HAPPINESS IN THE PRIVATE PHYSIOTHERAPY SECTOR OF SOUTH AFRICA

BY

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Submitted in partial fulfilment of the requirements for the

MASTER’S DEGREE IN BUSINESS ADMINISTRATION

in the

FACULTY OF BUSINESS AND ECONOMIC SCIENCES

of the

NELSON MANDELA METROPOLITAN UNIVERSITY

Supervisor: Professor Margaret Cullen

April 2017
DECLARATION

I, the undersigned, hereby declare that:

- The work contained in this dissertation is my own original work;
- This treatise was not submitted in full or partial fulfilment to any other recognised university for any other degree;
- This dissertation is being submitted in partial fulfilment of the requirements for the degree of Masters in Business Administration; and
- All sources used or referred to have been documented and recognised.

Michael Elliot

Date: 10 April 2017
ACKNOWLEDGEMENT

It is with great joy, deep appreciation and the utmost humility that I thank the following individuals and organisations for their support in enabling me to complete this dissertation and successfully exit this spectacular Master's degree in Business Administration. I am deeply grateful to the following:

- My parents, John and Betsie Elliot, for always believing in my abilities to conquer tasks set before me. During times of failure, you have consistently guided me to rise above unfavourable circumstances and experience joy despite the odds. I thank you both for your investment in my dreams. I love you.

- Professor Margaret Cullen, thank you for inspiring me to make excellence my normal. I am eternally grateful for your patience with me and it has been an honour to have you as my Supervisor for this treatise. Thank you for all your support, positive energy and brilliance.

- Dr Gilbert Dennis, thank you my friend, big brother and compass. Thank you for your friendship and always challenging me to make the skies my foundation, instead of my limit. I appreciate you.

- Carmen Sharpe, thank you for your patience and relentless support during this transformational journey. The successes achieved thus far and those to come are for you to share with me. You have been a phenomenal pillar to me and I thank you for love, kindness and endearing support. You continue to inspire me.

- Professor Frans Bezuidenhout, thank you for your sincere encouragement.

- My friends, thank you for still being here after all the times I had to decline your invitations. Thank you for your understanding during my absence and for all the times you have reached out to check up on me. I am truly blessed.

- The Graduate Business School, thank you for moulding me into the leader I am becoming. I look forward to being a proud alumnus.

- Lastly, the respondents of this study. Thank you for your time and contribution to providing the empirical data needed for this treatise.
ABSTRACT

There is limited research pertaining to assessing the happiness levels of various disciplines within the healthcare industry. Furthermore, happiness and physiotherapy studies are two research areas that are not necessarily associated with one another on a global perspective. Hence, the happiness levels have not been adequately established for private physiotherapists. This treatise is the first attempt to evaluate the happiness levels of private physiotherapists in South Africa.

A thorough literature review was conducted to determine the current climate of happiness studies pertaining to the business industry, with focus on private physiotherapy businesses in the healthcare sector. The literature review enabled the development of a hypothesised model, which was tested with quantitative techniques consisting of a questionnaire, data collection and statistical analysis.

The research confirmed that influence, social relations, life balance, optimism, work and leisure are all positively associated with the happiness levels of private physiotherapists in South Africa. These variables are recommended as key focus areas for physiotherapy business owners to address, in order to positively affect happiness levels in the workplace and thereby create favourable bottom line results. In accordance with the reviewed literature and the findings of this treatise, by adequately addressing these variables the business owners of physiotherapy practices will generate a workforce that are more productive, demonstrate greater collaboration with colleagues and customers, produce happier customers, are more positively energised and are less absent and more loyal to the business. It is recommended that the proposed model is tested to provide further benefit to the industry by constructing evidence-based retention and recruitment strategies for high performing private physiotherapy staff.

Keywords: Happiness, subjective wellbeing, economics, health economics, physiotherapy.
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CHAPTER ONE
INTRODUCTION AND PROBLEM STATEMENT

1.1 INTRODUCTION

Researchers of positive psychology have progressively increased the awareness of individual happiness studies and their benefits to society (Flynn & MacLeod, 2015). Although researchers and lay people often define happiness as life satisfaction or a sense of wellbeing, literature also defines happiness as positive subjective experiences (Aydin, 2012; Degutis & Urbonavicius, 2013; Delle Fave et al., 2016; Flynn & MacLeod, 2015; Frey et al., 2008; Joshanloo & Weijers, 2014; Scorsolini-Comin & Dos Santos, 2010; Wren-Lewis, 2014). However, despite the variance in happiness definitions, research confirms that an increase in individual happiness is advantageous to the individual and also enables societies to function better, thereby supporting the notion to incorporate aspects of happiness when formulating economic policy (Flynn & MacLeod, 2015; Guzi & de Pedraza García, 2015; Powdthavee, 2007).

The multiple definitions of happiness mentioned above and their cross-country differences or similarities may arguably be due to the variance in cultural dimensions and their collective influence on the happiness of individuals and societies (Delle Fave et al., 2016; Ye, Ng, & Lian, 2015), such as the Hofstede dimensions. Hofstede’s dimensions are measurements of a country’s “cultural style” that was constructed based on the basic problems that all societies would be faced with, such as (Harvey, 2011; Minkov & Hofstede, 2011):

- **Power distance**: Referring to social inequality and authority concerns;
- **Individualism-collectivism**: referring to the relationship between an individual and a group;
- **Masculinity-femininity**: referring to social implication of being born as a male or female;
- **Uncertainty avoidance**: referring to the extent that individuals feel threatened by ambiguous or unknown situations.

Theory supports that culture is in fact linked to happiness or subjective wellbeing, such as the “comparison theory” and Maslow’s “needs theory” (Diener & Lucas, 2000: 61;
Schyns, 1998: 3-8; Ye et al., 2015: 523). The comparison theory relates to the degree to which happiness is dependent on the comparisons between the standards of quality of life and the perceived life circumstances; whereas Maslow’s needs theory states that the more needs of an individual are met, the happier one will be (Aydin, 2012; Diener & Lucas, 2000; Schyns, 1998; Ye et al., 2015).

A study undertaken to explain the impact of cultural variables on happiness across different countries confirmed that Hofstede’s power distance dimension negatively correlates with happiness and that raising gender equality may also improve on a country’s happiness measurement (Ye et al., 2015). Furthermore, Ye et al. (2015) state that individualist cultured countries such as the European-American countries are happier or have higher levels of subjective wellbeing than people in a collectivist culture such as East-Asian countries. This is confirmed by literature such as research conducted by Stearns (2012) who states that East-Asian cultures have lower happiness expectations than what European-American cultures are accustomed to (Chiu et al., 2011; Stearns, 2012; Ye et al., 2015).

Culture is therefore an important factor to consider when measuring happiness across countries and the measurement of happiness across countries is in itself very important (Diener, 2000; Diener, Diener & Diener, 1995; Heukamp & Ariño, 2011; Inglehart & Klingemann, 2000; Kenny, 1999; Ye et al., 2015).

Although happiness predominantly features in research disciplines of philosophy, religion and psychology; it has subsequently become a focus in the fields of sociology, economics, neurology and as a result has been rather influential on the formulation and publication of public policy (Aydin, 2012; Frey & Stutzer, 2002; Okulicz-Kozaryn, 2016). Economists have focused on happiness studies due to their relevance and the effects of institutional conditions such as quality of governance and the size of social capital on individual wellbeing (Frey & Stutzer, 2002). Frey and Stutzer (2002) further mention that such research assists economists to understand the formation of wellbeing and the prediction of societies and individual's future utilities. The concept of utility refers to the choices people make in relation to tangible goods, which influence the supply and demand theory of economics and as a result measures of happiness serve as proxies for utility (Frey & Stutzer, 2002).
Furthermore, developing countries offer greater opportunities than developed countries for economists to research the volatility of socio-economic and macro-economic factors and their effects on the happiness of those societies and resident individuals (Powdthavee, 2007). Literature confirms that although, in previous decades, wealthier people were generally happier than the poorer people in the same country, that developed countries were not necessarily happier than developing countries and in addition concluded that rises in income over time failed to increase happiness levels (Easterlin, 2003; Fox, 2003; Robinson, Kennedy, & Harmon, 2012).

Happiness studies have thus been of great importance in the business sector as cultural and economic policies differ amongst countries and thus affect the successful implementation of businesses attempting to enter such markets. Lindsay and Pryce-Jones (2014: 51) define happiness at work as the “mind-set which enables action to maximise performance and achieve potential”. Happiness at work may also be described as “the workers experience of safety and healthiness of work, good leadership, competence, change management, support at work and how meaningful the employee finds the work” (Anttonen & Vainio, 2010; Utriainen, Kyngäs, & Nikkilä, 2011:1038).

This is particularly relevant in the service sector industry, whereby it has been established that a causal link exists between happy customers and greater profits (Davies, 2009). However, Davies and Chun (2009) state in an article in the Harvard Business Review (2009) that the same factors that increase customer satisfaction and in turn generate higher profits actually have a negative correlation on the happiness of employees.

Hence, due to the fact that increasing both the customer satisfaction levels and employee happiness are crucial and beneficial to business for many reasons, it is suggested to link the two by “engaging employees with reasons and ways to please customers and thereafter acknowledge and reward appropriate behaviour” which in turn assists employees to “have a sense of achieving their full potential” (Davies & Chun, 2009: 2; Pryce-Jones & Lindsay, 2014:131). This is particularly of relevance in the global medical industry; whereby the organisational culture, structure and shortage of resources seriously undermine the willingness of medical staff to serve their patients and as a result threatens patient care due to the shortage of medical staff, such as
physiotherapists and nurses and an often less than optimum mix of skills and experience (Newman, Maylor, & Chansarkar, 2002).

Thus far, few studies have been conducted to assess the quality of life, life satisfaction or subjective wellbeing of physiotherapists in the global medical sector and to the researcher’s knowledge there has been no attempt to measure these variables in the South African private physiotherapy sector. However, studies of happiness have been progressively conducted internationally and among the local nursing sector of South Africa. Studies relating to happiness levels of nursing staff in South Africa indicated that nursing staff are unhappy with their working environment, dissatisfied with the management skills of their supervisors and that the organisational cultures were not conducive to generate high levels of job satisfaction or happiness at work (Pietersen, 2005). Therefore, further studies of happiness in the international and national medical sector are necessary across the medical professionals such as nurses, physiotherapists and doctors, to determine their levels of satisfaction and happiness at work. It is noted that happiness would benefit from multifaceted methodological and theoretical perspectives, such as ethnographic approaches to understand how medical professionals still experience happiness despite difficult and stressful conditions at work (Einarsdóttir, 2012).

Although happiness is the ultimate goal and desirable outcome of interest for many, literature states that it also predicts other desirable outcomes of interest such as life expectancy, morbidity, productivity, quitting, absenteeism, unemployment and marriage duration (Chiu et al., 2011; Clark, 2011; Okulicz-Kozaryn, 2016). In addition, literature confirms that when happiness levels are increased and remain as such, that happier people are healthier, more productive, more environmentally sustainable, have more social capital and are more peace orientated, which leads to why happiness is in fact a yardstick to measure public policy and administration (Corral-Verdugo, Mireles-Acosta, Tapia-Fonillem, & Fraijo-Sing, 2011; Ed Diener, Lucas, Schimmack, & Helliwell, 2010; Lyubomirsky, King, & Diener, 2005; Okulicz-Kozaryn, 2016; Wiking, 2014).

Despite counter arguments in literature which state that happiness maximisation as a social goal should not be a governmental obligation, it is important to further expand the body of knowledge of happiness studies with public policy and administration in
mind, due to the objectively above-stated positive consequences of increasing happiness (Duncan, 2010).

The private physiotherapy sector is representative of a business operating within the service industry, as the product consumed is the service rendered by the physiotherapist. Furthermore, these private physiotherapists in South Africa formulate a diverse cultured workforce such as in Australia (Adams, Sheppard, Jones, & Lefmann, 2014) and require studies to support the management of business owners to thereby ensure that their staff maintain favourable happiness levels at work and in turn generate happy customers.

Figure 1.1 illustrates the overview of Chapter 1. The next section 1.2 will further elaborate on the problem statement put forward by the researcher.

Figure 1-1: Overview of Chapter 1

1.2 PROBLEM STATEMENT

The business model of many private physiotherapy businesses is under pressure due to changes in the health care market forces, causing the costs of running private physiotherapy practices to escalate whilst the remuneration for such physiotherapy services are diminishing (Ijntema, Mollema, & Duits, 2016; Neidhardt, 2009). The need
to modify the business models of physiotherapy businesses is essential for practice owners to ensure that they maintain and improve their market share in this particular service industry (Neidhardt, 2009). However, a general problem is that private practice physiotherapy owners are not equipped to understand where and how these changes should be made and in addition, information to support such decisions is not readily available (Ijntema et al., 2016; Neidhardt, 2009). In addition to the business model, many private physiotherapy businesses have started up without the consideration of a business plan which indicates that factors such as staff recruitment and retention strategies, competition and market segments and business strategies have been either neglected or poorly planned prior to start up due to the lack of business acumen gained from their tertiary education (Desveaux et al., 2012; Wassinger & Baxter, 2011). This could therefore lead to mismanagement of business processes and poor leadership attributes that may negatively influence the happiness levels of private physiotherapy staff.

A pioneering Canadian study established that the physiotherapy workforce identified a critical need for business acumen (Desveaux et al., 2012). 38% of physiotherapists surveyed work in the private sector and exceeded the expected perceived importance of business acumen in their workplace setting whereas the remaining 62% of public employed physiotherapists demonstrated a decline in the expected perceived importance of acquiring and implementation of business acumen (Desveaux et al., 2012). The contrast highlighted by this study relates to the general problem that physiotherapists are not equipped with sufficient business acumen to understand the business aspects of their practice environment and the important relation of business acumen to their practice and management of their staff (Desveaux et al., 2012).

It is therefore evident that physiotherapy private practice owners need to identify and analyse aspects of their businesses that require attention, improvement and managerial execution of solutions for the problems identified (Neidhardt, 2009). This treatise identifies that happiness levels of private physiotherapists in South Africa have not been analysed and that physiotherapy business owners have limited business knowledge to improve the happiness levels of their staff and thereby improve the success of their businesses. This relates to the notable problems in the healthcare industry across professions, such as staff retention; whereby physiotherapy business
owners fail to recognise their employees as internal customers and strategic key partners (Ijntema et al., 2016). This therefore stands to reason that the happiness levels of their staff have not yet been identified as an important aspect to analyse in terms of improving the wellbeing of their businesses.

Thus, the specific business problem is that there is insufficient information available to know whether private physiotherapists in South Africa are happy. The importance of investigating this will enable private practice business owners to implement evidence-based retention and recruitment strategies for high performing physiotherapy staff and in turn generate a workforce that is more productive, demonstrate greater collaboration with staff and customers, produce happier customers, are more positively energised and are less absent and more loyal to the business (Job Satisfaction Index, 2015; Kjerulf, 2013; Pryce-Jones & Lindsay, 2014).

Problem statement: Happiness levels have not been adequately established for private physiotherapists in South Africa.

1.3 RESEARCH OBJECTIVES

In light of the problem statement mentioned in section 1.2, the following research objective was formulated in order to solve the problem presented and thereby answer the main research question stipulated in section 1.4.

The main research objective of this treatise is:

- \( \text{RO}_M \): To Determine the happiness levels of private physiotherapists in South Africa.

Secondary objectives were set to accomplish the task of achieving the main objective of this treatise. The secondary objectives of this treatise are listed below:

- \( \text{RO}_1 \): Review the definitions and importance of happiness research;
- \( \text{RO}_2 \): Explore and critically review the disparaging arguments, relative theory and standard determinants of happiness;
- \( \text{RO}_3 \): Determine the trends of happiness across global, national and medical altitudes as well as briefly discussing various measuring instruments used to measure happiness;
• **RO4**: Explain the research methodology used in this treatise with sufficient detail to allow it to be reproduced in future;

• **RO5**: Conclude adequate recommendations from the data analyses to enable private physiotherapy businesses to improve the happiness levels of their employees.

The following section 1.4 will describe the research questions formulated to achieve the objectives that are described above, including the main research question.

### 1.4 RESEARCH QUESTIONS

The research questions of this treatise were formulated to steer the researcher toward achieving the research objectives mentioned in section 1.3 above. The main research question served to answer the main research objective in order for the problem statement to be solved.

The main research question of this treatise is:

- **RQM**: How happy are private physiotherapists in South Africa?

Secondary research questions were formulated to adequately answer the main research question and achieve the secondary objective points mentioned in section 1.3 above.

The secondary questions of this treatise are listed below:

- **RQ1**: What are the definitions, determinants and importance of happiness research?

- **RQ2**: What are the disparaging arguments and relative theories linked to happiness?

- **RQ3**: What are the happiness levels on a global, national and medical perspective regarding physiotherapists and which measurement instruments are used?

- **RQ4**: What research design technique will be used in this study?

- **RQ5**: What recommendations can be put forward for private physiotherapy businesses to increase the happiness levels of their physiotherapy staff and gain the financial, social and employee wellbeing benefits thereof?
The research questions and objectives were derived from the formulation of a research alignment plan (RAP) that aimed to disseminate the great task of completing this treatise, into smaller and actionable steps. The RAP was designed with the approval of the treatise supervisor and allowed the researcher to breakdown the research questions and objectives above into smaller objectives and questions to guarantee that an actionable, feasible and appropriate plan was set into place. This RAP can be viewed in table 1.1 and should be viewed as the blueprint of this treatise.

Table 1-1: Research alignment plan

<table>
<thead>
<tr>
<th>Title:</th>
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<tbody>
<tr>
<td>Happiness in the private physiotherapy sector in South Africa.</td>
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<th>Problem Statement:</th>
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<td>Happiness levels have not been adequately established for private physiotherapists in South Africa.</td>
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<th>Main Research Objective (RO_M):</th>
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<td>Determine the happiness levels of private physiotherapists in South Africa.</td>
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<tr>
<th>Main Research Question (RQ_M):</th>
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<td>How happy are private physiotherapists in South Africa?</td>
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<tr>
<th>Secondary research questions</th>
<th>Research objective</th>
<th>Chapter</th>
<th>Deliverable</th>
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</thead>
<tbody>
<tr>
<td>RQ1.1</td>
<td>What are the definitions of happiness? Review the various definitions of happiness established in literature. Select a definition to use in reference throughout the treatise.</td>
<td>2</td>
<td>Literature Review</td>
</tr>
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</table>

<p>| RQ1.2                        | What are the determinants of happiness? Review the established determinants of happiness from literature. | 2       | Literature Review            |</p>
<table>
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<th>Secondary research questions</th>
<th>Research objective</th>
<th>Chapter</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RQ1.3</strong></td>
<td>What is the history of the study of happiness?</td>
<td>Review the history and evolution of happiness studies.</td>
<td>2</td>
</tr>
<tr>
<td><strong>RQ1.4</strong></td>
<td>What is the importance of happiness studies?</td>
<td>Review the importance of happiness studies as established in literature.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>[What are the benefits of measuring happiness in an industry/country]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RQ2</strong></td>
<td>What are the disparagement arguments that target happiness studies?</td>
<td>Review the criticism faced by happiness studies and their counter arguments in literature.</td>
<td>2</td>
</tr>
<tr>
<td><strong>RQ2</strong></td>
<td>What theory is happiness linked to?</td>
<td>Evaluate possible theories embedded in the study of happiness.</td>
<td>2</td>
</tr>
<tr>
<td><strong>RQ3.1</strong></td>
<td>What are the measuring instruments used in happiness studies?</td>
<td>Compare the established measuring tools of happiness.</td>
<td>2 &amp; 3</td>
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<td>Secondary research questions</td>
<td>Research objective</td>
<td>Chapter</td>
<td>Deliverable</td>
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<tr>
<td><strong>RQ3.2</strong></td>
<td>What is the international trend of happiness?</td>
<td>Review the international trends of happiness, comparing international levels of happiness of various countries?</td>
<td>2</td>
</tr>
<tr>
<td><strong>RQ3.3</strong></td>
<td>What is the trend of happiness across the international medical sector?</td>
<td>Review the levels of happiness in the global medical sector.</td>
<td>2</td>
</tr>
<tr>
<td><strong>RQ3.4</strong></td>
<td>What is the trend of happiness in the South African medical sector?</td>
<td>Review the trends of happiness levels in the South African medical sector across disciplines.</td>
<td>2</td>
</tr>
<tr>
<td><strong>RQ3.5</strong></td>
<td>What is the global trend of happiness in private physiotherapy sector?</td>
<td>Review the trend of happiness levels of private physiotherapists globally.</td>
<td>2</td>
</tr>
<tr>
<td><strong>RQ3.6</strong></td>
<td>What is the trend of happiness in the South African private physiotherapy sector?</td>
<td>Review the trend of happiness levels of private physiotherapists in South Africa.</td>
<td>2</td>
</tr>
<tr>
<td><strong>RQ4.1</strong></td>
<td>What research design technique will be used in this study?</td>
<td>Describe the research design to be utilised in this study and why.</td>
<td>3</td>
</tr>
<tr>
<td>Secondary research questions</td>
<td>Research objective</td>
<td>Chapter</td>
<td>Deliverable</td>
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</tbody>
</table>
| RQ4.2 How was the research conducted? | Discuss the method of conducting research:  
  - Literature review process  
  - Sample group  
  - Questionnaires  
  - Ethics obtained  
  - Analytical methodology | 3 | Methodology  
(Enable future research to replicate the treatise) |
| RQ4.3 What challenges were faced in conducting the research? | Provide details of errors or complications and suggest ways that could be used in future to eliminate such complications. | 3 | Methodology |
| RQ5.1 Are physiotherapists in the private sector happy? | Determine the level of happiness amongst private physiotherapists in South Africa. | 4 | Analyse data from questionnaires.  
  - Measuring the happiness of private physiotherapists in South Africa  
  - Analysis: inferential and descriptive |
| RQ5.2 How can the happiness of private physiotherapists be improved? | Determine the key factors to improve the happiness of private physiotherapists in South Africa. | 5 | Use the data to determine key factors that private physiotherapists are unhappy about.  
  - Develop a framework to promote the happiness of private physiotherapy staff. |
1.5 RESEARCH DELIMITATION

This treatise research is limited to private physiotherapists registered by the Health Professional Council of South Africa (HPCSA) and the two regulating bodies of physiotherapy namely, the South African Society of Physiotherapy (SASP) and the Physiotherapy Association of South Africa (PASA). Therefore, the conducted research excludes physiotherapists solely employed in the public sector and those who are not registered to practice in South Africa by the HPCSA. The survey intended to reach the entire private physiotherapy population of South Africa, which is the sample chosen from the entire physiotherapy population in South Africa.

1.6 RESEARCH SIGNIFICANCE

This treatise adds value to literature as it is the first attempt to determine the happiness levels of private physiotherapists in South Africa. At present there is no literature addressing the happiness levels of private physiotherapists in South Africa. Therefore, this treatise establishes a foundation for future research to further investigate and contribute to the body of knowledge in regard to happiness in the medical sector and in addition will empower physiotherapy business owners to increase the happiness levels of their staff; thereby gaining the confirmed benefits that increased employee happiness produces. In addition, this treatise provides insight as to what the private physiotherapy workforce of South Africa perceive is important in terms of happiness at the workplace.

1.7 RESEARCH METHODOLOGY

1.7.1 Research Approach

This treatise followed a positivistic design and therefore a quantitative paradigm was utilised to conduct the research. The quantitative paradigm utilised aims to investigate the causal relationship between the dependent variable “happiness” and its independent variables “Influence, Social Relations, Life Balance, Purpose, Optimism, Work, Leisure”. Since this approach investigates the causal relationship between a dependent variable and independent variables and was conducted in a fast and economical way in which numerical analysis were collected on predetermined instruments which yielded statistical data; this treatise is characterised as a
quantitative research paradigm (Amaratunga, Baldry, Sarshar, & Newton, 2002; Collis & Hussey, 2003, 2013; Creswell, 2003). Section 3.2 further elaborates on research paradigms and the research paradigm chosen for this treatise.

1.7.2 Literature study

Literature was reviewed from vast electronic journal articles, business reports and books in order for the researcher to critically review important and relevant concepts in the current body of knowledge, particularly pertaining to the field of happiness and its relevance to the private physiotherapy sector. Key words were used in order to peruse the most relevant and pioneering articles in the body of knowledge of which this treatise aims to contribute to.

Keywords: Happiness, subjective wellbeing, economics, health economics, physiotherapy.

The above key words were mostly utilised in various combinations to produce the literature critically reviewed in this treatise. Section 3.3 further elaborates on the purpose and process of the literature review conducted for this treatise.

1.7.3 Data collection and analysis

An online questionnaire was used to collect primary data from the respondents via the online Question Pro Survey Tool. This online tool enabled the researcher to gather, analyse and collate the results in a fast and economical way. The questionnaire consisted of two sections, namely the demographic questions and questions relating to the predetermined dependent and independent variables. The latter section was presented in the format of 5 Point Likert scales which ranged from Strongly Disagree (1) to Strongly Agree (5).

The online survey tool, Question Pro, automatically tabulated the online responses and thereafter the researcher was able to export the data to an excel spreadsheet where it was cleaned appropriately to remove any corrupt or incorrect data from the data sheets. The quantitative data sets were imported and analysed via a IBM Statistical Package for the Social Science (SPSS) to produce descriptive and inferential statistical indexes to measure the responses. The IBM SPSS statistics data
editor (version 24) was utilised for this treatise and generated Cronbach alphas, multiple regression analysis and Pearson’s correlation values including descriptive statistics. Descriptive and inferential statistical analyses were completed whereby the inferential statistics verified whether the conclusion drawn from the sample population could be inferred to the larger population (Collis & Hussey, 2013). Cronbach alphas gained established that the instruments used in the research were reliable.

The data collection method and the survey design, distribution and data analyses are further elaborated in section 3.5, 3.6.2 and 3.7 respectively.

1.8 ETHICAL CLEARANCE

This treatise qualified for the Ethical Clearance Form E as it did not meet the criteria which prompts the requirement for full ethical clearance. The Form E is attached at the end of this treatise in Appendix E: Ethical Form E.

1.9 REPORT STRUCTURE

The proposed structure of this treatise is illustrated in table 1.1 which illustrates the entire treatise via a RAP. The RAP describes the chapter’s relevant research questions, objectives and deliverables including the research problem statement. Furthermore, the beginning of each chapter contains an illustrative overview of the chapter at hand.

1.9.1 Chapter 1: Introduction

This chapter serves to introduce the reader to the concepts of the research topic and presents the context, outline and purpose of the study. Additionally, the research problem, research objectives and research questions are presented to the reader in an orderly format.

1.9.2 Chapter 2: Literature review

This chapter presents the reader with a critical review of the literature perused to answer the research questions and thereby achieve the research objectives pertaining to this chapter. The research questions connected to this chapter are: “What are the definitions, determinants and importance of happiness research?”; “What is the trend
of happiness in the national, international and relative medical sector pertaining to private physiotherapists”; and “What are the happiness levels on a global, national and medical perspective and which measurement instruments are used?”

1.9.3 Chapter 3: Research design and methodology

This chapter describes the research design used for this treatise and the methodology. This chapter therefore elaborates on the literature review process, the survey design, distribution and data collection, data analyses and the limitations of the research methodology used to answer the RQ4 which questions “what research design technique will be used in this study?”

1.9.4 Chapter 4: Results and analysis of the empirical study

This chapter addresses the analysis of the data collection and assists to answer RQ5.1: “Are physiotherapists in the private sector happy?”. Descriptive and inferential statistics are produced from the questionnaires respondents. These results serve as the foundation for which Chapter 5 creates recommendations and conclusions.

1.9.5 Chapter 5: Recommendations and Conclusion

Chapter 5 serves as a summary of the treatise by revisiting each research question and objective. The deliverables of each chapter are discussed along with the practical recommendations derived from Chapter 4. Opportunities for future research, limitations of this study and managerial implications and are critically discussed and the significance of this treatise is briefly highlighted.

1.10 CHAPTER SUMMARY

In this chapter the construct of the research topic was presented by discussing the research problem statement, research objectives and research questions. Important concepts were highlighted throughout the chapter which also described the outline of this treatise. Concerns of ethics clearance, research significance and methodology were addressed and consequently followed by a brief summary of the chapter.

The following chapter 2 addresses the problem statement through the deliverance of a critical literature review. The chapter responds to RQ1, RQ2 and RQ3 by reviewing
literature that pertains to the overview, importance, measuring instruments and trends of happiness within an international, local and medical altitude.
CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This study assesses happiness levels of private physiotherapists in the South African health sector. The rationale behind happiness studies and their disparaging counter arguments are assessed based on embedded theory associated with the importance, determinants of happiness and measuring instruments of happiness studies. The preferred definition of happiness is reinstated for the purposes of clearly reviewing published literature of happiness studies in the health sector that interlink and pertain to private physiotherapists specifically in the South African context. An overview of this chapter is schematically presented in Figure 2.1 below while the research questions and objectives are graphically presented in Table 2.1.

Figure 2-1: Overview of Chapter 2
### Table 2-1: Chapter 2 RQ's and RO's

<table>
<thead>
<tr>
<th>RESEARCH QUESTION</th>
<th>RESEARCH OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RQ1:</strong></td>
<td><strong>RO1:</strong> Conduct a literature review to establish the definition, determinants and importance of happiness studies for this treatise.</td>
</tr>
<tr>
<td>What are the definitions, determinants and importance of happiness studies?</td>
<td></td>
</tr>
<tr>
<td><strong>RQ2:</strong></td>
<td><strong>RO2:</strong> Conduct a literature review to determine the current trends of happiness at a national, international and medical industry level.</td>
</tr>
<tr>
<td>What is the trend of happiness in the national, international and relative medical sector pertaining to private physiotherapists?</td>
<td></td>
</tr>
<tr>
<td><strong>RQ3:</strong></td>
<td><strong>RO3:</strong> Highlight the trends of happiness across global, national and medical altitudes as well as briefly discuss the various measuring instruments used to measure happiness across these altitudes.</td>
</tr>
<tr>
<td>What are the happiness levels and measurement instruments used on a global, national and medical perspective to assess the happiness levels across various disciplines.</td>
<td></td>
</tr>
</tbody>
</table>

### 2.2 OVERVIEW OF HAPPINESS

The emerging concept of happiness may either be defined as a state of wellbeing or the degree to which an individual positively evaluates the overall quality of their current life as a whole (Chiu et al., 2011; Merriam-Webster, 2016). However, it is argued that happiness is a more complex construct in the medical industry which is influenced by a mixture of personal, professional and situational factors (Appel, Labhart, Balczo, McCleary, Raley and Winsett, 2013). Appel et al. (2013) further argue that happiness is a multidimensional construct that includes joy, interest and pride in response to life circumstances, which are further affected by an individual’s personality traits and their situational responses. Various literature supports this notion of a multidimensional construct and states that happiness is comprised of both emotional and cognitive elements, whereby happiness relates to one’s situation and state of mind (Bekhet, Zauszniewski, & Nakhla, 2008; Chiu et al., 2011; Hills & Argyle, 2001). Similarly, three main components of happiness are identified, namely: a frequent positive affect, a high
level of satisfaction over a period of time and lastly the absence of negative feelings (Argyle & Crossland, 1987; Bekhet, Zauszniewski, & Nakhla, 2008).

However, a recent theory argues that happiness should be viewed as an indicator of changes in our wellbeing (Merriam-Webster, 2016; Wren-Lewis, 2014). This theory is referred to as the ‘indicator view’ which argues that happiness is an indicator of local changes in wellbeing, whereby an individual may experience happiness during unfavourable circumstances insofar as their wellbeing is improving and vice versa (Merriam-Webster, 2016; Wren-Lewis, 2014). This interpretation of happiness is based on an understanding of wellbeing that is widely accepted and consistent with substantive theories of wellbeing (Merriam-Webster, 2016; Wren-Lewis, 2014). It is further concluded that happiness in its essence may therefore comprise of the measure of an individual, community or nation’s wellbeing. This relates to why public policy practitioners have focused their attention on happiness studies in order to decide on what matters most to citizens, thereby amending policy to favour all (Easterlin, 2003; Merriam-Webster, 2016; Stiglitz, Sen, & Fitoussi, 2009; Tenaglia, 2007; Wren-Lewis, 2014). The interest of economists in happiness studies is discussed later in this chapter.

On the other hand, a recent study has determined that happiness is not wellbeing (Raibley, 2012). According to Raibley (2012), philosophical research indicates that happiness is conceptually, metaphysically and cognitively dissimilar from wellbeing. This is grounded in the finding that happiness is compatible with seriously impaired agencies and dysfunctional emotional and motivational systems, while wellbeing is not compatible with these dimensions (Raibley, 2012). This negates the indicator view of happiness, whereby if happiness is distinctly different from wellbeing then it cannot be used to measure the very thing it is distinctly different from (Raibley, 2012).

Nevertheless, it is argued that reported subjective wellbeing is the scientific term used in psychology for an individual’s evaluation of their own experiences of happiness or satisfaction of life (Frey et al., 2008; Rodríguez-Muñoz & Sanz-Vergel, 2013). Subjective wellbeing is similarly described as a concept used to explain the self-reported indications of an individual’s wellbeing (Degutis & Urbonavicius, 2013). Degutis and Urbonavicius (2013) report that subjective wellbeing is frequently used as a synonym for happiness and life satisfaction. In addition, it is further noted that
happiness and life satisfaction are the most common empirical indicators of subjective wellbeing (Degutis & Urbonavicius, 2013).

It is correspondingly presented that the terms ‘happiness’, ‘wellbeing’ and ‘life satisfaction’ are used interchangeably within literature even though they are separable constructs (Frey et al., 2008; Degutis & Urbonavicius, 2013). Therefore, this treatise will follow the substantiated notion that happiness certainly serves as an indication of one’s wellbeing.

Furthermore, ‘quality of life’ can be divided into two parts, namely objective wellbeing and subjective wellbeing (Scorsolini-Comin & Dos Santos, 2010). In this regard, objective wellbeing represents the objective aspects of one’s life in terms of income, education and transport among other domains and subjective wellbeing represents the subjective experiences of life in terms of happiness (Degutis & Urbonavicius, 2013; Frey et al., 2008; Rodríguez-Muñoz & Sanz-Vergel, 2013; Scorsolini-Comin & Dos Santos, 2010).

The study of subjective wellbeing has a central objective to understand the evaluation that individuals make of their lives in terms of happiness, quality of life and life satisfaction (Scorsolini-Comin & Dos Santos, 2010). Scorsolini-Comin and Dos Santos (2010) amongst other researcher’s further state that authors who represent the topic of subjective wellbeing interchangeably accept these designations of happiness, quality of life and life satisfaction (Degutis & Urbonavicius, 2013; Frey et al., 2008; Scorsolini-Comin & Dos Santos, 2010). It is foremost stated that in the context of scientific knowledge the term ‘happiness’ has been translated as ‘subjective wellbeing’ and therefore the construct of subjective wellbeing has been conceived as the study of happiness (Scorsolini-Comin & Dos Santos, 2010).

Therefore, literature reviewed thus far congruently supports that happiness serves as a representation of one’s state of subjective wellbeing and may be used interchangeably with the terms of “subjective wellbeing, quality of life and life satisfaction” (Degutis & Urbonavicius, 2013; Frey et al., 2008; McKeivitt, Redfern, La-Placa, & Wolfe, 2003; Merriam-Webster, 2016; Scorsolini-Comin & Dos Santos, 2010; Wren-Lewis, 2014).
In succession, this treatise shall use the rationale of the indicator view in reference to happiness that serves as an indication of changes in an individual's reported state of wellbeing.

2.3 IMPORTANCE OF HAPPINESS

Research in happiness studies consistently confirms the importance of happiness and its positive influence at work by fuelling growth and bottom line results and it is widely accepted that work is highly beneficial for the wellbeing and happiness of the individual (Fisher, 2010; Pryce-Jones & Lindsay, 2014; Rodríguez-Muñoz & Sanz-Vergel, 2013). Despite the controversy about whether a happy worker is a productive worker, it is argued based on empirical data that happy workers are in fact high performing workers (Job Satisfaction Index, 2015; Kjerulf, 2013; Pryce-Jones & Lindsay, 2014). The literature reviewed states that the happiest workers take one tenth the sick leave than their least happy colleagues; are more likely to generate and share new ideas and create greater cooperation between colleagues and with customers; are six times more energised; are more loyal to their organisations and are in fact twice more productive (Job Satisfaction Index, 2015; Kjerulf, 2013; Pryce-Jones & Lindsay, 2014).

Pryce-Jones and Lindsay (2014) clearly distinguish between happiness and employee engagement, namely that employee engagement is a management responsibility whereas individuals are responsible for their own happiness at work. Therefore, it is noted that although an individual maybe highly engaged at work that same individual may not necessarily be happy at work (Pryce-Jones & Lindsay, 2014). It is further proposed that due to high levels of conscientiousness, individuals may invest heavily towards achieving work objectives regardless of their mind-set (Pryce-Jones & Lindsay, 2014).

In order to create favourable bottom line results, which the Job Satisfaction Index (2015) refers to as a “happy bottom line”, it is recommended that management should focus on determinants that greatly affect happiness in the workplace, namely: “purpose, leadership, influence, achievement, work-life balance and social relations with colleagues” (Happiness Research Institute, 2015). The questionnaire utilised for this treatise comprised of a few of these listed determinants that are recognised to greatly affect the happiness of individuals in the workplace and will be further
discussed in Chapter 3. However, the standard determinants of happiness as well as other variables are discussed later in this chapter.

Research on improving the productivity of employees has been discussed for decades with many proposed methods and aspects to consider, which at times are in conflict with one another. The literature review undertaken for this treatise observes numerous literature in favour of Pryce-Jones and Lindsay (2014), that happy people are more creative, build better relationships which improve teamwork and create more satisfied customers if they are in the service industry; such as that of private physiotherapists rendering healthcare services to patients (Job Satisfaction Index, 2015; Kjerulf, 2013; Okulicz-Kozaryn, 2016; Pryce-Jones & Lindsay, 2014).

However, one must also discern between pleasant and unpleasant services that are delivered to the consumer, such as healthcare services that are often unpleasant and simultaneously necessary to experience and then take into the consideration not just the level of happiness of the service provider but of the recipient as well (Hellén & Sääksjärvi, 2011; Naidu, 2009). Hellén and Sääksjärvi (2011) further conclude that because happiness is a personality trait, the service does not affect happiness; instead happiness affects the perception of the service received. This suggests that the service provider, such as a private physiotherapist, needs to assess the level of happiness of the client and approach the individual accordingly so that the favourable perception is achieved. In addition, it is correspondingly stated that the quality of healthcare services rendered affects the patients satisfaction and either positively or negatively influences positive patient behaviours, such as desired loyalty, which is key in the private practice setting to retain clientele (Hellén & Sääksjärvi, 2011; Naidu, 2009).

Nevertheless, if the service provider is not happy in their working environment this will surely affect their ability to deliver a service with a joyful heart and therefore negatively influence the desired positive behaviour of the patient (Hellén & Sääksjärvi, 2011; Naidu, 2009).

Employees are globally regarded as a company’s best asset and success is therefore arguably more probable in companies that boast happier staff, indicating a need to nurture work environments that promote happier staff (Career Success, 2013; Vincent-
Höper, Muser & Janneck, 2012). It is perceived as common law that once a work environment that induces or promotes happier staff is achieved the motivation levels of employees will rise accordingly. This supports the view that a service provider will render a more favourable service if he/she is happy within their work environment; thereby concluding that the employees wellbeing is critical for the success of the organisation (Career Success, 2013; Hellén & Sääksjärvi, 2011; Page & Vella-Brodrick, 2009; Vincent-Höper et al., 2012).

However, establishing such an environment will be a difficult task if the needs of employees are misunderstood. It is proposed that if Herzberg’s hygiene factors, such as the work environment, are not aligned with the employee’s expectations in relation to work and does not enable employees to achieve their goals, the employee will be inclined to appraise their work as less meaningful which may lead to burnout and poor subjective wellbeing (Salmela-Aro & Nurmi, 2004; Tietjen & Myers, 2003). Therefore, the apparent contribution of the employee needs to be matched by the perceived contribution of the employer to that individual, in order to limit burnout and low subjective wellbeing in the workplace (Salmela-Aro & Nurmi, 2004).

Happiness in the workplace can be influenced by either intrinsic task-related motivating factors that are associated with satisfaction/happiness or extrinsic people-related hygiene factors that are associated with dissatisfaction/unhappiness as described by Herzberg’s motivation theory (Herzberg, 2003; Salmela-Aro & Nurmi, 2004; Tietjen & Myers, 2003). According to Herzberg’s theory of motivation, the intrinsic motivating factors that enhance happiness in the workplace are recognition, achievement, possibility of growth, advancement, responsibility and work itself (Herzberg, 2003; Tietjen et al., 2003). Whereas hygiene factors are related to extrinsic variables that surround the job such as the work environment, policy and administration and the salary (Herzberg, 2003; Tietjen & Myers, 2003).

Hence, in order for the employee to be truly motivated at work, both motivating and hygiene factors need to be in place with regard to Herzberg’s theory of motivation. Literature confirms that happier workers are indeed more productive workers, emphasising the need to evaluate, analyse and improve the happiness levels of employees in all industries to elevate ‘happier bottom lines’ and growth within
organisations. Consequently, this highlights the importance of happiness studies in relation to the science of economics.

In addition to the workplace, studies of happiness also serve as an indication of societal success and the results of measuring happiness have therefore been utilised in the evaluation and development of national policies by economists (Hitokoto & Uchida, 2014; Okulicz-Kozaryn, 2016; Rodríguez-Muñoz & Sanz-Vergel, 2013; Stiglitz et al., 2009). Although happiness is more related to the field of psychology than to economics, it is established that happiness is important to economists for mainly three reasons (Okulicz-Kozaryn, 2016; Wang & Wong, 2014).

Firstly, happiness studies assist economists in their analysis of the net impact that economic policy induces. Secondly, the empirical happiness studies strengthen the understanding of the effect of institutions on individuals. Thirdly, these studies assist economists in their exploration of individual happiness formation which further illuminates basic concepts and assumptions in economic theory, such as the link between demand and supply and utility (Frey & Stutzer, 2002; Wang & Wong, 2014). It is argued in fact, that the core of economics should be geared around individual happiness (Frey et al., 2008). This proposition is based on the finding that happiness or reported subjective wellbeing is a better proxy than income for evaluating human welfare and although it serves as a desirable outcome of interest, it also serves as a predictor of other desirable outcomes of interest such as life expectancy, productivity and absenteeism (Frey et al., 2008; Okulicz-Kozaryn, 2016). Frey et al. (2008) propose two approaches that happiness studies can serve the core of economics in the future, namely in the understanding of utility and secondly by theory testing. With regard to understanding utility, happiness studies with econometric and experimental research methods may shed light on greater psychological concepts of utility which will aid economists in their efforts to manage national policy (Frey et al., 2008). Additionally, literature suggests that there are substantial benefits to happiness from improved accountability, effectiveness and stability of governments, the rule of law and the control of corruption (Frey et al., 2008).

Happier workers are more productive and contribute greatly to economic wellbeing, growth of a company and ultimately a nation’s bottom line with respect to GDP (Job Satisfaction Index, 2015; Kjerulf, 2013; Pryce-Jones & Lindsay, 2014). However, a
contradictory finding is that happiness does not increase due to economic growth (Ashkanasy, 2011). Contrary to this, the opposite is true whereby unemployment, economic decline or the potential loss of income will prominently depress the happiness of an individual and its society or nation (Clark, Diener, Georgellis, & Lucas, 2008; Frey et al., 2008; Rodríguez-Muñoz & Sanz-Vergel, 2013). Tenaglia (2007) confirms that unemployment is a major economic source of human distress, which negatively impacts the happiness levels of those who are unemployed, until new employment is sourced (Clark et al., 2008; Rodríguez-Muñoz & Sanz-Vergel, 2013; Tenaglia, 2007). Therefore, the study of happiness serves as an important database of knowledge with regard to industry, national economic policy and societal success.

Thus far, this treatise has illustrated that happier workers enable businesses to flourish which positively spill over to national economic and societal success. The importance of happiness was outlined above in respect to the scientific fields of psychology as well as economics.

The determinants of happiness are now reviewed according to recently published literature. The determinants of happiness are described as multifaceted and may be classified as internal or external factors whereby these variables may either influence happiness by exerting an absolute effect on happiness or affect happiness through a social context (Appel et al., 2013; Hills & Argyle, 2001; Van Beuningen, Van der Houwen, & Moonen, 2014; Yang, Hsee, & Zheng, 2012). Variables that exert an absolute effect on happiness are referred to as “type A” and variables that affect happiness through a social context are referred to as “type B” variables (Yang et al., 2012). Yang et al. (2012) concluded that investing in “type A” variables will increase the overall happiness of all members of society over time, whereas investing in “type B” variables ultimately results in a zero sum game which will not raise the happiness of all members of society. This supports the findings of Ashkanasay (2011) that economic growth does not improve the happiness of society. It is further noted that variables are neither purely type A nor purely type B but lie in between these two ends of a continuum and that whether happiness with an external variable is relative or absolute depends on whether the variable is inherently more evaluable (type A) or inherently less evaluable (type B) (Yang et al., 2012). Type A variables consist of characteristics such as ambient temperature, amount of sleep and stress whereas
Type B variables include the size of a diamond, the brand of a handbag or the horsepower of a car (Yang et al., 2012).

It is furthermore clarified that one’s overall happiness in a social context is a multifaceted concept defined by income, leisure time, health and marital status (Yang et al., 2012). In favour of Yang et al. (2012), a study that measured the link between leisure and happiness consistently found that individual variables such as income, health condition, age, gender and national economic variables such as the unemployment rate and political stability are strongly associated with the individuals perception of happiness (Wang & Wong, 2014). The 2015 World Happiness Report congruently confirms the standard determinants of happiness as income, employment, inflation, personality traits, socio-demographic, political and institutional factors and sturdily proposes to further integrate social relations in happiness studies alongside these standard determinants of happiness (Helliwell, Layard, & Sachs, 2015). The non-material aspects of a person’s life such as social relations among family, friends and colleagues are important even though they fall outside the realm of economics and should be included in the endeavours of happiness research when quantifying the standard determinants of happiness (Frey et al., 2008).

This supports the proposal of the World Happiness Report to include social relations when measuring happiness. The literature therefore stalwartly emphasises the need to acknowledge social relations when analysing the happiness levels of a given population (Helliwell et al., 2015; Yang et al., 2012; & Frey et al., 2008).

Determinants of happiness that relate to equations of happiness in the South African context bear similarities for equations of happiness in developed and other developing countries (Hinks & Gruen, 2007). Hinks and Gruen (2007) compared the structural differences of happiness of the Durban region against those of international findings and concluded that unemployment, absolute household income level, relative household income level, racial group and level of education influences the level of happiness in the South African Durban region was consistent with other developing and developed countries. However, Hinks and Gruen (2007) found dissimilarities whereby marital status and age did not have substantial influences on happiness in the South African context.
2.4 MEASURING INSTRUMENTS OF HAPPINESS

For the purposes of this treatise, the impact of social relations is included in the standard determinants of happiness as per the recommendations stated above. In the literature reviewed thus far, various instruments have been used to measure these determinants of happiness, which have been highlighted in this treatise. In order to study happiness or any theory a reliable measuring instrument is needed to correctly determine and infer the findings (Dambrun et al., 2012).

Literature on happiness utilises various measurement instruments in their quest to determine the level of happiness of a specific population and thereby contribute to happiness research which is gradually becoming a field of primary importance (Dambrun et al., 2012). Over the last two decades this has become a focus area of economists, researchers and policy makers whereby the information is used to determine policy alterations that bring about positive changes in the overall happiness of people (Easterlin, 2003; Rodríguez-Muñoz & Sanz-Vergel, 2013; Stiglitz et al., 2009; Tenaglia, 2007). Therefore, in order to implement policy changes that bring about the desired effects, reliable measuring instruments in the studies undertaken to analyse happiness constructs are scientifically necessary to validate the proposed changes in policy.

Dambrun et al. (2012) present the development of two measurement scales of happiness, which intimately link to a preceding theoretical model named the Self-centeredness/Selfless Happiness model presented by Dambrun and Ricard (2011). The two scales of measurement introduced by Dambrun et al. (2012) are the Subjective Fluctuating Happiness Scale (SFHS) and the Subjective Authentic-Durable Happiness Scale (SA-DHS) which are characterised by high internal consistency, a logical factorial structure and stability over time. It was concluded that the SA-DHS is closely related to positive affectivity as well as indicative of selflessness and self-transcendence values, while the SFHS is more closely related to negative affectivity in addition to a self-centred functioning and self-enhancement values (Dambrun et al., 2012). Dambrun et al. (2012) suggest that the relationship between happiness, life satisfaction and their usual psychological correlates may be due to a common unmeasured component, namely durable inner peace. It is further proposed that contentment and durable inner peace be incorporated in future studies of happiness,
alongside social relations, to determine its role in the psychology of human happiness (Dambrun et al., 2012). However, little research has used these measurement instruments developed by Dambrun et al. (2012) in their endeavours to determine the happiness of a given population (Dambrun et al., 2012; Dambrun & Ricard, 2011).

A more widely used measuring instrument of happiness studies is the Oxford Happiness Inventory (OHI) which is a broad measure of personal happiness and developed in the late 1980’s (Bekhet et al., 2008). This measurement instrument has been used cross-culturally on a worldwide platform and forms the foundation of the Chinese Happiness Inventory (Bekhet et al., 2008). The OHI has recently been improved to the (OHQ) Oxford Happiness Questionnaire containing similar items of the OHI and presented on a uniform six point Likert scale which is less susceptible to questionnaire and respondent bias (Hills & Argyle, 2002). Moreover a short-form version of the OHQ was devised for use when space and time is limited, as it uses a discriminant analyses of the full scale (Hills & Argyle, 2002). The correlation between the results of the full scale and short-from scale was greater than 0.90 and deemed highly significant, p<0.001 (Hills & Argyle, 2002). A recent Canadian study utilised the OHQ as a measuring instrument to explore the relationship between happiness and six domains, namely academic success, financial security, familial support, living environment, self-image and social relations of undergraduate students at the Nipissing University in Canada which illustrates the usefulness of the OHQ (Flynn & MacLeod, 2015).

To this date, no research used the Oxford Happiness Questionnaire or any other valid measure of happiness to determine the level of happiness of physiotherapists in the private sector of South Africa.

2.5 INTERNATIONAL AND NATIONAL TREND OF HAPPINESS

In respect of the abovementioned history, importance, determinants and measurement instruments of happiness, a rapid development in the literature of the economics and psychology of individual happiness has awakened in the last two decades since Easterlin first studied the association between income and happiness across countries over time from 1974 (Easterlin, 2003; Wang & Wong, 2014).
Due to variances in external factors such as political stability, the happiness levels of various countries will differ from one another as do their cultures differ from one another (Delle Fave et al., 2016). In a study aimed to determine and compare the levels of happiness across countries, Wang and Wong (2014) found that the US, Ireland, Mexico and Switzerland had favourable happiness scores whereas Bulgaria, Russia and Slovakia had unfavourably low happiness scores. These findings confirmed the 2013 World Happiness Report which established that Ireland, the US and Mexico ranked 18th, 17th and 16th respectively out of 156 countries measured while Switzerland ranked 3rd in global happiness rankings (Helliwell, Layard, & Sachs, 2013). In this report South Africa ranked 96th among the 156 countries measured while Bulgaria, Russia and Slovakia ranked 144th, 68th and 46th respectively (Helliwell et al., 2013).

In comparison with the 2015 World Happiness Report, it is consequently found that Switzerland has moved from 3rd to 1st in the rankings of global happiness whilst Ireland, the US and Mexico have shifted to 18th, 15th and 14th respectively since 2013 (Helliwell et al., 2015). In the 2015 World Happiness report South Africa ranked 113th out of 158 countries measured (Helliwell et al., 2015). Both the World Happiness Reports confirm Wang and Wong’s (2014) findings that the US, Ireland, Mexico and Switzerland had favourable happiness rankings and that Bulgaria, Russia and Slovakia had relatively lower scores. Bulgaria, Russia and Slovakia ranked 134th, 64th and 45th respectively in the 2015 World Happiness report with South Africa positioned at the 113th place, indicating a decline for South Africa from the 2013 World Happiness Report (Helliwell et al., 2015).

The latest rankings as per the World Happiness Report are listed in the 2016 update. The changes of rankings between the 2013, 2015 and 2016 World Happiness Report are graphically presented in Figure 2.2 below. The figure illustrates the further decline of South Africa from 113th place in the 2015 report to 116th in the 2016 report (Helliwell, Layard, & Sachs, 2016). Denmark takes the first place in the latest report, shifting Switzerland to second place (Helliwell et al., 2016). Furthermore, the countries referenced above (US, Ireland, Mexico, Bulgaria, Russia and Slovakia) are also graphically presented in the chart, indicating the fluctuations of their ranked happiness.

30

Adapted from (Helliwell et al., 2013, 2015, 2016)

**Figure 2-2: Changes in Happiness Ranking.**

The decline of overall national happiness in South Africa serves as a foundation to investigate the decline of happiness levels of the South African population. In order to improve the happiness levels of the South African population, further research needs to be undertaken in various segments and industries of South Africa to determine the current state of extrinsic and intrinsic variables that are presently affecting the nation’s state of wellbeing. This treatise therefore aims to contribute to the limited existing happiness research in South Africa by assessing the happiness levels in the medical sector and its medical staff, specifically of private physiotherapists across the nine provinces.

### 2.6 HAPPINESS LEVELS IN THE MEDICAL SECTOR

Although happiness is an important phenomenon in research, few studies that pertain to the happiness of medical professionals were found in literature. This is supported by a study in 2008 that aimed to explicate the concept of happiness through examining its determining factors, antecedents, consequences and measurement in the nursing sector (Bekhet et al., 2008). The study confirmed that there was limited research on
happiness in the medical sector that appears to be useful in developing strategies that can be tested to enhance the happiness levels of medical staff (Bekhet et al., 2008). Similarly, a recent study in the US that did comparative analyses of happiness interventions in Medical-Surgical nurses found that research was very limited in the literature of happiness that pertained to medical staff such as nurses (Appel et al., 2013). As a solution the researchers reviewed studies with other populations that were published after 2000 (Appel et al., 2013).

However, there has been a surge in the nursing sector of Southern Africa to determine the levels of happiness of nurses due to many public nurses leaving the state health system to either work abroad or enter the private healthcare industry nationally or abroad (Pietersen, 2005). Furthermore, Pietersen (2005) recommends that future research focus on other populations of healthcare staff across South Africa, with regard to different health care settings, institutions and parts of South Africa.

In the UK, an attempt was made to study the quality of life of health care professionals that also documented the poorly defined outcome and research of the happiness/quality of life of health care professionals (McKevitt et al., 2003). In their study a total of 72 percent of respondents of 1572 health care professionals returned questionnaires whereby they defined quality of life in terms of happiness (McKevitt et al., 2003). McKevitt et al. (2003) concluded that quality of life and happiness may be used in the technical sense as well as the colloquial sense without having the need to distinguish between the two concepts.

This supports the previously mentioned findings articulated above that happiness, quality of life and life satisfaction are used interchangeably in literature (Degutis & Urbonavicius, 2013; McKevitt et al., 2003; Scorsolini-Comin & Dos Santos, 2010).

McKevitt et al. (2003) sampled elderly Physicians, Occupational Therapists and Physiotherapists in their study, which sought the health care professional’s view of the meaning of quality of life and the purposes of quality of life assessment. The study concluded that health care workers in the UK dominantly view quality of life as an alternative expression to happiness.

In India, a comparative study of the ‘happiness index’ of medical and paramedical students found that many physiotherapy students were happy with their present life
while nursing and medical students were less happy (Chimanlal, 2015). Chimanlal (2015) discovered that in this sample of students the main determining factors of happiness were social relations, leisure activities and nature. Interestingly, Chimanlal (2015) found that the highest sub-group score about self-perception was seen in physiotherapy students in comparison to medical and nursing students. Although physiotherapy students were happier, the study concluded that the overall average happiness score of all three groups were similar and that 32 to 40 percent of the subjects were unhappy, scoring below the desirable index of 73 (Chimanlal, 2015).

In all of the literature reviewed, it is evident that in South Africa there is no literature available on the level of happiness of private physiotherapists or of public physiotherapists. However, there are limited findings of happiness studies in the nursing sector internationally and nationally in South Africa. This treatise is therefore the first attempt to determine the happiness levels of private physiotherapists in South Africa and contributes to the growing knowledge database of happiness studies in the medical sector. Results from this study will serve further studies in their attempts to develop and test models that will enhance the happiness of private physiotherapists, develop retention strategies and fuel a happier workforce that in turn will promote improved healthcare services, contribution to multidisciplinary teamwork and foster a high performing work system.

2.7 SUMMARY

This chapter reviewed the limited literature available on happiness within the healthcare sector. The limited research on happiness has been confirmed by various efforts in literature that have attempted to investigate the levels of happiness of several populations of healthcare workers to date (Appel et al., 2013; Bekhet et al., 2008; McKevitt et al., 2003).

The rationale behind investigating happiness in industries, individuals and nationally, as well as their disparaging arguments, were assessed in relation to the literature associated with the importance, determinants and measuring instruments of happiness studies. Various definitions of happiness were discussed, of which the indicator view has been chosen as most relevant to this treatise. The indicator view, which proposes that happiness serves as an indication of changes in wellbeing, was
founded on supporting arguments from literature stating that the construct of subjective wellbeing is in fact conceived as the study of happiness whereby the individual evaluates his or her own life. The domains of subjective wellbeing, happiness and quality of life may be used interchangeably in literature and are widely accepted by authors despite the fact that they are separable constructs (Frey et al., 2008; Rodríguez-Muñoz & Sanz-Vergel, 2013; Scorsolini-Comin & Dos Santos, 2010; Wren-Lewis, 2014).

The importance of happiness studies was discussed with emphasis on its benefit to industry, society and economics. It was established that happier workers are in fact more productive than their less happier colleagues (Pryce-Jones & Lindsay, 2014). The motivation theory of Herzberg was introduced in support of literature stating that the work environment is influential in creating happier workers (Salmela-Aro & Nurmi, 2004), which is associated with the hygiene factors of Herzberg's motivation theory (Tietjens et al., 2003; Herzberg, 2003). With regard to the importance of happiness studies, it is stated that although economic growth does improve the happiness of society (Ashkanasy, 2011), a decline of economic strength certainly does negatively affect the level of happiness of society (Frey et al., 2008).

It is proposed that individual happiness should be the core focus of economics, as it serves as a better proxy than income to evaluate human welfare (Frey et al., 2008). The determinants of happiness has been confirmed by the World Health Report (2015) as income, employment, inflation, personality traits, social demographics, political and institutional factors (Helliwell et al., 2015). However, various literature endorses that social relations, durable inner peace and contentment should be included in future endeavours of happiness studies, alongside the standard determinants of happiness (Dambrun et al., 2012; Frey et al., 2008; Helliwell et al., 2015). However, in the South African context, determinants such as marital status and age were found not to be of great influence on happiness in the Greater Durban area (Hinks & Gruen, 2007).

Furthermore, this chapter introduced a new measurement instrument of happiness, amongst older measurement instruments, that proposes to include durable inner peace and content alongside social relations aspects. The instrument was constructed to measure the differences between fluctuating happiness and authentic durable happiness (Dambrun et al., 2012), nevertheless further measurement instruments that
pertain to this study are discussed in chapter 3. The decline of happiness levels in South Africa from the 2013 to 2016 report urges the need for further happiness studies to be undertaken so that economists can evaluate the current situation and develop appropriate national policies that may improve the level of happiness within the nation. Hence, further studies of various populations need to be undertaken with regard to industry, societal and economical fields. In conclusion, due to the limited research available on happiness in the healthcare sector and the absence of happiness research on private physiotherapists in South Africa, this research treatise aims to determine the level of happiness of private physiotherapists in South Africa. The independent variables selected to determine the happiness levels of private physiotherapists in South Africa were identified in light of the key aspects reviewed in this chapter thus far, namely: influence, social relations, purpose, life balance, optimism, work and leisure.

The next chapter will address the research design and discuss the methodology used to conduct the research required to meet the aims and research objectives of this treatise. Any difficulties faced during the implementation of the research design and collection of data will be discussed to assist future endeavours of those who wish to pursue conducting research in happiness of private healthcare professionals such as the selected target market of private physiotherapists in South Africa.
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The previous chapter discussed key concepts to this treatise such as the correlation between subjective wellbeing, life satisfaction and happiness. Chapter 2 addressed RQ₁ that explores the definitions, determinants and importance of happiness research and RQ₂ that queries the trend of happiness in the national, international and relative medical sector pertaining to private physiotherapists. Complementary to the above research questions, the previous chapter similarly traversed discussions regarding RQ₃ that examines the various happiness levels from a global, national and medical perspective including mentioning various instruments used to measure happiness across various disciplines. Hence, Chapter 2 achieved the respective research objectives, namely RO₁+₂+₃.

This chapter will address RQ₄ that asks, “What research design technique will be used in this study?” and addresses the objective of explaining the research methodology used in this research study with sufficient detail to allow it to be reproduced in future (RO₄). Error! Reference source not found. illustrates a synopsis of this chapter and is accompanied by the RQs and ROs of this chapter in Error! Reference source not found.1.

In Section Error! Reference source not found. research definitions and the various paradigms will be defined, discussed and the paradigm of this study will be identified. Section Error! Reference source not found. defines the literature review addressed in Chapter 2, to explain the purpose of literature review and the process followed for this study. Section Error! Reference source not found. formulates the various hypotheses for this research. Section 3.5 to section 3.7 critically discusses the survey design, the survey respondents and the data collection and analysis methods utilised respectively. Lastly, Section 3.8 and Section 3.9 discuss the limitations of the research methodology and the reliability and validity factors, before concluding the chapter with a summary of the research design and methodology.
Table 3-1: Research question and objective

<table>
<thead>
<tr>
<th>RESEARCH QUESTION</th>
<th>RESEARCH OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1: What research design technique will be used in this study?</td>
<td>RO1: Explain the research methodology used in this treatise with sufficient detail to allow it to be reproduced in future.</td>
</tr>
</tbody>
</table>

3.2 RESEARCH

3.2.1 Definition of Research

Research may be defined in parlance as the search for knowledge; to find the causal relationship between occurrences; or academically as the scientific and systematic search for pertinent information on a specific topic (Johnston, 2014; Kothari, 2004). Although these may appear to be simple explanations, literature suggests that there is confusion regarding the common understanding of research amongst individuals when the topic is discussed (Pitcher & Åkerlind, 2009; Leedy & Ormrod, 2010).
However, for clarification purposes of this treatise the term “research” shall be defined as the process of “enunciating a problem, formulating a hypothesis, gathering and analysing the data to reach a viable conclusion for the purposes of establishing a solution to a problem or to formulate and prove a theory” (Kothari, 2004: 2).

In addition to the proposed research definition, it is recommended that research projects should possess four main phases, namely:

- Planning the research;
- Acting in the fieldwork;
- Observing and evaluating the fieldwork; and
- Reflecting on the results in comparison to literature reviewed to substantiate the research argument and contribute to the knowledge within the field (Zuber-Skerritt & Fletcher, 2007).

Furthermore, Zuber-Skerrit and Fletcher (2007) stated that quality research should include:

- Solving a real complex problem;
- The research should enable action;
- Contribute to knowledge in theory and practice; and
- Must have an appropriate argument throughout the paper, provide evidence of claims and be ethical (Zuber-Skerritt & Fletcher, 2007).

Correspondingly, for the purposes of this treatise the notion of the following research principles will be followed in conjunction with the definition of Kothari (2004). According to Leedy and Omrod (2010), regardless of the research paradigm, there are eight key characteristics to what is accepted as good research, namely that:

- Research starts off with a specific question or problem;
- Research requires clear verbalisation of an objective;
- Research needs to follow a defined process;
- Research normally subdivides the main research questions or problem into smaller, more manageable sub-problems or questions;
- Research is directed by the specific question or problem it intends to solve;
• Research accepts that certain crucial assumptions are required;
• Research requires the collection, analysis and interpretation of data; and
• that research is cyclical by nature (Leedy & Ormrod, 2010).

In this section, the agreed definition for research has been established outlining the typical process which this treatise has followed. The next section discusses the various research paradigms and highlights the selected research paradigm for this treatise.

### 3.2.2 Research Paradigms

The research approach, paradigm or design undertaken by a researcher primarily refers to the rationale of the way that research is to be conducted (Johnston, 2014).

The research design represents the master plan of the methods and procedures for collecting and analysing data and is a blueprint for accomplishing the set research objectives and answering research questions (Blumberg, Cooper, & Schindler, 2009; Zikmund, Babin, Carr, & Griffin, 2010). The starting point of the research design is to determine the research paradigm, which is a framework for how the research should be completed and begins with the concept of research definitions described in section 3.2.1. The approach or research paradigm following the research design may either be characterised as quantitative, qualitative or a mixed paradigm approach (Collis & Hussey, 2013; Creswell, 2003; Johnston, 2014).

#### 3.2.2.1 Qualitative Research

Qualitative research approaches are characterised by emerging methods and emancipatory assumptions, with a typical narrative design and open-ended interviewing data which is subjective in nature, viewed as a phenomenological paradigm and has data which is analysed using interpretative methods (Amaratunga et al., 2002; Collis & Hussey, 2003, 2013; Creswell, 2003; Zikmund et al., 2010).

This research approach is indicative of subjective assessments of attitudes, behaviour and opinions (Kothari, 2004). In this instance the researcher interacts with what is being researched as the researcher cannot separate what exists in the social world from what is in the researcher’s mind (Collis & Hussey, 2003, 2013; Creswell, 2003; Kothari, 2004).
The research therefore produces mostly non-quantitative data formulated from focus group interviews, projective techniques and in-depth interviews (Amaratunga et al., 2002; Creswell, 2003; Kothari, 2004). This data are collected in an interpretative method and an inductive process that is rich in detail and nuance, due to the emphasis placed on quality and depth of the data collected about the researched phenomenon (Collis & Hussey, 2003, 2013; Creswell, 2003). Qualitative research is often criticised for being too subjective, susceptible to bias during data collection and results cannot be generalised to a larger population (Collis & Hussey, 2003, 2013).

Furthermore, the nature of qualitative research is associated with high validity and low reliability; used to generate theories using small samples (Collis & Hussey, 2003, 2013). Figure 3.2 illustrates the pathway of qualitative paradigm studies.

![Figure 3-2: Qualitative paradigm (Adapted from Creswell (2003).)](image)

### 3.2.2.2 Quantitative Research

In comparison to a qualitative approach, quantitative research is based on a positivistic paradigm with an experimental design inquiry, measuring attitudes or rating behaviour via closed ended questions, numerical analysis (whereby data is collected on predetermined instruments which yield statistical data) and characterised by
predetermined methods; which are objective and viewed as a positivistic paradigm (Amaratunga et al., 2002; Collis & Hussey, 2003, 2013; Creswell, 2003).

This research approach is based on the measurement of the quantity whereby the phenomena researched can be expressed in numerical terms to determine the relationship between a dependent variable and its independent variables within a given population (Creswell, 2003; Hopkins, 2000; Kothari, 2004). In respect to the above definitions, the researcher in this instance is independent from that being researched (Collis & Hussey, 2003, 2013), dissimilar to the qualitative approach.

![Quantitative paradigm: Adapted from Creswell (2003)](image)

**Figure 3-3: Quantitative paradigm: Adapted from Creswell (2003)**

However, quantitative research with a highly constructed research design can be criticised for imposing constraints on the results and thereby losing information that is relevant, interesting and of value for future research (Collis & Hussey, 2003, 2013).

In addition, quantitative research is accompanied with high reliability and low validity in nature; with data that are specific and precise in order to test theories and generalise from the sample in order to infer to the greater population (Collis & Hussey, 2003, 2013). Figure 3.3 illustrates the pathway of quantitative paradigm studies.
3.2.2.3 Mixed Research

Figure 3.4 illustrates the pathway for mixed method paradigm studies.

![Mixed Methods Paradigm](image)

**Figure 3-4: Mixed methods paradigm: Adapted from Creswell (2003)**

In this approach, the researcher utilises both qualitative and quantitative data collection methods in order to provide the best understanding of the proposed research problem (Creswell, 2003). The researcher establishes a purpose to validate why both quantitative and qualitative methods of collection are to be used for the research methodology and is as result implemented within a pragmatic view as the inquirer draws on both qualitative and quantitative views when engaging in the research at hand (Amaratunga et al., 2002; Creswell, 2003).

3.2.3 Research Paradigms for this Study

This treatise lies within the positivistic model and therefore a quantitative research paradigm will be utilised to measure the levels of happiness of private physiotherapists in South Africa. The primary objective of the research is to explore the levels of happiness of private physiotherapists in South Africa and subsequently explore the causal relationship between the dependent variable “happiness” and its independent
variables “Influence, Social relations, Life balance, Purpose, Optimism, Work, and Leisure.”

Furthermore, the benefits of utilising this positivistic approach are that the researcher may cover a wider range of situations; conduct research in a fast and economical way and provide considerable relevance to policy makers where statistics are aggregated from large samples (Amaratunga et al., 2002).

Quantitative analytical tools will be utilised to analyse the quantitative data gained from the respondents. For further clarity, Section 3.7 briefly mentions what these quantitative tools are and are further described in detail in Chapter 4.

3.3 LITERATURE REVIEW

3.3.1 Literature Review Defined

According to Rowley and Slack (2004), a literature review aims to identify and organise the appropriate concepts within the relevant literature. The literature review extracts relevant information from the existing body of knowledge within a subject field; whereby the primary objective is to summarise the reviewed literature and identify the areas where further research will be beneficial and therefore substantiate work within the context of previous findings (Jaidka, 2013; Rowley & Stack, 2004). A more concise definition proposes that a literature review is a summarised document of a set of researched papers (Jaidka, 2013). This summary should be focused and seamlessly integrated into the research propositions and methodologies that follow (Rowley & Stack, 2004).

The set of researched material from which a literature review draws its information are located in books, journals and all manner of research writing such as archival sources whereby the contemporary and significant research are compared against each other to support the hypothesis of the treatise being conducted (Collis & Hussey, 2013; Jaidka, 2013).

To produce a literature review, one should thoroughly evaluate information sources, search and locate information sources, develop conceptual frameworks and then write the literature review accordingly (Rowley & Stack, 2004). In respect of the above
definitions, the literature reviewed in this treatise to be found in chapter 2 has set out to integrate information from several studies in a condensed fashion whereby the evaluation and comparisons conducted refer to the research gap identified. The research gap identified was that there is no research done to investigate the happiness levels of private physiotherapists in the South African medical sector.

3.3.2 Purpose of Literature Review

The primary purpose of a literature review is to distinguish what has been done and identify gaps in research for what could still be done and build an understanding of theoretical concepts and terminology (Jaidka, 2013; Rowley & Stack, 2004). The function of conducting a literature review also assists the researcher to (Jaidka, 2013; Rowley & Stack, 2004):

- distinguish what has been done and gaps for what could still be done and build an understanding of theoretical concepts and terminology;
- identify important variables that are relevant to the researched topic such as identifying the research topic, question or hypothesis;
- synthesise previous results and ideas to formulate a new perspective and therefore enable information to be identified that contributes to contextualising of the new perspective gained;
- identify predominant methodologies and research techniques that have been successfully and unsuccessfully utilised; and to
- position the research into context with the most recent developments through the analysing and interpretation of previous results.

As a result of the above points, the literature review allows the researcher to substantiate various views against each other and ultimately builds credibility to the research through developing a library of references in the form of a bibliography (Rowley & Stack, 2004).

3.3.3 Literature Review Process for this Study

In order to efficiently explore literature and review the source information found for this treatise, a conceptual framework and mind map were initiated and refined with
assistance from the supervisor. The conceptual framework is illustrated in Figure 3.5 below.

Once the mind map, referred to as the research alignment plan (RAP), was approved, a conceptual framework was established to drive the search of appropriate source information. The conceptual framework represents a picture of the territory under study, representing the concepts in that area and the relationship between them (Rowley & Stack, 2004). Utilising the RAP and conceptual framework allowed the researcher to:

- Identify additional search items during the literature search;
- Clarify thinking about the structure of the literature prior to writing the review; and
- Better understand the theory, concepts and the relationships between them (Rowley & Stack, 2004).

Following the approved RAP and conceptual framework, the researcher set out to search for the most relevant, recent and significant literature to aid the study. The key sources of information were retrieved from the Nelson Mandela Metropolitan University (NMMU) online library database, google scholar, Mendeley as well as textbooks.

The search strategies implemented to search for the source information for this treatise may be described as:

- **Brief search**: as a starting point, prior to the citation pearl growing technique, literature thought to provide benefit to the treatise was crudely and quickly acquired;
- **Citation pearl growing**: Using the first relevant documents found to generate further necessary key words which are derived from these initial documents. Either key words from within the document, title or reference list have been utilised to further procure additional important source information;
- **Building blocks**: the concepts used in the search statement were modified by using synonyms and related theoretical terminology, allowing the researcher to
gain an extensive list of source information to compare, evaluate and utilise (Rowley & Stack, 2004).

To assist in the collection, filing and referencing of the online source information a software programme named “Mendeley” was utilised to allow for efficient storage of literature. The benefits of using the Mendeley software programme aided the researcher with the following aspects:

- **Online synchronisation and storage**: Besides keeping records up to date and synchronising the source information this benefitted the researcher by allowing access to the central stored data from any laptop, personal computer or tablet provided internet usage was available.

- **Citation manager**: this feature allowed correct referencing of the source referencing via a Microsoft Word plugin of the Mendeley account. The selected referencing style for this treatise is the APA 6TH edition. Once the referenced author is selected via this feature, the application inputs the correct in-text referencing as well simultaneously updating the reference list seen in Section 6.

- **Electronic notes**: the researcher was able to make notes for future reference within the saved document and highlight specific data of importance.

- **Online library**: The online software application also hosts a variety of literature available for the researcher to peruse and confirm correct referencing of data sourced from the primary databases used such as “Emerald” which is available via the NMMU online library catalogue.

- **Searchable tags**: by adding selected key words to the selected highlighted data in the saved documents, the researcher was able to promptly locate applicable sections (Mendeley, 2009).

Once the data were selected, processed and reviewed the proposed literature review was finalised with the necessary input and approval of the researcher’s supervisor. The final literature review applicable to this treatise is found in Chapter 2. Figure 3.5 demonstrates the conceptual framework which was created to initiate this treatise. The conceptual framework illustrated in figure 3.6 illustrates the causal relationship of the
independent variables and dependent variable which encompass the survey used to collect data from the targeted respondents of this treatise.
Figure 3-5: Conceptual Framework (Authors own construct, 2016)
3.4 RESEARCH HYPOTHESIS

This section describes the proposed hypotheses for this treatise, derived from the conceptual framework illustrated in figure 3.5, which represents the variables used to determine the levels of happiness of the Private Physiotherapists in South Africa. The formulated hypotheses shall be accepted or rejected by means of empirical analyses via statistical procedures to be outlined and documented in chapter 4 and support conclusions drawn in chapter 5.

The following hypotheses have been developed in alignment with the conceptual framework to establish the relationship between the dependent variable and independent variables in relation to this treatise:

3.4.1 Influence

H0₁: “Influence” exerts no effect on happiness.

HA₁: “Influence” exerts a positive effect on happiness.

3.4.2 Social Relations

H0₂: “Social Relations” exert no effect on happiness.

HA₂: “Social Relations” exert a positive effect on happiness

3.4.3 Life Balance

H0₃: “Life Balance” exerts no effect on happiness.

HA₃: “Life Balance” exerts a positive effect on happiness.

3.4.4 Purpose

This variable was removed due to a poor Cronbach Alpha score as displayed in table 3.4.

H0₄: “Purpose” exerts no effect on happiness.

HA₄: “Purpose” exerts a positive effect on happiness.
3.4.5 Optimism

H$_0$: “Optimism” exerts no effect on happiness.

H$_A$: “Optimism” exerts a positive effect on happiness.

3.4.6 Work

H$_0$: “Work” exerts a positive effect on happiness.

H$_A$: “Work” exerts no effect on happiness.

3.4.7 Leisure

H$_0$: “Leisure” exerts a positive effect on happiness.

H$_A$: “Leisure” exerts no effect on happiness.

The results obtained in chapter 4 is derived from the survey questionnaire conducted in this section. Figure 3.6 graphically illustrates the hypothesised model.
3.5 SURVEY DESIGN

3.5.1 Survey Research Defined

Surveys represent studies whereby quantifiable data are collected from a population or a subset of a population through questionnaires or interviews (Brzycki, 2014). Surveys typically relate to social research and have the potential to elicit powerful data from a captive audience, considering that the survey is conducted in an efficient and holistic approach (Boari & Ruscone, 2015; Elias, 2015). Surveys are often the best way to determine the actual facts about a certain population in question (Janes, 1999). This is a commonplace research tool whereby the population may denote to communities, organisations or a profession (Janes, 1999; McClelland, 1994). The data collected from the population may be subjective or objective whereby the combination...
of weighting between the questions as well as responses must be maintained in order to remain unbiased (McClelland, 1994).

The primary advantage of using survey questionnaires over other types of data collection is that the respondents from various geographical locations do not need to assemble in one place, as the survey may be electronically distributed to the intended target population (McClelland, 1994). Amongst other advantages, using this method of data collection in non-intrusive, bias is minimised and does not require lengthy time to complete (McClelland, 1994). According to McClelland (2006), research shows that simplicity will positively increase the rate of return as well as response accuracy. However, in order to counter bias, researchers need to craft the questionnaire in such a manner that all respondents will be able to interpret, answer accurately and complete it timeously (Moy & Murphy, 2016).

Section 3.5.2 below outlines the questionnaire description for this treatise.

3.5.2 Questionnaire Design

According to recent research, a good survey design follows the basics of firstly identifying the objectives of the study; secondly to write well-constructed questions derived from the objectives; thirdly to determine the format of the response options and fourthly to format the survey (Elias, 2015). Section 3.5.2.1 to section 3.5.2.4 below will elaborate on how the questionnaire used in this treatise has been designed in relation to the points highlighted by Elias (2015).

3.5.2.1 Identifying the objectives

The objectives of this questionnaire are derived from the conceptual framework and research alignment plan, which have been highlighted in the beginning of this chapter in section 3.1 and 3.3. As discussed in section 3.2.3, the primary objective of the questionnaire aims to explore the levels of happiness of private physiotherapists in South Africa and subsequently explore the causal relationship between the dependent variable “happiness” and its independent variables “Influence, Social relations, Life balance, Purpose, Optimism, Work, and Leisure”.
The objectives gave rise to determining the target audience as well as the target population (Elias, 2015). The target population is described in section 3.6.

3.5.2.2 Writing well-constructed questions

These questions are based on the set objectives of the treatise and relate to the determinants of subjective wellbeing and their projected causal relationship with subjective wellbeing. The questions were selected from previous reliable literature to ensure that the questionnaire to be utilised is clear and unambiguous, free of bias and respectful toward the respondents’ privacy (Elias, 2015). The source of the questions used will be discussed in section 3.5.3.

3.5.2.3 Format

The Likert scale was predominantly utilised in this research questionnaire. Likert scales are typically used in the social science industries to measure opinion-based questions whereby the respondents are encouraged to evaluate their preference, attitudes or subjective feelings onto the scale (Boari & Ruscone, 2015; Elias, 2015; Hartley, 2013). However, Likert scales may cause distortion effects such as bias in the form of central tendency bias, social desirability bias and acquiescence bias (Boari & Ruscone, 2015). As most literature in clinical and health psychology utilise Likert scales (Hartley, 2013), the researcher has chosen to set the questionnaire utilised with Likert scale questions.

The format of the research questionnaire for this study follows the process of order regards to Elias (2015):

- Introduction: Introducing the university, supervisor, researcher and research topic as well as providing instructions;
- Questions were logically inserted and grouped accordingly;
- The questions utilised are short in nature; and
- Conclusion: Thanking the respondent for their time and participation.

The introduction to this questionnaire invited the respondents to understand the rationale behind the study and highlighted the mutual benefit to the respondent as well as the applicable healthcare industry. In addition to the research topic, the
respondent’s attention was drawn to the confidentiality statement and furnished with instructions on how to answer the questions to follow.

The questionnaire consists of two main divisions following the introduction, whereby the first division (section A) captured the demographic aspects of the target population. This section therefore collected data pertaining to age, gender, tenure, geographical location and education through 7 questions.

The next division (section B to section G) collected data of the independent and dependent variables. This section had a total of 56 questions. Section B to section G utilises Likert scale questions to capture the respondent’s perception of the independent variables as well as the dependent variable identified for this treatise. The independent variables are derived from the determinants of happiness which are discussed in chapter 2.

3.5.3 Questionnaire Scale, Validity and Reliability

As discussed in the previous section, this research questionnaire makes use of Likert scale questions to capture the respondent's answers. Furthermore, 5 point Likert scales will be utilised throughout section B to section G, whereby respondents are required to react toward the statements by indicating their answer on the 5 point Likert scale provided. Table 3.2 represents the Likert scale used to determine level of agreement or disagreement experienced by the respondent and is weighted as follows:
Table 3-2: LIKERT Scale Question

| Strongly Agree [5]: indicates that you strongly agree with the statement made. |
| Somewhat Agree [4]: indicates that you are in fair agreement about the statement |
| Neutral [3]: indicates that you do not agree or disagree with the statement. |
| Somewhat Disagree [2]: indicates that you are in fair disagreement with the statement made. |
| Strongly Disagree [1]: indicates that you strongly disagree with the statement made |

Information gained from the literature review was utilised to construct the questionnaire of this treatise. Survey items were gathered from electronic journal articles that relate to the study at hand in order to improve the reliability and validity of the research questionnaire. This information was collated into a operationalisation table illustrated below in Section 3.5.3.1 and discussed with the research supervisor of this treatise.

Once the operationalisation factors were approved, the survey questionnaire was compiled into the above stated format and sent to the research supervisor for final approval before being sent to the target population. These operationalisation factors are illustrated in table 3.2 below. The target survey population and the distribution process will be described below in section 3.6.

3.5.3.1 Operationalisation Factors

Table 3.3 displays the operationalisation factors of the questionnaire used for this treatise and includes the source of the factor to strengthen the validity of the questionnaire.
Table 3-3: Operationalisation Factors (Authors own construct)

<table>
<thead>
<tr>
<th>QUESTION STATEMENT</th>
<th>SOURCE OF ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable: Happiness</td>
<td></td>
</tr>
<tr>
<td>Operationalisation: In this study, happiness refers to one’s judgement of the overall quality of his own life-as-a-whole as favourable.</td>
<td></td>
</tr>
<tr>
<td>1. I often experience joy.</td>
<td>(Hills &amp; Argyle, 2002)</td>
</tr>
<tr>
<td>2. Life is good.</td>
<td>(Hills &amp; Argyle, 2002)</td>
</tr>
<tr>
<td>3. I am satisfied with my life.</td>
<td>(Hills &amp; Argyle, 2002)</td>
</tr>
<tr>
<td>4. In general, I consider myself a happy person.</td>
<td>(Lyubomirsky &amp; Lepper, 1999)</td>
</tr>
<tr>
<td>5. Compared to others I appear to be happier.</td>
<td>(Lyubomirsky &amp; Lepper, 1999)</td>
</tr>
<tr>
<td>6. I am generally happy and enjoy life regardless of what is going on.</td>
<td>(Lyubomirsky &amp; Lepper, 1999)</td>
</tr>
<tr>
<td>Independent variable: Influence</td>
<td></td>
</tr>
<tr>
<td>Operationalisation: In this study, influence refers to the capacity to have an effect on the character, development, or behaviour of someone or something, or the effect itself.</td>
<td></td>
</tr>
<tr>
<td>1. I have great influence on how I perform my tasks.</td>
<td>(Happiness Research Institute, 2015)</td>
</tr>
<tr>
<td>2. I have great influence on how my tasks are structure and planned?</td>
<td>(Happiness Research Institute, 2015)</td>
</tr>
<tr>
<td>3. I exert great influence at my workplace?</td>
<td>(Happiness Research Institute, 2015)</td>
</tr>
<tr>
<td>4. I have great influence on important decisions that affect my work</td>
<td>(Happiness Research Institute, 2015)</td>
</tr>
<tr>
<td>5. I have considerable influence on the strategy in my workplace.</td>
<td>(Happiness Research Institute, 2015)</td>
</tr>
<tr>
<td>6. In general, I have control over the important elements of my job.</td>
<td>(ACME, 2013)</td>
</tr>
<tr>
<td>Independent Variable: Social Relations</td>
<td></td>
</tr>
<tr>
<td>Operationalisation: In this study, Social Relations refers to how much value one places on the love and support of one’s colleagues.</td>
<td></td>
</tr>
<tr>
<td>1. I feel part of the social network at my work</td>
<td>(Happiness Research Institute, 2015)</td>
</tr>
<tr>
<td>2. I have very good friends at work.</td>
<td>(ACME, 2013)</td>
</tr>
<tr>
<td>QUESTION STATEMENT</td>
<td>SOURCE OF ITEMS</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>3. In general, I get along well with my manager.</td>
<td>(ACME, 2013)</td>
</tr>
<tr>
<td>4. I like the people within my workplace.</td>
<td>(ACME, 2013)</td>
</tr>
<tr>
<td>5. I receive help and support from my colleagues when I need it in general.</td>
<td>(ACME, 2013)</td>
</tr>
<tr>
<td>6. In general I would say the job I do is beneficial to society.</td>
<td>(ACME, 2013)</td>
</tr>
</tbody>
</table>

**Independent Variable: Life Balance**

Operationalisation: In this study, Life Balance encompasses positive self-reported indications of an individual’s wellbeing.

<table>
<thead>
<tr>
<th>QUESTION STATEMENT</th>
<th>SOURCE OF ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In most ways my life is close to my ideal way of living.</td>
<td>(E Diener, Emmons, Larsen, &amp; Griffin, 1985)</td>
</tr>
<tr>
<td>2. The conditions of my life are excellent.</td>
<td>(E Diener et al., 1985)</td>
</tr>
<tr>
<td>3. I am satisfied with my life.</td>
<td>(E Diener et al., 1985)</td>
</tr>
<tr>
<td>4. So far I have gotten the important things I want in life.</td>
<td>(E Diener et al., 1985)</td>
</tr>
<tr>
<td>5. If I could live my life over, I would change almost nothing.</td>
<td>(E Diener et al., 1985)</td>
</tr>
</tbody>
</table>

**Independent Variable: Purpose**

This variable was removed due to a poor Cronbach Alpha score

Operationalisation: In this study, purpose incorporates the meaning of life and the alignment of one's work with their belief structure.

<table>
<thead>
<tr>
<th>QUESTION STATEMENT</th>
<th>SOURCE OF ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My work is aligned with my purpose in life.</td>
<td>(Happiness Research Institute, 2015)</td>
</tr>
<tr>
<td>2. At the end of the day, I often feel that I have not accomplished what I had set out to do.</td>
<td>(Pennock &amp; Ura, 2006; Veenhoven, 2004)</td>
</tr>
<tr>
<td>4. In achieving life goals, I have progressed to complete fulfilment.</td>
<td>(Crumbaugh &amp; Maholick, 1964)</td>
</tr>
<tr>
<td>5. After retiring, I would loaf completely the rest of my life</td>
<td>(Crumbaugh &amp; Maholick, 1964)</td>
</tr>
<tr>
<td>6. After retiring I would do some of the things I've always wanted to do.</td>
<td>(Burke, 1964)</td>
</tr>
<tr>
<td>QUESTION STATEMENT</td>
<td>SOURCE OF ITEMS</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Independent Variable: Optimism</strong></td>
<td></td>
</tr>
<tr>
<td>Operationalisation: In this study, optimism refers to the strength of one's conviction that things will always turn out well.</td>
<td></td>
</tr>
<tr>
<td>1. When I do something, I expect to succeed.</td>
<td>(Myers &amp; Diener, 1995)</td>
</tr>
<tr>
<td>2. I always expect the best outcome.</td>
<td>(Lai &amp; Yue 2000; McFarland 2009)</td>
</tr>
<tr>
<td>3. I always expect things to go my way.</td>
<td>(Lai &amp; Yue 2000)</td>
</tr>
<tr>
<td>4. I am optimistic about my future.</td>
<td>(Lai &amp; Yue, 2000; McFarland, 2009)</td>
</tr>
<tr>
<td>5. I expect that I will do well in most things I try.</td>
<td>(Schutte, Malouf Hall, Haggerty, Cooper, Golden &amp; Dorheim, 1998)</td>
</tr>
<tr>
<td><strong>Independent Variable: Work</strong></td>
<td></td>
</tr>
<tr>
<td>Operationalisation: In this study, happiness at work refers the notion that paid work and personal life should be seen less as competing priorities than as complementary elements of a full life.</td>
<td></td>
</tr>
<tr>
<td>1. I would say that my job is stressful.</td>
<td>(ACME, 2013)</td>
</tr>
<tr>
<td>2. In general, I would say I feel motivated to do the best I can in my job.</td>
<td>(ACME, 2013)</td>
</tr>
<tr>
<td>3. In general, I would say that I feel happy when I am at work.</td>
<td>(ACME, 2013)</td>
</tr>
<tr>
<td>4. My job offers good prospects for progressing in my career.</td>
<td>(ACME, 2013)</td>
</tr>
<tr>
<td>5. I am able to learn new skills at work.</td>
<td>(ACME, 2013)</td>
</tr>
<tr>
<td>6. I receive regular and constructive feedback on my performance.</td>
<td>(ACME, 2013)</td>
</tr>
<tr>
<td>7. I feel trusted by my manager.</td>
<td>(ACME, 2013)</td>
</tr>
<tr>
<td>8. It is important to achieve a balance between work and personal life.</td>
<td>(Manfredi &amp; Holliday, 2004)</td>
</tr>
<tr>
<td>10. Work Life Balance is entirely an individual responsibility</td>
<td>(Manfredi &amp; Holliday, 2004)</td>
</tr>
</tbody>
</table>
12. Work Life Balance is partly an employer and partly an individual responsibility
   (Manfredi & Holliday, 2004)

13. People have different needs at different stages of their life
   (Tobergte & Curtis, 2013)

14. I often miss out on quality time with my family or friends because of work pressures
   (Tobergte & Curtis, 2013)

Independent Variable: Leisure

Operationalisation: In this study, leisure refers to how important and enjoyable one judges his/her leisure activities.

1. My leisure activities are important to me.
   (Beggs & Elkins, 2010)

   (Beggs & Elkins, 2010)

3. My leisure activities help me to stay healthy.
   (Beggs & Elkins, 2010)

4. My leisure activities contribute to my emotional wellbeing.
   (Beggs & Elkins, 2010)

5. My leisure activities have helped me to develop close relationships.
   (Beggs & Elkins, 2010)

6. I often use my free time to develop and learn new skills
   (Wang & Wong, 2014)

7. I often think of work in my spare time.
   (Wang & Wong, 2014)

Section 3.3 illustrated the conceptual framework that displays the variables utilised in the questionnaire for this treatise. The independent variables identified in the table above below: purpose, social relations, influence, life balance, optimism, work, and leisure (Burke, 1964; Diener et al., 1985; Hills & Argyle, 2002; Institute, 2015; Lyubomirsky & Lepper, 1999; Manfredi & Holliday, 2004; Myers, 1992; Pennock & Ura, 2006; Survey, 2013; Tobergte & Curtis, 2013; Veenhoven, 2004; Wang & Wong, 2014; Ware, 1976).

These variables have been selected from the literature reviewed in Chapter 2 and has included the recommendations of previous authors to include the investigation of
social aspects to determine the level of happiness of the population (Helliwell et al., 2015; Yang et al., 2012; & Frey et al., 2008).

3.6 SURVEY RESPONDENTS AND DATA COLLECTION

3.6.1 Population
The surveyed population for this treatise consisted of all private physiotherapists working in South Africa. The target population was comprised of those private physiotherapists, who are currently registered with the Health Professional Council of South Africa (HPCSA) and either the South African Society of Physiotherapy (SASP) or the Physiotherapy Association of South Africa (PASA). More than 90% of the respondents were affiliated with the SASP and each respondent was registered with the HPCSA. Furthermore, the target population excluded physiotherapists who were employed by the state.

3.6.2 Sample and sampling method
In order to estimate characteristics of the targeted population, the researcher sampled a subset of individuals from the population to reduce costs, time and item destruction (Wegner, 2013). Sample statistics were obtained through statistical analysis to measure the characteristics (regarding the relationship between the independent variables and the dependent variable) of the sample (Wegner, 2013). Descriptive and inferential statistics are described in Chapter 4 and utilised to formulate a statistical model of the relationships between the variables examined (Wegner, 2013).

The sample selected was derived from the South African Society of Physiotherapy database and the Physiotherapy Association of South Africa, pertaining to private physiotherapists registered with them. This sampling method is best described as non-probability convenience sampling due to the fact that this sampling method was available at no cost and was immediately available to the researcher (Wegner, 2013). Additionally, it was not feasible to collect data from the entire physiotherapy population in South Africa as it was deemed to be costly and cumbersome. Therefore, only private physiotherapists in South Africa who were registered with the HPCSA, SASP and PASA were sampled and excluded those employed by the government or who did not
belong to these to professional boards. Each measureable variable received 395 responses and therefore provided more credence to the results.

3.6.3 Questionnaire Distribution

The researcher is a member of the SASP and has access to use the SASP and PASA private physiotherapy members as a sample for research purposes. The SASP permitted the researcher to have access to their members and distributed the online survey questionnaire to the desired target population on behalf of the researcher. In order to increase the response rate, reminders were sent to the respondents to kindly complete the online surveys and the option was given to download, print and complete hardcopies to be forwarded to the SASP head office. These hardcopies would be placed into a locked and secure box by the receptionist in order to protect the confidentiality of these respondents. Hardcopy questionnaires would be picked up at the receptionist office on each day that hardcopies are submitted by notification of the receptionist. However, all the respondents completed the questionnaire online via technological devices such as laptops, personal computers and handheld devices such as tablets or cellular phones. In order to improve the quality of data collection, the online survey tool collects the IP address of each respondent and has the functionality to remove duplicate responses from the same IP address device. No duplicate responses were received during the data collection for this treatise.

3.6.4 Strengths and Weaknesses of the Data Collection Method Used

As a result of technological advancements and internet penetration into developing countries, online surveys are able to be distributed over a global outreach at very low costs which provides a valuable advantage to the researcher (Evans & Mathur, 2005). Literature further describes the advantages of online surveys as being flexible, convenient for the researcher and respondent and advantageous due to the ease of data entry and analysis (Evans & Mathur, 2005; Guzi & de Pedraza García, 2015). In contrast, the disadvantages of this data collection approach is that it excludes individuals of the target population who do not have access to internet and only includes those individuals who are willing to complete the online survey (Evans & Mathur, 2005; Guzi & de Pedraza García, 2015). Furthermore, additional major weaknesses are presented by the perception of junk mail by the intended survey
population, representativeness and implementation, privacy and security issues as well as low response rate (Guzi & de Pedraza García, 2015). In an attempt to assess the validity of online survey tools to measure subjective wellbeing, it was established that online surveys are valid as the results of the data collected were found to be comparable to results generated form probabilistic samples and consistent with existing literature (Guzi & de Pedraza García, 2015). In light of this conclusion of Guzi and de Pedraza Garcia (2015) the researcher has chosen to collect the data required for the main research question via online questionnaires.

3.6.5 Number of Responses and Response Rate

A total of 395 respondents successfully completed the online questionnaire. Only 507 respondents started the questionnaire and failed to complete it while 1289 respondents viewed the questionnaire without attempting to start the questionnaire at all. Table 3.4 summarises the overall respondent statistic report. A total of 395 respondents completed the questionnaire out of 1289 respondent who viewed the questionnaire. Furthermore, only 507 respondents started the questionnaire but did not complete all the questions relating to the variables in question.

For the purpose of this treatise, only the data from the respondents who had completed the questionnaire will be analysed in chapter 4 and used to derive recommendations from in chapter 5.

Table 3-4: Overall Respondent Statistics (Authors own construct, 2016)

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Completed ÷ Started</th>
<th>Completed ÷ Viewed</th>
<th>Started ÷ Viewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPLETED</td>
<td>395</td>
<td>77.91%</td>
<td>30.64%</td>
<td>39.33%</td>
</tr>
<tr>
<td>STARTED</td>
<td>507</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIEWED</td>
<td>1289</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.7 DATA ANALYSES

The data received from the online questionnaire is automatically organised by the online survey tool used to conduct the survey for this treatise. Using Microsoft Excel
2010, the data are exported and prepared by removing incorrect records, ensuring that order is in place and that all data sets are clean.

The quantitative data sets were analysed via a IBM Statistical Package for the Social Science (SPSS) to produce descriptive and inferential statistical indexes to measure the responses. The IBM SPSS statistics data editor (version 24) was utilised for this treatise. In addition, Cronbach alphas were determined to measure the reliability of the instruments used for the questionnaire used to survey the respondents. The Cronbach alphas of the measuring instruments are presented below.

### 3.7.1 Overall Cronbach Alpha.

Table 3.5 summarises the overall Cronbach alpha of the independent variables for this treatise. As shown, the overall Cronbach alpha is 0.88 indicating that the overall coefficient is academically acceptable and that the measuring instruments demonstrate strong internal consistency.

<table>
<thead>
<tr>
<th>RELIABILITY STATISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>0.875</td>
</tr>
</tbody>
</table>

The next section illustrates the Cronbach alpha values for the dependent and independent variable measuring instruments.
### 3.7.2 Cronbach alpha values for measuring instruments

**Table 3-6: Cronbach alpha values of measuring instruments**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>CRONBACH’S ALPHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happiness (HAP)</td>
<td>0.83</td>
</tr>
<tr>
<td>Influence (INF)</td>
<td>0.90</td>
</tr>
<tr>
<td>Social Relations (SRL)</td>
<td>0.80</td>
</tr>
<tr>
<td>Life Balance (LBL)</td>
<td>0.89</td>
</tr>
<tr>
<td>Optimism (OPT)</td>
<td>0.72</td>
</tr>
<tr>
<td>Work (WRK)</td>
<td>0.72</td>
</tr>
<tr>
<td>Leisure (LEI)</td>
<td>0.82</td>
</tr>
<tr>
<td>Purpose (PPS)</td>
<td>-0.30</td>
</tr>
</tbody>
</table>

Table 3.6 illustrates the Cronbach alpha values for the dependent and independent variable measuring instruments. Due to the high degree of internal consistency only a single independent variable, consisting of 6 question statements, are omitted from the interpretation of the data to facilitate the attainment of Cronbach alpha scores of > 0.70 throughout. Purpose was therefore removed and will not be used for interpretation due to the negative average covariance between the question statements.

### 3.8 RELIABILITY AND VALIDITY

The concerns of reliability and validity, have been explored via exploratory factor analysis and item analysis (Rattray & Jones, 2007). Furthermore, addressing issues of reliability and validity in the questionnaires used for research play an important part in providing evidence based research (Rattray & Jones, 2007). Reliability refers to the repeatability, stability and internal consistency of a questionnaire used in research projects whereby the Cronbach alpha’s coefficient is widely used to demonstrate the reliability (Jack & Clarke, 1998; OECD, 2013; Rattray & Jones, 2007).

On the other hand, the concept of validity refers to whether or not the measurement item actually measures the underlying concept that it is designed to measure (OECD,
However, measures of subjective wellbeing cannot be compared to objective measures of the subjective wellbeing, indicating that the survey design should be carefully constructed in order to overcome the limits of subjective wellbeing measurements (OECD, 2013). The OECD (2013) recommend three types of validity that a good subjective measurement should display, namely face validity, construct validity and convergent validity:

- **Face validity** refers to whether the respondents perceive the proposed measurement as appropriate given their understanding of what was meant to be assessed;
- **Construct validity** refers to whether the measurement performs similarly to what literature portrays, in respect to the construct being measured; and
- **Convergent validity** refers to whether the measure correlates well with other proxy measurements of the same underlying concept.

To improve the reliability of this treatise the construct of purpose was omitted from the eventual interpretation of the collected data. Hence, the researcher confirmed that face, construct and content validity were upheld through a literature review and grounding the research instruments on previously validated questionnaires and surveys.

### 3.9 SUMMARY

This chapter clarified the research definition and outlined the methodology of the treatise. The research paradigm, literature review and survey design were discussed in relation to the methods used to collect the data for this treatise. Subsequently, this chapter described the data collection process from the survey respondents, briefly described the data analyses methods that are discussed in detail in the next chapter and engaged in the limitations of the research methods before concluding with a discussion regarding validity and reliability. Hence, this treatise adopts a positivistic approach, whereby quantitative methods of data collection and analysis are implemented. Figure 3.7 illustrates the quantitative method adopted for the purposes of this treatise. The following chapter critically addresses the results and analysis of the collected data from the empirical research.
Figure 3-7: Quantitative method used for this treatise (Authors own construct, 2016)
CHAPTER FOUR

4.1 INTRODUCTION

The previous chapter addressed RQ₄, which analyses the research design that was utilised, describes how research was conducted and elaborates on the challenges face during the research methodology process. The chapter focuses on achieving the objective set by RO₄ to explain the research methodology used in this treatise with sufficient detail in order for it to be reproduced in future.

This chapter is encompassed by addressing components of RQ₅ and RO₅, namely RQ₅.₁ and RO₅. RQ₅.₁ seeks to question whether private physiotherapists in South Africa are happy and attempts to achieve RO₅, which aims to conclude adequate recommendations from the data analyses to enable private physiotherapy businesses to improve the happiness levels of their employees. Thereafter chapter 5 is comprised of RQ₅.₂, which states, “How can the happiness of private physiotherapists be improved?” and similarly to chapter 5 seeks to achieve RO₅ which states “Conclude adequate recommendations from the data analyses to enable private physiotherapy businesses to improve the happiness levels of their employees”.

The following chapter describes the results of the primary data collected, with regard to analyses of the survey respondents in terms of descriptive statistics followed by inferential statistical analyses to infer the results to the predetermined population. The research questions and objectives relevant to this chapter as described above are illustrated in figure 4.1 and the overview of this chapter is found in figure 4.2 below.

Table 4-1: Research question and research objective: Chapter 4

<table>
<thead>
<tr>
<th>RESEARCH QUESTION</th>
<th>RESEARCH OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ₅.₁ Are physiotherapists in the private sector happy?</td>
<td>RO₅.₁ Determine the level of happiness amongst private physiotherapists in South Africa.</td>
</tr>
</tbody>
</table>
4.2 PRESENTATION AND ANALYSIS OF BIOGRAPHICAL PROFILES

Section A of the questionnaire was designed to obtain biographical data from the respondents. The questions related their geographical location, age, gender, marital status, education level, tenure in private physiotherapy and their employment status with regard to whether the respondent is a private physiotherapy practice business owner or an employee of a private physiotherapy practice business.

4.2.1 Section A: Demographic data

The table below summarises the demographic breakdown of the respondents in terms of frequency distribution. The results show that the majority of private physiotherapists reside in Gauteng (42.53%); fall into the 31-40 age bracket (36.71%); are female (87.85%); and are married (68.86%). It is distinctively shown that two thirds of the respondents are physiotherapy business owners who typically have less than 20 (74.68%) years of experience and only hold an honours degree (63.04%).
Table 4-2: Demographic frequency distribution of the sample (Authors own construction, 2016)

<table>
<thead>
<tr>
<th>Q1.1 IN WHICH PROVINCE DO YOU RESIDE?</th>
<th>FREQUENCY OF RESPONSES</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gauteng</td>
<td>168</td>
<td>42.53%</td>
</tr>
<tr>
<td>Western Cape</td>
<td>94</td>
<td>23.80%</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>5</td>
<td>1.27%</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>23</td>
<td>5.82%</td>
</tr>
<tr>
<td>Free State</td>
<td>26</td>
<td>6.58%</td>
</tr>
<tr>
<td>North West Province</td>
<td>6</td>
<td>1.52%</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>14</td>
<td>3.54%</td>
</tr>
<tr>
<td>Limpopo</td>
<td>11</td>
<td>2.78%</td>
</tr>
<tr>
<td>Kwa-Zulu Natal</td>
<td>48</td>
<td>12.15%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>395</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q1.2 WHAT IS YOUR AGE?</th>
<th>FREQUENCY OF RESPONSES</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 30</td>
<td>104</td>
<td>26.33%</td>
</tr>
<tr>
<td>31 - 40</td>
<td>145</td>
<td>36.71%</td>
</tr>
<tr>
<td>41 - 50</td>
<td>74</td>
<td>18.73%</td>
</tr>
<tr>
<td>51 - 60</td>
<td>52</td>
<td>13.16%</td>
</tr>
<tr>
<td>61 - 70</td>
<td>20</td>
<td>5.06%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>395</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q 1.3 WHAT IS YOUR GENDER?</th>
<th>FREQUENCY OF RESPONSES</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>347</td>
<td>87.85%</td>
</tr>
<tr>
<td>Male</td>
<td>48</td>
<td>12.15%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>395</strong></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Q 1.4 WHAT IS YOUR MARITAL STATUS?</td>
<td>FREQUENCY OF RESPONSES</td>
<td>PERCENT AGE (%)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Single</td>
<td>54</td>
<td>13.67%</td>
</tr>
<tr>
<td>In a Relationship</td>
<td>22</td>
<td>5.57%</td>
</tr>
<tr>
<td>Living Together</td>
<td>23</td>
<td>5.82%</td>
</tr>
<tr>
<td>Married</td>
<td>272</td>
<td>68.86%</td>
</tr>
<tr>
<td>Divorced</td>
<td>18</td>
<td>4.56%</td>
</tr>
<tr>
<td>Widowed</td>
<td>6</td>
<td>1.52%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>395</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q 1.5 WHAT IS YOUR HIGHEST LEVEL OF EDUCATION?</th>
<th>FREQUENCY OF RESPONSES</th>
<th>PERCENT AGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>57</td>
<td>14.43%</td>
</tr>
<tr>
<td>Honours</td>
<td>249</td>
<td>63.04%</td>
</tr>
<tr>
<td>Masters</td>
<td>59</td>
<td>14.94%</td>
</tr>
<tr>
<td>Doctorate</td>
<td>5</td>
<td>1.27%</td>
</tr>
<tr>
<td>Other</td>
<td>25</td>
<td>6.33%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>395</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q 1.6 WHAT IS THE TENURE OF YOUR EXPERIENCE AS A PHYSIOTHERAPIST IN THE PRIVATE SECTOR?</th>
<th>FREQUENCY OF RESPONSES</th>
<th>PERCENT AGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 10</td>
<td>174</td>
<td>44.05%</td>
</tr>
<tr>
<td>11 - 20</td>
<td>121</td>
<td>30.63%</td>
</tr>
<tr>
<td>21 - 30</td>
<td>67</td>
<td>16.96%</td>
</tr>
<tr>
<td>31 - 40</td>
<td>24</td>
<td>6.08%</td>
</tr>
<tr>
<td>40+</td>
<td>9</td>
<td>2.28%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>395</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q 1.7 ARE YOU A PHYSIOTHERAPY PRIVATE PRACTICE OWNER?</th>
<th>FREQUENCY OF RESPONSES</th>
<th>PERCENT AGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>262</td>
<td>66.33%</td>
</tr>
<tr>
<td>No</td>
<td>133</td>
<td>33.67%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>395</td>
<td>100%</td>
</tr>
</tbody>
</table>
4.2.1.1 Question 1.1: Geographical Location

Table 4.2 above illustrates the demographics of the study, which includes the geographical location of private physiotherapists surveyed for this treatise. The majority of respondents reside in the Gauteng province (42.53%) followed by the Western Cape (23.80%). Therefore, the results generated from this survey will be more true for individuals residing in Gauteng. Surprisingly, the third highest geographical population of respondents reside in Kwa-Zulu Natal (12.15%) versus the remainder provinces of the Eastern Cape, North-West Province, Mpumalanga, Northern Province, Free State and Limpopo.

4.2.1.2 Question 1.2: Age

As table 4.2 illustrates, the majority of the respondents are aged younger than 40 years of age totalling 63.04% of the total respondents. This indicates that most of the respondents are comprised of a younger workforce of which 36.71% fall in the age group between 31 and 40 years of age. Respondents who fall in the 20 to 30 years of age category comprise 26.33% of the total sample size. Therefore, the results of this treatise are primarily representative of the younger workforce of private physiotherapists in South Africa.

4.2.1.3 Question 1.3: Gender

Table 4.2 summarises the difference in gender of the respondents surveyed for this treatise. The figure below depicts the responses of question 1.3 regarding the respondents gender and illustrates that 87.85% of the respondents are Female. Only 12.15% of the respondents were Male indicating that majority of South Africa physiotherapists in the private sector are Female.

4.2.1.4 Question 1.4: Marital Status

Table 4.2 depicts the responses to question 1.4 regarding the marital status of the respondents. As seen in table 4.2, 68% of the respondents are married and thus the results of this survey may be influenced by this variable. Respondents who are single comprise of 13.67% of the sample size. This implies that most private physiotherapists in South Africa are married.
4.2.1.5 **Question 1.5: Educational Level**

This section describes the responses of question 1.5 regarding the highest level of education of the respondents. As seen in table 4.2 above, 63.84% of the respondents only have a Honours Degree whereas 14.94% hold Masters degrees. A low percentage of respondents hold a Doctorate degree equivalent to 5 respondents or 1.27%. In addition, 6.33% selected other indicating that although they have qualified as a Physiotherapist that they have been actively involved in achieving other qualifications such as certificates, diplomas or attended courses for continuous professional development. Of the 59 respondents (14.94%) who had a Masters qualification, 29 respondents fell into the 20 to 40-year age group whereas the remainder 30 respondents fell into the 40 and above age group. In comparison to those who have a Masters qualification, the 63.94% of respondents who only hold a Honours qualification are mostly aged within the first two age groups (20-30 and 31-40). Therefore, the majority of respondents are comprised of a younger workforce as described in section 4.3.1.2 and also only hold a Honours qualification.

4.2.1.6 **Question 1.6: Tenure**

This section describes the responses to question 1.6 regarding the tenure of the respondents. As seen in table 4.2 above, 44.05% of the respondents have less than 10 years of experience followed by 30.63% who have between 11 and 20 years of experience. The table also indicates that only 25.32% of respondents have more than 21 years of experience in the private physiotherapy sector in South Africa.

4.2.1.7 **Question 1.7: Employment status**

This section describes the responses to question 1.7 regarding whether the respondents are the physiotherapy practice business owners or whether they are only employed by such businesses. As seen in table 4.2, 66.33% of the respondents own a physiotherapy practice business whereas 33.67% of the respondents are employed by such businesses. What is unknown in this question is how many physiotherapists are employed by each physiotherapy business and whether the business owner is the sole service provider or not.
4.3 STATISTICAL ANALYSIS AMONG VARIABLES

Since reliability and validity of the data have been established in chapter 3, it was examined using statistical techniques via IMB SPSS (Version 24). The following section statistically examines and presents the data through processes of using the ANOVA method, correlation and multiple linear regression analysis.

The hypotheses mentioned and presented in chapter 1 of this treatise are tested in reference to the results of the data analyses.

4.3.1 Analysis of variance (ANOVA) method

Table 4-3: Overall descriptive statistics of dependent and independent variables

<table>
<thead>
<tr>
<th>DESCRIPTIVE STATISTICS</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAPPINESS</td>
<td>3.9692 [3.97]</td>
<td>0.62132</td>
<td>395</td>
</tr>
<tr>
<td>INFLUENCE</td>
<td>4.0447 [4.05]</td>
<td>0.75399</td>
<td>395</td>
</tr>
<tr>
<td>SOCIAL</td>
<td>3.8639 [3.90]</td>
<td>0.70890</td>
<td>395</td>
</tr>
<tr>
<td>LIFE</td>
<td>3.5944 [3.60]</td>
<td>0.82957</td>
<td>395</td>
</tr>
<tr>
<td>OPTIMISM</td>
<td>3.8927 [3.90]</td>
<td>0.52416</td>
<td>395</td>
</tr>
<tr>
<td>WORK</td>
<td>3.9494 [3.95]</td>
<td>0.47380</td>
<td>395</td>
</tr>
<tr>
<td>LEISURE</td>
<td>4.2422 [4.24]</td>
<td>0.53249</td>
<td>395</td>
</tr>
</tbody>
</table>

(Author's own construction, 2016)

Table 4.3 above serves to illustrate the descriptive statistics of the independent variables and dependent variables in terms of their mean, standard deviation and sample size. As depicted, the dependent variable and independent variables have means between strongly agree and agree regarding to the grouped question statements presented to the respondents.

Table 4.4 below depicts the ANOVA results, from the multiple linear regression model obtained via SPSS and will be used to determine the explanatory power of the proposed model in section 4.3.5. as seen in the table, the significant values are all <
0.05 and therefore it is established that the independent variables are able to predict outcomes in the dependent variable named happiness.

Table 4-4: Anova of variables (Authors own construction, 2016)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>83.460</td>
<td>1</td>
<td>83.460</td>
<td>477.864</td>
<td>0.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>68.638</td>
<td>393</td>
<td>0.175</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>152.097</td>
<td>394</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression</td>
<td>87.538</td>
<td>2</td>
<td>43.769</td>
<td>265.764</td>
<td>0.000c</td>
</tr>
<tr>
<td>Residual</td>
<td>64.559</td>
<td>392</td>
<td>0.165</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>152.097</td>
<td>394</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression</td>
<td>90.320</td>
<td>3</td>
<td>30.107</td>
<td>190.550</td>
<td>0.000d</td>
</tr>
<tr>
<td>Residual</td>
<td>61.778</td>
<td>391</td>
<td>0.158</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>152.097</td>
<td>394</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression</td>
<td>91.360</td>
<td>4</td>
<td>22.840</td>
<td>146.657</td>
<td>0.000e</td>
</tr>
<tr>
<td>Residual</td>
<td>60.738</td>
<td>390</td>
<td>0.156</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>152.097</td>
<td>394</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: HAPPINESS
b. Predictors: (Constant), LIFE
c. Predictors: (Constant), LIFE, LEISURE
d. Predictors: (Constant), LIFE, LEISURE, INFLUENCE
e. Predictors: (Constant), LIFE, LEISURE, INFLUENCE, OPTIMISM

4.3.2 Correlation

Correlation analysis measures the strength of the linear association between two numeric variables that are ratio-scaled (Wegner, 2013). Pearson’s correlation analysis
was used to determine the degree to which the variables of this treatise are related, either positively or negatively (Emerson, 2015; Wegner, 2013). According to literature reviewed, the most commonly used correlation statistic methods is the “Pearson’s product-moment correlation coefficient” or alternatively known as the “Pearson coefficient” or the “correlation coefficient” (Collis & Hussey, 2013; Emerson, 2015; Wegner, 2013). The coefficient is measured between the range of -1 and 1 whereby a positive result indicates that the variables are in sync and increase together in the same direction; and a negative result shows that the variables move in the opposite direction even though they be in sync, therefore decreasing together. (Emerson, 2015; Wegner, 2013).

The strength of correlation is measured in accordance with its size and may be graded as $-1 \leq r \leq +1$ (Collis & Hussey, 2013; Wegner, 2013):

**Table 4-5: Description: Grade of correlation Strength**

<table>
<thead>
<tr>
<th>Strength</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.90 to 0.99</td>
<td><strong>Very High positive correlation</strong></td>
</tr>
<tr>
<td>0.70 to 0.89</td>
<td><strong>High positive correlation</strong></td>
</tr>
<tr>
<td>0.40 to 0.69</td>
<td><strong>Medium positive correlation</strong></td>
</tr>
<tr>
<td>0 to 0.39</td>
<td><strong>Low positive correlation</strong></td>
</tr>
<tr>
<td>0</td>
<td><strong>No Linear association</strong></td>
</tr>
<tr>
<td>0 to -0.39</td>
<td><strong>Low Negative correlation</strong></td>
</tr>
<tr>
<td>0.40 to 0.69</td>
<td><strong>Medium negative correlation</strong></td>
</tr>
<tr>
<td>0.70 to 0.89</td>
<td><strong>High negative correlation</strong></td>
</tr>
<tr>
<td>0.90 to 0.99</td>
<td><strong>Very High negative correlation</strong></td>
</tr>
</tbody>
</table>

Table 4.6 below depicts the Pearson coefficient between the dependent variable and the chosen independent variables and includes the p-value obtained through the SPSS programme. The Pearson coefficient proportion will be analysed in terms of table 4.5 above which assesses the direction and strength of the correlation between the variables (Collis & Hussey, 2013; Wegner, 2013).
From table 4.6 below it can also be seen that the dependent variable (happiness) is positively correlated with the independent variables (influence, social relations, life balance, optimism, work and leisure). As per the above definition of Pearson correlation, it is evident that happiness has a high positive correlation with **Life Balance** (0.74 Pearson coefficient) while it (the dependent variable) has a medium positive correlation with **Work** (0.52 Pearson coefficient), **Social Relations** (0.42 Pearson coefficient), **optimism** (0.40) and **Influence** (0.49 Pearson coefficient). However, the dependent variable illustrates a low positive correlation with **Leisure** (0.30).

Hence, it is established via the use of Pearson coefficient that the chosen independent variables demonstrate positive correlation levels with the dependent variable construct (Happiness). This indicates that all the independent variables have a positive influence on the dependent variable with low to high strength. As seen in the table 4.6, the p-value for all the independent and dependent variables are below 0.05 and thus illustrate significant relationships, as p-values that are less than 0.05 demonstrate that an independent variable is a significant determinant of the outcome of the dependent variable (Collis & Hussey, 2013; Wegner, 2013). Furthermore, a p-value is defined as “a probability that indicates how likely it is to observe the sample statistic if the null-hypothesised population parameter value is assumed to be true” (Wegner, 2013: 207). The p-value is therefore commonly used to either accept $H_A$ due to overwhelming or strong evidence; or to not reject $H_0$ due to weak or no evidence (Wegner, 2013). The p-value illustrated above will be used to decide whether the null hypothesis is likely to be true or false in section 4.3.7.
### Table 4-6: Pearson's correlation with P values (Authors own construction, 2016)

<table>
<thead>
<tr>
<th>CORRELATIONS</th>
<th>HAPPI</th>
<th>INF</th>
<th>SRL</th>
<th>LBL</th>
<th>OPT</th>
<th>WRK</th>
<th>LEI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HAPPNESS</td>
<td>INFLUENCE</td>
<td>SOCIAL</td>
<td>LIFE</td>
<td>OPTIMISM</td>
<td>WORK</td>
<td>LEISURE</td>
</tr>
<tr>
<td>Pearson</td>
<td>1.000</td>
<td>0.487</td>
<td>0.418</td>
<td>0.741</td>
<td>0.397</td>
<td>0.522</td>
<td>0.301</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td>1.000</td>
<td>0.438</td>
<td>0.497</td>
<td>0.250</td>
<td>0.576</td>
<td>0.100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.418</td>
<td>1.000</td>
<td>0.441</td>
<td>0.208</td>
<td>0.604</td>
<td>0.133</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.741</td>
<td>0.497</td>
<td>1.000</td>
<td>0.363</td>
<td>0.571</td>
<td>0.189</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.397</td>
<td>0.250</td>
<td>0.208</td>
<td>1.000</td>
<td>0.306</td>
<td>0.335</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.522</td>
<td>0.576</td>
<td>0.604</td>
<td>0.571</td>
<td>1.000</td>
<td>0.215</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.301</td>
<td>0.100</td>
<td>0.133</td>
<td>0.189</td>
<td>0.335</td>
<td>0.215</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sig. (1-tailed)</th>
<th>HAPPINESS</th>
<th>INFLUENCE</th>
<th>SOCIAL</th>
<th>LIFE</th>
<th>OPTIMISM</th>
<th>WORK</th>
<th>LEISURE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.024</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
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<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
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<td></td>
<td>0.000</td>
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<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>0.010</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
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<td>0.000</td>
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<tr>
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<td>0.000</td>
<td>0.024</td>
<td>0.004</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N</th>
<th>HAPPINESS</th>
<th>INFLUENCE</th>
<th>SOCIAL</th>
<th>LIFE</th>
<th>OPTIMISM</th>
<th>WORK</th>
<th>LEISURE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>395</td>
<td>395</td>
<td>395</td>
<td>395</td>
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<td>395</td>
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<td>395</td>
<td>395</td>
<td>395</td>
<td>395</td>
<td>395</td>
</tr>
</tbody>
</table>

### 4.3.3 Multiple linear regression analysis

Simple linear regression analysis determines a straight line equation to illustrate the relationship of two variables (a dependent and independent variable) that are numeric
in nature (Wegner, 2013). This concept is commonly used to determine whether independent variables are able to predict an outcome on a dependent variable where a linear relationship is present and thus defined as multiple regression analysis (Collis & Hussey, 2013; Wegner, 2013).

In this treatise the independent variables are presented as influence (INF), social relations (SRL), life balance (LBL), optimism (OPT), work (WRK) and leisure (LEI). The dependent variable, as per the conceptual framework presented in Chapter 3, is happiness (HAP). The results of the multiple regression analysis are summarised below.

The coefficient of determination \( R^2 \) is defined as the square of the sample correlation coefficient (Pearson correlation), which measures the proportion of variation in the dependent variable that is caused by the independent variables (Wegner, 2013). The \( R^2 \) values displayed in the model summary above indicate that approximately 60% of the variance in private physiotherapists happiness may be explained by the combined effect of the independent variables of this treatise. Therefore, the independent variables are moderately to strongly associated with the dependent variable.

**Table 4-7: Model Summary of multiple regression analysis for dependent variable (Authors own construction, 2016)**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.741(^a)</td>
<td>0.549</td>
<td>0.548</td>
<td>0.41791</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.759(^b)</td>
<td>0.576</td>
<td>0.573</td>
<td>0.40582</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.771(^c)</td>
<td>0.594</td>
<td>0.591</td>
<td>0.39749</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.775(^d)</td>
<td>0.601</td>
<td>0.597</td>
<td>0.39464</td>
<td>1.981</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), LIFE  
b. Predictors: (Constant), LIFE, LEISURE  
c. Predictors: (Constant), LIFE, LEISURE, INFLUENCE  
d. Predictors: (Constant), LIFE, LEISURE, INFLUENCE, OPTIMISM  
e. Dependent Variable: HAPPINESS
Table 4-8: Grouped correlation and Multiple regression analysis (Authors own construction, 2016)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>95.0% Confidence Interval for B</th>
<th>Correlations</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
<td>Sig.</td>
<td>Lower Bound</td>
<td>Upper Bound</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.975</td>
<td>.094</td>
<td>21.097</td>
<td>.000</td>
<td>1.791</td>
<td>2.159</td>
</tr>
<tr>
<td></td>
<td>LIFE</td>
<td>.555</td>
<td>.025</td>
<td>.741</td>
<td>21.860</td>
<td>.000</td>
<td>.505</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>1.234</td>
<td>.174</td>
<td>7.078</td>
<td>.000</td>
<td>.891</td>
<td>1.577</td>
</tr>
<tr>
<td></td>
<td>LIFE</td>
<td>.531</td>
<td>.025</td>
<td>.709</td>
<td>21.167</td>
<td>.000</td>
<td>.482</td>
</tr>
<tr>
<td></td>
<td>LEISURE</td>
<td>.195</td>
<td>.039</td>
<td>.167</td>
<td>4.977</td>
<td>.000</td>
<td>.118</td>
</tr>
<tr>
<td>3</td>
<td>(Constant)</td>
<td>.928</td>
<td>.186</td>
<td>4.994</td>
<td>.000</td>
<td>.563</td>
<td>1.293</td>
</tr>
<tr>
<td></td>
<td>LIFE</td>
<td>.473</td>
<td>.028</td>
<td>.632</td>
<td>16.790</td>
<td>.000</td>
<td>.418</td>
</tr>
<tr>
<td></td>
<td>LEISURE</td>
<td>.193</td>
<td>.038</td>
<td>.166</td>
<td>5.051</td>
<td>.000</td>
<td>.118</td>
</tr>
<tr>
<td></td>
<td>INFLUENCE</td>
<td>.128</td>
<td>.031</td>
<td>.156</td>
<td>4.196</td>
<td>.000</td>
<td>.068</td>
</tr>
<tr>
<td>4</td>
<td>(Constant)</td>
<td>.720</td>
<td>.201</td>
<td>3.576</td>
<td>.000</td>
<td>.324</td>
<td>1.115</td>
</tr>
<tr>
<td></td>
<td>LIFE</td>
<td>.455</td>
<td>.029</td>
<td>.607</td>
<td>15.738</td>
<td>.000</td>
<td>.398</td>
</tr>
<tr>
<td></td>
<td>LEISURE</td>
<td>.164</td>
<td>.040</td>
<td>.140</td>
<td>4.114</td>
<td>.000</td>
<td>.085</td>
</tr>
<tr>
<td></td>
<td>INFLUENCE</td>
<td>.122</td>
<td>.031</td>
<td>.147</td>
<td>3.984</td>
<td>.000</td>
<td>.062</td>
</tr>
<tr>
<td></td>
<td>OPTIMISM</td>
<td>.110</td>
<td>.043</td>
<td>.093</td>
<td>2.584</td>
<td>.010</td>
<td>.026</td>
</tr>
</tbody>
</table>

a. Dependent Variable: HAPPINESS
4.3.4 Multiple regression results with hypotheses

In this section, the results from the multiple regression analyses are evaluated against hypotheses presented in Chapter 3 to develop a proposed model for happiness of private physiotherapists in South Africa.

4.3.4.1 Hypothesis 1

Hypothesis HA1 states that influence exerts a positive effect on happiness. Therefore, the formulated null hypothesis was presented as:

\[ H_0: \text{“Influence” exerts no effect on happiness.} \]

According to the statistical analyses influence has a p-value of 0.01 (< 0.05) which means that HA1 is accepted and the null hypothesis is not supported. As a result of the strong evidence, it is established that influence has a significant positive effect on happiness.

4.3.4.2 Hypothesis 2

Hypothesis HA2 states that social relations exert a positive effect on happiness. Therefore, the formulated null hypothesis was presented as:

\[ H_0: \text{“Social Relations” exert no effect on happiness.} \]

According to the statistical analyses social relations has a p-value of 0.00 (<0.05) which means that HA2 is accepted as the null hypothesis is not supported. As a result of this overwhelming evidence, it is established that social relations have a significant positive effect on happiness.

4.3.4.3 Hypothesis 3

HA3 states that life balance exerts a positive effect on happiness. Therefore, the formulated null hypothesis was presented as:

\[ H_0: \text{“Life Balance” exerts no effect on happiness.} \]

According to the statistical analyses life balance has a p-value of 0.00 (< 0.05) which means that HA3 is accepted as the null hypothesis is not supported. As a result of the
overwhelming evidence, it is established that life balance has a significant positive effect on happiness.

4.3.4.4 Hypothesis 4

This hypothesis was omitted as the independent variable was removed from the questionnaire and analyses due to poor Cronbach alpha measurements.

4.3.4.5 Hypothesis 5

HA5 states that optimism exerts a positive effect on happiness. Therefore, the formulated null hypothesis was presented as:

\[ H_0^5: \text{“Optimism” exerts no effect on happiness.} \]

According to the statistical analyses optimism has a p-value of 0.01 (<0.05), which means that HA5 is accepted as the null hypothesis is not supported. As a result of this overwhelming evidence, it is established that optimism has a significant positive effect on happiness.

4.3.4.6 Hypothesis 6

HA6 states that work exerts a positive effect on happiness. Therefore, the formulated null hypothesis was presented as:

\[ H_0^6: \text{“Work” exerts no effect on happiness.} \]

According to statistical analyses work has a p-value of 0.00 (<0.05), which means that HA6 is accepted as the null hypothesis is not supported. As a result of this overwhelming evidence, it is established that work has a significant positive effect on happiness.

4.3.4.7 Hypothesis 7

HA7 states that leisure exerts a positive effect on happiness. Therefore, the formulated null hypothesis was presented as:

\[ H_0^7: \text{“Leisure” exerts no effect on happiness.} \]
According to statistical analyses leisure has a p-value of 0.00 (<0.05), which means that HA\textsubscript{7} is accepted as the null hypothesis is not supported. As a result of this overwhelming evidence, it is established that leisure has a significant positive effect on happiness.

### 4.3.5 Proposed model

The statistical analysis shows that influence, social relations, life balance, optimism and work, which are the chosen independent variables are strongly associated with the outcome of happiness of private physiotherapists in South Africa. The statistical analysis has also illustrated that there is a low to medium degree of positive inter-correlation between the independent variables, as measured by the Pearson coefficient.

In light of this low to medium strength of positive inter-correlation between the independent variables and the conjunction of significant positive effect these independent variables have on happiness, the following model in figure 4.2 is proposed to enhance the happiness of private physiotherapists in South Africa.

![Figure 4-2: Statistical model for enhancing happiness of private physiotherapists in South Africa](image_url)
4.4 PRESENTATION AND ANALYSIS OF DESCRIPTIVE STATISTICS

The primary objective (ROM) of this treatise was to determine the happiness levels of private physiotherapists in South Africa. In order to determine this, respondents were asked to record their level of agreement to multiple question statements that were anchored on a 5 point Likert scale. The scale ranged from strongly disagree to strongly agree. The responses are summarised in the tables that follow and clustered into negative responses (disagree to strongly disagree), neutral (undecided) and positive responses (agree to strongly agree). The descriptive analyses of these responses regarding frequency distribution provide further insight to the statistical analysis in section 4.3. Section 4.2, 4.3 and the current section greatly contribute to support Chapter 5, thereby realising ROs (Conclude adequate recommendations from the data analyses to enable private physiotherapy businesses to improve the happiness levels of their employees).

4.4.1 Section B: Dependent variable (Happiness)

This section depicts the responses with regard to the dependent variable happiness. This section was divided into 6 question statements to capture the happiness levels of the respondents. The respondent had to select whether they strongly disagreed, disagreed, were undecided, agreed or strongly agreed with the question statements displayed in table 4.9.
Table 4-9: Frequency distribution of Dependent variable Happiness

<table>
<thead>
<tr>
<th>CODE</th>
<th>STATEMENT</th>
<th>Disagree to strongly disagree (%)</th>
<th>NEUTRAL (%)</th>
<th>AGREE TO STRONGLY AGREE (%)</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAP₁</td>
<td>I often experience joy.</td>
<td>6.84</td>
<td>5.82</td>
<td>87.34</td>
<td>4.13</td>
</tr>
<tr>
<td>HAP₂</td>
<td>Life is good.</td>
<td>4.3</td>
<td>7.85</td>
<td>87.85</td>
<td>4.14</td>
</tr>
<tr>
<td>HAP₃</td>
<td>I am satisfied with my life.</td>
<td>10.63</td>
<td>12.91</td>
<td>76.46</td>
<td>3.91</td>
</tr>
<tr>
<td>HAP₄</td>
<td>In general, I consider myself a happy person.</td>
<td>3.54</td>
<td>5.57</td>
<td>90.89</td>
<td>4.24</td>
</tr>
<tr>
<td>HAP₅</td>
<td>Compared to others I appear to be happier.</td>
<td>10.38</td>
<td>21.77</td>
<td>67.85</td>
<td>3.76</td>
</tr>
<tr>
<td>HAP₆</td>
<td>I am generally happy and enjoy life regardless of what is going on.</td>
<td>17.47</td>
<td>13.16</td>
<td>69.37</td>
<td>3.63</td>
</tr>
</tbody>
</table>

N= 395; Mean = 3.97; Median= 4.02; Cronbach Alpha = 0.83

4.4.1.1 Question 2.1: I often experience joy.

This question assessed whether the respondents often experienced joy and concluded that 87.34% of the respondents confirmed that they do. As seen in the table, a large portion (53.16%) agreed to often experience joy followed by a smaller portion (34.18%) who strongly agreed to often experience joy. Only 6.84% of respondents disagreed to often experience joy leaving the remainder 5.82% undecided.

4.4.1.2 Question 2.2: Life is good

Table 4.9 depicts the responses regarding Question 2.2, which assesses whether the respondents feel that life is good. An overwhelming response rate of 87.85% feel that life is good whereas 4.30% disagree. Of the 87.85% who felt this statement to be true, 56.20% agree with this statement and 31.65% strongly agree that it is true. As seen in table 4.9, 7.85% were undecided about whether life is good and a total of 4.30% had negative responses to the question statement.
4.4.1.3  **Question 2.3: I am satisfied with my life**

Table 4.9 depicts the responses to Question 2.3, which assesses whether the respondents are satisfied with their life. The table depicts overwhelmingly positive responses with 25.82% strongly agreeing and 50.63% agreeing that they are satisfied with their life. This illustrates that 76.46% of responses were positive, 12.91% remained undecided and 10.63% were negative in regard to the question statement. Therefore, it can be said that private physiotherapists in South Africa are satisfied with their life.

4.4.1.4  **Question 2.4: In general, I consider myself a happy person.**

This question statement attempted to assess whether the respondents generally consider themselves as happy people. The responses were positively favoured as 36.46% strongly agreed and 54.43% agreed to the question statement. Table 4.9 depicts the frequency distribution of the responses to question 2.4 and illustrates that 90.89% of responses were positive, 5.57% remained neutral and 3.54% were negative.

4.4.1.5  **Question 2.5: Compared to others I appear to be happier.**

Table 4.9 depicts the frequency distribution of responses to question 2.5 which relate to happiness. The responses were tremendously positive with 18.99% strongly agreeing and 48.86% agreeing to the question statement. A moderate portion of the respondents remained undecided. Those that disagreed amounted to 9.87% and a smaller portion of 0.51% strongly disagreed. Therefore, the table illustrates that 67.85% of the responses were positive, 21.77 remained undecided and 10.38% were negative.

4.4.1.6  **Question 2.6: I am generally happy and enjoy life regardless of what is going on.**

Table 4.9 depicts the frequency distribution of the responses to question 2.6 which relates to the dependent variable happiness. The responses were positive with 11.65% strongly agreeing and 57.72% agreeing with the question statement. A lesser portion of respondents disagreed (16.96%) and an even smaller portion strongly disagreed (0.51%) with the question statement.
4.4.1.7 Summary of happiness

Section 4.4.1.1 to section 4.4.1.6 has sought to determine the state of happiness of the respondents (private physiotherapists) through presenting the respondent with seven questions relating to happiness. All six questions were collectively positively answered and established that private physiotherapists in South Africa are happy in regard to the question statements presented to them with an overall mean of 3.97.

The following sections will analyse the results obtained regarding the independent variables selected in the conceptual framework.

4.4.2 Section C: Influence

This section analyses the responses to 6 question statements that relate to influence. The question statements were presented to the respondent using 5-point Likert scales ranging from strongly disagree, disagree, undecided, agree and strongly disagree. The responses are summarised below in table 4.10.
### Table 4-10: Frequency distribution: Influence

<table>
<thead>
<tr>
<th>CODE</th>
<th>STATEMENT</th>
<th>Disagree to strongly disagree (%)</th>
<th>NEUTRAL (%)</th>
<th>AGREE TO STRONGLY AGREE (%)</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>INF₁</td>
<td>I have great influence on how I perform my tasks at work</td>
<td>3.29</td>
<td>2.78</td>
<td>93.92</td>
<td>4.31</td>
</tr>
<tr>
<td>INF₂</td>
<td>I have great influence on how my work tasks are structured and planned.</td>
<td>7.85</td>
<td>7.09</td>
<td>85.06</td>
<td>4.12</td>
</tr>
<tr>
<td>INF₃</td>
<td>I exert great influence in my workplace.</td>
<td>8.10</td>
<td>10.38</td>
<td>81.52</td>
<td>4.03</td>
</tr>
<tr>
<td>INF₄</td>
<td>I have great influence on important decisions that affect my work.</td>
<td>12.41</td>
<td>8.61</td>
<td>78.99</td>
<td>3.98</td>
</tr>
<tr>
<td>INF₅</td>
<td>I have considerable influence on the strategy of my workplace</td>
<td>17.97</td>
<td>9.87</td>
<td>72.15</td>
<td>3.80</td>
</tr>
<tr>
<td>INF₆</td>
<td>In general, I have control over the important elements of my job</td>
<td>7.85</td>
<td>8.86</td>
<td>83.29</td>
<td>4.03</td>
</tr>
</tbody>
</table>

**N= 395; Mean = 4.05; Median= 4.03**

### 4.4.2.1 Question 3.1: I have great influence on how I perform my tasks at work

Table 4.10 depicts the frequency distribution of the responses to question 3.1 that relates to *influence*. The responses were tremendously positive with a total of 93.92% positive responses, 2.78% undecided and only 3.2% of negative responses. Of the 93.92% of positive responses, 41.01% strongly agreed and 52.91% agreed to have great influence on how they perform their work tasks.

It can therefore be said that private physiotherapists in South Africa have great influence on how they perform their tasks.
4.4.2.2 **Question 3.2: I have great influence on how my work tasks are structured and planned.**

Table 4.10 depicts the frequency distribution of the responses to question 3.2 that relates to influence. The responses to this question statement were highly positive (85.06%). A small portion (7.09%) were undecided while a similar portion size (7.85%) were negative in nature. 35.44% of respondents strongly agreed to how their work tasks are structured and planned and 49.62% were in agreement. As summarised in the table, private physiotherapists feel that they have great influence on how their work tasks are structured and planned.

4.4.2.3 **Question 3.3: I exert great influence in my workplace.**

Table 4.10 depicts the frequency distribution of the responses to question 3.3 in relation to influence in the workplace. The responses to this question statement were highly positive (81.52%) with a small portion (10.38%) remaining undecided and a smaller portion (8.10%) of negative responses. 31.39% of respondents strongly agreed and 50.13% of respondents were in agreement with the question statement presented to them. In accordance with these results, it can be said that private physiotherapists feel that they do exert great influence in their workplaces.

4.4.2.4 **Question 3.4: I have great influence on important decisions that affect my work.**

Table 4.10 depicts the frequency distribution of the responses to question 3.4 that relates to influence in the workplace. The responses to this question statement were highly positive (78.99%) with a small portion (8.61%) remaining undecided and a slighter larger portion (12.41%) of negative responses. Of the 78.99% of positive responses, 33.42% strongly agreed and 45.57% agreed to have great influence on important decisions that affect their work.

4.4.2.5 **Question 3.5: I have considerable influence on the strategy of my workplace.**

Table 4.10 depicts the frequency distribution of the responses to question 3.5 that relates to influence in the workplace in terms of strategy. The responses to this question statement were highly positive (72.15%) with a small portion (9.87%)
remaining undecided and a slightly bigger portion (17.97%) of negative responses. Of the 72.15% of positive responses, 29.87% strongly agreed and 42.28% agreed that they have considerable influence on the strategy of their workplace.

4.4.2.6  **Question 3.6: In general, I have control over the important elements of my job.**

Table 4.10 depicts the frequency distribution of the responses to question 3.5 that relates to influence in terms of control over the important elements of the respondent’s job. The responses to this question statement were highly positive (83.29%) with a small portion (8.86%) remaining undecided and a lesser portion (7.85%) of negative responses. Of the 83.29% of positive responses, 28.86% strongly agreed and 54.43% agreed to have control over the important elements of their job.

4.4.2.7  **Summary of influence at work**

All key aspects of this independent variable were collectively positively answered with a mean of 4.05 and illustrate that private physiotherapists in South Africa feel they are in control of how they plan their work (85.06%); exert influence in their workplace (81.52%) and hold considerable influence on the strategy of their workplace (72.15%). Majority of respondents also exhibit a strong influence on how they perform their work tasks, which means that there is little interference with their clinical reasoning processes and the implementation of their decisions regarding treatment plans.

4.4.3  **Section B: Social Relations**

This section analyses the responses to question statements 4.1 to 4.6 regarding the social aspects of the respondents that refers to how much value one places on the love and support of one’s colleagues. The question statements were presented to the respondent using 5-point Likert scales ranging from strongly disagree, disagree, undecided, agree and strongly disagree. The responses are summarised below in table 4.11.
Table 4-11: Frequency distribution of independent variable: Social Relations

<table>
<thead>
<tr>
<th>CODE</th>
<th>STATEMENT</th>
<th>Disagree to strongly disagree (%)</th>
<th>NEUTRAL (%)</th>
<th>AGREE TO STRONGLY AGREE (%)</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRL1</td>
<td>I feel part of the social network at my work</td>
<td>12.15</td>
<td>15.44</td>
<td>65.32</td>
<td>3.80</td>
</tr>
<tr>
<td>SRL2</td>
<td>I have very good friends at work</td>
<td>17.47</td>
<td>16.20</td>
<td>63.04</td>
<td>3.64</td>
</tr>
<tr>
<td>SRL3</td>
<td>In general, I get along well with my manager</td>
<td>5.06</td>
<td>22.78</td>
<td>72.15</td>
<td>3.90</td>
</tr>
<tr>
<td>SRL4</td>
<td>I like the people within my workplace</td>
<td>3.04</td>
<td>8.10</td>
<td>88.86</td>
<td>4.11</td>
</tr>
<tr>
<td>SRL5</td>
<td>I receive help and support from my colleagues when I need it</td>
<td>5.57</td>
<td>10.13</td>
<td>84.30</td>
<td>4.09</td>
</tr>
<tr>
<td>SRL6</td>
<td>In general, I would say that the job I do is beneficial to society</td>
<td>0.51</td>
<td>1.52</td>
<td>97.97</td>
<td>4.64</td>
</tr>
</tbody>
</table>

N= 395; Mean = 3.90; Median = 4.0

### 4.4.3.1 Question 4.1: I feel part of the social network at my work.

Table 4.11 depicts the frequency distribution of the responses to question 4.1 that relates to social relations in terms of the social network at the respondent’s workplace. The responses of this question statement were highly positive (65.32%) with a lesser portion (15.94%) remaining undecided and a smaller portion (12.15%) of negative responses. Of the 65.32% positive responses, 22.53% strongly agreed and 49.87%
agreed to feel part of the social network at work. This indicates that majority of private physiotherapists feel part of the social network at their workplace.

**4.4.3.2 Question 4.2: I have very good friends at work.**

Table 4.11 depicts the frequency distribution of the responses to question 4.2 that relates to the independent variable called social relations in terms of having friends at work. The responses to the question statement presented to the respondents were mildly positive (63.04%) with a small portion (16.20%) remaining undecided and a small portion (17.47%) of negative responses. Of the 63.04% of positive responses, 19.49% strongly agreed and 46.84% agreed with the question statement. This indicates that 33.67% of the respondents did not feel that they had very good friends at their work, which may cause rise to problems concerning the culture of the private physiotherapy businesses. However, as illustrated below majority of private physiotherapists feel that they have very good friends at work.

**4.4.3.3 Question 4.3: In general, I get along well with my manager.**

Table 4.11 depicts the frequency distribution of the responses to question 4.3 relating to social relations in terms of the respondent’s relationship with their manager. The responses to this question statement were highly positive (72.15%) with a moderate portion (22.78%) remaining undecided and a small portion (5.06%) of negative responses. Of the 72.15% of positive responses, 24.56% strongly agreed and 47.59% agreed to having favourable relationships with their managers. The 22.78% of undecided responses could be due to the fact that not all respondents surveyed had managers as it was expressed in the comment section which will be elaborated on later in this chapter. However, the majority of private physiotherapists in South Africa feel that they have favourable relationships with the manager.

**4.4.3.4 Question 4.4: I like the people within my workplace.**

Table 4.11 the frequency distribution of the responses to question 4.4 relating to social relations in terms of the likability of the respondent’s colleagues. The responses to this question statement were highly positive (88.86%) with a small portion (8.10%) remaining undecided and a lesser portion (3.04%) of negative responses. Of the 88.86% of positive responses, 26.08% strongly agreed and 62.78% agreed to like their
colleagues. Therefore, the majority of private physiotherapists in South Africa claim to like their colleagues.

4.4.3.5 Question 4.5: I receive help and support from my colleagues when I need it.

Table 4.11 depicts the frequency distribution of responses to question 4.5 relating to social relations in terms of receiving assistance from their work colleagues when needed. The responses to this question statement were highly positive (84.30%) with a small portion (10.13%) remaining undecided and a lesser portion (5.57%) of negative responses. Of the 84.30% of positive responses, 31.14% strongly agree and 53.16% agree to receiving help and support from their colleagues when they need it.

4.4.3.6 Question 4.6: In general, I would say that the job I do is beneficial to society.

Table 4.11 depicts the frequency distribution of the responses to question 4.6 relating to social relations in terms of the respondent’s job benefit to society. The responses of this question statement were tremendously positive (97.97%) with a small portion (1.52%) remaining undecided and a lesser portion (0.51%) of negative responses. Of the 97.97% positive responses, 66.08% strongly agreed and 31.09% agreed that their job is beneficial to society. Therefore, majority of private physiotherapists in South Africa strongly agree that their job is beneficial to society.

4.4.3.7 Summary of social relations

Question statements relating to social relations all received positive responses with a collective mean of 3.90. The frequency distribution of the responses showed that majority of respondents felt that their work is beneficial to society (97.97%) as expected in the medical field. Although the majority of respondents feel that they receive support from their colleagues (84.30%), less respondents feel that they are part of social networks at work (65.32%) and likewise feel that they have good friends at work (63.04%). Thus, these aspects could be further improved.
4.4.4 Section C: Life Balance

This section analyses the responses to question statements 5.1 to 5.5 regarding life balance that encompasses the self-reported indications of an individual's wellbeing. The question statements were presented to the respondent using 5-point Likert scales ranging from strongly disagree, disagree, undecided, agree and strongly disagree. The responses are summarised below in table 4.12.

Table 4-12: Frequency distribution of independent variable: Life Balance

<table>
<thead>
<tr>
<th>CODE</th>
<th>STATEMENT</th>
<th>Disagree to strongly disagree (%)</th>
<th>NEUTRAL (%)</th>
<th>AGREE TO STRONGLY AGREE (%)</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBL1</td>
<td>In most ways, my life is close to my ideal way of living</td>
<td>18.48</td>
<td>19.24</td>
<td>62.28</td>
<td>3.54</td>
</tr>
<tr>
<td>LBL2</td>
<td>The conditions of my life are excellent</td>
<td>16.71</td>
<td>18.23</td>
<td>65.06</td>
<td>3.59</td>
</tr>
<tr>
<td>LBL3</td>
<td>I am satisfied with my life.</td>
<td>11.39</td>
<td>13.42</td>
<td>75.19</td>
<td>3.81</td>
</tr>
<tr>
<td>LBL4</td>
<td>So far, I have the most important things I want in life.</td>
<td>15.19</td>
<td>12.91</td>
<td>71.90</td>
<td>3.73</td>
</tr>
<tr>
<td>LBL5</td>
<td>If I could live my life over, I would change almost nothing.</td>
<td>26.84</td>
<td>23.29</td>
<td>49.87</td>
<td>3.31</td>
</tr>
</tbody>
</table>

N= 395; Mean = 3.60; Median = 3.59

4.4.4.1 Question 5.1: In most ways, my life is close to my ideal way of living

Table 4.12 depicts the frequency distribution of the responses to question 5.1 relating to life balance in terms of the respondent’s ideal way of living. The responses are mildly positive (62.68%) with a lesser portion (19.24%) remaining undecided and similar lesser portion (18.48%) of negative responses.
Of the 62.68% of positive responses, 14.18% strongly agreed and 48.10% agreed to living a life that is close to their idea way of living. The results from this question indicates that majority of private physiotherapists in South Africa feel that they are living a life that is close to their ideal way of living (Mean = agree).

4.4.4.2 **Question 5.2: The conditions of my life are excellent.**

Table 4.12 depicts the frequency distribution of question 5.2 relating to life balance in terms of the respondent’s life conditions. The responses are mildly positive inclined (65.06%) with a lesser portion (18.23%) remaining undecided and similar lesser portion (16.71%) of negative responses. Of the 65.06% of positive responses, 13.16% strongly agreed and 51.09% agreed that the conditions of their life are excellent. This indicates that majority of private physiotherapists in South Africa feel that the conditions of their life are excellent (Mean = agree).

4.4.4.3 **Question 5.3: I am satisfied with my life.**

Table 4.12 depicts the frequency distribution of the responses to question 5.3 relating to life balance in terms of whether the respondents are satisfied with their life from a subjective perspective. The responses are highly positive (75.19%) with a small portion (13.42%) remaining undecided and an even smaller portion (11.39%) of negative responses. Of the 75.19% of positive responses, 18.73% strongly agree and 56.46% agree that they are satisfied with their life. In light of these responses, it indicates that South African private physiotherapists are on average (mean = agree) satisfied with their life.

4.4.4.4 **Question 5.4: So far, I have the most important things I want in life.**

Table 4.12 depicts the responses to question 5.4 relating to life balance in terms of whether the respondents feel that they have procured most of the important things they want from their lives. The responses were highly positive (70.90%) with a small portion (12.91%) remaining undecided and a slightly bigger portion (15.19%) of negative responses. Of the positive responses 17.22% strongly agreed and 54.68% agreed that they have the most important things they want in their lives. This indicates that South African private physiotherapists on average (mean = agree) feel they have the most important things they want of life.
4.4.4.5  Question 5.5: If I could live my life over, I would change almost nothing.

Table 4.12 depicts the responses to question 5.5 relating to life balance in terms of whether respondents would want to change any aspect of their life given a second chance. The responses were fairly average (49.87%) with a smaller portion (23.29%) remaining undecided and a slightly bigger (26.84%) portion of negative responses. Of the 49.87% positive responses, 13.42% strongly agree and 36.46% agree that they would not change anything in their lives should they have a second chance. This indicates that South African private physiotherapists would not change anything if their lives were given a second chance.

4.4.4.6  Summary of life balance

The collective responses to these question statement are positively ranked with a collective mean of 3.60. Majority of the respondents feel that they are satisfied with their life (75.19%), while a lesser portion felt that they would not change anything in their life if they had the chance (49.87%). Further research could be conducted on this question statement to determine whether the respondents who answered negatively or who remain undecided would change their career choice to that of medicine for example. Although the mean leans toward “agree”, the amount of respondents who remain uncertain or have negatively answered calls for further investigation.

4.4.5  Section E: Optimism

This section analyses the responses to 6 question statements that relate to optimism. The question statements were presented to the respondent using 5-point Likert scales ranging from strongly disagree, disagree, undecided, agree and strongly disagree. The responses are summarised below in table 4.13.
### Table 4-13: Frequency distribution of independent variable: Optimism

<table>
<thead>
<tr>
<th>CODE</th>
<th>STATEMENT</th>
<th>Disagree to strongly disagree (%)</th>
<th>NEUTRAL (%)</th>
<th>AGREE TO STRONGLY AGREE (%)</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPT₁</td>
<td>When I do something, I expect to succeed.</td>
<td>0.51</td>
<td>3.54</td>
<td>95.95</td>
<td>4.36</td>
</tr>
<tr>
<td>OPT₂</td>
<td>I always expect the best outcome.</td>
<td>7.59</td>
<td>10.38</td>
<td>82.03</td>
<td>4.01</td>
</tr>
<tr>
<td>OPT₃</td>
<td>I always expect things to go my way.</td>
<td>38.73</td>
<td>25.32</td>
<td>35.95</td>
<td>3.01</td>
</tr>
<tr>
<td>OPT₄</td>
<td>I am optimistic about my future.</td>
<td>4.56</td>
<td>13.16</td>
<td>82.28</td>
<td>4.04</td>
</tr>
<tr>
<td>OPT₅</td>
<td>I expect that I will do well in most things I try.</td>
<td>2.28</td>
<td>8.61</td>
<td>89.11</td>
<td>4.05</td>
</tr>
</tbody>
</table>

N= 395; Mean = 3.90; Median = 4.04

#### 4.4.5.1 Question 7.1 When I do something, I expect to succeed.

The frequency distribution reflects that responses were tremendously positive (95.95%) with a small portion (3.54%) who remained undecided and similarly a smaller portion (0.51%) of negative responses. Of the 95.95% of positive responses, 40.25% strongly agree and 55.70% agree to expecting that they will succeed when they do something.

#### 4.4.5.2 Question 7.2 I always expect the best outcome.

The frequency distribution reflects that the responses were highly positive (82.03%) with a small portion (10.38%) who remained undecided and a smaller portion (7.59%) of negative responses. Of the 82.03% of positive responses, 26.33% strongly agree and 55.70% agree to always expect the best outcome.
4.4.5.3 **Question 7.3 I always expect things to go my way.**

The frequency distribution reflects that the responses were fairly negative (38.73%), with a lesser portion (25.32%) remaining undecided and fairly positive response rate (35.95%). This indicates that majority of the respondents do not agree to always expect things to always go their way.

4.4.5.4 **Question 7.4 I am optimistic about my future.**

The frequency distribution reflects that the responses were highly positive (82.28%), with a lesser portion (13.16%) remaining undecided and a small portion (4.56%) of negative responses. Of the 82.28% of positive responses, 27.09% strongly agree and 55.19% agree to feeling optimistic about life.

4.4.5.5 **Question 7.5 I expect that I will do well in most things I try.**

The frequency distribution reflects that the responses were highly positive (89.11%), with a lesser portion (8.61%) remaining undecided and a smaller portion (2.28%) of negative responses. Of the 89.11% of positive responses, 17.97% strongly agree and 71.14% agree to expecting to do well in most tasks they attempt.

4.4.5.6 **Summary: Optimism**

Interestingly, majority of physiotherapists (95.95%) expect to succeed when they are performing a task and always expect the best outcome (82.03%) in conjunction with feeling optimistic with their future (82.28%). Conversely, a negative finding was that only 35.95% of respondents always expect things to go their way. This indicates that while the respondents expect the best outcome they concurrently realise that things do not always go their way. The results prove the private physiotherapists in South Africa to be rather optimistic while still conceding that in reality things might not always go their way. The results for this variable are collectively positive with a collective mean of 3.90.

4.4.6 **Section F: Work**

This section analyses the responses to 6 question statements that relate to *work life balance*. The question statements were presented to the respondent using 5-point
Likert scales ranging from strongly disagree, disagree, undecided, agree and strongly disagree. The responses are summarised below in table 4.14.

Table 4-14: Frequency distribution of independent variable: Work

<table>
<thead>
<tr>
<th>CODE</th>
<th>STATEMENT</th>
<th>Disagree to strongly disagree (%)</th>
<th>NEUTRAL (%)</th>
<th>AGREE TO STRONGLY AGREE (%)</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRK₁</td>
<td>I would say that my job is stressful.</td>
<td>24.56</td>
<td>14.68</td>
<td>60.76</td>
<td>3.49</td>
</tr>
<tr>
<td>WRK₂</td>
<td>In general, I would say I feel motivated to do the best I can in my job.</td>
<td>3.54</td>
<td>4.56</td>
<td>91.90</td>
<td>4.27</td>
</tr>
<tr>
<td>WRK₃</td>
<td>In general, I would say that I feel happy when I am at work.</td>
<td>8.86</td>
<td>11.90</td>
<td>79.24</td>
<td>3.90</td>
</tr>
<tr>
<td>WRK₄</td>
<td>My job offers good prospects for progressing in my career.</td>
<td>32.91</td>
<td>23.29</td>
<td>43.80</td>
<td>3.11</td>
</tr>
<tr>
<td>WRK₅</td>
<td>I am able to learn new skills at work.</td>
<td>12.15</td>
<td>14.94</td>
<td>72.91</td>
<td>3.74</td>
</tr>
<tr>
<td>WRK₆</td>
<td>I receive regular and constructive feedback on my performance.</td>
<td>30.13</td>
<td>22.28</td>
<td>47.59</td>
<td>3.21</td>
</tr>
<tr>
<td>WRK₇</td>
<td>I feel trusted by my manager.</td>
<td>7.85</td>
<td>24.81</td>
<td>67.34</td>
<td>3.81</td>
</tr>
<tr>
<td>WRK₈</td>
<td>It is important to achieve a balance between work and personal life.</td>
<td>0.51</td>
<td>0.51</td>
<td>98.99</td>
<td>4.68</td>
</tr>
<tr>
<td>CODE</td>
<td>STATEMENT</td>
<td>Disagree to strongly disagree (%)</td>
<td>NEUTRAL (%)</td>
<td>AGREE TO STRONGLY AGREE (%)</td>
<td>MEAN</td>
</tr>
<tr>
<td>------</td>
<td>---------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
<td>-------------</td>
<td>-----------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>WRK₉</td>
<td>Work Life Balance enables people to work better.</td>
<td>0.51</td>
<td>1.52</td>
<td>97.97</td>
<td>4.58</td>
</tr>
<tr>
<td>WRK₁₀</td>
<td>Work Life Balance is entirely an individual responsibility.</td>
<td>22.78</td>
<td>12.66</td>
<td>64.56</td>
<td>3.61</td>
</tr>
<tr>
<td>WRK₁₁</td>
<td>Work Life Balance is entirely an employer's responsibility.</td>
<td><strong>84.30</strong></td>
<td>11.39</td>
<td>4.30</td>
<td>1.99</td>
</tr>
<tr>
<td>WRK₁₂</td>
<td>Work Life Balance is partly an employer and partly an individual responsibility.</td>
<td>15.44</td>
<td>15.19</td>
<td><strong>69.37</strong></td>
<td>3.73</td>
</tr>
<tr>
<td>WRK₁₃</td>
<td>People have different needs at different stages of their life.</td>
<td>0.25</td>
<td>0</td>
<td>99.75</td>
<td>4.59</td>
</tr>
<tr>
<td>WRK₁₄</td>
<td>I often miss out on quality time with my family or friends because of work pressures.</td>
<td>41.01</td>
<td>11.14</td>
<td>47.85</td>
<td>3.13</td>
</tr>
</tbody>
</table>

N= 395; Mean = 3.95; Median = 3.74

4.4.6.1 **Question 8.1 I would say that my job is stressful.**

The frequency distribution reflects that the responses were mildly positive (60.76%), with a lesser portion (14.68%) remaining undecided and a small portion (24.56%)
negative. Of the 60.76% of positive responses, 15.95% strongly agree and 44.81% agree to experiencing a stressful natured job.

4.4.6.2 Question 8.2 In general, I would say I feel motivated to do the best I can in my job.

The frequency distribution reflects that the responses were tremendously positive (91.90%), with a lesser portion (4.56%) remaining undecided and a smaller portion (3.54%) of negative responses. Of the 91.90% of positive responses, 39.49% strongly agree and 52.41% agree to experiencing motivated to do the best they can in their job.

4.4.6.3 Question 8.3 In general, I would say that I feel happy when I am at work.

The frequency distribution reflects that the responses were highly positive (79.24%), with a lesser portion (11.90%) remaining undecided and a smaller portion (8.86%) negative responses. Of the 79.24% of positive responses, 21.52% strongly agree and 57.72% agree to experiencing happiness when they are work.

4.4.6.4 Question 8.4 My job offers good prospects for progressing in my career.

The frequency distribution reflects that the responses were fairly positive (43.80%), with a lesser portion (23.29%) remaining undecided and a fair portion (32.91%) fairly negative responses. This is a negative finding as the majority (56.20%) of respondents do not feel positive that their job offers good prospects for career progression.

4.4.6.5 Question 8.5 I am able to learn new skills at work.

The frequency distribution reflects that the responses were highly positive (72.91%), with a lesser portion (14.94%) remaining undecided and a smaller portion (12.15%) of negative responses. Of the 72.91% of positive responses, 17.22% strongly agree and 55.70% agree to experiencing the ability to learn new skills at their workplace.
4.4.6.6 **Question 8.6 I receive regular and constructive feedback on my performance.**

The frequency distribution reflects that the responses were fairly positive (47.59%), with a lesser portion (22.28%) remaining undecided and a smaller portion (30.13%) of negative responses. This is a negative finding as 52.41% of respondents do not agree that they receive regular and constructive feedback on their performance. This could be related to the fact that majority of the respondents also feel that they have control over how they perform and plan their work tasks.

4.4.6.7 **Question 8.7 I feel trusted by my manager.**

The frequency distribution reflects that the responses were mildly positive (67.34%), with a lesser portion (24.81%) remaining undecided and a smaller portion (7.85%) negative responses. Of the 67.34% of positive responses, 24.56% strongly agree and 42.78% agree to feeling trusted by their manager. This is a positive finding.

4.4.6.8 **Question 8.8 It is important to achieve a balance between work and personal life**

The frequency distribution reflects that the responses were tremendously positive (98.99%), with a small portion (0.51%) remaining undecided and a similar portion (0.51%) of negative responses. Of the 98.99% of positive responses, 69.87% strongly agree and 29.11% agree that it is important to have a balance between work and one’s personal life.

4.4.6.9 **Question 8.9 Work Life Balance enables people to work better**

The frequency distribution reflects that the responses were tremendously positive (97.97%), with a lesser portion (1.52%) remaining undecided and a smaller portion (0.51%) of negative responses. Of the 97.97% of positive responses, 60.51% strongly agree and 37.47% agree that work life balance enables people to work better. This is a positive finding.
4.4.6.10 Question 8.10 Work Life Balance is entirely an individual responsibility.

The frequency distribution reflects that the responses were mildly positive (64.56%), with a lesser portion (12.66%) remaining undecided and a smaller portion (22.78%) of negative responses. Of the 64.56% of positive responses, 19.75% strongly agree and 44.81% agree that work life balance is entirely an individual’s responsibility.

4.4.6.11 Question 8.11 Work Life Balance is entirely an employer’s responsibility.

The frequency distribution reflects that the responses were highly negative (84.30%), with a lesser portion (11.39%) remaining undecided and a smaller portion (4.30%) of negative responses. Of the 84.30% of negative responses, 21.01% strongly disagree and 63.29% disagree that work life balance is entirely an employer’s responsibility. This is a positive finding and supports the previous question indicating that private physiotherapists in South Africa feel that work life balance is entirely an individual’s responsibility.

4.4.6.12 Question 8.12 Work Life Balance is partly an employer and partly an individual responsibility.

The frequency distribution reflects that the responses were mildly positive (69.37%), with a lesser portion (15.19%) remaining undecided and a smaller portion (15.44%) of negative responses. Of the 69.37% of positive responses, 21.27% strongly agree and 48.10% agree that work life balance is partly both and employer and individual’s responsibility. This is a positive finding and illustrates that private physiotherapists in South Africa take ownership of their work life balance and in addition feel that the employer too must take ownership of the influence they hold on their work life balance.

4.4.6.13 Question 8.13 People have different needs at different stages of their life.

The frequency distribution reflects that the responses were tremendously positive (99.75%), with 0% remaining undecided and a similar portion (0.25%) negative responses. Of the 99.75% of positive responses, 59.75% strongly agree and 40.00% agree that people have different needs at different stages of their life.
4.4.6.14 **Question 8.14 I often miss out on quality time with my family or friends because of work pressures.**

The frequency distribution reflects that the responses were fairly positive (47.85%), with a lesser portion (11.14%) remaining undecided and a fairly sized portion (41.01%) of negative responses. This illustrates a negative find as a moderate portion of respondents (47.85%) feel that they often miss out on quality time with their family and friends because of work pressures. This requires further investigation.

4.4.6.15 **Summary: Work**

Although a majority respondents feel that their job is stressful (60.76%), they strongly feel that they are motivated to do their best at work (91.90%) and generally feel happy when they are at work (79.24%). Negative findings of this independent variable were that the respondents (56.20%) felt that there are poor prospects of progression in their career and that they do not receive regular and constructive feedback regarding their performance (52.41%). A resounding finding is that private physiotherapists in South Africa take ownership of their work life balance and in addition feel that the employer too must take ownership of the influence they hold on their work life balance. Additionally, an area of focus would be that although respondents feel that work life balance is both the responsibility of the employer and employee they still often miss out on quality time with friends and family due to work pressures. To conclude, this variable collected an overall positive response with a mean of 3.95.

4.4.7 **Section G: Leisure**

This section analyses the responses to 7 question statements that relate to leisure. The question statements were presented to the respondent using 5-point Likert scales ranging from strongly disagree, disagree, undecided, agree and strongly disagree. The responses are summarised below in table 4.15.
### Table 4-15: Frequency distribution of independent variable: Leisure

<table>
<thead>
<tr>
<th>CODE</th>
<th>STATEMENT</th>
<th>Disagree to strongly disagree (%)</th>
<th>NEUTRAL (%)</th>
<th>AGREE TO STRONGLY AGREE (%)</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEI₁</td>
<td>My leisure activities are important to me.</td>
<td>2.78</td>
<td>3.29</td>
<td>93.92</td>
<td>4.34</td>
</tr>
<tr>
<td>LEI₂</td>
<td>My leisure activities help relieve my stress.</td>
<td>1.01</td>
<td>3.29</td>
<td>95.70</td>
<td>4.44</td>
</tr>
<tr>
<td>LEI₃</td>
<td>My leisure activities help me to stay healthy.</td>
<td>1.27</td>
<td>4.05</td>
<td>94.68</td>
<td>4.44</td>
</tr>
<tr>
<td>LEI₄</td>
<td>My leisure activities contribute to my emotional well-being.</td>
<td>0.76</td>
<td>1.27</td>
<td>97.97</td>
<td>4.53</td>
</tr>
<tr>
<td>LEI₅</td>
<td>My leisure activities have helped me to develop close relationships.</td>
<td>6.33</td>
<td>11.65</td>
<td>82.03</td>
<td>4.11</td>
</tr>
<tr>
<td>LEI₆</td>
<td>I often use my free time to develop and learn new skills.</td>
<td>16.20</td>
<td>21.27</td>
<td>62.53</td>
<td>3.60</td>
</tr>
<tr>
<td>LEI₇</td>
<td>I often think of work in my spare time.</td>
<td>28.35</td>
<td>11.14</td>
<td>60.51</td>
<td>3.44</td>
</tr>
</tbody>
</table>

N = 395; Mean = 4.24; Median = 4.34

#### 4.4.7.1 Question 9.1 My leisure activities are important to me

The frequency distribution reflects that the responses were tremendously positive (93.92%), with a lesser portion (3.29%) remaining undecided and a smaller portion (2.78%) of negative responses. Of the 93.92% of positive responses, 42.53% strongly agreed and 51.39% agreed that leisure activities are important. This is a positive finding and infers that private practice physiotherapists in South Africa consider the strongly consider leisure activities as important.
4.4.7.2 Question 9.2 My leisure activities help relieve my stress.

The frequency distribution reflects that the responses were tremendously positive (95.70%), with a lesser portion (3.29%) remaining undecided and a smaller portion (1.01%) of negative responses. Of the 95.70% of positive responses, 49.11% strongly agreed and 46.58% agreed that leisure activities assist in alleviating their stress.

4.4.7.3 Question 9.3 My leisure activities help me to stay healthy

The frequency distribution reflects that the responses were tremendously positive (94.68%), with a lesser portion (4.05%) remaining undecided and a smaller portion (1.27%) of negative responses. Of the 94.68% of positive responses, 50.89% strongly agreed and 43.80% agreed that leisure activities promote their health.

4.4.7.4 Question 9.4 My leisure activities contribute to my emotional well-being.

The frequency distribution reflects that the responses were tremendously positive (97.97%), with a lesser portion (1.27%) remaining undecided and a smaller portion (0.76%) of negative responses. Of the 97.97% of positive responses, 56.02% strongly agreed and 41.77% agreed that leisure activities promote their emotional wellbeing.

4.4.7.5 Question 9.5 My leisure activities have helped me to develop close relationships

The frequency distribution reflects that the responses were highly positive (85.70%), with a lesser portion (11.65%) remaining undecided and a smaller portion (6.33%) of negative responses. Of the 82.03% of positive responses, 35.44% strongly agreed and 46.58% agreed that leisure activities improved their ability to develop close relationships.

4.4.7.6 Question 9.6 I often use my free time to develop and learn new skills

The frequency distribution reflects that the responses were fairly positive (62.533%), with a lesser portion (21.27%) remaining undecided and a smaller portion (16.02%) of negative responses. Of the 62.53% of positive responses, 15.19% strongly agreed and 47.34% agreed that they often spend their free time to develop and learn new skills.
4.4.7.7 Question 9.7 I often think of work in my spare time.

The frequency distribution reflects that the responses were fairly positive (60.51%), with a lesser portion (11.14%) remaining undecided and a small portion (28.35%) of negative responses. Of the 60.51% of positive responses, 14.94% strongly agreed and 45.57% agreed that they often think of work in their spare time.

4.4.7.8 Summary: Leisure

The collective responses were positive with a collective mean of 4.24. The respondents feel that leisure activities alleviate their stress, promote their emotional wellbeing and that leisure activities greatly assists them in developing close relationships with others. This could provide a solution to the lowest scores in section 4.4.3 which displayed that a considerable portion of respondents did not feel part of the social network at work and did not feel that they had good friends at work. Thus, providing a platform for leisure activities may improve the social relations as leisure activities are felt to improve the respondent’s ability to develop close relations.

4.5 SUMMARY

This chapter presented empirical results of the collected data. Data collection was obtained from 395 respondents who work in the private physiotherapy sector of South Africa. The information received via the data collection method were analysed in terms of descriptive of inferential statistics. The biographical component presented in section A found that majority of the respondents reside in Gauteng (42.53%); fall into the 31-40 age bracket (36.71%); are female (87.85%); and are married (68.86%). In addition, two thirds of the respondents are business owners of private physiotherapy practices.

Statistical relationships between the dependent and independent variables were revealed via the statistical functions of ANOVA, correlation and multiple linear regression analysis. The proposed model was confirmed via ANOVA which determined the ability of the independent variables to cause positive effect on the dependent variable. The independent variables showed low to medium strength inter-correlations amongst themselves and also illustrated that they are positively correlated to the dependent variable (happiness). Thus, both the ANOVA and multiple linear regression analysis indicate that the independent variables selected positively
influence happiness and in effect the alternative hypothesis for all the independent variables were accepted with 0.05< significance.

A model was then proposed to enhance the happiness levels of private physiotherapists in South Africa in relation to the findings mentioned above. Furthermore, the descriptive statistics followed the proposed model and aimed to provide further insight into the results analysed thus far. The variables (IV & DV) were therefore assessed in terms of the individual and collective means which depicted positive responses in overall. Areas for future improvement were highlighted through the analyses and presentation of the descriptive statistics and the statistical relationships between the variables. These areas of improvement are discussed in the next section, which discusses the research findings, promotes recommendations and conclusions with emphasis on managerial implications.
CHAPTER FIVE

5.1 INTRODUCTION

The previous chapters have addressed RQ₁, RQ₂, RQ₃, RQ₄ and RQ₅.₁ and successfully obtained the respective objectives of this treatise. The previous chapter presented the empirical results of this study whereas the purpose of this section is to address RQ₅.₂ and complete RO₅.₂ in terms of drawing conclusions and summarising the findings of this study in regard to the research problem. Hence, this chapter outlines managerial recommendations that will enable physiotherapy private practice business owners to enhance the happiness levels of their staff. Figure 5.1 illustrates the overview of this chapter and table 5.1 summarises the research question and research objective regarding this chapter.

Figure 5-1: Overview of Chapter 5
### Table 5-1: Research question and research objective

<table>
<thead>
<tr>
<th>RESEARCH QUESTION</th>
<th>RESEARCH OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RQ</strong>$_{5.2}$:</td>
<td><strong>RO</strong>$_{5.2}$:</td>
</tr>
<tr>
<td>What recommendations can be put forward for private physiotherapy businesses to increase the happiness levels of their physiotherapy staff and gain the financial, social and employee wellbeing benefits thereof?</td>
<td>Conclude adequate recommendations from the data analyses to enable private physiotherapy businesses to improve the happiness levels of their employees.</td>
</tr>
</tbody>
</table>

### 5.2 SUMMARY OF THE STUDY

The problem statement of this treatise is that happiness levels have not been adequately established for private physiotherapists in South Africa. Therefore, the main research objective (RO$_M$) of this treatise was expressed as “To determine the happiness levels of private physiotherapists in South Africa”. In order to accomplish the RO$_M$, subset RO’s were formulated to guide the researcher.

The main research question of this treatise (RQ$_M$) questions how happy private physiotherapists in South Africa are. The RQ$_M$ is supported by the following subset research questions:

- **RQ$_1$:** What are the definitions, determinants and importance of happiness research?
- **RQ$_2$:** What are the disparaging arguments and relative theories linked to happiness?
- **RQ$_3$:** What are the happiness levels on a global, national and medical perspective regarding physiotherapists and which measurement instruments are used?
- **RQ$_4$:** What research design technique will be used in this study?
- **RQ$_5$:** What recommendations can be put forward for private physiotherapy businesses to increase the happiness levels of their physiotherapy staff and gain the financial, social and employee wellbeing benefits thereof?
In order to sufficiently answer these research questions, a research alignment plan was constructed which broke down these RQ’s into subset RQ’s and aligned them with the appropriate RO’s. To achieve the ROM, subset RO’s were formulated and thereafter broken down into smaller actionable steps within the RAP. The RAP (complete subset of RQ’s, RO’s and action steps) are exhibited as a blueprint in table 1.1 and resonate throughout this treatise.

Chapter 1 introduced the reader to the concepts of the research topic and presented the context, outline and purpose of the treatise. Additionally, the research problem, research objectives and research questions were presented to the reader in an orderly format.

Chapter 2 presented the reader with a critical review of the literature perused to answer the research questions and thereby accomplished the research objectives (RO1,2&3) pertaining to this chapter, namely: “Review the definitions and importance of happiness research”; “Explore and critically review the disparaging arguments, relative theory and standard determinants of happiness”; and “Determine the trends of happiness across global, national and medical altitudes as well as briefly discussing various measuring instruments used to measure happiness”.

Chapter 3 described the research design used for this treatise, including the methodology. This chapter therefore elaborates on the literature review process, the survey design, distribution and data collection, data analyses and the limitations of the research methodology used to answer the RQ4. The research methodology was explained with sufficient detail to allow it to be reproduced in future and thereby accomplished RO4 stated as “Explain the research methodology used in this treatise with sufficient detail to allow it to be reproduced in future”.

Chapter 4 addressed the analysis of the data collection and assisted to answer RQ5.1: “Are physiotherapists in the private sector happy?”. Descriptive and inferential statistics were produced from the respondents’ answers. These results serve as the foundation for the current Chapter 5 to create recommendations and conclusions and accomplishes RO5.1 which mirrors ROM to determine the level of happiness amongst private physiotherapists in South Africa.
Chapter 5 serves as a summary of the treatise by revisiting each research question and objective. The deliverables of each chapter are discussed along with the practical recommendations derived from Chapter 4. Opportunities for future research, limitations of this study and managerial implications are critically discussed and the significance of this treatise is briefly highlighted to successfully accomplish RO5.2 stated as “Conclude adequate recommendations from the data analyses to enable private physiotherapy businesses to improve the happiness levels of their employees”.

5.3 SUMMARY OF RESEARCH FINDINGS

The independent variables selected for this treatise were identified as influence, social relations, life balance, optimism, work and leisure. Some of these independent variables are recommended as key focus areas for management to address in order to positively affect happiness in the workplace and thereby create favourable bottom line results (Happiness Research Institute, 2015). Furthermore, the literature reviewed highlighted that contentment be included into future studies of happiness. Hence, the concept of contentment shaped the following independent variables found to measure happiness in other studies, namely: life balance, work, optimism and leisure.

It was concluded that the independent variables exert a positive effect on the dependent variable, happiness. This section will conclude the findings of the empirical results to highlight the contributions of this treatise.

5.3.1 Influence

This independent variable exhibited a mean score of 4.05 which indicates that the majority of the respondents agree to exert influence in their workplace in terms of the capacity to have an effect on the character, development, or behaviour of someone or something, or the effect itself. This independent variable was also positively correlated to happiness with medium strength (0.49 Pearson coefficient). It was also positively correlated with all the other independent variables in question. With a p-value less than 0.05 and in connection with the above stated outcomes, the HA1 was accepted as the null hypothesis was not supported. Furthermore, a result of the strong evidence it is established that influence has a significant positive effect on happiness of private physiotherapists in South Africa.
Therefore, this treatise successfully established that there is a positive relationship between influence and happiness of private physiotherapists in South Africa.

5.3.2 Social Relations

This independent variable exhibited a mean score of 3.90 which indicates that the majority of the respondents agree to have strong social relations with their colleagues in terms of how much value they place on the love and support of their colleagues. This independent variable was also positively correlated to happiness with medium strength (0.42 Pearson coefficient). It was also positively inter-correlated with the other independent variables in question. With a p-value less than 0.05 and in connection with the above stated outcomes, the HA1 was accepted as the null hypothesis was not supported. Furthermore, a result of the strong evidence it is established that social relations with colleagues has a significant positive effect on happiness of private physiotherapists in South Africa.

Therefore, this treatise successfully established that there is a positive relationship between social relations with colleagues and happiness of private physiotherapists in South Africa.

5.3.3 Life Balance

This independent variable exhibited a mean score of 3.60 which indicates that the majority of the respondents agree to experiencing a balanced life, encompassing positive self-reported indications of their wellbeing. This independent variable was also positively correlated to happiness with high strength (0.74 Pearson coefficient). It was also positively inter-correlated with the other independent variables in question. With a p-value less than 0.05 and in connection with the above stated outcomes, the HA3 was accepted as the null hypothesis was not supported. Furthermore, a result of the strong evidence it is established that life balance has a significant positive effect on happiness of private physiotherapists in South Africa. However, the amount of respondents who did not positively answer this section warrants further investigation.

Therefore, this treatise successfully established that there is a positive relationship between life balance and the happiness of private physiotherapists in South Africa.
5.3.4 Optimism

This independent variable exhibited a mean score of 3.90, which indicates that the majority of the respondents agree to being optimistic regarding their convictions that things will always turn out well. This independent variable was also positively correlated to happiness with medium strength (0.4 Pearson coefficient). It was also positively inter-correlated with the other independent variables in question. With a p-value less than 0.05 and in connection with the above stated outcomes, the HA4 was accepted as the null hypothesis was not supported. Furthermore, a result of the strong evidence it is established that optimism has a significant positive effect on happiness of private physiotherapists in South Africa.

Therefore, this treatise successfully established that there is a positive relationship between optimism and the happiness of private physiotherapists in South Africa.

5.3.5 Work

This independent variable exhibited a mean score of 3.95, which indicates that the majority of the respondents agree to the notion that paid work and personal life should be seen less as competing priorities than as complementary elements of a full life. This independent variable was also positively correlated to happiness with medium strength (0.52 Pearson coefficient). It was also positively inter-correlated with the other independent variables in question. With a p-value less than 0.05 and in connection with the above stated outcomes, the HA5 was accepted as the null hypothesis was not supported. Furthermore, a result of the strong evidence it is established that the work circumstances has a significant and positive effect on happiness of private physiotherapists in South Africa.

Therefore, this treatise successfully established that there is a positive relationship between work circumstances and the happiness of private physiotherapists in South Africa.

5.3.6 Leisure

This independent variable exhibited a mean score of 4.24, which indicates that the majority of the respondents agree to perceive their leisure activities as important and enjoyable. This independent variable was also positively correlated to happiness with
a low strength (0.3 Pearson coefficient). It was also positively inter-correlated with the other independent variables in question. With a p-value less than 0.05 and in connection with the above stated outcomes, the HA₆ was accepted as the null hypothesis was not supported. Furthermore, a result of the strong evidence it is established that work life balance has a significant and positive effect on happiness of private physiotherapists in South Africa.

Therefore, this treatise successfully established that there is a positive relationship between leisure activities and the happiness of private physiotherapists in South Africa.

5.3.7 Summary of key findings

This treatise has successfully established the happiness levels of private physiotherapists in South Africa as well as established positive causal factors for enhancing happiness levels of private physiotherapists in South Africa. To the researcher’s knowledge, this is the first attempt to determine the happiness levels of physiotherapists in South Africa. Hence, this treatise provides deeper insight into what the private physiotherapy workforce of South Africa perceive are important in terms of happiness at the workplace.

The independent variables of the treatise were concluded to have a positive inter-correlation and exert a significant and positive effect on happiness of private physiotherapists in South Africa. The standout independent variable that proves to be most highly correlated with happiness is life balance with a Pearson’s correlation score of 0.74. These key findings are based on multiple regression analysis and Pearson’s correlation amongst other statistical analysis methods which are presented in chapter 4.

As a result of this, a statistical model was derived and presented in section 4.3.5 for physiotherapy business owners to enhance the happiness levels of their physiotherapy staff. Therefore, this treatise greatly contributes toward enabling the private physiotherapy business sector to enhance the happiness levels of their physiotherapy staff and as a result stimulate the financial bottom line of their businesses. This treatise provides a model for physiotherapy business owners to generate a physiotherapy workforce that take one tenth the sick leave than their least
happy colleagues; are more likely to generate and share new ideas and create greater cooperation between colleagues and with customers; are six times more energised; are more loyal to their organisations and are in fact twice more productive (Job Satisfaction Index, 2015; Kjerulf, 2013; Pryce-Jones & Lindsay, 2014).

5.4 LIMITATIONS OF THE STUDY

One key limitation of the treatise was the removal of the proposed independent variable named purpose due to low Cronbach alpha scores. This could have been favourably included into the analysis through reverse coding and removing the negative average covariance between the question statements. Therefore, this could have added much more credence to the proposed statistical model presented. The limitation is that more time should have been utilised to refine the measuring instrument thorough repeated reliability testing and validation. Although the questionnaire was piloted to 10 private physiotherapists, further refining of the measuring instrument would have improved the credence of the reliability and validity to include the proposed independent variable “purpose” into the analysis of empirical results.

Another limitation was that of sampling bias as most of the respondents were private physiotherapy business owners. The measuring instrument could be more refined to further investigate whether they are the only service provider of the practice or how many staff they have employed as well as the nature of their employment. The measuring instrument did not measure whether those respondents who were employed were permanent or temporary workers. Section 7.7 highlights this limitation within the comments of the respondents. In addition, many of the respondents did not recognize the term “undecided” as a substitute for “not applicable”.

5.5 OPPORTUNITIES FOR FUTURE RESEARCH

With regard to the previous section and the research conducted, opportunities for further research on similar topics are identified as follows:

- Compare the happiness values of permanent staff against temporary staff and against physiotherapists who employ themselves to be the sole service provider
versus those who choose to employ other physiotherapists and work in a team environment.

- Conduct longitudinal studies, which provide a longer timeframe to adequately refine the measuring instrument and include state employed physiotherapists into the sample. The comparison of happiness levels between private physiotherapists and state employed physiotherapists would enable greater and substantial contributions to the medical industry regarding allied healthcare professions such as physiotherapy. The managerial implications may differ between these two physiotherapy groups and provide further insight for government to generate a workforce that stimulates the results highlighted in section 5.37.

- Distinguishing between physiotherapy groups – physiotherapists work in a multitude of disciplines such as sports physiotherapy, outpatient physiotherapy (traditional stand-alone practices), inpatient physiotherapy (operating out of hospitals), a combination of inpatient and outpatient physiotherapy, neural rehabilitation physiotherapy centres etc. the variance of happiness levels across these sectors would prove as substantial contributions to the field investigated.

- Life balance emerged as the highest positive correlation to happiness and therefore warrants further investigation, especially since a large amount of respondents did not positively answer this section. However, since 3.6 leans more towards agree than uncertain this treatise recognises that majority of respondents have positively answered this section.

- This treatise is the first attempt at investigating the happiness levels of physiotherapists in South Africa. Although previous studies have conducted happiness studies in the nursing sector within Southern Africa, further research is warranted in the physiotherapy industry as well as across the various disciplines in the health sector. A comparison between the multi disciplines regarding their happiness levels and causal factors will make for a great longitudinal study.

- Further research could be conducted to determine whether the respondents would change their career choice to that of medicine for example.
• A statistical model was formulated in light of the string empirical findings and warrants further testing to verify its credence.

5.6 MANAGERIAL RECOMMENDATIONS

The researcher has identified certain practical business recommendations for physiotherapy business owners throughout this research process. The strong empirical evidence of this treatise enables the researcher to put forward the following recommendations with regard to solving the problem statement, presented as “happiness levels are not adequately established for private physiotherapists in South Africa”. This treatise has successfully established the happiness levels of private physiotherapists in South Africa. Hence, the following recommendations should be implemented by physiotherapy business owners to improve the happiness levels of their staff.

5.6.1 Influence

Influence proves to be positively correlated to happiness \((r = 0.5, \ p < 0.01)\). As per the empirical evidence it is recommended to allow private physiotherapists to take control of how they plan their work; thereby improving their self-sufficiency as independent practitioners. In agreement with the results, it would not be wise to micromanage private physiotherapists in terms of how their tasks are planned; how they perform their tasks and execution of the important elements of their job.

To further enhance this variable and thereby improving their happiness it is recommended to provide a medium where staff can take part in strategic decisions of the business. A suggestion box, brainstorming sessions and regular strategic meetings could prove beneficial to the business. This would be beneficial to maintain the market share of the company and assist in adapting the business model to identify new avenues to generate revenue.

5.6.2 Social relations

Social relations with colleagues proves to be positively correlated to happiness \((r=0.4, \ p<0.01)\). As per the strong empirical evidence it is recommended to build on social networks at work as this was ranked the most negatively. This could be due to the fact
that physiotherapists spend most of their working day with their patients during private and confidential treatment sessions and as a result have less time to socialise with one another during working hours. Time should be scheduled to build on social relations and develop strong social networks to promote happiness of the staff and in turn foster loyalty and better collaboration between colleagues. Although majority felt that they received support from their colleagues, 34% of respondents did not feel that they were part of social networks and 37% did not feel that they had good friends at work. Hence, teambuilding exercises and placing importance on social relations at work from a managerial perspective is imperative to drive happiness in the business.

5.6.3 Life balance

Life balance is proven to be highly positively correlated to happiness \( r = 0.7, p < 0.01 \). Therefore, much emphasis should be placed on this in comparison to the other independent variables of medium and low positive correlation. It is recommended that business owners acquire a coaching toolkit to assist their staff toward achieving contentment. Alternatively, it is recommended for the business owner to make use of a life coach to assist their employees in becoming their best selves. Through the use of a life coach, the business owner will be able to manage their staff based on their personality profiles and thereby foster great social relations as well.

5.6.4 Optimism

Optimism is proven to be positively correlated to happiness \( r = 0.4, p < 0.05 \). Although this variable positively correlates to happiness with low strength, it is recommended to nurture the highly optimistic nature of the staff to combat the moments when staff are not feeling happy. Hence, the highly optimistic nature of private physiotherapists can be used as an opportunity to generate higher life satisfaction levels and consequently generate happier staff.

5.6.5 Work

Work is proven to be positively correlated to happiness \( r = 0.5, p < 0.01 \). It is recommended to create avenues that staff may progress through their careers as clinicians and provide incentives for furthering their education. Business owners need provide regular and constructive feedback regarding the performance of their staff.
Hence, performance appraisal systems should be agreed upon in order to provide the employee with constructive feedback and enable them to be more productive. Lastly, business owners need to ensure that their staff are not overworked to the point where their work satisfaction is compromised. It is further recommended that staff are encouraged to brainstorm and create systems to promote work satisfaction of all staff, thereby involving the employees into strategic discussions.

5.6.6 Leisure

It is proven that leisure is positively correlated to happiness \( (r = 0.3, p< 0.01) \). It is recommended that the staff actively engage in leisure activities to alleviate any stress, promote their emotional wellbeing and enhance their social relations. The researcher further recommends that physiotherapy business owners facilitate leisure activities that the staff can engage in as a team to promote social relations with colleagues. This recommendation will interlink with the social relations proposal to build social networks within the workforce. Thus, providing a platform for leisure activities may improve the social networks as leisure activities are felt to improve the respondent’s ability to develop close relations.

All the above mentioned recommendations are proposed to further enhance the happiness levels of private physiotherapists in South Africa and are based on the strong empirical evidence presented in chapter 4.

5.7 CONCLUSION

The main objective of this research was to identify factors that influenced the happiness of private physiotherapists in South Africa and assess their level of happiness. Furthermore, a statistical model was formulated based on the literature review and empirical study to enhance the happiness of private physiotherapists in South Africa; and develop a deeper insights and analysis of the perceptions they hold important to their work.

The deliverables to achieve this included:

- Performing a literature review on happiness: regarding the definitions and importance of happiness research; disparaging arguments, relative theory and
standard determinants of happiness; and the trends of happiness across global, national and medical altitudes as well as briefly discussing various measuring instruments used to measure happiness;

- Developing a proposed statistical model for physiotherapy business owners to enhance the happiness levels of their workforce;
- Explaining the research methodology used for this research study with sufficient detail to allow it to be reproduced in future;
- Concluding strong empirical evidence to support the recommendations;
- Establishing the correlation between the independent factors and happiness, in order to accept or reject the formulated hypotheses; and
- Establishing the significance value of the independent variables in relation to happiness.

- Conclude adequate recommendations from the data analyses to enable private physiotherapy businesses to improve the happiness levels of their employees.

This study concluded that all the independent variables have positive and significant relationships with happiness. The core problem to be addressed by this treatise, which is that the happiness levels of private physiotherapists in South Africa have not been adequately researched, has been successfully addressed. In addition to the opportunities for further research that were outlined and the identification of limitation factors of this study, managerial recommendations were proposed.

The recommendations were formulated based on the literature review and empirical evidence with the intention to enable physiotherapy business owners to foster a workforce that are happier and consequently take one tenth the sick leave than their least happy colleagues; are more likely to generate and share new ideas and create greater cooperation between colleagues and with customers; are six times more energised; are more loyal to their organisations and are in fact twice more productive. These recommendations also serve the physiotherapy business owner with tools to understand the driving forces behind their organisational culture and thereby develop appropriate retention and attraction strategies and successfully cultivate generous market shares. Thus, the findings of this treatise should enable physiotherapy business owners to adapt their business model to counter the changes in the health
care market forces and consequently foster happier workforces that generate positive effects on their business bottom line.
REFERENCES


APPENDICES

APPENDIX A: QUESTIONNAIRE

This questionnaire was compiled using an online software tool, powered by ‘QuestionPro’. The online questionnaire could be accessed through the participant’s smart phone, tablet, desktop or laptop.

Survey: Happiness at work: Private Physiotherapists in RSA

Dearest Colleague:

You are invited to participate in our survey to assess the happiness levels of private physiotherapists in South Africa. In this survey, you will be asked to complete questions about Happiness, Influence, Social Relations, Life Balance, Purpose, Optimism, Work and Leisure. It will take approximately 8 to 10 minutes to complete the questionnaire.

Your participation in this study is completely voluntary. There are no foreseeable risks associated with this project. However, if you feel uncomfortable answering any questions, you can withdraw from the survey at any point.

This survey forms part of my graduate requirements as an MBA student at the Nelson Mandela Metropolitan University Business School. It is very important for us to learn your opinions and we greatly appreciate your assistance in this regard.

Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate. Your information will be coded and will remain confidential. If you have questions at any time about the survey or the procedures, you may contact my dissertation supervisor: Professor Margaret Cullen at margaret.cullen@nmmu.ac.za.

We would like to thank you for your time and support in completing this survey within two weeks of receipt.

Please start with the survey now by clicking on the Continue button below.

Joyful Regards,
Michael Elliot
01 September 2016
Please select the appropriate answer. Complete all questions.

In which Province do you reside? *
  -- Select --

What is your age? *
  -- Select --

What is your gender? *
  -- Select --

What is your Marital Status? *
  -- Select --

What is your highest level of education? *
  -- Select --

What is the tenure of your experience as a Physiotherapist in the private sector? *
  -- Select --

Are you a Physiotherapy private practice owner? *
  -- Select --

Please complete the following questions by ticking the appropriate box in reference to the Question Statement. This applies to all the questions that follow this instruction. The boxes are ranked as illustrated below:

"Strongly Agree": Indicates that you strongly agree with the statement made.
"Somewhat Agree": Indicates that you are in fair agreement about the statement.
"Undecided": Indicates that you do not agree or disagree with the statement made.
"Somewhat Disagree": Indicates that you are in fair disagreement with the statement.
"Strongly Disagree": Indicates that you strongly disagree with the statement made.
I often experience joy. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

Life is good. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I am satisfied with my life. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

In general I consider myself a happy person. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

Compared to others I appear to be happier. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
I am generally happy and enjoy life regardless of what is going on.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I am generally not very happy.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I have great influence on how I perform my tasks at work.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I have great influence on how my work tasks are structured and planned.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
I exert great influence in my workplace. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I have great influence on important decisions that affect my work. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I have considerable influence on the strategy of my workplace. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

In general, I have control over the important elements of my job. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
I feel part of the social network at my work. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I have very good friends at work. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

In general I get along well with my manager. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I like the people within my workplace. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
I receive help and support from my colleagues when I need it. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

In general, I would say that the job I do is beneficial to society. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

In most ways, my life is close to my ideal way of living. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

The conditions of my life are excellent. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
I am satisfied with my life. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

So far, I have gotten the most important things I want in life. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

If I could live my life over, I would change almost nothing. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

My work is aligned with my purpose in life. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

At the end of the day, I often feel that I have not accomplished what I had set out to do. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
I feel trapped in a daily routine.
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

In achieving life goals, I have progressed to complete fulfillment.
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

After retiring, I would loaf completely for the rest of my life.
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

After retiring, I would do some of the things I’ve always wanted to do.
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

When I do something, I expect to succeed.
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
I always expect the best outcome.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I always expect things to go my way.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I am optimistic about my future.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
I expect that I will do well in most things I try. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I would say that my job is stressful. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

In general, I would say I feel motivated to do the best I can in my job. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

In general, I would say that I feel happy when I am at work. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

My job offers good prospects for progressing in my career. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
I am able to learn new skills at work. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I receive regular and constructive feedback on my performance. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I feel trusted by my manager. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

It is important to achieve a balance between work and personal life. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

Work Life Balance enables people to work better. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
Work Life Balance is entirely an individual responsibility. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

Work Life Balance is entirely an employer's responsibility. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

Work Life Balance is partly an employer and partly an individual responsibility. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

People have different needs at different stages of their life. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I often miss out on quality time with my family or friends because of work pressures. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
My leisure activities are important to me. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

My leisure activities help relieve my stress. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

My leisure activities help me to stay healthy. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

My leisure activities contribute to my emotional well-being. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

My leisure activities have helped me to develop close relationships. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
I often use my free time to develop and learn new skills. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

I often think of work in my spare time. *
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

Comments/Suggestions:

Thank you! Your support is greatly appreciated!
Dearest Colleagues,

I am a physiotherapist currently completing an MBA at the NMMU Business School. As part of my graduation and dissertation requirements, I humbly request your attention for 8 -10 minutes to complete the attached questionnaire via the survey link provided (http://happyphysio.questionpro.com).

The aim of the questionnaire seeks to assess the current happiness trends of South African private physiotherapists. To the researcher’s knowledge, the proposed dissertation is the first attempt in surveying the targeted South African private physiotherapy population and thereby highlights the importance of this dissertation in providing the results in such a manner that facilitates future research to replicate its approach and formulate models or frameworks that enable retention strategies, foster improved working environments and thereby promote productivity for the private physiotherapy business sector.

Consequently, the effects of gathering this data allows the private physiotherapy business sector to stimulate employees that are less prone to absence; freely generate and share creative ideas; illustrate improved collaboration with their colleagues and customers; are further energised and hence are more productive.

The rationale behind the dissertation originated from the concept whereby as healthcare professionals who promote healing, happiness and quality of life in others; we should surely operate from a space of health, happiness and favourable quality of life positions.

In conclusion, we feel that this survey will provide details that will allow the physiotherapy community to align ourselves with excellence and thereby grow from strength to strength as employees, employers and individuals.

To verify the authenticity of the study, please contact Dr Margaret Cullen at: Margaret.Cullen@nmmu.ac.za.

Regards,

Michael Elliot

We thank you dearly for your support in this survey!
APPENDIX C: LETTER TO SASP

Aug 4

SASP - President
resident@saphysio.co.za

Aug 4

to president:

Good day Ina (Dr Diener),

I hope that this email finds you well and filled with joy.

Ina, I am currently completing a masters degree through the NMU Business School and would like to use the SASP private practice physiotherapy members as a sample group for my dissertation.

I aim to measure the happiness levels of private physiotherapists in South Africa via utilisation of a survey questionnaire.

The secretary I contacted gave me your email address as I require written permission from SASP for my university, with regards to ethical approval.

Ina, could you kindly advise how to proceed from here please?

Joyful Regards,
Michael Elliot
APPENDIX D: SASP APPROVAL

SASP - President <president@saphysio.co.za>
To: deputypresident, Naeta, M. no

Hi Michael
We often give permission for masters students to use our members as subjects
This seems to be a study which can be useful for our private practice group
I will organise that your questionnaire is bulk emailed to the private practitioners, and I will post it in our PhysioFocuss FB page

Before we can do that we need your proposal and ethics clearance
We also need your agreement that you will send us the outcome of your study, once you have collected and interpreted all your data
So if you agree on the above we will send out your questionnaire to the private practitioners

Regards
Ina

---

The South African Society Of Physiotherapy

Dr. Ina Diener
President

---

10/27/2016
Gmail - Survey Invitation: Happiness of South African Private Physiotherapists at Work

Daintern Physiotherapy <dainternphysio@gmail.com>

Survey Invitation: Happiness of South African Private Physiotherapists at Work

SASP - President <president@saphysio.co.za>  Sat, Sep 3, 2016 at 6:46 PM
To: Daintern Physiotherapy <dainternphysio@gmail.com>

Thanks, received.
I will start the processing for a bulk email to the Private practitioners and I will post it on their FB page

Regards
Ina

---

The South African Society Of Physiotherapy

Dr. Ina Diener
President

---

152
ETHICS CLEARANCE FOR TREATISES/DISSERTATIONS/THESSES

Please type or complete in black ink

FACULTY: Faculty of Business and Economic Science

SCHOOL/DEPARTMENT: Business School

I, (surname and initials of supervisor) CULLEN N D M

the supervisor for (surname and initials of candidate) ELLIOT M

(student number) 214358216

a candidate for the degree of Masters in Business Administration


Happiness in the private physiotherapy sector in South Africa

considered the following ethics criteria (please tick the appropriate block):

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is there any risk of harm, embarrassment of offence, however slight or temporary, to the participant, third parties or to the communities at large?</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>2. Is the study based on a research population defined as 'vulnerable' in terms of age, physical characteristics and/or disease status?</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>2.1 Are subjects/participants/respondents of your study: (a) Children under the age of 18?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>(b) NMMU staff?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>(c) NMMU students?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>(d) The elderly/persons over the age of 60?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>(e) A sample from an institution (e.g. hospital/school)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f) Handicapped (e.g. mentally or physically)?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Does the data that will be collected require consent of an institutional authority for this study? (An institutional authority refers to an organisation that is established by government to protect vulnerable people)

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
</table>

3.1 Are you intending to access participant data from an existing, stored repository (e.g. school, institutional or university records)?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</table>

4. Will the participant’s privacy, anonymity or confidentiality be compromised?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
</table>

4.1 Are you administering a questionnaire/survey that:

(a) Collects sensitive/identifiable data from participants?

<p>| | |</p>
<table>
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</thead>
</table>

(b) Does not guarantee the anonymity of the participant?

<p>| | |</p>
<table>
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</thead>
</table>

(c) Does not guarantee the confidentiality of the participant and the data?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
</table>

(d) Will offer an incentive to respondents to participate, i.e. a lucky draw or any other prize?

<p>| | |</p>
<table>
<thead>
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</thead>
</table>

(e) Will create doubt whether sample control measures are in place?

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</thead>
</table>

(f) Will be distributed electronically via email (and requesting an email response)?

<p>| | |</p>
<table>
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<th></th>
<th></th>
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</thead>
</table>

Note:
- If your questionnaire DOES NOT request respondents' identification, is distributed electronically and you request respondents to return it manually (print out and deliver/mail); AND respondent anonymity can be guaranteed, your answer will be NO.
- If your questionnaire DOES NOT request respondents' identification, is distributed via an email link and works through a web response system (e.g. the university survey system); AND respondent anonymity can be guaranteed, your answer will be NO.

Please note that if ANY of the questions above have been answered in the affirmative (YES) the student will need to complete the full ethics clearance form (REC-H application) and submit it with the relevant documentation to the Faculty RECH (Ethics) representative.

and hereby certify that the student has given his/her research ethical consideration and full ethics approval is not required.

**SUPERVISOR(S)**

[Signature]

DATE: 28/10/16

**HEAD OF DEPARTMENT**

[Signature]

DATE: 28/10/16

**STUDENT(S)**

[Signature]

DATE: 27/10/2016

Please ensure that the research methodology section from the proposal is attached to this form.

Please note that by following this Proforma ethics route, the study will NOT be allocated an ethics clearance number.
APPENDIX F: QUESTIONNAIRE REPORTS

Devices used to complete Questionnaire

Variable inter-item statistics

Happiness

<table>
<thead>
<tr>
<th>Inter-Item Correlation Matrix</th>
<th>10-8</th>
<th>11-9</th>
<th>12-10</th>
<th>13-11</th>
<th>14-12</th>
<th>15-13</th>
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<td>0.460</td>
<td>0.436</td>
<td>0.421</td>
<td>0.347</td>
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<td>0.487</td>
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<td>0.320</td>
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<tr>
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<td>0.529</td>
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<tr>
<td>14-12</td>
<td>0.421</td>
<td>0.331</td>
<td>0.430</td>
<td>0.519</td>
<td>1.000</td>
<td>0.517</td>
</tr>
<tr>
<td>15-13</td>
<td>0.347</td>
<td>0.320</td>
<td>0.383</td>
<td>0.529</td>
<td>0.517</td>
<td>1.000</td>
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<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
<th>Scale Mean Item Deleted</th>
<th>Scale Variance Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Squared Multiple Correlation</th>
<th>Cronbach's Alpha Item Deleted</th>
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<td>14-12</td>
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<td>9.814</td>
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<td>9.887</td>
<td>.551</td>
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Histogram
Dependent Variable: HAPPINESS

Mean = 3.395
Std. Dev. = 0.966
N = 315

Scatterplot
Dependent Variable: HAPPINESS
Influence

Inter-Item Correlation Matrix

<table>
<thead>
<tr>
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<th>18 - 16</th>
<th>19 - 17</th>
<th>20 - 18</th>
<th>21 - 19</th>
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<td>.614</td>
<td>.588</td>
<td>.552</td>
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<tr>
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<td>22 - 20</td>
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Item-Total Statistics

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<td>.643</td>
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### Social relations

#### Inter-Item Correlation Matrix

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</thead>
<tbody>
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<td>23 - 21</td>
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<td>.642</td>
<td>.428</td>
<td>.468</td>
<td>.517</td>
<td>.222</td>
</tr>
<tr>
<td>24 - 22</td>
<td>.642</td>
<td>1.000</td>
<td>.387</td>
<td>.542</td>
<td>.400</td>
<td>.210</td>
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<td>25 - 23</td>
<td>.428</td>
<td>.387</td>
<td>1.000</td>
<td>.398</td>
<td>.408</td>
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<td>26 - 24</td>
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<td>.542</td>
<td>.398</td>
<td>1.000</td>
<td>.575</td>
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<td>27 - 25</td>
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<td>.490</td>
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<td>.575</td>
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<td>28 - 26</td>
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<td>.218</td>
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<td>.206</td>
<td>.266</td>
<td>1.000</td>
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</table>

#### Item-Total Statistics

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<th>Scale Variance if Item Deleted</th>
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<th>Squared Multiple Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
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### Life Balance

#### Inter-Item Correlation Matrix

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<tr>
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<th>29 - 27</th>
<th>30 - 28</th>
<th>31 - 29</th>
<th>32 - 30</th>
<th>33 - 31</th>
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<td>.687</td>
<td>.609</td>
</tr>
<tr>
<td>31 - 29</td>
<td>.673</td>
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<td>.628</td>
<td>.649</td>
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<td>32 - 30</td>
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<td>.587</td>
<td>.529</td>
<td>1.000</td>
<td>.521</td>
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<tr>
<td>33 - 31</td>
<td>.617</td>
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<td>.643</td>
<td>.521</td>
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#### Item-Total Statistics

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<th>Squared Multiple Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
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### Optimism

#### Inter-Item Correlation Matrix

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<th>42 - 40</th>
<th>43 - 41</th>
<th>44 - 42</th>
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#### Item-Total Statistics

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### Work

#### Inter-Item Correlation Matrix

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APPENDIX G: PARTICIPANT COMMENTS

- “My faith in God and relationship with Him is the motivation and inspiration in my life and through trusting in Jesus I can achieve all things.”
- “Happiness is a choice and mostly I choose to be happy.”
- “Well set.”
- “I have a new job as a permanent locum where I get paid on commission only. No work no pay, no benefits as in leave etc. And the boss expects me to be there for a full day even when there isn't a client booked....and she polices and worse than that...Both of us are mums...I am a single parent on top of that. She believes that her being a mum is more important than my being a mum.... sounds like taken advantage of ...”
- “Certain questions were not applicable. A not applicable option would have been handy.”
- “Feedback on results would be great.”
- “Physiotherapy is the best occupation to have if you love people. Your own attitude is what makes you a happy person.”
- “Not Applicable answer is not possible for sole practitioners.”
- “Tenure is a very complicated word and can be wrongly interpreted.”
- “Some of these questions do not take into consideration the owners who is the manager's perspective.”
- “I only work 7 to 13h00 so there is not really reason to complain. I believe full day physios might have more stress.”
- “I am only a happy, productive and positive person because I can live my calling in Jesus Christ trough my work, not because of anything that I am doing correct.”
- “Questions are often not clear what is meant.”
- “My work hours are very few and flexible at the moment...Some weeks I don't work at all. But I love my job.”
“being self-employed, it is the medical aids that puts unnecessary pressures like serious limits on the allowance per person per year. also unnecessary rejections are hell.”

“I work part time for myself.”

“I am an employer, could not answer "manager" questions... therefore: undecided.”

“I am happy at work and with my work place/colleagues. Just tired and frustrated with the demands of the profession itself, especially when dealing with patients' emotional wellbeing.”

“There should be a box that states not applicable. I am the only working person in my practice, I do not have a supervisor or a manager as I am on my own.”

“I think it would be important to note that I am also a mother with a young family which influences my opinions and how I relate to work issues.”

“Suffered a breakdown last year. Psychiatrist diagnosed burnout & depression. His words were that physiotherapy is an expensive hobby. Our hearts are in the right place but the money does not allow one to make a successful career out of it. Working that hard physically and emotionally for 27 years has caused me to lose my passion for the profession. Morally and ethically I don’t agree with how things are done now especially in private hospitals and how doctors are using therapists as pawns in their games. Considering other alternatives such as medical rep work that pays much better and is less demanding on body and soul.”

“I am in solo practice and this should be considered when evaluating the answers. I have enjoyed every working day. There was always a "thank-you" in the day.”

“Undecided answers due to being owner and manager.”

“Some questions are irrelevant as I have no manager. I am a self-employed sole practitioner with no permanent staff. Thanks.”
“This was poorly worded. You asked if practice owner, and then presumed that all practise owners have managers. You also didn’t allow for more than one stream of physio work involvement e.g. clinical practise vs. research.”

“I am 74 years old and run a small private practice at home for the last 10 years. Worked in of others in private practices for 20…I did work in hospitals in my younger days and thoroughly enjoyed that as well. Great job satisfaction. Count myself lucky.”

“I am happy in my life living on a farm with my young family but life requires that I work as a physio in the closest town (20km away). Many pressures w school and lifting and fitting it all in. And in the small town I am seen as 'the physio' and am constantly asked advice after hours. I cannot be 'me' or a mom. There is no off button and the fees charged are not enough to warrant all the free time I spend on admin and Dr referrals and telephonic advice. Seeing people in pain is draining. Yes, they leave w no pain but we see people generally only because they're in pain. If I had lived my life over I'd had studied in business to earn more and work less and end with a result, something 'ticked' or achieved. Well done to you Michael on this research. I've long thought this is what physio needs. We are all high achievers who end up achieving far below our capability. Even in studying physio further we can't earn more and it's still the same old hum drum of daily life as a physio. We spend so much on courses and registrations and we should all be doing meditation courses rather! Best regards”

“My happiness comes from Christ Jesus- I think another question on the participant's beliefs/religion might influence the outcome.”

“I find my profession stressful and feel that having to deal with so many more admin related things sometimes makes clinical work more difficult e.g. lots of time spent writing reports after hours, filling in PMB forms for medical aids, dealing with financial stress.”

“If I completed this survey 3 years ago, I would be the happiest person but with the changes in the medical aid industry, they steal my joy. Things are no longer as perfect.”
• “Physio is a tough job emotionally, mentally and especially physically and I would not encourage my children to do it.”

• “Would be really interesting to read the results of your study.”

• “The construct in which physiotherapy coding and fees are managed in private practice forces you to do treatments according to what you can charge and not always what is in the best interest of the patient. New research may show that certain treatments work better, but as you cannot charge for them, you do not use these. This is especially true in the field of cardiopulmonary physiotherapy and is the biggest frustration I face on a daily basis.”

• “I have a difficult and malicious physio working for me and I can't get her out. She has been with me for 7 years and I kept thinking that I could improve the situation. I am so miserable at my own Practice that I am on a business course and in the process of buying another practice so that I can move there.”

• “Differentiate between different aspects of the work environment. such as relationship with business partner (stressful, toxic person, undermines my employees and makes growing business difficult) vs relationship with employees (colleagues and other administrative staff (good and constructive pleasant environment).”

• “The things about work that stresses me have nothing to do with the normal tasks a physio performs. I feel stressed about things like getting authorization at medical aids and non-payment of accounts.”
APPENDIX H: TURNITIN REPORT

Turnitin Originality Report
Happiness in the private physiotherapy sector in South Africa by Michael Elliot
From MBA Treatise - Part 1 (Moodle 32663503) (T711TR0: Treatise (Moodle 5623824))

- Processed on 26-Nov-2016 18:56 SAST
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- Word Count: 37060

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6. < 1% match (Internet from 02-Jul-2014)
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