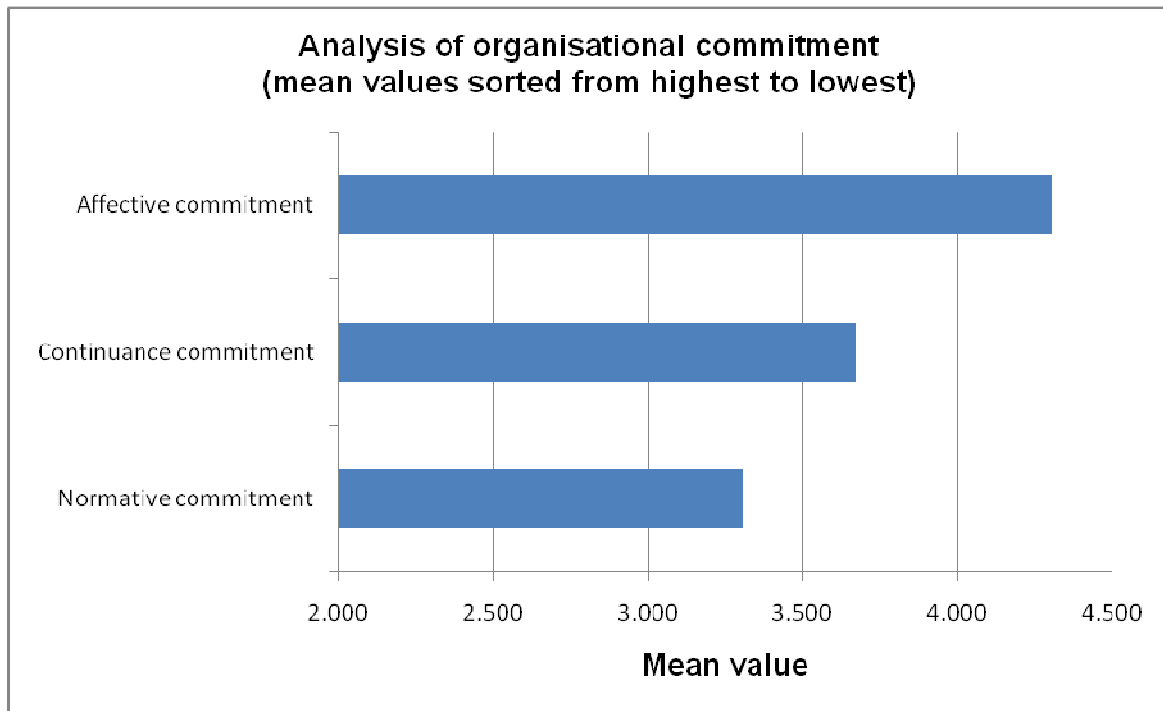
Variable	n	\bar{x}	s
Affective commitment	70	4.304	0.585
Continuance commitment	70	3.671	0.815
Normative commitment	70	3.307	0.690
Total	70	3.761	

Analysis

The average mean calculated for **organisational commitment** (including all three variables) was $\bar{x} = 3.761$. This number indicates an overall positive perception towards commitment in the practices. The average means for continuance commitment ($\bar{x} = 3.671$) and normative commitment ($\bar{x} = 3.307$) are considerably lower than that of affective commitment ($\bar{x} = 4.304$).

In the graph that is presented in Figure 3.1, the results of the three different dimensions of organisational commitment are compared to one another. The results are sorted from the largest to the smallest value.

Figure 3.1: Graphical presentation of organisational commitment results



The highest mean value was obtained for the independent variable affective commitment, with $\bar{x} = 4.304$. Continuance commitment followed with a mean value of $\bar{x} = 3.671$. The lowest mean score was obtained for normative commitment ($\bar{x} = 3.307$). Both continuance commitment and normative commitment obtained mean values below the average mean of $\bar{x} = 3.761$.

3.9. ASSESSMENT OF ENTREPRENEURIAL ORIENTATION

Section B that measured entrepreneurial orientation consisted of 27 statements that evaluated five independent variables namely: **autonomy**, **innovativeness**, **risk-taking**, **pro-activeness** and **competitive aggressiveness**. As with the previous two sections, the respondents used the five point Likert scale to indicate their level of agreement or disagreement.

The results of each of the individual variables will be presented where after the combined results will be discussed.

3.9.1. Assessment of the individual variables that measure entrepreneurial orientation

3.9.1.1. Autonomy

Purpose

The purpose of questions B1 to B5 of Section B (see Annexure A) was to measure the level of **autonomy** experienced by employees working in the private practices.

Results

The means and standard deviations for each of the statements measuring **autonomy** are indicated in Table 3.23 in a descending manner.

Table 3.23: Results of autonomy of respondents

Question number	Statement	n	\bar{x}	s
B2	The practice allows employees to be creative and try different methods to do their job.	70	4.329	0.696
B1	Employees in the practice have enough autonomy to do their job without continual supervision to do their work.	70	4.257	0.755
B4	Employees in the practice are encouraged to manage their own work and have flexibility to resolve problems.	70	4.257	0.630
B3	Employees in the practice are allowed to make decisions without going through elaborate justification and approval procedures.	70	4.129	0.741
B5	Employees in the practice seldom have to follow the same work methods or steps while performing major tasks from day to day.	70	3.486	0.847
Average		70	4.091	0.555

Analysis

The average mean of the variable **autonomy** ($\bar{x} = 4.091$) shows general agreement towards the measured statements. Four of the five statements obtained mean values above the average mean. There is therefore opportunity for employees in the practices to be **creative and try different methods to do their job** ($\bar{x} = 4.329$), work without **continual supervision** ($\bar{x} = 4.257$), have **flexibility to resolve problems** ($\bar{x} = 4.257$) in their work and make **decisions without going through elaborate justification** ($\bar{x} = 4.129$). The only statement that scored fairly lower than the rest was statement B5: **employees seldom have to follow the same work methods or steps**. This was the only statement that scored below 4. However, they still had a level of agreement with the statement as indicated by the mean value of $\bar{x} = 3.486$ (between neutral and agree). The standard deviations, ranging only between 0.630 and 0.847, indicated that the variation of responses were fairly constant between the individual statements measuring **autonomy**.

3.9.1.2. Innovativeness

Purpose

The purpose of questions B6 to B14 of Section B (see Annexure A) was to determine the emphasis that is put on **innovation** in the private practices. The respondents selected any number from 1 to 5 to indicate their level of agreement with the separate statements.

Results

The means and standard deviations for each of the different statements measuring innovativeness are displayed in the table below (Table 3.24). The means were ranked from the highest to the lowest.

Table 3.24: Results of innovativeness of respondents

Question number	Statement	n	\bar{x}	s
B12	The practice places a strong emphasis on continuous improvement in products/service delivery/processes.	70	4.214	0.720
B8	The practice has increased the number of services/products offered during the past two years.	70	3.971	0.868
B9	The practice is continually pursuing new opportunities.	70	3.871	0.900
B14	The practice seeks to maximise value from opportunities without constraint to existing models, structures or resources.	70	3.829	0.636
B13	The practice has a widely held belief that innovation is an absolute necessity for the practice's future.	70	3.757	0.908
B7	The practice places a strong emphasis on new and innovative products/ services/processes.	70	3.714	0.819
B11	In the practice there is a strong relationship between the number of new ideas generated and the number of new ideas successfully implemented.	70	3.557	0.773
B6	The practice regularly introduces new services/products/ processes.	70	3.429	0.910
B10	Over the past few years, changes in our processes, services and product lines have been quite dramatic.	70	3.229	0.981
Average		70	3.730	0.590

Analysis

The overall average ranking of the statements that measure **innovativeness** was between 3 and 4, therefore between neutral and agree. Four statements, **dramatic**

changes in services ($\bar{x} = 3.229$), **new introduction of services** ($\bar{x} = 3.429$), **new ideas generated and implemented** ($\bar{x} = 3.557$) and **emphasis on new and innovative services** ($\bar{x} = 3.714$) obtained a mean below the average mean ($\bar{x} = 3.730$). The remaining five statements' (**strong emphasis on continuous improvement service delivery; increase in the number of services offered during the past two years; continually pursuing new opportunities; maximise value from opportunities without constraint to existing models, structures or resources; and a belief that innovation is an absolute necessity for the practice's future**) obtained mean values above the total average mean and measured close to 4. This indicated a high level of agreement among the participants. The respondents agreed the most with the statement of a **strong emphasis placed on continuous improvement in service delivery** ($\bar{x} = 4.214$).

The standard deviations measured between 0.636 and 0.981 indicating a relatively low spread of opinions among the participants regarding the statements that measured **innovativeness**.

3.9.1.3. Risk-taking

Purpose

The purpose of questions B15 to B19 of Section B of the questionnaire (see Annexure A) was to determine the **risk-taking** propensity of the owners or partners in private practice. Respondents selected the number according to the Likert scale that correlated the most with their level of agreement or disagreement.

Results

The table below (Table 3.25) indicates the means and standard deviations of the five statements that measure risk-taking.

Table 3.25: Results of risk-taking of respondents

Question number	Statement	n	\bar{x}	s
B15	When confronted with uncertain decisions, our practice typically adopts a bold posture in order to maximise the probability of exploiting opportunities.	70	3.371	0.726
B18	Employees in the practice are often encouraged to take calculated risks concerning new ideas.	70	3.100	0.837
B19	The term 'risk-taker' is considered a positive attribute for employees in our practice.	70	2.986	0.876
B17	Owing to the environment, the practice believes that bold, wide-ranging acts are necessary to achieve the practice's objectives.	69	2.841	0.868
B16	In general, the practice has a strong inclination towards high-risk projects.	70	2.586	0.940
Average		70	2.978	0.603

Analysis

Five statements were used to measure **risk-taking**, and collectively concluded with an average mean of $\bar{x} = 2.978$ and a standard deviation that measured $s = 0.603$. Thus, the respondents had a relatively neutral feeling towards the statements that measured **risk-taking**. The lowest score was obtained for statement B16 meaning that the respondents were not really **inclined towards high-risk projects** ($\bar{x} = 2.586$). On the other hand, the respondents indicated the highest agreement with statement B15 ($\bar{x} = 3.371$). **The believe that bold, wide-ranging acts are necessary to achieve the practice's objectives** ($\bar{x} = 2.841$), the term “**risk-taker**” **being a positive attribute** for employees ($\bar{x} = 2.986$), as well as **encouragement to take calculated risks** concerning new ideas ($\bar{x} = 3.100$), seemed to have produced neutral feelings among the respondents.

3.9.1.4. Pro-activeness

Purpose

The purpose of questions B20 to B23 was to measure the level of **pro-activeness** that the practices of the participants exhibit. Selection of number 1 displayed strong disagreement with the particular statement, while selection of number 5 showed strong agreement from the respondent.

Results

The results for the dimension of pro-activeness are displayed in Table 3.26. The means and standard deviations were ranked in a descending manner.

Table 3.26: Results of pro-activeness of respondents

Question number	Statement	n	\bar{x}	s
B22	The practice continuously seeks out new products/processes/ services.	70	3.529	0.989
B23	The practice continuously monitors market trends and identifies future needs of customers.	70	3.457	0.958
B20	The practice is very often the first to introduce new products/ services/processes.	70	3.143	0.952
B21	The practice typically initiates actions that competitors respond to.	70	3.100	0.950
Average		70	3.307	0.806

Analysis

The average mean of the variable **pro-activeness** was measured to be $\bar{x} = 3.307$, with a standard deviation of $s = 0.806$. Two of the four statements, **the practice continuously seeks out new services** ($\bar{x} = 3.529$) and **monitors market trends and**

identifies future needs of customers ($\bar{x} = 3.457$), had mean values above the average mean. The other two statements' mean values were below that of the average mean. None of the statements were rated below 3, indicating that none of the four statements roused a feeling of disagreement among the respondents. The feelings were generally between neutral and agree.

3.9.1.5. Competitive aggressiveness

Purpose

The purpose of the final four questions of Section B (B24 to B27) of the questionnaire (see Annexure A), was to establish the level of **competitive aggressiveness** that the practices of the respondents display. Each respondent selected a number between 1 and 5, depending on their level of agreement with each of the different statements.

Results

The results below show the means and standard deviations for each of the statements, ranked from the highest to the lowest mean (Table 3.27).

Table 3.27: Results of competitive aggressiveness of respondents

Question number	Statement	n	\bar{x}	s
B27	The practice knows when it is in danger of acting overly aggressive (this could lead to erosion of our practice's reputation or to retaliation by our competitors).	70	3.614	0.873
B24	In dealing with competitors the practice typically adopts a very competitive undo-the-competitor "posture.	70	2.443	1.058
B26	The practice effectively assumes an aggressive posture to combat trends that may threaten our survival or competitive position.	70	2.400	1.069
B25	The practice is very aggressive and intensely competitive.	70	2.214	1.075
Average		70	2.668	0.834

Analysis

Four statements were used to measure the level of **competitive aggressiveness** that the practices display. The average mean was computed to be $\bar{x} = 2.668$. Three of the four statements had mean values below the average mean. The respondents disagreed the most with statement B25 indicating that in general the private practices are not very **aggressive and intensively competitive** ($\bar{x} = 2.214$). The respondents agreed with statement B27 which showed that the practice **knows when it is in danger of acting overly aggressive** ($\bar{x} = 3.614$). The standard deviation varied between 0.873 and 1.075.

3.9.2. Assessment of the overall entrepreneurial orientation (combined results)

Purpose

The purpose of questions B1 to B27 in Section B of the questionnaire (see Annexure A), was to determine the respondents' overall **entrepreneurial orientation**, taking into account and combining the five separate dimensions discussed above.

Results

Table 3.28 displays the results of the overall entrepreneurial orientation by indicating the mean and standard deviation of the combined variables.

Table 3.28: Results of overall entrepreneurial orientation

Variable	n	\bar{x}	s
Autonomy	70	4.091	0.555
Innovativeness	70	3.730	0.590
Pro-activeness	70	3.307	0.806
Risk-taking	70	2.978	0.603
Competitive aggressiveness	70	2.668	0.834
Total	70	3.355	

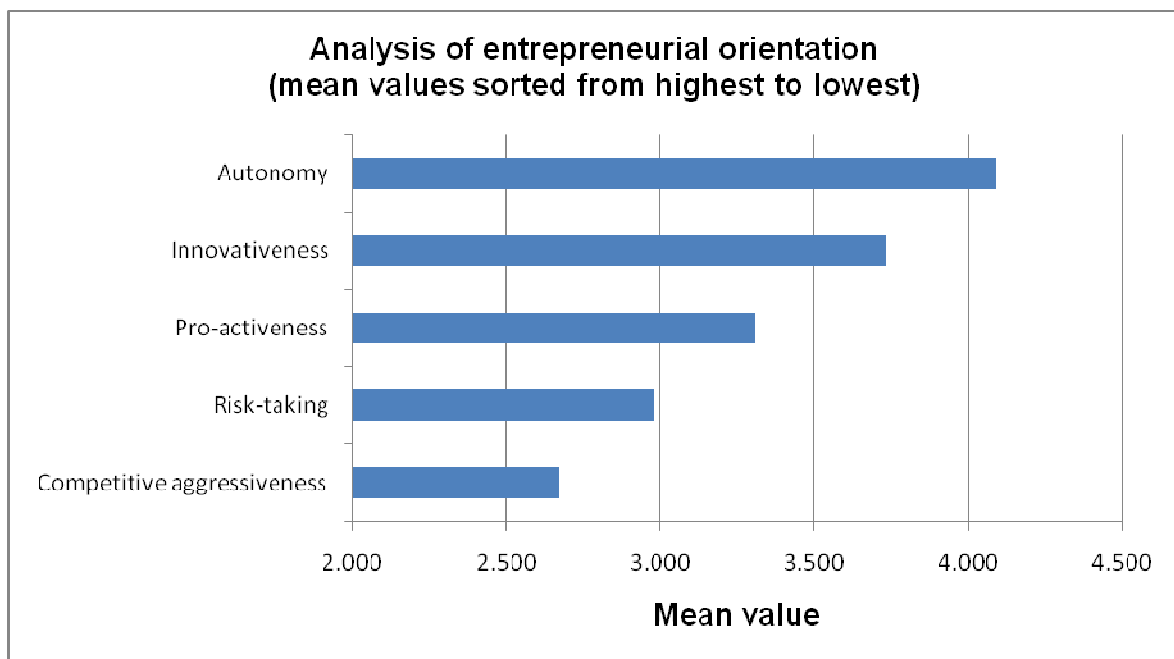
Analysis

When the five independent variables of entrepreneurial orientation were combined, an average mean value of $\bar{x} = 3.355$ was obtained. This indicates that the respondents had

a neutral to positive perception with regard to **entrepreneurial orientation**, but with room for development.

The results and comparison of the five independent variables of **entrepreneurial orientation** are graphically presented in a bar chart in Figure 3.2 below. The results were sorted from the largest to the smallest value to make a clear comparison between the variables.

Figure 3.2: Graphical presentation of entrepreneurial orientation results



Autonomy measured the highest mean value ($\bar{x} = 4.091$) which indicated the strongest respondents' agreement of all the variables measuring entrepreneurial orientation. Autonomy was followed by **innovativeness** with a mean value of $\bar{x} = 3.730$. **Pro-activeness** ($\bar{x} = 3.307$), **risk-taking** ($\bar{x} = 2.978$) and **competitive aggressiveness** ($\bar{x} = 2.668$) had mean values below that of the average mean.

The standard deviation of the variables ranged from 0.555 to 0.834.

3.10. SELECTED DEMOGRAPHIC VARIABLES' RELATIONSHIP WITH THE CONSTRUCTS

T-tests can be performed to establish whether a significant difference exists between the means of two different populations (Welman *et al.* 2010: 237). The *t*-test determines *p*-values to test whether statistical significance exists, as well as *d*-values to determine effect sizes. For the purpose of the current study, the approach where equal variances are not assumed, was used (Elliot & Woodward, 2007: 59).

According to Bryman and Bell (2007: 369), statistical significance is “the level of risk that you are prepared to take that you are inferring that there is a relationship between two variables in the population from which the sample was taken, when in fact no such relationship exists”. Significance is indicated by a *p*-value. In the current study, a significance level of $p < 0.05$ was accepted (Ellis & Steyn, 2003: 51). This means that there is a 5% chance that conclusions regarding relationships that exist between variables might be false.

P-values have a tendency to have smaller values when larger sample sizes are used, even if higher statistical significance does not necessarily exist. To overcome the disadvantage, *d*-values can be computed to determine an effect size. The *d*-values determine practical significance, compared to the statistical significance that is revealed by *p*-values. Effect sizes further measure the magnitude of the correlation that is tested and the size of the sample does not affect the outcome. It can serve a purpose even if statistical significance is not detected (Field 2005: 56; Ellis & Steyn 2003: 51-53).

The magnitude of the *d*-value can be interpreted by the Cohen's guidelines.

Table 3.29: Interpretation of *d*-values (effect size)

<i>d</i>	Meaning
0.2	Small effect size
0.5	Medium effect size
0.8	Large effect size

Source: Cohen (1988: 25-26)

For the purpose of this study, the relationship between gender, overall job satisfaction, the three variables of organisational commitment and the five variables of entrepreneurial orientation were determined.

3.10.1. Relationship between gender of respondents and the construct variables

A total of 14 males and 56 females completed the questionnaires that were included in the study. The relationships between the demographic variable gender and the different variables (job satisfaction, three variables of organisational commitment and five variables of entrepreneurial orientation) were indicated in Table 3.30 below.

To determine whether differences existed between the genders with regard to the separate variables, mean values (\bar{x}) and standard deviation (s) were computed. The t -test was utilised to determine the p -values for statistical significance, as well as the d -values (effect size) for practical significance. Hence, it could be established whether a significant difference exists between the views of the males and females.

Table 3.30: Relationship between gender and the construct variables

Gender						
Variable	Male		Female		Comparison	
	\bar{x}	s	\bar{x}	s	p	d
Job satisfaction						
Overall job satisfaction	4.082	0.828	4.225	0.410	0.541	0.17
Organisational commitment						
Affective commitment	4.277	0.615	4.310	0.583	0.856	0.05
Continuance commitment	3.723	0.854	3.658	0.813	0.801	0.08
Normative commitment	3.420	0.677	3.279	0.696	0.497	0.20
Entrepreneurial orientation						
Autonomy	4.000	0.719	4.114	0.511	0.583	0.16
Innovativeness	3.976	0.541	3.669	0.590	0.076	0.52
Risk-taking	3.586	0.615	2.826	0.500	0.000	1.24
Pro-activeness	3.786	0.699	3.188	0.791	0.011	0.76
Competitive aggressiveness	3.304	0.900	2.509	0.743	0.007	0.88

When Table 3.30 was analysed, it became evident that three of the variables obtained p -values below 0.05. This indicated statistical significance between the opinions of the males and the females with regard to risk-taking, pro-activeness and competitive aggressiveness. Although the variable of innovativeness did not indicate a value of $p < 0.05$, the p -value is still below 0.01, indicating a confidence level of higher than 90%.

When the d -values were taken into account, a medium effect and therefore visible difference between the genders were demonstrated regarding **innovativeness** and **pro-activeness**. The d -values were 0.52 and 0.76, respectively. Pro-activeness was indeed extremely close to practical significance (d -value very close to 0.8). A large and practical significant difference between the genders were measured with regard to **competitive aggressiveness** ($d = 0.88$) and **risk-taking** ($d = 1.24$).

This indicated that the males exceeded the females by far in exhibiting these entrepreneurial behaviours. The male owners or partners ($\bar{x} = 3.976$) were visibly more orientated towards innovation in their practices than the females ($\bar{x} = 3.669$). The results also demonstrated a practical significant difference in terms of the pro-active behaviour of males compared to females ($\bar{x} = 3.786$ compared to $\bar{x} = 3.188$). Males ($\bar{x} = 3.304$) are competing much more aggressively in the market than their female counterparts ($\bar{x} = 2.509$). The biggest difference among the opinions of the genders was seen when risk-taking propensity was measured. The males ($\bar{x} = 3.586$) rated risk-taking significantly higher than the females ($\bar{x} = 2.826$) which indicated that they displayed a considerably higher propensity for the taking of risks in practice.

The above variables revealed statistical- and practical significance as indicated by the p -values and d -values. It became evident that males rated four of the five dimensions of entrepreneurial orientation higher than their counterparts. Only **autonomy** revealed no difference between the genders.

In view of the discussion above, it can be stated that the p -values and d -values did not yield any statistical differences among genders with regard to job satisfaction and organisational commitment. However, the dimensions of entrepreneurial orientation,

(with **autonomy** excluded) achieved significantly higher ratings among the male participants when compared to the females.

3.11. MULTIPLE REGRESSION ANALYSES RESULTS

Multiple regression analyses are used when the influence of two or more independent variables on a dependent variable needs to be determined (Levine, Stephan, Krehbiel & Berenson, 2011: 556).

This statistical procedure requires the collection of data, where after an equation can be developed to illustrate the relationships between the chosen variables. The dependent variable is the variable that is predicted. The variables that are used to make the prediction, are termed the independent variables (Levine *et al*, 2011: 556-559).

The current study aimed to determine the influence of two constructs - organisational commitment and entrepreneurial orientation, on the job satisfaction of physiotherapists in South Africa. Therefore, two separate regression models were used to display the results of the regression analyses.

3.11.1. Impact of organisational commitment on job satisfaction

Purpose

Multiple regression analyses were done to determine the influence of the **organisational commitment** constructs namely, **affective commitment**, **continuance commitment** and **normative commitment**, on the **job satisfaction** of the respondents. Multiple linear regressions were used, and the specific impact that each of the three independent variables had on **job satisfaction** (the dependent variable) was determined.

Results

The results of the first regression model, indicating the influence of the first set of independent variables on the dependent variable, are presented in Table 3.31.

Table 3.31: Impact of organisational commitment on job satisfaction of physiotherapists

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level (Sig.)
	B	Std. Error	Beta		
(Constant)	2.810	0.466		6.033	0.000
Affective commitment	0.253	0.119	0.287	2.135	0.036*
Continuance commitment	0.039	0.086	0.062	0.455	0.651
Normative commitment	0.046	0.095	0.062	0.490	0.626

R² = 0.122 (* p<0.05)

Analysis

The R² of a data set indicated the multiple coefficient of determination. This number indicated the fraction of the variability of **job satisfaction**, the dependent variable, that was explained by the independent variable in the predicted multiple regression equation. It can be multiplied by 100 to determine a percentage of variability in **job satisfaction** that is explained by the regression equation. In the table above (Table 3.31), the R² was calculated to be 0.122. Therefore, only 12.2% (which is not significant in practice) of the variation in **job satisfaction** could be explained by the three variables that measure **organisational commitment** namely: **affective commitment, continuance commitment and normative commitment**.

The p-values are used to test each of the independent variables for individual statistical significance. A p-value below 0.05 indicates statistical significance, and therefore a significant relationship between the independent- and dependent variable exists. A p-value above 0.05 points out that no significant relationship between the variables is present. Table 3.31 indicated that one of the three independent variables had a p-value less than 0.05. The p-value of **affective commitment** was demonstrated to be $p = 0.036$. Consequently, if **affective commitment** of the physiotherapists increases, their level of **job satisfaction** will also increase. Therefore, H^{A1} was accepted. **Continuance commitment** and **normative commitment** showed no significant relationship with **job satisfaction**, as demonstrated by their respective p-values of $p = 0.651$ and $p = 0.626$ (which are both greater than $p < 0.05$). As a result, H^{A2} and H^{A3} were rejected.

3.11.2. Impact of entrepreneurial orientation on job satisfaction

Purpose

Multiple regression analyses were used to establish the influence of the constructs of **entrepreneurial orientation (autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness)** on the **job satisfaction** (dependent variable) of the participants. Multiple linear regressions were performed, and the specific impact that each of the five independent variables of **entrepreneurial orientation** had on **job satisfaction** was determined. It should be noted that only the results of the participants that indicated to employ one or more employees (question E8 and E9), were included in this analysis. The reason for this is the fact that many questions contained in Section B are in view of the employees and their experiences in the practice.

Results

The results of the second regression model, which indicated the influence of the second set of independent variables on the dependent variable, are presented in Table 3.32.

Table 3.32: Impact of entrepreneurial orientation on job satisfaction of physiotherapists

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. Error	Beta		
(Constant)	2.391	0.755		3.168	0.003
Autonomy	0.215	0.135	0.210	1.585	0.119
Innovativeness	0.213	0.179	0.239	1.188	0.240
Risk-taking	-0.035	0.128	-0.043	-0.273	0.786
Pro-activeness	-0.010	0.156	-0.015	-0.066	0.948
Competitive aggressiveness	0.104	0.096	0.174	1.077	0.287

R² = 0.134 (* p<0.05)

Analysis

Table 3.32 indicated $R^2 = 0.134$, which revealed that only 13.4% of the variation in **job satisfaction** could be explained by the five variables that measure **entrepreneurial orientation** namely: **autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness**. As none of the five variables indicated a p -value less than 0.05, it can be concluded that none of the variables that measured **entrepreneurial orientation** was shown to influence **job satisfaction** of physiotherapists. Even though statistical significance between neither of the constructs of **entrepreneurial orientation** and **job satisfaction** could be established, **autonomy** showed the highest correlation of all the constructs with **job satisfaction** ($p = 0.119$). **Innovativeness** and **competitive aggressiveness** followed with the p -values $p = 0.240$ and $p = 0.287$, respectively. **Risk-taking** and **pro-activeness** showed the lowest correlation with **job satisfaction** as indicated by their relevant p -values ($p = 0.786$ and $p = 0.948$). However, as mentioned, no significant relationship between the variables was established. Consequently, all five of the hypotheses of hypothesis Model B (H^{B1} , H^{B2} , H^{B3} , H^{B4} and H^{B5}) were rejected.

3.12. CHAPTER SUMMARY

In Chapter three, the empirical study's results and discussions were revealed.

The chapter commenced with the explanation of the data gathering process. A questionnaire was employed to investigate the job satisfaction of physiotherapists, the three variables of organisational commitment, as well as the construct of entrepreneurial orientation which comprises five variables. The first four sections of the questionnaire aimed to investigate the dependent- and independent variables, while the last section established the demographical information of the participants and their practices.

The target population consisted of physiotherapists who currently work as owners or partners of private practices in South Africa. The questionnaires were distributed to 129 physiotherapists in electronic format by means of e-mail or hardcopies that were hand-delivered. The response rate was calculated to be 54.26%, therefore 70 questionnaires

could be included for data capturing and analysis. Data capturing and analysis were performed by the Statistical Consultation Services of the North-West University.

The demographic data was analysed according to age group (25-29 = 18.57%; 30-39 = 51.43%; 40-49 = 14.29%; ≥50 = 15.71%), gender (male = 20%; female = 80%), race (Black = 1.43%; Coloured = 1.43%; White = 90% ; Indian = 2.86%), marital status (single = 17,14%; married = 78.57%; divorce = 2.86%) and level of tertiary education (graduate = 82.86%; post-graduate = 11.43%). Data with regard to years of experience as a physiotherapist and number of permanent employees was also discussed. The statistics further revealed the percentage of respondents possessing a practice number, the current position of the respondents in the practices, the areas of interest of the respondents, as well as the geographical distribution of the practices.

The reliability of the measuring instrument was demonstrated by calculating and discussing the Cronbach's alpha coefficients. Ten variables were investigated, namely: job satisfaction, life satisfaction, three variables of organisational commitment and five variables of entrepreneurial orientation. One of the variables demonstrated acceptable reliability, eight of the variables showed good reliability and the dependent variable (job satisfaction) revealed an excellent reliability with a Cronbach's alpha coefficient above 0.9. Therefore the study included all the variables as the reliability of all variables was satisfactory.

The purpose of each statement contained in the questionnaire was explained and results of the individual statements and separate variables were revealed by stating the mean values and standard deviations. The mean value of overall **job satisfaction** was calculated to be $\bar{x} = 4.196$. Overall **organisational commitment** had an average mean of $\bar{x} = 3.761$, whereas the individual variables' mean scores sorted in a descending manner, resulted in **affective commitment** with a value of $\bar{x} = 4.304$, **continuance commitment** with a value of $\bar{x} = 3.671$ and **normative commitment** displaying a value of $\bar{x} = 3.307$.

Entrepreneurial orientation had an average mean of $\bar{x} = 3.355$. The largest mean value among the five independent variables was obtained by **autonomy** ($\bar{x} = 4.091$), followed by **innovativeness** ($\bar{x} = 3.730$) and pro-activeness ($\bar{x} = 3.307$). **Risk-taking** and **competitive aggressiveness** had the lowest mean values among the five variables, with $\bar{x} = 2.978$ and $\bar{x} = 2.668$ respectively.

Effect sizes were determined and results demonstrated that no practical significant differences exist between males and females with regards to job satisfaction and organisational commitment. However, noticeable differences were seen regarding the entrepreneurial orientation construct. Male participants were visibly more innovative in the way they did business. They were also practically significant more inclined towards exhibition of pro-active-, competitive aggressive- and risk-taking behaviour in their respective practices than the females.

Both the multiple regression analyses showed low R^2 values. This signifies that low percentages of the variance of **job satisfaction** were explained by the independent variables **organisational commitment** and **entrepreneurial orientation** (12.2% and 13.4%, respectively). The only independent variable that showed a significant relationship with **job satisfaction** was **affective commitment**. Neither of the dimensions constituting **entrepreneurial orientation** was shown to have influenced the **job satisfaction** of physiotherapists.

In the next and final chapter the results will be used to draw conclusions. Action plans will be discussed on how to improve organisational commitment and job satisfaction of physiotherapists. In addition, recommendations for future research will be formulated.

CHAPTER 4

CONCLUSION AND RECOMMENDATIONS

4.1. INTRODUCTION

The purpose of this fourth and final chapter was to conclude and discuss the findings of the empirical study as set out in the previous chapter. Practical recommendations to improve job satisfaction and affective commitment among physiotherapists were given, as well as action plans to enhance entrepreneurial orientation among these professionals.

The chapter commenced with conclusions that were drawn from the empirical study. Thereafter, recommendations to increase job satisfaction, affective commitment and entrepreneurial orientation among physiotherapists were given. Action plans followed to explain how the recommendations can be put into practice.

The chapter concluded by evaluating the study objectives that were set out in Chapter 1 and recommendations for future research were considered.

4.2. CONCLUSION REGARDING THE EMPIRICAL STUDY

In this section of the final chapter, the results obtained in Chapter 3 were used to draw conclusions. Conclusions commenced with the response to the survey and demographic information of the participants. Thereafter, the values of the Cronbach's alpha coefficients were assessed, which gave an indication of the reliability of the measuring instrument that was used.

The different variables of job satisfaction, organisational commitment and entrepreneurial orientation and their mean values were appraised. Included in the appraisal of the separate variables, were conclusions regarding the results of the effect sizes, as well as conclusions concerning the outcome of the multiple regression analyses.

4.2.1. Responses to the survey and demographic information

The following conclusions were drawn from the demographic information received by the respondents:

- A total of 129 physiotherapists were targeted to participate in the study. A total number of 74 questionnaires were received back and 70 questionnaires were included in the study. This represents a response rate of 54.26%.
- In view of the age groups of the participants, more than half of the respondents (51.43%) were from the age group 30 to 39 years. This was by far the most representative age group. No respondent was 25 years or younger. The rest of the participants were fairly evenly distributed among the remaining age groups.
- When the gender distribution of the participants was assessed, it was evident that the representation of men was quite low. Female responses amounted to 80%, while the male representation was only 20% of the total population group.
- The racial distribution of respondents was profoundly skewed. Only four participants were categorised either in the Black, Coloured or Indian racial groups, while 90% of the respondents were from the White racial group.
- The results regarding the marital status of the respondents indicated that almost 80% of the respondents were married, 17.14% were single and a little less than 3% of the participants indicated that they were divorced.
- Most of the participants held a bachelors degree in B.PhysT, B.Sc Physio or B.Physio (or equivalent), while only 11.43% of respondents obtained a Post Graduate Degree.
- The participants were asked two questions with regard to years of experience and they were consequently categorised regarding years of experience as physiotherapists, as well as years of experience as owner or partner in private practice. When comparing Table 3.8 to Table 3.7, it was evident that the numbers changed considerably. In Table 3.7, only two respondents had no more than five

years of experience as a physiotherapist. Most of the respondents (38.57%) had between 6 and 10 years of experience as physiotherapists.

However, in Table 3.8, it was apparent that more than 40% of the respondents had only between 1 and 5 years of experience as owner or partner in private practice. Therefore, even though the sample was not inexperienced, the largest percentage of respondents still had limited experience with regard to being owners or partners in private practice. The second highest number of respondents in both categories fell in the experience group 15 years and above (35.71% and 21.43% respectively).

- A total of 71.43% of the respondents indicated that they employed at least one additional physiotherapist, therefore only 28.57% were “one-man” practices. On the other hand, 78.57% employed any other permanent employees, except physiotherapists. This information was important, as only the questionnaires from participants who employed at least one more physiotherapist or other permanent employee, were included when the impact of entrepreneurial orientation on job satisfaction was determined (in the multiple regression analyses).
- Almost 95% of participants were in the possession of a practice number. A total of 87.14% of the respondents were private practice owners, while 8.57% indicated that they were partners. This information was important, as only respondents who had a practice number and/or was the owner or partner of the practice, were included in the study.
- Information regarding the respondents’ interest in different treatment areas, revealed that 78.57% and 64.29% of respondents had interest in orthopaedics and sport, respectively. More than half of the respondents also indicated an interest in pain management. Less than 5% of participants had a special interest in animal physiotherapy.
- Almost 80% of the participants’ practices were situated either in Gauteng or the Eastern- or Western Cape, with the highest number of practices located in Gauteng (44.29%).

4.2.2. Reliability of the questionnaire

The reliability of the measuring instrument was determined by calculating Cronbach's alpha coefficients. All the variables (except life satisfaction) were included in the study, as acceptable to excellent values were obtained for all variables. Job satisfaction had a Cronbach's alpha value higher than 0.9, which indicated excellent internal consistency. Affective-, continuance- and normative commitment, as well as four of the dimensions of entrepreneurial orientation (autonomy, innovativeness, pro-activeness and competitive aggressiveness), had values between 0.8 and 0.9, demonstrating good reliability. Only risk-taking had a Cronbach's alpha coefficient between 0.7 and 0.8, however, the value was still acceptable.

The results implied that the measuring instruments used to determine job satisfaction, organisational commitment and entrepreneurial orientation, were reliable. All the variables had Cronbach's alpha values higher than 0.7.

4.2.3. Assessment of job satisfaction

Section C of the measuring instrument, which consisted of 20 statements, evaluated the job satisfaction of physiotherapists working as owners or partners in private practices in South Africa.

The respondents were asked to evaluate each of the 20 statements, by indicating their level of disagreement or agreement by choosing 1 to 5 on the five point Likert scale (where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree).

The results demonstrated that all the statements had average mean values between 3 and 5, which signify that the respondents had a neutral to strong agreement with all of the statements measuring job satisfaction.

The average mean value was calculated as $\bar{x} = 4.196$. In general, there was an agreement towards the statements measuring job satisfaction, implying that the

respondents agreed that they experience a satisfactory level of job satisfaction in their respective private practices. Effect sizes demonstrated no significant difference among males and females with regard to their job satisfaction.

It is important to further study the job satisfaction and factors that influence the job satisfaction of healthcare practitioners, as these professionals render invaluable services in the hospitals and practices where they work (Alkassabi *et al.*, 2015: 62-63; Ogiwara, 2006: 127). The level of job satisfaction may also determine whether these professionals will remain in their jobs (Alkassabi *et al.*, 2015: 62-63; Millán *et al.*, 2013: 653; Bride & Kintzle, 2011: 223). Job satisfaction further has an influence on various health professionals' intention to change careers (Seston, Hassell, Ferguson & Hann, 2009: 129; Parry, 2008: 163; Carless & Bernath, 2007: 194). Bride and Kintzle (2011: 23) argued that job satisfaction is essential to ensure that healthcare practitioners, including those who own businesses or practices, remain in their job and ensure survival of their businesses. However, in South Africa, job satisfaction and its predecessors among physiotherapists, are largely unexplored and need to become an area of focus among researchers.

4.2.4. Assessment of organisational commitment

Section A of the measuring instrument evaluated the organisational commitment of physiotherapists working as owners or partners in private practices in South Africa. Twenty four statements were included in this section – the first eight statements evaluated the respondents' affective commitment, the following eight statements evaluated the continuance commitment and the final eight statements in the section were used to measure the level of normative commitment that the participants experienced. The respondents once again used the five point Likert scale to evaluate each statement.

In the section that follows, conclusions were drawn regarding each of the three independent variables of organisational commitment, whereafter the combined results were discussed.

4.2.4.1. Affective commitment

In Section A, eight statements were evaluated by the respondents on a scale from 1 to 5. Of the three variables that constituted organisational commitment, **affective commitment** had the highest mean value with $\bar{x} = 4.304$. Five of the eight statements had mean values higher than the average mean. All these statements scored values above 4, indicating a high level of agreement from the respondents. The respondents agreed mostly with the fact that the practice had personal meaning to them, and agreed to a lesser extent (compared to the other statements) that they would not be able to become attached to another practice as they are to their current practices.

The standard deviation was calculated at $s = 0.585$, the lowest of the three variables measuring organisational commitment. This reveals a relatively low spread of opinions relating to the statements that measure **affective commitment**. Therefore, the majority of the respondents agreed that they experience some degree of **affective commitment** towards their practices.

Results of the effect sizes demonstrated no difference in **affective commitment** among men and women.

The multiple regression analyses indicated that job satisfaction was significantly influenced by **affective commitment**. This corresponded with the findings of Markovits *et al.* (2007: 93), Meyer *et al.* (2002: 32) and Sirin and Sirin (2013: 180). It also confirmed the research of Markovits *et al.* (2007: 93) who found that the highest levels of job satisfaction were shown in groups that possessed high **affective commitment** - irrespective of high or low continuance commitment. The current study's findings contradicted that of Brunetto *et al.* (2012: 437) who found no correlations between job satisfaction and **affective commitment**.

Therefore, H^{A1} in hypothesis model A was accepted.

4.2.4.2. Continuance commitment

Eight statements were evaluated to determine the level of **continuance commitment** portrayed by the participating physiotherapists. A mean value of $\bar{x} = 3.671$ was calculated for the aforementioned variable. The mean value was considerably lower than the value obtained for affective commitment.

It became evident that it would be hard and costly for the participants to leave their practices. On the other hand, the respondents did not feel that scarcity of available alternatives would be a serious consequence when leaving the practice.

Seven of the statements had standard deviations above 1, which indicated a higher spread of opinions regarding **continuance commitment**, compared to affective commitment.

Once again, no difference with regard to **continuance commitment** was observed among the genders (as demonstrated by the effect sizes).

The results of the multiple regressions analyses contrasted the findings by Sirin and Sirin (2013: 180), Meyer *et al.* (2002: 32) and Yang (2008: 439) who demonstrated a significant relationship between **continuance commitment** and job satisfaction; although the correlation was lower than that of affective commitment. Buonocore and Russo (2013: 97) held an opposing view and reported that **continuance commitment** demonstrated a negative association with job satisfaction. The findings in this study have disagreed with the above literature, as no correlation (neither positive nor negative) between **continuance commitment and** job satisfaction could be established (p -value > 0.05). As a result, H^{A2} in hypothesis model A was rejected.

The **continuance commitment** component of organisational commitment had not been comprehensively examined by researchers in the past (Gutierrez *et al.* 2012: 1603). Future research is recommended to investigate the processes that are engaged in **continuance commitment** in more detail (Gutierrez *et al.*, 2012: 1609).

4.2.4.3. Normative commitment

The final eight statements in Section A measured the **normative commitment** of the physiotherapists. This variable scored the lowest mean value of the three variables that measured organisational commitment, with $\bar{x} = 3.307$. This value indicated a relatively neutral feeling regarding the statements. The respondents agreed the most with the statement regarding that a person must always be loyal to his/her organisation. They doubted whether things were better when people stayed with one organisation for most of their careers.

The findings by Buonocore and Russo (2013: 95-97) and Sirin and Sirin (2013: 180), demonstrated that **normative commitment** was positively linked to job satisfaction. The current study contrasted their views, as the multiple regressions analysis showed that **normative commitment** did not have a significant influence on the job satisfaction of physiotherapists ($p\text{-value} > 0.05$). Consequently, H^{A3} in hypothesis model A was rejected.

4.2.4.4. Overall organisational commitment

An average mean value of $\bar{x} = 3.761$ was measured for the overall organisational commitment variable. This indicated that the respondents portrayed a fair amount of commitment towards their practices.

The highest mean value was obtained by the **affective commitment** construct ($\bar{x} = 4.304$), followed by **continuance commitment** ($\bar{x} = 3.671$). **Normative commitment** revealed the lowest mean value ($\bar{x} = 3.307$). This means that the feeling of having too much to lose if they left their practices (**continuance commitment**) and the perceived obligation to remain in the organisation (**normative commitment**), did not override the emotional attachment and yearning to remain at their respective practices.

Effect sizes revealed no difference among the genders with regard to **affective commitment, continuance commitment** or **normative commitment**.

According to the multiple regression analyses findings, only **affective commitment** demonstrated a significant relationship with job satisfaction. This substantiated findings by Sirin and Sirin (2013: 176), Markovits *et al.* (2007: 93) and Meyer *et al.* (2002: 32) which revealed that **affective commitment** was a stronger predictor of job satisfaction than **continuance-** and **normative commitment**.

Accordingly, H^{A1} in hypothesis model A was accepted, but H^{A2} and H^{A3} were both rejected.

4.2.5. Assessment of entrepreneurial orientation

Section B measured the entrepreneurial orientation of physiotherapists working as owners or partners in private practices in South Africa. This section consisted of 27 statements which measured the five different dimensions of entrepreneurial orientation, namely: autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness. As with Section A and Section C of the questionnaire, the five point Likert scale was used to evaluate each statement in the section.

Once again, conclusions were drawn regarding each of the five independent variables of entrepreneurial orientation and the combined results were also discussed.

4.2.5.1. Autonomy

A total of five statements were used to determine the level of **autonomy** experienced in the practices. A mean value of $\bar{x} = 4.091$ was obtained, which was the highest mean among the dimensions of entrepreneurial orientation. The respondents were in definite agreement that the practices allowed employees to be creative and try different methods to do their jobs. The respondents had the lowest level of agreement regarding the opinion that employees in the practice seldom have to follow the same work methods or steps while performing major tasks from day to day. This statement, which scored the lowest mean value, might hinder the development of **autonomy** in private practices.

Effect sizes revealed no difference among the genders with regard to **autonomy** present in the practices.

Arnold *et al.* (2010: 263) mentioned that **autonomy** is one of the major determinants of job satisfaction. Dawson (2012: 7) also stated that business success and employee satisfaction might be improved by making employees autonomous leaders and involving them in the business. As **autonomy** is a concept associated with corporate entrepreneurship, and corporate entrepreneurship was related to job satisfaction in the study by Van Wyk and Adonisi (2008: 403), it was hypothesised that **autonomy** would influence job satisfaction in the current study. Even though the multiple regression analysis revealed that the **autonomy** dimension of entrepreneurial orientation had the greatest influence on **job satisfaction**, the p -value was higher than 0.05 ($p = 0.119$) and therefore did not reveal significance. The findings of the study deviated from the above statements, as **autonomy** showed no significant relationship with job satisfaction. H^{B1} in hypothesis model B was therefore rejected.

4.2.5.2. Innovativeness

The **innovativeness** variable scored the second highest rating among the five dimensions of entrepreneurial orientation and had a mean value of $\bar{x} = 3.730$. Results highlighted that the practices placed strong emphasis on continuous improvement in products, service delivery and/or processes. The respondents indicated a close to neutral view regarding dramatic changes in processes, services and product lines over the past few years. Therefore, even though **innovativeness** scored the second highest mean value, room for improvement does exist.

Effect sizes revealed interesting findings. A visible difference was noted regarding the innovativeness dimension among males and females. Males were noticeably more innovative in their treatment approaches than the female participants. They seem to value the pursuing of new opportunities and introduction of new products and services, higher than the females. According to the men, innovative behaviour is crucial for their practices' future. Females lack innovation within the industry and focus will therefore need to be placed on the development of this imperative skill.

Multiple regression analyses revealed that innovativeness had no significant influence on job satisfaction (p -value > 0.05). This finding opposed that of Rutherford and Holt

(2007: 442) who indicated a positive relationship between innovativeness and job satisfaction. As a result, H^{B2} in hypothesis model B was rejected.

Even though no significant influence of **innovativeness** on job satisfaction could be established, **innovativeness** in private practices remains essential. Private practices should nurture new ideas, even though benefits are still unclear. This might create opportunities to achieve competitive advantages and might further lead to higher financial returns for the owners or partners involved (Dess & Lumpkin, 2005: 150; Goosen, de Coning & Smit, 2002: 22).

4.2.5.3. Risk-taking

Five statements were used to determine the **risk-taking** propensity of the participating owners and partners. **Risk-taking** obtained the second lowest mean value among the five dimensions of entrepreneurial orientation. The value of $\bar{x} = 2.978$ (extremely close to 3) indicated that the respondents in general felt very neutral with regard to **risk-taking** in their respective practices.

The respondents agreed only to some extent that the practices adopt bold postures to maximize the exploitation of opportunities, and agreed the least that the practices have a strong inclination towards high-risk projects. The standard deviation measured between 0.726 and 0.940. The opinions were more spread, compared to the opinions regarding innovativeness, but the spread was still fairly low among the respondents.

The greatest difference among genders was seen with regard to the statements that measured the variable **risk-taking**. A practical significant difference ($d = 1.24$) between males and females were observed when effect sizes were performed. Male participants exhibited a tremendously higher **risk-taking** propensity than the females. Men are more inclined towards high-risk projects and they view the term “risk-taker” more positively than women. This outcome suggests that the advancement of female-owned practices, might lag behind if they do not force themselves to take calculated risks from time to time.

The multiple regressions analyses demonstrated no significant relationship between **risk-taking** and job satisfaction (p -value > 0.05). Hence, H^B in hypothesis model B was rejected.

It is important to note that the average mean value of **risk-taking** among physiotherapists was fairly low. Especially females in practice are extremely hesitant to be involved in activities which involve a level of risk. Now and then, risks should be taken, as opportunities might be lost if owners of private practices are too risk-averse. In this case, females could learn a great deal from their male counterparts or colleagues, as they showed a much higher willingness to grasp business opportunities that involved a degree of risk. Risk-taking per se is not gambling, even though it entails taking chances and may have potential dangers (Dess & Lumpkin, 2005: 152). Risk that is managed cautiously has the potential to create competitive advantages for the practices involved.

4.2.5.4. Pro-activeness

Four statements were used to measure **pro-activeness** and the mean value was calculated to be $\bar{x} = 3.307$. This indicated a close to neutral feeling regarding overall **pro-activeness** in the practices. This number also revealed an opportunity for improvement. The respondents agreed the most with the opinion that the practices continuously seek out new products or services, but agreed less that the practices typically initiate actions that competitors respond to.

A visible effect was measured regarding the difference in opinions between the genders. Male physiotherapists demonstrate a noticeably higher **pro-active** attitude in their practices, compared to the females. They are more orientated in knowing the current market trends and needs of their customers. Men are also more prone to initiate actions that their competitors respond to.

As with the other dimensions of entrepreneurial orientation, pro-activeness is associated with corporate entrepreneurship. The study by Van Wyk and Adonisi (2008: 403) demonstrated a positive relationship between corporate entrepreneurship and job satisfaction, and therefore the hypothesis was made that pro-activeness will also

influence job satisfaction. However, the multiple regressions analyses demonstrated no relationship between **pro-activeness** and job satisfaction (p -value > 0.05). As a result, H^{B4} in hypothesis model B was rejected.

Pro-active strategic managers look into the future and search for possibilities that can foster organisational growth and development (Dess & Lumpkin, 2005: 150). In the same way, private practice owners need to be encouraged to act as strategic managers, by also identifying and evaluating new opportunities, as well as being involved in the identification and monitoring of market trends (Kropp *et al.*, 2008: 104). In that way, they may also benefit from growth and development in their respective practices. Specifically, the way in which males exhibit pro-active behaviours in practice, should be leveraged to foster pro-activeness in the industry.

4.2.5.5. Competitive aggressiveness

Competitive aggressiveness revealed the lowest mean value of the dimensions of entrepreneurial orientation with $\bar{x} = 2.668$. The respondents agreed most with the opinion that the practice knows when it is in danger of acting overly aggressive.

It can be concluded that most of the practices do not really assume a bold competitive posture and “undo-the-competitor” attitude. They are generally not very aggressive and do not act intensely competitive. This might be the nature of the health care industry; however, more focus can be put on developing **competitive aggressiveness** to improve the practice’s position in the market.

The second highest difference among gender, was seen regarding the statements that measured competitive aggressiveness. Gender had a practical significant effect ($d = 0.88$) on the variable competitive aggressiveness. Males who own or partly own a private practice are far more aggressive in competing in the market than the female owners or partners. They can be seen as “assertive businessmen”, while the women are content with being “passive therapists”.

Multiple regressions analyses revealed no significant influence between **competitive aggressiveness** and job satisfaction (p -value > 0.05) and therefore the H^{B5} in hypothesis model B was rejected.

Private practices' owners rated **competitive aggressiveness** the lowest of all the variables, and females once again contributed drastically to the low figures. This could indicate that they are not aware of the advantages that **competitive aggressiveness** might result in. They need to understand that by establishing their competitive stance aggressively, their competitive advantages might be preserved better over the long run. The goal does not have to be to destroy, but rather to exceed their competitors (Dess & Lumpkin, 2005: 152). Once again, males in the industry can play a key role in exhibiting and enhancing healthy competitive aggressive behaviour.

4.2.5.6. Overall entrepreneurial orientation

The five dimensions discussed above, contributed to entrepreneurial orientation, obtaining an average mean value of $\bar{x} = 3.355$. It can be concluded that there is some level of entrepreneurial orientation in the participating practices. However, the respondents lean more towards a neutral feeling with regard to exhibition of entrepreneurial orientated behaviours in their practices. The spread of the data further seemed to be inconsistent. One of the variables had a mean value above 4, which indicated agreement from the respondents. A level of disagreement was shown towards some of the other variables, as the mean values obtained was lower than $\bar{x} = 3.0$. Therefore, the industry may benefit from action plans to improve the overall entrepreneurial orientation of physiotherapy practices in South Africa.

Autonomy obtained the highest mean value with $\bar{x} = 4.091$, indicating an overall agreement with the statements that measured the specific variable. **Innovativeness** had the second highest mean value ($\bar{x} = 3.730$), followed by **pro-activeness** ($\bar{x} = 3.307$), **risk-taking** ($\bar{x} = 2.978$) and **competitive aggressiveness** ($\bar{x} = 2.668$), which had the lowest overall rating.

The two strongest variables, namely **autonomy and innovativeness**, can be used as foundation to improve overall entrepreneurial orientation in private practices. It was interesting to note that **risk-taking** and **competitive aggressiveness** were the two lowest ranked variables of entrepreneurial orientation and these two aspects, as well as **pro-activeness**, have the potential to develop a lot. Males could play important roles to enhance **risk-taking** and **competitive aggressiveness**, as well as **innovativeness** and **pro-activeness** in the industry and among practices. The effect sizes demonstrated significantly higher ratings for these four variables among the males compared to the females.

It was surprising to note that one of the statements of **autonomy** (B5) scored far lower than the rest ($\bar{x} = 3.486$). The statement regarding employees that seldom have to follow the same work methods while performing major tasks, scored this low mean value and might cause a delay in the development of **autonomy** in practices. The remaining statements had mean values that ranged between $\bar{x} = 4.129$ and $\bar{x} = 4.329$.

The overall **risk-taking** dimension scored the second lowest mean value (below 3). In the risk-taking section, the statement regarding the practice that has a strong inclination towards high-risk projects, scored the lowest. One of the reasons for this result may be that the medical industry may feel hesitant in allowing employees to take too much risk, as people's lives and health are involved. The owner or partner still has the responsibility to treat, and let patients be treated, with the utmost care. This is especially true in days where patients have rights and would not hesitate to take legal action against healthcare practitioners.

Consequently (considering the aforementioned two paragraphs concerning **autonomy** and **risk-taking**), routine work methods and steps, and lower-risk projects, might be absolutely necessary to protect the healthcare practitioner from disciplinary hearings, legal action and court cases. Hence, the reason for the low scores with regard to the specific statement of **autonomy** and overall **risk-taking**, could be that the owners might want to knowingly and willingly limit the amount of high-risk projects, and even the amount of **autonomy** that is given to employees to an absolute minimum. This might be

bluntly for the motive to protect themselves and their practices from legal steps. However, this may in turn hinder the development of entrepreneurial orientation.

None of the variables revealed a significant relationship with the job satisfaction variable and therefore H^{B1} , H^{B2} , H^{B3} , H^{B4} and H^{B5} in hypothesis model B were rejected.

4.3. RECOMMENDATIONS

As indicated in the empirical study (Chapter 3) and conclusions (in the previous section of this chapter), physiotherapists acting as owners or partners in private practices in South Africa, enjoy a satisfactory level of job satisfaction and affective commitment, but displayed lower levels of entrepreneurial orientation.

The industry can gain from recommendations and action plans to maintain and enhance job satisfaction and affective commitment, and notably improve the entrepreneurial behaviour within the industry. Recommendations to meet these are listed below. Action plans to put the recommendations into practice, follow thereafter.

Job satisfaction

Job satisfaction had an average mean of $\bar{x} = 4.196$. The results suggested that current physiotherapists in private practice who participated in the study, were satisfied with their jobs. This should be maintained and improved, also among other physiotherapists who were not part of the target population. The majority of participating private practice owners or partners, enjoyed the fact that they were being able to do things that did not go against their conscience and to have had the chance to do things for other people. This contributed highly to the overall job satisfaction.

The way that practice policies are put into practice and the remuneration for the amount of work, did not score high mean values and pulled the overall score of job satisfaction down. These lower ranked statements need to be addressed. By capitalising on the positives, and improving the negatives, overall job satisfaction can be enhanced. Furthermore, the results can be leveraged to promote the profession for future generations.

Affective commitment

Reasonable levels of organisational commitment, mainly driven by affective commitment, also show that commitment was generally displayed in the respective practices. The mean value obtained was $\bar{x} = 3.761$. Even though affective commitment ($\bar{x} = 4.304$) measured higher than the other two variables of commitment, relatively high levels of both continuance commitment ($\bar{x} = 3.671$) and normative commitment ($\bar{x} = 3.307$) were also displayed. This indicated that there was a sense of staying at the respective practices, due to lack of employment alternatives, as well as perceived obligation to remain at the practice. Nevertheless, the emotional attachment that the respondents experienced towards their practices, contributed considerably more.

The recommendation will be to make an intense effort to increase the affective commitment of owners or partners in private practice, as it was shown to have had a positive influence on their job satisfaction. It will therefore ultimately also lead to an increase in overall job satisfaction.

Entrepreneurial orientation

The variable that received the lowest overall mean value was entrepreneurial orientation. It showed that some level of entrepreneurial orientation was present among the owners and partners of the private practices. However, as indicated by specific statements' mean values, there is still plenty of room for improvement among the different dimensions that constitute entrepreneurial orientation. The higher ranked variables such as autonomy ($\bar{x} = 4.091$) and innovativeness ($\bar{x} = 3.730$) could be used as a basis to improve overall entrepreneurial orientation. In addition, the lower ranked variables, namely pro-activeness ($\bar{x} = 3.307$), risk-taking ($\bar{x} = 2.978$) and competitive aggressiveness ($\bar{x} = 2.668$) could be developed to also contribute to enhance overall entrepreneurial orientation. Action plans are necessary to assist in the development of entrepreneurial orientation in the physiotherapy industry.

In developing the action plans, the role that male physiotherapists can play should not be overlooked. Males can be utilised to increase the level of entrepreneurial orientation

in the industry, especially with regard to innovativeness, pro-activeness, risk-taking and competitive aggressiveness, as they exhibit higher levels thereof than their female counterparts. One of the reasons for this outcome might be that males exhibit more entrepreneurial characteristics and traits by nature, than females. Another reason might be that men in the White racial culture (which was the dominant racial group in the study) were previously seen as the breadwinners of the families and women tended to care for and raise the children. However, women can benefit by willingly and knowingly focus on developing their entrepreneurial skills and behaviour within their practices.

4.4. ACTION PLANS

The following action plans can be considered to practically implement the recommendations that were given in the previous section.

4.4.1. Maintain and ensure high levels of job satisfaction among practicing physiotherapists and leverage on job satisfaction to promote the profession

From the empirical study (Chapter 3) and conclusions (Chapter 4) it seems as if physiotherapists in private practice in South Africa, experience relatively high levels of job satisfaction. This needs to be maintained and promoted to keep the physiotherapy profession excellent and gratifying.

- Tertiary education should not only focus on anatomy, physiology and physiotherapy practices. Emotional benefits that physiotherapists currently experience in private practice should be shared with current students. The chance to help people, the chance to do things that do not go against one's conscience, the freedom to use one's own judgment and the feeling of accomplishment, are all contributing to job satisfaction. Awareness of these benefits prior to entering the profession, may enhance the actual experience of it.
- The above mentioned benefits experienced in private practice, should also be promoted among students while still in secondary school. This might encourage

more students to apply, a higher number of candidates to be part of the selection process, and ultimately higher quality professionals to enter the industry.

- The way that practice policies are put into place, should receive more attention in the profession, as this statement scored low in the empirical study. Attention should be given to clearly stipulate the practice policies and consideration should be given to adequately implement them. Assistance from the South African Society of Physiotherapy (SASP) can arise by publishing journal articles on how to effectively implement practice policies.
- Owners should constantly assess and re-assess their employees' job satisfaction (Folkman, 2013: 1; Gray, 2013: 1). This would challenge them to find opportunities to improve not only their own, but also their employees' satisfaction levels. This may lead to an overall increase in the satisfaction within the practice.
- Continuous communication among owners and employees might reduce misunderstanding. Owners should continually share important information, as well as the reality of the current situation (Folkman, 2013: 1). This may cause a positive increase in all the involved individuals' satisfaction within the workplace.
- Therapists should keep on developing their skills (Gray, 2013: 1). Stagnation can be very unfulfilling, and therefore they need to continually attend courses, stay updated with the latest technologies and spend time with peers to discuss interesting- and "hard-to-treat" patients.
- The lowest score for job satisfaction was obtained regarding the pay and the amount of work that is done. Physiotherapists are physically and emotionally challenged on a daily basis while treating a wide variety of illnesses and diseases. These professionals play a vital role in the society and focus can therefore be placed on better remuneration for these highly-skilled professionals.

4.4.2. Improve levels of affective commitment to ultimately increase levels of job satisfaction

The multiple regression analyses revealed that affective commitment influenced the job satisfaction of physiotherapists. This means that by increasing the affective commitment of owners or partners in private practice, their levels of job satisfaction will ultimately also increase. The following actions can contribute to higher affective commitment levels among physiotherapists:

- Feelings of emotional attachment within the practice need to be encouraged. The owners need to allow for, and create opportunities to make everyone in the practice feel like they are family. One suggestion is to make everyone in the practice's birthday- and anniversary dates known and have joint celebrations. Another initiative is to create occasions to get to know each individual on a personal level. This could make the owners and employees feel more "part of the family" in the practice.
- The practice should be a "happy" place for the owners and employees. It is important to invest in things that would lead to the owners spending the rest of their lives with the practice.
- Affective commitment will further be enhanced if the practice is discussed with people not personally involved in it. This does not mean that details with regard to financial information or strategy need to be blurted out, but by discussing and sharing best practices and achievements, people will note enthusiasm and pride.
- The owners should regularly introduce thoughts that generate positivity and keep them motivated.
- The owners need to continually revisit the practice's goals and values and make sure that they are still in line with theirs.

4.4.3. Formulation of specific plans to enhance entrepreneurial behaviour in the physiotherapy profession in South Africa

Even though the hypotheses were rejected to reveal a positive relationship between entrepreneurial orientation and job satisfaction, entrepreneurial orientation remains an important construct in the healthcare industry, and specifically the physiotherapy profession. Businesses today find themselves in a competitive- and dynamic environment. Entrepreneurial behaviour is vital to discover opportunities and secure a basis for future successes (Ireland & Webb, 2007: 59). Perceived success was not investigated as an outcome variable in the current study, however, numerous studies demonstrated a significant relationship between entrepreneurial orientation and perceived success or firm performance (Lotz & van der Merwe, 2013: 15; Dafel, 2012: 109; Rauch *et al.* 2009: 761). Therefore, if entrepreneurial orientation could also be linked to perceived success within the physiotherapy industry (see suggestions for future research at Section 4.6), the industry could clearly benefit from clear action plans to enhance entrepreneurial behaviour among physiotherapists. Of all the variables, entrepreneurial orientation measured the lowest in the study.

Proposed actions to improve entrepreneurial orientation include the following:

- Opportunities should be created to encourage physiotherapists to enhance their entrepreneurial skills. Continuous Professional Development (compulsory for all physiotherapists to achieve 60 CPD points in a time frame of two years), should not only focus on the newest treatments and technologies available. More courses should be available where entrepreneurial- and business skills can be mastered. In the end, a physiotherapy practice is a business and should exhibit the same amount of entrepreneurial expertise than any other profit-making business. By educating physiotherapists with regard to entrepreneurial orientation, they may be encouraged to enter the private practice sector.
- Enhance autonomy and innovativeness.

Autonomy: Employees in the practice should be allowed to experience alternative work methods or steps, while performing major tasks from day to day. This is possible while still conforming to the treatment standards and will not necessarily lead to irresponsibility towards patients. Thereby, autonomy that has already scored well in the current study, can further be enhanced.

Innovativeness: Owners need to be encouraged to introduce at least one new product or service annually. This can be done by allocation of CPD points for those who have successfully introduced something original.

Female physiotherapists need to improve their innovative practices, as they scored considerably lower than their male counterparts. They need to stay in touch with the newest technological innovations in terms of treatment options and products (electrotherapeutic modalities, manual treatment advancements, biomechanical advancements and the latest assistive devices). They should not fall behind, by adding to their current knowledge on a regular basis. They are advised to start an “innovation club” where the latest treatment options and techniques can be discussed amongst one another on a monthly or quarterly basis.

In addition, women must be encouraged to identify male mentors within the industry who can share their best practice skills and guide them on the road of innovative development.

- Improve pro-activeness, risk-taking and competitive aggressiveness

Pro-activeness: Clients of practices can be asked to assist the practice by regularly voicing their needs. This can be achieved by the completion of feedback forms. Owners can use this feedback to anticipate future needs of their clients and consequently be the first to introduce actions that competitors respond to.

The SASP can be involved by aiding in the monitoring of market trends and distributing the results to the members in journal articles published in their “Hands-on” magazines that are already being issued on a quarterly basis.

Once again, women (who scored much lower than the men with regard to pro-activeness) are encouraged to initiate actions that their competitors will respond to. They should not merely follow the crowd, but actively be on the lookout for new products or services that could give them a competitive advantage. They can become stockists of the newest orthopaedic braces, ergonomic office chairs and freshest-on-the-market running shoes. Therefore, they should not only know and advise their clients about the newest and best technology, but have these options readily available to them.

Risk-taking: Owners need to understand the value of calculated risks. The principal of “higher risk, higher return” needs to be established among private practice owners. Risk-taking should not only be seen as risks involving the patients, but also the risks regarding expansion in terms of property and human capital. All owners can therefore benefit from attending managerial accounting- and financial management courses.

Once again, women need to take advice from males in the industry. Risk-taking does not necessarily come naturally for them, and therefore they must practically be involved in calculated risk-taking. This could be achieved by the use of the strategic tool “benchmarking” (Hough, Thompson, Strickland & Gamble, 2011: 131). Benchmarking can assist women to learn from male physiotherapists who are excellent at performing specific risk-taking activities and then use these “best practices” to improve risk-taking propensity in their own practices.

Competitive aggressiveness: Competition does not only exist among physiotherapy practices. Physiotherapists need to realise that they can also act in co-operation with one another against competing professionals, such as chiropractors, biokineticists and massage therapists. Therefore, competition does not necessarily have to exist amongst one another, but practices can stand together to increase their competitive stance amongst other professionals.

Males exhibit much more competitive aggressiveness in the physiotherapy industry. Again, this may come more naturally for them. Women need to

consciously focus on enhancing their aggressive stance, by using ethics-approved marketing initiatives to their benefit. They need to be more active in “face-to-face” promotion of their practices amongst doctors’ surgeries, hospital management and even gymnasiums. Furthermore, the role that the males can play in enhancing the industry’s overall competitive stance, is fundamental. Once again, women can benchmark the marketing initiatives of their male counterparts. Males’ best practices (specifically against other competition such as biokineticists, chiropractors and massage therapists) can be shared through mentoring, or even the writing- and publishing of journal articles with regards to successful marketing practices.

- In general, women in the industry need guidance to implement entrepreneurial orientation dimensions. Males in established practices where innovativeness, risk-taking, pro-activeness and competitive aggressiveness have shown to have been implemented with success, can act as mentors. Another option is a partnership between male and female, to achieve a balance between being financially too conservative and too risky. By doing so, “passive therapists” may evolve into “assertive business women”.

4.5. ACHIEVEMENT OF STUDY OBJECTIVES

In this section, the success of the study was critically evaluated by determining whether the research objectives (as formulated in section 1.3) were met.

4.5.1. Primary objective

The primary objective of the research was to investigate the influence of organisational commitment and entrepreneurial orientation on the job satisfaction of physiotherapists in South Africa. Furthermore, the objective was to establish practical recommendations to enhance job satisfaction, organisational commitment and entrepreneurial orientation in the industry.

Consequently, the secondary objectives were addressed, to achieve the primary objective of the study.

4.5.2. Secondary objectives

The following secondary objectives were addressed with the aim of achieving the primary objective:

- To gain insight in the field of physiotherapy through a literature study.
- To obtain insight in the variables of job satisfaction and organisational commitment by means of a literature study.
- To define the concept of entrepreneurship.
- To obtain insight in the variables of entrepreneurial orientation by means of a literature study.
- To assess the job satisfaction, organisational commitment and entrepreneurial orientation of physiotherapists in the industry by means of a questionnaire.
- To validate the reliability of the questionnaire measuring job satisfaction, organisational commitment and entrepreneurial orientation by using Cronbach's alpha analysis.
- To investigate the differences in gender with regard to job satisfaction, organisational commitment and entrepreneurial orientation by determining effect sizes.
- To investigate the influence of organisational commitment and entrepreneurial orientation variables on job satisfaction of physiotherapists, by using multiple regression analyses.
- To give practical suggestions and recommendations to physiotherapists to increase job satisfaction and develop organisational commitment and entrepreneurial orientation within the industry.

The first four secondary objectives were achieved by the literature study that was presented in Chapter two. The objectives were:

- to gain insight in the field of physiotherapy (section 1.4.2)
- to obtain insight in the variables of job satisfaction and organisational commitment (section 2.2 and section 2.3),
- to define the concept of entrepreneurship (section 2.5.1 and section 2.5.2) and
- to obtain insight in the variables of entrepreneurial orientation (section 2.5.3),

The fifth objective was to assess the job satisfaction, organisational commitment and entrepreneurial orientation of physiotherapists in the industry. This was achieved by the completion of questionnaires which gathered demographic information of respondents, as well as their views regarding job satisfaction, organisational commitment and entrepreneurial orientation. The results of the empirical study and the discussion were presented in Chapter 3 and concluded in the final chapter.

The sixth objective was to validate the reliability of the questionnaire measuring job satisfaction, organisational commitment and entrepreneurial orientation. The reliability of the questionnaire was established by using Cronbach's alpha analysis and was presented in section 3.5.

The differences in gender with regard to job satisfaction, organisational commitment and entrepreneurial orientation were investigated by calculation of effect sizes. Hence, the seventh objective was achieved (see section 3.10).

The influence of organisational commitment and entrepreneurial orientation on job satisfaction of physiotherapists was determined and herewith the eighth objective was addressed. This was done by means of multiple regression analyses on job satisfaction, the three variables that measured organisational commitment, as well as the five variables that measured entrepreneurial orientation. The results were revealed in section 3.11.

The final objective was to give practical suggestions and recommendations to physiotherapists to increase job satisfaction and develop organisational commitment

and entrepreneurial orientation within the industry. This objective was addressed in the conclusion (section 4.2), recommendations (section 4.3) and action plans (section 4.4) of this final chapter.

It can be concluded that the primary objectives, namely to investigate the influence of organisational commitment and entrepreneurial orientation on the job satisfaction of physiotherapists in South Africa and to give practical recommendations to enhance job satisfaction, organisational commitment and entrepreneurial orientation in the industry, were achieved. This was due to the fact that all the secondary objectives were addressed.

4.6. SUGGESTIONS FOR FUTURE RESEARCH

Suggestions for future research include the following:

- The findings might not be generalisable to all physiotherapists across the globe. It is therefore recommended to replicate the study among physiotherapists in other countries.
- The study may also be performed among physiotherapists working as government employees in the public sector. The results between physiotherapists who work in the private sector and those working in the public sector can be compared.
- It is suggested to include more participants in the target population. The current study consisted of 70 research participants. The results may alter if a larger number of participants are included in the target population.
- The convenience sampling method was used to conduct the research and therefore the questionnaire was distributed and completed only among physiotherapists who were fairly easy to reach. A more representative sample of physiotherapists can be attained by simple random sampling, utilising a database comprising of all physiotherapists working in the private practice environment in South Africa.

- In the current study, specific factors were selected (organisational commitment and entrepreneurial orientation) and investigated to determine whether they influenced the job satisfaction of physiotherapists. Further research can investigate additional factors that may show to influence the job satisfaction of physiotherapists, as well as other healthcare professionals.
- Future research is recommended to investigate the processes that are engaged in continuance commitment in more detail.
- A study that specifically includes male physiotherapists, may shed more light on how entrepreneurial orientation behaviour can be exhibited within the industry.
- Entrepreneurial orientation and its relationship with job satisfaction were investigated in this study. However, usually the variable of entrepreneurial orientation is related to business success. The current study did not include the variable of business success. The study can be performed among the same target population, but could investigate the relationship between entrepreneurial orientation and business success.

4.7. CHAPTER SUMMARY

In this final chapter, conclusions were drawn from the results that were discussed in Chapter 3. The conclusions were presented in a similar structure than the analysis of results in the previous chapter. Conclusions pertaining to the demographic information of respondents, included among others age, gender, race, years of experience, number of employees and areas of interest. The responses to the survey, as well as the reliability of the questionnaire, also received attention. Conclusions were further presented on job satisfaction, organisational commitment and entrepreneurial orientation. Finally the conclusions on differences in responses between male and female participants and multiple regression analyses were drawn.

From the 74 questionnaires that had been received back, 70 were included in the study. Most of the respondents were from the White racial group, with only a very small percentage representing the Black-, Coloured- and Indian race groups. Also, females

were far more representative in the population sample than males. The differences regarding the dependent- and independent variables based on gender, were further investigated.

The reliability of the questionnaire was demonstrated by using the Cronbach's alpha coefficient analysis. All of the variables displayed coefficients higher than 0.6. Most of the variables had values between 0.8 and 0.9, demonstrating good reliability.

The dependent variable, job satisfaction, was discussed in detail. The constructs of organisational commitment and entrepreneurial orientation, and its individual variables, were also reviewed in depth. Conclusions were drawn regarding every individual variable. The only variable that significantly influenced job satisfaction, was affective commitment. Gender differences revealed that males experienced more innovativeness, pro-activeness, risk-taking and competitive aggressiveness than their female counterparts.

Recommendations were formulated from the conclusions. Discussion of action plans followed that may assist in the practical implementation of the recommendations. Action plans specifically focused on ensuring and maintaining high levels of job satisfaction among physiotherapists, on improving affective commitment which may ultimately increase job satisfaction and on enhancing entrepreneurial orientation of physiotherapists.

Lastly, the study was concluded by assessing whether the primary- and secondary objectives had been achieved and suggestions for future research were made.

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ANNEXURE A

QUESTIONNAIRE: JOB SATISFACTION, ORGANISATIONAL COMMITMENT AND ENTREPRENEURIAL ORIENTATION

The questionnaires were distributed among respondents either by e-mail or hardcopy and collected likewise.

The hardcopy of the questionnaire is presented in the current annexure. A cover letter and general instructions accompanied the questionnaire which explained the purpose of and methods for completing the questionnaire.

As a result, Annexure A exists of:

- A cover letter
- General instructions
- Questionnaire consisting of Sections A to Section E.

JOB SATISFACTION, ORGANISATIONAL COMMITMENT AND ENTREPRENEURIAL ORIENTATION QUESTIONNAIRE

Dear Respondent

I would like to thank you for your valuable time to complete this survey questionnaire.

The purpose of the attached questionnaire is to examine the influence of entrepreneurial orientation and commitment on job satisfaction of physiotherapists, and specifically private practice owners or partners.

You have been identified as a suitable candidate to assist me in this study. Your participation will contribute to the dissertation as a partial completion of my Masters Degree in Business Administration (MBA) at the Potchefstroom Business School at the North-West University.

The questionnaire is divided into five sections.

Section A: Evaluation of Commitment of physiotherapists

Section B: Evaluation of Entrepreneurial Orientation

Section C: Evaluation of Job Satisfaction

Section D: Evaluation of Satisfaction with life

Section E: Geographical and Educational Information, and Structure of the Practice

The questionnaire is completed anonymously and all findings and results will be kept confidential. Please be so kind to give your honest opinion with regard to all the statements. The questionnaire will take approximately 15 minutes to complete.

The completed questionnaires can be returned via e-mail to howell.marelle@gmail.com on or before 14 August 2015.

Please do not hesitate to contact me should you have any further questions.

Your participation is highly appreciated.

Yours sincerely

Marelle Howell

B.PhysT (UP 2008)

084 888 3726

GENERAL INSTRUCTIONS

Please note:

This questionnaire must only be completed by physiotherapists who are owners and/or partners of private practice/s.

Instructions for completion:

1. Please complete every question or statement to ensure reliability and validity of the study
2. Please answer all questions as objectively and honestly as possible.
3. Answer all questions or statements by marking the most relevant block with a cross (x) or by highlighting the block. Use the following key to specify your preference:

SCALE	TERM USED
1	Strongly disagree
2	Disagree
3	Neither agree nor disagree (Neutral)
4	Agree
5	Strongly agree

Example: In the statement below, the respondent strongly agreed with the statement.

B9	The business is continually pursuing new opportunities.	1	2	3	4	5
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4. Please complete all five sections of the questionnaire (Section A - Section E)

SECTION A: COMMITMENT

The following statements concern your attitude towards your commitment to the practice.

Please rate the extent to which you agree or disagree with the following statements by making an “X” over the appropriate number on the 1 to 5 point scale next to the statement.
Please take note that 1 = Strongly disagree and 5 = Strongly agree.

1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
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	STATEMENT	SCALE				
		1	2	3	4	5
A1	I would be happy to spend the rest of my career with the practice.					
A2	I enjoy discussing the practice with people outside it.					
A3	I feel as if the practice’s problems are my own.					
A4	I do not think I could become as attached to another practice as I am to the practice.					
A5	I feel like “part of the family” at the practice.					
A6	I feel emotionally attached to the practice.					
A7	The practice has personal meaning for me.					
A8	I feel a strong sense of belonging to the practice.					
A9	It would be hard for me to leave the practice right now even if I wanted to.					
A10	My life would be disrupted if I decided I wanted to leave the practice now.					
A11	I am afraid of what might happen if I quit my job (leaving the practice) without having another one lined up.					
A12	It would be costly for me to leave the practice now.					

A13	Right now, staying with the practice is a matter of necessity as much as desire.	1	2	3	4	5
A14	I feel that I have few options to consider leaving the practice.	1	2	3	4	5
A15	One of the serious consequences of leaving the practice would be scarcity of available alternatives.	1	2	3	4	5
A16	One of the major reasons I continue with the practice is that leaving would require personal sacrifice – another business may not match the overall benefits I have.	1	2	3	4	5
A17	I think that people these days move from organisation to organisation too often.	1	2	3	4	5
A18	I believe that a person must always be loyal to his/her organisation.	1	2	3	4	5
A19	Jumping from organisation to organisation seems unethical to me.	1	2	3	4	5
A20	I believe that loyalty is important and therefore I feel a strong sense of moral obligation to remain.	1	2	3	4	5
A21	If I get another offer for a better job elsewhere I would not feel it was right to leave the practice.	1	2	3	4	5
A22	I was taught to believe in the value of remaining loyal to one organisation.	1	2	3	4	5
A23	Things were better in the days when people stayed with one organisation for most of their careers.	1	2	3	4	5
A24	I think that wanting to be “a company man” or “company women” is sensible.	1	2	3	4	5

SECTION B: ENTREPRENEURIAL ORIENTATION

The following statements concern your attitude towards the entrepreneurial orientation of the business.

Please rate the extent to which you agree or disagree with the following statements by making an "X" over the appropriate number on the 1 to 5 point scale next to the statement.

Please take note that 1 = Strongly disagree and 5 = Strongly agree.

1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
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	STATEMENT	SCALE				
		1	2	3	4	5
B1	Employees in the practice have enough autonomy to do their job without continual supervision to do their work.	1	2	3	4	5
B2	The practice allows employees to be creative and try different methods to do their job.	1	2	3	4	5
B3	Employees in the practice are allowed to make decisions without going through elaborate justification and approval procedures.	1	2	3	4	5
B4	Employees in the practice are encouraged to manage their own work and have flexibility to resolve problems.	1	2	3	4	5
B5	Employees in the practice seldom have to follow the same work methods or steps while performing major tasks from day to day.	1	2	3	4	5
B6	The practice regularly introduces new services/products/processes.	1	2	3	4	5
B7	The practice places a strong emphasis on new- and innovative products/ services/processes.	1	2	3	4	5
B8	The practice has increased the number of services/products offered during the past two years.	1	2	3	4	5
B9	The practice is continually pursuing new opportunities.	1	2	3	4	5
B10	Over the past few years, changes in our processes, services and product lines have been quite dramatic.	1	2	3	4	5

B11	In the practice there is a strong relationship between the number of new ideas generated and the number of new ideas successfully implemented.	1	2	3	4	5
B12	The practice places a strong emphasis on continuous improvement in products/service delivery/processes.	1	2	3	4	5
B13	The practice has a widely held belief that innovation is an absolute necessity for the practice's future.	1	2	3	4	5
B14	The practice seeks to maximise value from opportunities without constraint to existing models, structures or resources.	1	2	3	4	5
B15	When confronted with uncertain decisions, our practice typically adopts a bold posture in order to maximise the probability of exploiting opportunities.	1	2	3	4	5
B16	In general, the practice has a strong inclination towards high-risk projects.	1	2	3	4	5
B17	Owing to the environment, the practice believes that bold, wide-ranging acts are necessary to achieve the practice's objectives.	1	2	3	4	5
B18	Employees in the practice are often encouraged to take calculated risks concerning new ideas.	1	2	3	4	5
B19	The term 'risk-taker' is considered a positive attribute for employees in our practice.	1	2	3	4	5
B20	The practice is very often the first to introduce new products/services/processes.	1	2	3	4	5
B21	The practice typically initiates actions that competitors respond to.	1	2	3	4	5
B22	The practice continuously seeks out new products/processes/services.	1	2	3	4	5
B23	The practice continuously monitors market trends and identifies future needs of customers.	1	2	3	4	5
B24	In dealing with competitors the practice typically adopts a very competitive "undo-the-competitor" posture.	1	2	3	4	5
B25	The practice is very aggressive and intensely competitive.	1	2	3	4	5
B26	The practice effectively assumes an aggressive posture to combat trends that may threaten our survival or competitive position.	1	2	3	4	5
B27	The practice knows when it is in danger of acting overly	1	2	3	4	5

	aggressive (this could lead to erosion of our practice's reputation or to retaliation by our competitors).					
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SECTION C: JOB SATISFACTION

The following statements concern your attitude towards your job satisfaction in the business.

Please rate the extent to which you feel (dis)satisfied with the following statements by making an "X" over the appropriate number on the 1 to 5 point scale next to the statement.

Please take note that 1 = Strongly disagree and 5 = Strongly agree.

1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
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	STATEMENT	SCALE				
		1	2	3	4	5
C1	Being able to keep busy all the time.					
C2	The chance to work alone on the job.					
C3	The chance to do different things from time to time.					
C4	The chance to be "somebody" in the community.					
C5	The way I handle the co-workers (or subordinates).					
C6	My competence in making decisions.					
C7	Being able to do things that don't go against my conscience.					
C8	The way my job provides for steady employment.					
C9	The chance to do things for other people.					
C10	The chances to tell people what to do.					
C11	The chance to do something that makes use of my abilities.					
C12	The way the practice policies are put into practice.					
C13	My pay and the amount of work I do.					
C14	The chances for advancement or growth on the job.					
C15	The freedom to use my own judgement.					
C16	The chance to try my own methods of doing the job.					
C17	The working conditions.					

C18	The way my co-workers get along with each other.	1	2	3	4	5
C19	The praise or satisfaction I get for doing a job.	1	2	3	4	5
C20	The feeling of accomplishment I get from my job.	1	2	3	4	5

SECTION D: SATISFACTION WITH LIFE

The purpose of this section is to assess how you view your satisfaction with life. The following are statements of life satisfaction that you may agree or disagree with.

Please rate the extent to which you disagree or agree with the following statements by making an "X" over the appropriate number on the 1 to 5 point scale next to the statement.

Please take note that 1 = Strongly disagree and 5 = Strongly agree.

1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
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	STATEMENT	SCALE				
		1	2	3	4	5
D1	In most ways my life is closely to my ideal.	1	2	3	4	5
D2	The conditions of my life are excellent.	1	2	3	4	5
D3	I am satisfied with my life.	1	2	3	4	5
D4	So far I have gotten the important things I want in life.	1	2	3	4	5
D5	If I could live my life over, I would change almost nothing.	1	2	3	4	5
D6	Life is worth living.	1	2	3	4	5
D7	All in all, I am satisfied with my life these days.	1	2	3	4	5

**SECTION E: GEOGRAPHICAL AND EDUCATIONAL INFORMATION, AND
STRUCTURE OF THE PRACTICE**

The following questions/statements are with regard to your geographical and educational background, as well as the structure of the practice. We appreciate your help in providing this important information.

Mark the applicable block with a cross (X). Complete the applicable information.

E1	Indicate your age group	≤ 25	25 – 29	30 - 39	40 - 49	50+
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E2	Indicate your gender	Male	Female
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E3	Indicate your race group classification	Black	Coloured	White	Indian	Other
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E4	Indicate your marital status	Single	Married	Divorce	Widow(er)
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E5	Indicate your qualification (mark the applicable block with a cross (X) or highlight the applicable row).				
	Degree: B.PhysT / B.Sc Physio / B.Physio (or equivalent)				
	Post Graduate Degree				
	Other				

E6	Indicate your years experience as a physiotherapist	1-5	6-10	11-15	15+
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E7	Indicate your years experience as owner/partner of a private practice	1-5	6-10	11-15	15+
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E8	How many permanent physiotherapists are employed by the practice (excluding you)? Please leave the blocks open if your answer is none (0).	1	2	3	4+
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E9	How many other permanent employees are employed by the practice (thus excluding you and other physiotherapists)? Please leave the blocks open if your answer is none (0).	1	2	3	4+
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E10	Do you have a PR number?	Y	N
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E11	Indicate your current position (mark the applicable block with a cross (X) or highlight the applicable row).	
	Owner	
	Partner	
	Other	

E12	Indicate your area/s of interest (mark the applicable block with a cross (X) or highlight the applicable row/s).	
	Neurology	
	Orthopaedics	
	Women's health	
	Sport	
	Respiratory	
	Geriatrics	
	Paediatrics	
	Pain management	
	Animal Physiotherapy	
	Aquatic Physiotherapy	

Other	
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E13	Indicate in which province your practice is situated (mark the applicable block with a cross (X) or highlight the applicable row).	
	Gauteng	
	Limpopo	
	Mpumalanga	
	North-West	
	KwaZulu-Natal	
	Eastern Cape	
	Western Cape	
	Northern Cape	
	Free State	

THANK YOU FOR YOUR TIME.

ANNUXURE B

ITEMS MEASURING THE VARIABLES

JOB SATISFACTION	Being able to keep busy all the time.
	The chance to work alone on the job.
	The chance to do different things from time to time.
	The chance to be "somebody" in the community.
	The way I handle the co-workers (or subordinates).
	My competence in making decisions.
	Being able to do things that don't go against my conscience.
	The way my job provides for steady employment.
	The chance to do things for other people.
	The chances to tell people what to do.
	The chance to do something that makes use of my abilities.
	The way the practice policies are put into practice.
	My pay and the amount of work I do.
	The chances for advancement or growth on the job.
	The freedom to use my own judgement.
	The chance to try my own methods of doing the job.
	The working conditions.
	The way my co-workers get along with each other.
The praise or satisfaction I get for doing a job.	
The feeling of accomplishment I get from my job.	

LIFE SATISFACTION	In most ways my life is closely to my ideal.
	The conditions of my life are excellent.
	I am satisfied with my life.
	So far I have gotten the important things I want in life.
	If I could live my life over, I would change almost nothing.
	Life is worth living.
	All in all, I am satisfied with my life these days.

ORGANISATIONAL COMMITMENT

AFFECTIVE COMMITMENT	I would be happy to spend the rest of my career with the practice.
	I enjoy discussing the practice with people outside it.
	I feel as if the practice's problems are my own.
	I do not think I could become as attached to another practice as I am to the practice.
	I feel like "part of the family" at the practice.
	I feel emotionally attached to the practice.
	The practice has personal meaning for me.
	I feel a strong sense of belonging to the practice.
CONTINUANCE COMMITMENT	It would be hard for me to leave the practice right now even if I wanted to.
	My life would be disrupted if I decided I wanted to leave the practice now.
	I am afraid of what might happen if I quit my job (leaving the practice) without having another one lined up.
	It would be costly for me to leave the practice now.
	Right now, staying with the practice is a matter of necessity as much as desire.
	I feel that I have few options to consider leaving the practice.
	One of the serious consequences of leaving the practice would be scarcity of available alternatives.
	One of the major reasons I continue with the practice is that leaving would require personal sacrifice – another business may not match the overall benefits I have.
NORMATIVE COMMITMENT	I think that people these days move from organisation to organisation too often.
	I believe that a person must always be loyal to his/her organisation.
	Jumping from organisation to organisation seems unethical to me.
	I believe that loyalty is important and therefore I feel a strong sense of moral obligation to remain.
	If I get another offer for a better job elsewhere I would not feel it was right to leave the practice.
	I was taught to believe in the value of remaining loyal to one organisation.
	Things were better in the days when people stayed with one organisation for most of their careers.
	I think that wanting to be "a company man" or "company women" is sensible.

ENTREPRENEURIAL ORIENTATION

AUTONOMY	Employees in the practice have enough autonomy to do their job without continual supervision to do their work.
	The practice allows employees to be creative and try different methods to do their job.
	Employees in the practice are allowed to make decisions without going through elaborate justification and approval procedures.
	Employees in the practice are encouraged to manage their own work and have flexibility to resolve problems.
	Employees in the practice seldom have to follow the same work methods or steps while performing major tasks from day to day.
INNOVATIVENESS	The practice regularly introduces new services/products/processes.
	The practice places a strong emphasis on new and innovative products/ services/processes.
	The practice has increased the number of services/products offered during the past two years.
	The practice is continually pursuing new opportunities.
	Over the past few years, changes in our processes, services and product lines have been quite dramatic.
	In the practice there is a strong relationship between the number of new ideas generated and the number of new ideas successfully implemented.
	The practice places a strong emphasis on continuous improvement in products/service delivery/processes.
	The practice has a widely held belief that innovation is an absolute necessity for the practice's future.
	The practice seeks to maximise value from opportunities without constraint to existing models, structures or resources.
RISK-TAKING	When confronted with uncertain decisions, our practice typically adopts a bold posture in order to maximise the probability of exploiting opportunities.
	In general, the practice has a strong inclination towards high-risk projects.
	Owing to the environment, the practice believes that bold, wide-ranging acts are necessary to achieve the practice's objectives.
	Employees in the practice are often encouraged to take calculated risks concerning new ideas.
	The term 'risk-taker' is considered a positive attribute for employees in our practice.

PRO-ACTIVENESS	The practice is very often the first to introduce new products/ services/processes.
	The practice typically initiates actions that competitors respond to.
	The practice continuously seeks out new products/processes/ services.
	The practice continuously monitors market trends and identifies future needs of customers.
COMPETITIVE AGGRESSIVENESS	In dealing with competitors the practice typically adopts a very competitive "undo-the-competitor "posture.
	The practice is very aggressive and intensely competitive.
	The practice effectively assumes an aggressive posture to combat trends that may threaten our survival or competitive position.
	The practice knows when it is in danger of acting overly aggressive (this could lead to erosion of our practice's reputation or to retaliation by our competitors).