

**Graduate School of Business  
Management College of Southern Africa**

**Evaluation of the factors impacting entrepreneurial sustainability  
of Tibb Healthcare Practitioners in Cape Town**

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**Evaluation of the factors impacting entrepreneurial sustainability  
of Tibb Healthcare Practitioners in Cape Town**

**by**

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## Declaration

I, Christo Abraham Scheepers, do hereby declare that this dissertation is the result of my investigation and research and that this has not been submitted in part or full for any degree or for any other degree to any other University.



Signature Removed

28 June 2013

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Christo Abraham Scheepers

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Date

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## **Abstract**

The Complementary and Alternative Medicine (CAM) industry is growing globally and Unani-Tibb as a profession falls within this fraternity by being formally regulated in South Africa by the Allied Health Professions Council of South Africa (AHPCSA). Tibb Practitioners are formally recognised with practice numbers, but although very successful in their treatment approach within the confines of the Tibb Medical Centres (TMC), lack the ability to venture out into entrepreneurially sustainable private practices; which is problematic since entrepreneurial private practices are the domain of CAM Practitioners due to not being integrated into the public healthcare system. The reasons for this have to be investigated.

The purpose of this study is to evaluate the factors impacting entrepreneurial sustainability of Tibb Practitioners in order to determine which factors can be utilised and effectively implemented so that recommendations may be made to ensure sustainability of the Tibb Practitioners within the TMC and as a successful method into sustainable private practices. The aim of the study is to evaluate the factors that impact on entrepreneurial sustainability of Tibb Healthcare Practitioners in Cape Town.

To accomplish this, exploratory qualitative research was embarked upon by collecting data by means of semi-structured interviews. Self-selection non-probability sampling was used to give the target population of Tibb Practitioners in Cape Town the opportunity to respond and partake in the study. A pilot study with three participants was performed, followed by interviewing 16 respondents. The limitation to the study is seen in that data was collected by writing down responses instead of making use of audio or video. The data was analysed using inductive thematic analysis with the use of NVIVO-10.1 and SPSS-21 software.

The findings indicate Tibb Practitioners are too comfortable within the comfort zone of the TMC resulting in them not seeing themselves as entrepreneurs and thus not acting accordingly. They lack business skills and the entrepreneurial drive to make a success of private practices; confirmed by the literature review. Many factors were identified and evaluated as impacting entrepreneurial sustainability of Tibb Practitioners, resulting in numerous recommendations to various stakeholders to ensure continued existence of Tibb.

## Keywords

- Entrepreneurship;
- Intrapreneurship;
- Sustainability;
- Entrepreneurial sustainability;
- Intrapreneurial sustainability;
- Private practice;
- Entrepreneurial factors;
- Intrapreneurial factors;
- Impacting factors;
- Success factors; and
- Strategic factors.

# TABLE OF CONTENTS

<b>Content</b>	<b>Page No.</b>
Title page	i
Declaration	ii
Acknowledgements	iii
Abstract	v
Keywords	vi
Table of contents	vii
List of acronyms	xii
List of tables	xiii
List of figures	xiv
<b>CHAPTER ONE: INTRODUCTION</b>	<b>1</b>
1.1 Introduction	1
1.2 Background to the Problem	2
1.3 Problem Statement	5
1.4 Aim of the Study	5
1.5 Objectives of the Study	5
1.6 Research Questions	6
1.7 Significance of the Study	6
1.8 Format of the Study	7
1.9 Conclusion	8
<b>CHAPTER TWO: LITERATURE REVIEW</b>	<b>9</b>
2.1 Introduction	9
2.2 The Definition of Entrepreneurial Sustainability	9
2.2.1 Entrepreneurship	9
2.2.2 Sustainability	10
2.2.3 Entrepreneurial Sustainability	11
2.3 The Context of Entrepreneurial Sustainability	13

2.3.1 The External Environment: Unemployment	13
2.3.2 The Paradigm Shift: Job Seeking to Job Creation	13
2.3.3 The Country: South Africa	16
2.3.4 The Industry: Healthcare	17
2.3.5 The Sector: Allied Healthcare	18
2.3.6 The Curriculum: Tibb Education	20
2.4 The Foundation of Entrepreneurial Sustainability	22
2.4.1 Entrepreneurial Characteristics	22
2.4.2 Types of Entrepreneurs	24
2.4.3 Entrepreneurship versus Intrapreneurship	25
2.5 The Impacting Factors of Entrepreneurial Sustainability	26
2.5.1 General Factors	26
2.5.2 Specific Factors	28
2.5.2.1 Private Practice Factors	30
2.5.2.2 Impediment Factors	31
2.6 Conclusion	32
<b>CHAPTER THREE: RESEARCH METHODOLOGY</b>	<b>33</b>
3.1 Introduction	33
3.2 Rationale for the Research	33
3.3 Research Design	33
3.4 Research Philosophy	34
3.5 Target Population	35
3.6 Sampling Strategy	35
3.7 Sample Size	37
3.8 The Research Instrument	38
3.8.1 Interviews	38
3.8.1.1 The Interview Design	40
3.8.1.2 The Interview Structure	41
3.8.2 Pilot Study	42
3.9 The Research Process	43
3.9.1 Conducting the Interviews	43
3.9.2 Recording the Data	44

3.9.3	Limitations of the Study	44
3.9.4	Validity	44
3.9.5	Reliability	45
3.9.6	Data Analysis	45
3.10	Ethical Considerations	46
3.10.1	Ensuring respondents have given informed consent	46
3.10.2	Ensuring no harm comes to respondents	47
3.10.3	Ensuring confidentiality and anonymity	47
3.10.4	Ensuring that permission was obtained	48
3.11	Conclusion	48
 <b>CHAPTER FOUR: FINDINGS, INTERPRETATION AND DISCUSSION</b>		<b>49</b>
4.1	Introduction	49
4.2	Demographics	52
4.2.1	Title	52
4.2.2	Profession	53
4.2.3	Employment	54
4.2.4	Gender	56
4.2.5	Age	58
4.2.6	Website	59
4.3	Respondents' Mindset	61
4.3.1	Conscious Mindset	63
4.3.2	Unconscious Mindset	65
4.4	Emergent Themes	66
4.4.1	Recognised Needs	66
4.4.2	Barriers to sustainable Tibb Practices	70
4.4.3	Entrepreneurial Mentality	80
4.4.4	Individual Responsibility	85
4.4.5	The Future of Tibb	86
4.5	Conclusion	88
 <b>CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS</b>		<b>89</b>
5.1	Introduction	89

5.2 Research Findings	89
5.2.1 Findings from Literature Review	89
5.2.2 Findings from the Research	89
5.3 Research Objective Conclusions	89
5.3.1 Research Objective One	90
5.3.2 Research Objective Two	90
5.3.3 Research Objective Three	91
5.3.4 Research Objective Four	91
5.4 Recommendations	92
5.4.1 Allied Health Professions Council of South Africa (AHPCSA)	93
5.4.2 South African Tibb Association (SATA)	94
5.4.3 Tibb Health Sciences	94
5.4.4 Tibb Institute (Ibn Sina Institute of Tibb)	94
5.4.5 Tibb Medical Centres (TMC)	95
5.4.6 Tibb Practitioners	96
5.4.7 University of the Western Cape (UWC)	97
5.5 Suggestions for Further Research	98
5.6 Conclusion	98
<b>Bibliography</b>	99
<b>Annexure A:</b> Letter of Permission to Conduct Research	118
<b>Annexure B:</b> Draft of the Interview Questions	119
<b>Annexure C:</b> Research Invitation Letter	121
<b>Annexure D:</b> Prepared Questions Interview Template	122
<b>Annexure E:</b> Unprepared Questions Interview Template	125
<b>Annexure F:</b> Opening of Register for Unani-Tibb	126
<b>Annexure G:</b> Curriculum Comparison	127
<b>Annexure H:</b> NLP Eye Movement Explanation	131
<b>Annexure I:</b> Frequency tables of Closed-Ended Questions	132
<b>Annexure J:</b> Descriptive Statistical Findings	135
<b>Annexure K:</b> Correlations to Statistical Findings	140
<b>Annexure L:</b> Tests for Age and Verbal Yes/No Answers	142

<b>Annexure M:</b> Test for Age and Eye Movement	145
<b>Annexure N:</b> Mean Plots for the Relationship between Age and Eye Movements	149
<b>Annexure O:</b> Tests for Website and Eye Movement	151
<b>Annexure P:</b> Mean Plots for the Relationship between Website and Eye Movements	152
<b>Annexure Q:</b> Chi-Square Tests for Closed-Ended Questions	154
<b>Annexure R:</b> Graphs relating to Interview Questions	207
<b>Annexure S:</b> Tree Diagram of Word Frequency	221
<b>Annexure T:</b> Tag Cloud of Frequently Used Words	222
<b>Annexure U:</b> E-mail from AHPCSA	223
<b>Annexure V:</b> E-mail from HPCSA	224
<b>Annexure W:</b> Unani-Tibb Scope of Practice	225

## LIST OF ACRONYMS

AHP Act:	Allied Health Professions Act, No. 63 of 1982, as amended
AHPCSA:	Allied Health Professions Council of South Africa
BHF:	Board of Healthcare Funders of South Africa
B.Sc.(CHS):	Bachelor of Science degree in Complementary Health Sciences
BCM (NAT):	Bachelor of Complementary Medicine degree in Naturopathy
BCM (PHYT):	Bachelor of Complementary Medicine degree in Phytotherapy
BCM (UTM):	Bachelor of Complementary Medicine degree in Unani-Tibb Medicine
CAM:	Complementary and Alternative Medicine
CPD:	Continuing Professional Development
CPUT:	Cape Peninsula University of Technology
DUT:	Durban University of Technology
HPCSA:	Health Professions Council of South Africa
HP Act:	Health Professions Act, No. 56 of 1974
MANCOSA:	Management College of Southern Africa
M.B.Ch.B.:	Bachelor of Medicine and Bachelor of Surgery degree
M.Tech.(Hom.):	Master of Technology degree in Homeopathy
NLP:	Neuro-Linguistic Programming
PG Dip (UTM):	Post-Graduate Diploma in Unani-Tibb Medicine
PHC:	Primary Healthcare
SATA:	South African Tibb Association
SAIE:	South African Institute of Entrepreneurship
SMME:	Small, Medium and Micro Enterprises
SPSS:	Statistical Programme for Social Sciences
THP Act:	Traditional Health Practitioner's Act, No. 22 of 2007
TMC:	Tibb Medical Centres
UTM:	Unani-Tibb Medicine
UJ:	University of Johannesburg
US:	University of Stellenbosch
UWC:	University of the Western Cape

## LIST OF TABLES

Table 4.1:	Respondents by Title	52
Table 4.2:	Respondents by Profession	53
Table 4.3:	Respondents by Employment	54
Table 4.4:	Respondents by Gender	56
Table 4.5:	Respondents by Age	58
Table 4.6:	Respondents' Websites	59
Table 4.7:	Verbal Responses and NLP Eye Movements	62

## LIST OF FIGURES

Figure 1.1:	Representation of the Tibb Profession in South Africa	4
Figure 2.1:	Entrepreneurial Life Cycle	27
Figure 3.1:	Eye Referencing Cues	41
Figure 4.1:	Pie Chart of Respondents Profession	54
Figure 4.2:	Pie Chart of Respondents Gender	56
Figure 4.3:	Pie Chart of Respondents Age	58
Figure 4.4:	Pie Chart of Respondents who have a Private Website	59
Figure 4.5:	The Factors influencing the success and sustainability of Tibb Practitioners in private practice	64

# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

Tibb Healthcare Practitioners or Unani-Tibb Doctors are Allied Healthcare Professionals registered and monitored by the Allied Health Professions Council of South Africa (AHPCSA) as the eleventh profession alongside Homeopaths, Naturopaths and Chiropractors.

This study will look at the entrepreneurial sustainability of Tibb Healthcare Practitioners in Cape Town. Chapter one introduces the study by looking at the problem with the resulting need and purpose for conducting the research. It elaborates on the aim of the study, its objectives, significance and format while laying the foundation with four research questions that will be attempted to be answered during the research phase.

The word *Tibb* is not an acronym, but an Arabic word meaning *medicine* while the Persian word *Unani* means *Greek* according to Bhikha and Abdul Haq (2001:11). Unani-Tibb is therefore a form of medicine sometimes called Greek Medicine, Western Holistic Medicine or Western Herbal Medicine. Tibb originated in 600 B.C. with Hippocrates alongside conventional medicine according to Bhikha and Mohamed (2011:6).

In 1997 Tibb was pioneered in South Africa by the Ibn Sina Institute of Tibb and in 2007 it was formally recognised by the Department of Health as an allied health profession and incorporated for professional registration under the regulation of the AHPCSA (Annexure F).

*A Science of Medicine the Art of Care* is the motto of the Ibn Sina Institute of Tibb which clearly differentiates the profession. Bhikha (2006:8) states that in contrast with conventional medicine, Tibb treats the illness holistically. The Tibb approach is holistic and therefore it falls in the Complementary and Alternative Medicine (CAM) industry to care for patients as unique individuals, but with scientifically proven concepts, principles and techniques by assisting the body to heal itself. Tibb is a new pioneering profession in South Africa with entrepreneurial growth possibilities that may be used to combat unemployment in the country.

## **1.2 Background to the Problem**

Scheepers (2007:237) states that unemployment can be seen as one of the biggest monsters threatening human existence in the twenty first century necessitating drastic, effective and rapid intervention to ensure survival of individuals, families and the human race.

Scheepers (2010:35) in addition offers a solution to the problem, stating:

“Unemployment is currently facing every leader globally and leaders should find a solution to this obstacle instead of theoretically arguing about the semantics of entrepreneurship, because entrepreneurship is a definite resolution for redundancy. Entrepreneurship offers an opportunity for every unemployed individual to create employment for themselves as well as for others.”

Bolton and Thompson (2003:1) confirms this when affirming entrepreneurs are at the heart of change in every field of activity.

Unemployment in South Africa is a major problem and entrepreneurial ventures are encouraged in order to alleviate this problem, but many of these ventures are functioning on low profitability and with a lack of cash flow resulting in the inability to sustain such ventures over the long term. This problem is seen first-hand within the Tibb Medical Centres (TMC) in Cape Town.

There are two TMC in Cape Town serving a dual purpose: firstly it offers effective low cost natural healthcare to the public as part of the social responsibility function of the Ibn Sina Institute of Tibb, and secondly it offers Tibb Practitioners exiting university a controlled internship setting where they can gain practical experience for at least one year before entering private practices. When entering private practices the Tibb Practitioners may name their practices Tibb Medical Centres as well, very similar to the franchise model, yet without all the obligations that the franchise model requires.

Tibb Medicine is noticeably differentiated from conventional medicine and clearly set apart from the other allied healthcare professions by means of its scope of practice. However, it seems once Tibb Practitioners enter private practices their entrepreneurial endeavours are not as sustainable as the TMC of the Ibn Sina Institute of Tibb.

The leap from working in the TMC as Tibb Practitioners to entering private practices seems to be not only a dive from the safety of a large organisation to the insecurity of a smaller entrepreneurial venture, but also a soar from sustainability to uncertain continuity.

There is a global interest and growth in the CAM industry. Kandler (2009:1) agrees by saying an increasing trend towards non-traditional health practices is emerging internationally. Verkerk (2009:2) confirms this when stating the increasing interest in “East-West” medicine is just one expression of the need for a more holistic approach to healthcare that is also better adapted to the needs of the individual. Referring to alternative therapies, Bhikha and Abdul Haq (2001:14) seconds this when mentioning that health care institutions around the world are increasingly offering these therapies as part of their integrated treatment programmes.

Unani-Tibb is a profession falling within this industry and category of CAM. The CAM industry is not directly incorporated in mainstream public healthcare in South Africa and therefore these practitioners have to enter into private practices to earn a living. Their practices are therefore entrepreneurial in nature and have to be profitable and sustainable to ensure the continued existence of the profession and the survival of the industry.

After studying a five year programme at the School of Natural Medicine of the University of the Western Cape (UWC) the Unani-Tibb Medicine (UTM) graduates normally do an internship year at the TMC of the Ibn Sina Institute of Tibb in Cape Town as well as in the G.F. Jooste Hospital before entering private practices or staying employed within the TMC, as illustrated in Figure 1.1.

Medical doctors have very profitable and sustainable private practices so the question of why CAM practitioners sometimes struggle to sustain private practices emerges. The question furthermore arises whether this is a normal trend for all CAM practitioners or only relevant to Tibb Practitioners?

The significance of evaluating the factors impacting entrepreneurial sustainability of Tibb Practitioners is therefore worth investigating, since this profession falls within a growing industry and determining why these practitioners struggle to sustain private practices is very relevant research for the twenty first century.

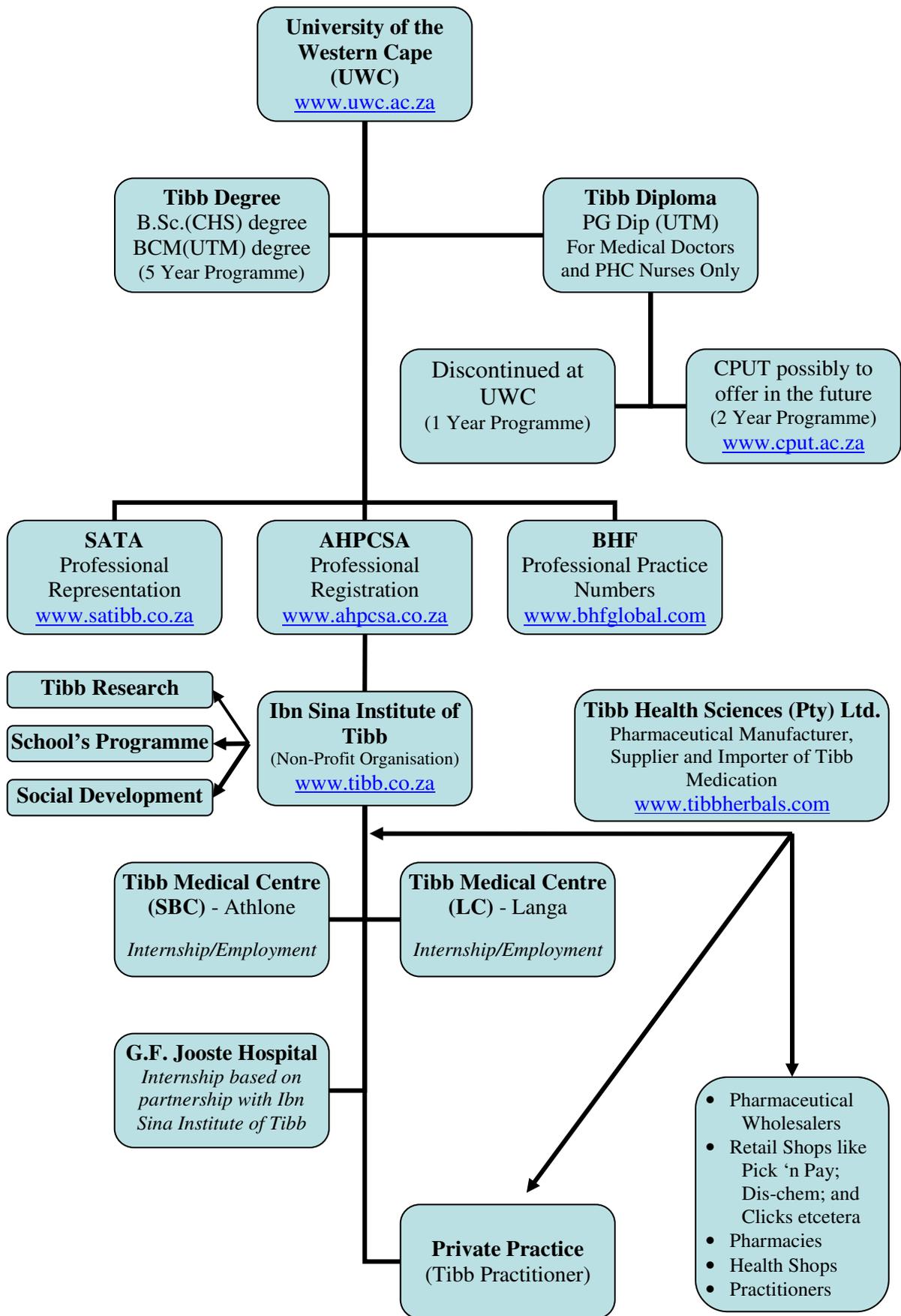


Figure 1.1 Representation of the Tibb Profession in South Africa

### **1.3 Problem Statement**

Tibb Practitioners are trained to become effective natural and holistic practitioners, but often lacking business skills to run effective practices. Tibb falls within the CAM industry which is not directly incorporated in public healthcare and therefore these practitioners have to enter into sustainable and profitable private practices to earn a living due to there not being work available for them in the public healthcare sector.

The purpose of this study is to evaluate the factors impacting entrepreneurial sustainability of Tibb Practitioners in order to determine which factors can be utilised and effectively implemented so that recommendations may be made to management of the Ibn Sina Institute of Tibb as well as to the owners of the Tibb private practices to ensure success of the Tibb Practitioners as well as sustainability of Tibb private practices.

### **1.4 Aim of the Study**

The aim of the study is to evaluate the factors that impact on entrepreneurial sustainability of Tibb Healthcare Practitioners in Cape Town.

### **1.5 Objectives of the Study**

The four objectives of this study are the following:

- To evaluate the factors impacting entrepreneurial sustainability of Tibb Practitioners in Cape Town;
- To investigate why some Tibb Practitioners own successful private practices while others do not;
- To identify what factors can be utilised to ensure entrepreneurial sustainability of Tibb Practitioners in Cape Town; and
- To provide recommendations on ensuring entrepreneurial sustainability for Tibb Practitioners.

## **1.6 Research Questions**

From these research objectives, the following research questions have been instigated:

- What factors impact entrepreneurial sustainability of Tibb Practitioners in Cape Town?
- Why do some Tibb Practitioners own successful private practices while others do not?
- What factors can be utilised to ensure entrepreneurial sustainability of Tibb Practitioners in Cape Town?
- What recommendations can be provided to ensure entrepreneurial sustainability for Tibb Practitioners?

## **1.7 Significance of the Study**

There is a significant interest in natural healthcare in South Africa ever since the Traditional Health Practitioners Act (THP Act) has been gazetted in 2007 in an attempt to incorporate Traditional Healers into the healthcare system in the country. This led many to attempt inclusion under the auspices of Traditional Healthcare due to perceiving the South African Government's invested interest in incorporating Traditional Healing into the healthcare system based on the large number of the population making use of their services.

Tibb Practitioners are already registered with the Allied Health Professions Council of South Africa (AHPCSA) and already have practice numbers issued by the Board of Healthcare Funders of South Africa (BHF), the same organisation which awards practice numbers to medical practitioners. The Tibb profession is controlled with the other CAM professions under the Allied Health Professions Act (AHP Act). It does not seem as if the practice numbers are in actual fact causing higher profitability or more sustainability in the Tibb practices. Practice numbers can therefore not guarantee success in practice.

Tibb Healthcare practices have the potential to be profitable and sustainable entrepreneurial ventures in a growing industry and it is essential to evaluate the impacting factors in order to make the necessary recommendations that will increase sustainability of these practices.

There has been no known study conducted to evaluate the factors impacting entrepreneurial sustainability of Tibb Practitioners in Cape Town. The need for such an investigation is evident since it will directly benefit all Tibb practitioners in making their profession a more attractive option when it comes to making career decisions; especially a career in CAM. The research will therefore also directly benefit the South African Tibb Association (SATA) and all its members.

The study will furthermore benefit the TMC in providing it with valuable recommendations on how to utilise certain factors in order to create entrepreneurial sustainability of their Tibb practitioners.

The study will secondarily benefit all CAM practitioners and tertiary the public making use of CAM practitioners, because once success factors for entrepreneurial sustainability have been identified and utilised, it will result in sustainable practices becoming more readily available all over South Africa. The expected outcome will be more visibility of Tibb Practitioners which will lead to higher public awareness of the profession and consequently directing more people to make use of these CAM practitioners. In return this will benefit the UWC since more CAM students might decide to study further in order to become Tibb Practitioners.

This study will greatly contribute to the knowledge in the field of entrepreneurship, especially regarding the success factors making entrepreneurial ventures successful, profitable and sustainable over the long term. The research is very likely to result in additional investigation within the field of entrepreneurship, but also across disciplines like corporate strategy and strategic management.

## **1.8 Format of the Study**

This study is divided into five distinct chapters presented as follows:

Chapter One is the Introduction; introducing the research to be conducted by providing the background and framework for the study while laying a foundation to build on during the rest of the chapters.

Chapter Two is the Literature Review in which the existing knowledge on the subject of entrepreneurial sustainability is discussed and expanded upon by specifically focusing more in-depth on the impacting factors.

Chapter Three is the Research Methodology where more information is given about how the study was conducted and why certain approaches were followed.

Chapter Four discusses the Results and Interpretation of Findings of the research by looking at what the comments on the qualitative research interview questions revealed about entrepreneurial sustainability of Tibb Practitioners.

Chapter Five provides the Conclusion and Recommendations for possible solutions to be implemented to sustain entrepreneurial practices of Tibb Practitioners.

## **1.9 Conclusion**

CAM is a globally growing industry and Tibb Practitioners are part of this lucrative sector by being formally recognised and regulated by the AHPCSA in South Africa. Tibb and CAM as a whole is not part of the mainstream public healthcare system in South Africa and it may be perceived as a setback, but since it is formally positioned within a fast growing industry, it should rather be observed as an excellent entrepreneurial opportunity to pioneer profitable practices within a revolutionary environment.

In this introductory chapter a foundation was put in place for what Tibb is and where it is positioned in South Africa. The background to the problem was discussed clearly mentioning that although Tibb Practitioners are effective in their treatment of patients, there are certain factors lacking because once they enter private practices it seems like they are unable to develop sustainable entrepreneurial ventures. The need for conducting this study has been conveyed along with the aim, objectives and significance thereof and the chapter was concluded by outlining the format of the study. In the next chapter the literature about the subject will be reviewed in order to determine theoretically what factors may be impacting on the entrepreneurial sustainability of Tibb Practitioners in Cape Town.

# **CHAPTER 2**

## **LITERATURE REVIEW**

### **2.1 Introduction**

This chapter reviews entrepreneurial sustainability and how it impacts on the continued existence of Tibb Practitioners. Entrepreneurial sustainability is outlined in broader general terms as well as focusing specifically on its influence on Tibb Practitioners.

Entrepreneurial sustainability is defined before looking at entrepreneurial sustainability within the context of South Africa's unemployment crisis and more specifically within the healthcare industry with special focus on the area of Allied Health. This is followed by looking at entrepreneurship, the foundation of entrepreneurial sustainability. The link between Tibb Practitioners and entrepreneurial sustainability is then investigated before examining the factors impacting entrepreneurial sustainability to determine the importance of entrepreneurial sustainability on Tibb Practitioners.

### **2.2 The Definition of Entrepreneurial Sustainability**

#### **2.2.1 Entrepreneurship**

Ahmad, Naqi Khan and Mahmood (2011:1) clearly state that entrepreneurship is a notion not easy to define while the South African Institute of Entrepreneurship (SAIE) (2013:1) says most that was ever heard about entrepreneurship misses the point. These statements make it evident that although it may not be an easy term to define, a definition is crucial since entrepreneurship is at the heart of entrepreneurial sustainability.

Venter, Urban and Rwigema (2011:5) mention the fundamental activity of entrepreneurship is new venture creation which is a process and Venter *et al.* (2011:6) continue the definition by saying entrepreneurs recognise opportunities and then use various means to exploit or develop

these opportunities. Schlange (2009:14) confirms this by describing entrepreneurship as a process of realising opportunities by applying a creative approach to resource control.

Mohr, Fourie and Associates (2009:25) second this by declaring entrepreneurs see opportunities and are willing to take risks by producing goods in the expectation that they will be sold. Koe, Sa'ari, Majid and Ismail (2012:199) confirm this defining entrepreneurship as a process in which people recognise opportunities, utilise the opportunities through invention and innovation and eventually gain satisfaction from it.

Bolton and Thompson (2003:1) on the other hand pronounce that entrepreneurs are at the heart of change in every field of activity. SAIE (2013:1) believes entrepreneurship is all about taking giant leaps into the unknown while taking the entrepreneur from a comfort zone into uncharted territory.

These are all good, but divergent definitions in their own right. These definitions do not provide a workable definition for this study and it is thus necessary to craft such a definition. The recommendation is made for it to be formulated by combining these various definitions into a practical definition of entrepreneurship.

Entrepreneurship is therefore defined as a process, often at the centre of change, whereby an entrepreneur makes use of personal skills, talent and savvy to recognise and realise opportunities by taking calculated risks while often moving from a place of comfort into unfamiliar territory in order to develop creative products and services as well as sustainable new ventures while effectively obtaining and managing resources with the purpose of making a profit.

### **2.2.2 Sustainability**

Sustainability is a word usually associated with environmental aspects and Verkerk (2009:4) validates this in his very effective definition of sustainability:

“Sustainability has been defined in many different ways, in different contexts. Most definitions refer in one way or another to those approaches that provide the best

outcomes for the human and natural environments both now and into the indefinite future. Sustainability relates to the continuity of social, environmental, economic and institutional aspects of human society, as well as to all aspects of the non-human environment.”

Branson (2011:1) confirms this definition by saying he uses the word “sustainable” to describe ways of supplying energy that will remain productive over time and protect ecological diversity. Kotler and Keller (2009:679) bring yet another perspective on sustainability by seeing it as the importance of meeting humanity’s needs without harming future generations.

Firer, Ross, Westerfield, and Jordan (2008:100) describe sustainability from a managerial finance perspective when defining a sustainable growth rate as the maximum growth rate a firm can achieve without external equity financing while maintaining a constant debt/equity ratio. This is an important aspect due to making it clear from a financial perspective that sustainability has to do with profitability over an extended period of time.

Hough, Thompson, Stickland, Gamble, Human, Makin, and Braxton (2008:180) summarise and define it perfectly by saying the concept of sustainability in a business context means the achievement of balanced and integrated social, economic and environmental performance, referred to as the “triple bottom line”.

Commercial Sustainability is therefore defined from a business perspective as the creation of continuous business growth and profitability to meet present and future needs by effectively using available resources in such a way as to generate maximum performance and integrative equilibrium of the triple bottom line, namely social, economic and environmental factors to ensure business survival and continued existence.

### **2.2.3 Entrepreneurial Sustainability**

Entrepreneurial sustainability can be defined by simply combining the definitions of entrepreneurship and sustainability, but it is necessary to rather look at it as a new concept instead of looking at it just as a combination of two separate terms or definitions.

Schaltegger and Wagner [date unknown:5-6] define sustainable entrepreneurship in a general, narrow and wide sense:

“Sustainable entrepreneurship is characterized by some fundamental aspects of entrepreneurial activities which are less oriented towards management systems or technical procedures, and focus more on the personal initiative and skills of the entrepreneurial person or team to realize large-scale market success and societal change with environmental or societal innovations ...

“... Sustainable entrepreneurship – defined in a narrow sense – deals with a very innovative company start-up supplying environmentally and/or socially beneficial products and services with the potential to conquer a large part of the market. However, the spirit and the process of creating substantial market success with environmentally or socially beneficial products and services is not limited to start-ups, sustainable entrepreneurship can also be seen in established companies...

“... Defined more widely, sustainable entrepreneurship can thus be described as an innovative, market-oriented and personality driven forms of creating economic and societal value by means of break-through environmentally or socially beneficial market or institutional innovations.”

This definition is very long and due to the length, seems to lose its emphasis and usability.

Dean and McMullen (2007:58) offer a much more compact definition by defining sustainable entrepreneurship as the process of discovering, evaluating, and exploiting economic opportunities that are present in market failures which detract from sustainability, including those that are environmentally relevant.

These definitions do not define entrepreneurial sustainability as practically as what is needed within this study and by looking at these various definitions, the following effective definition is suggested.

Entrepreneurial sustainability is the continued existence and survival of entrepreneurial ventures by identifying business opportunities to innovatively exploit for profit within ethical boundaries to create employment while improving the quality of social, economic and environmental factors in the lives of the entrepreneur, the workforce, the family, the larger community and ultimately for the future generations.

## **2.3 The Context of Entrepreneurial Sustainability**

### **2.3.1 The External Environment: Unemployment**

Venter *et al.* (2011:530) point out that South Africa's unemployment rate is said to be one of the highest in the world and it is currently estimated to be in the region of 25 per cent of the economically-active population. Mohr *et al.* (2009:79) agree by saying unemployment is arguably the most important and vexing problem facing the South African economy, but it is noted that the increase in unemployment is not unique to South Africa.

Schiller (2008:111) brings in a more personal angle to this problem by mentioning unemployment statistics do not tell the complete story about the human costs of a sluggish economy, because when unemployment persists, job seekers become increasingly frustrated. Mohr *et al.* (2009:79) confirm this by stating the unemployed suffer mental and physical hardship and unemployment poses a serious threat to social and political stability.

Unemployment is a global phenomenon, but is especially affecting the South African economy due to the very high unemployment rate. It has a devastating effect on the economy, but more so in the minds of people, because the end results of unemployment is a generation of defeated individuals without any entrepreneurial drive and motivation to change the world and the socio-economic problems in the country.

The need for entrepreneurial sustainable ventures is thus evident within a global and national environment plagued by the socio-economic crisis of unemployment.

### **2.3.2 The Paradigm Shift: Job Seeking to Job Creation**

Scheepers (2010:35) believes entrepreneurship offers an opportunity for every unemployed individual to create employment for themselves as well as for others. Venter *et al.* (2011:20) agree with this view when saying that in an increasingly globalised world, survival depends on people who are driven by opportunity and who seek to maximise their goals in a sustainable way and those who nurture entrepreneurs are likely to generate a larger pool of sustainable ventures than those who do not. Koe *et al.* (2012:197) confirm this when stating:

“No doubt, entrepreneurs have contributed significantly to economy, society as well as human kind. Specifically, job creation has been regarded as one of the major contributions of entrepreneurs.”

Entrepreneurship can only become the solution to the unemployment crisis when a paradigm shift takes place; a change in the individual’s mindset from looking for employment to creating employment.

Kirsten (2013:1) agrees that everything boils down to the human mind and specifically the subconscious mind because it is the subconscious mind which controls more than 95 percent of our lives. Mohr *et al.* (2009:88) confirm this need for a paradigm shift in the minds of South African when mentioning that in the *South African Executive Report of the Global Entrepreneurship Monitor 2006* published by the Graduate School of Business at the University of Cape Town, only 5.29 per cent of adult South Africans engaged in entrepreneurial activity, the second lowest rate of all the developing countries that participated in the study.

The question arises why only the minority of people engage in entrepreneurship in a country like South Africa, with one of the highest unemployment rates in the world, when it is clearly seen as the solution to this socio-economic crisis?

Friedman (2013:11) indicates that his generation had it easy and had to *find* a job, but more than ever his kids will have to *invent* a job. This is a very relevant statement especially for Tibb Practitioners needing to establish sustainable practices in order to create work for themselves.

Strauss and Howe (1991:279-342) list various generations accordingly:

- The GI Generation, born between 1901 and 1924;
- The Silent Generation, born between 1925 and 1942;
- The Boom Generation, born between 1943 and 1960;
- The Thirteenth Generation or Generation X, born between 1961 and 1981; and
- The Millennial Generation, born between 1982 and 2003.

Waters (2013:1) mentions that it is safe to say everyone in the current society, referring to Generation Y, has become so lazy and has so little work ethic that they are just going by life waiting for a handout to fall out of the sky to solve all their problems. McCarron (2012:3) clarifies that Generation Y is also called the Millennial Generation. Scheid (2012:1) confirms that today's worker does not want to work a full eight hour day, but expects high pay and lots of perks.

Zimmerer, Scarborough and Wilson (2009:19) disagree with this point of view by mentioning that although members of Generation X are more likely than other age groups to launch businesses, even the Millennial Generation show high levels of interest in entrepreneurship.

The possibility therefore exists that the reason for the low drive for entrepreneurship might be linked to generational influence. Wolter (2007:126) states that if you want to persevere in the face of challenges and achieve your goals, you must remain committed to succeeding no matter what the circumstances. This leads to the question of whether the present generation is actually committed to succeeding and if so, why not by using the obvious solution of entrepreneurship to overcome unemployment instead of continuing seeking employment?

Most Tibb Practitioners in South Africa are from the Millennial Generation with a smaller number from Generation X and minimal from the Boom Generation, so it is necessary to understand the Millennial Generation to determine whether the generation has an impact on the entrepreneurial sustainability of their private.

Keeling (2003:31) states that while members of Generation X could be described as independent and survival oriented, Millennials may be described as sheltered and team oriented with seven distinguishing traits, such as:

- Special;
- Sheltered;
- Confident;
- Team Oriented;
- Achieving;
- Pressured; and
- Conventional.

These characteristics do not make the Millennial Generation bad or ineffective, just different from the previous generations.

Keeling (2003:34) furthermore mentions that because Millennial students are accustomed to being spoon fed information, they may expect a prescriptive advising style. This may be exactly why such a small percentage of people from the Millennial Generation are entering entrepreneurial activities, because they expect to be prescribed clearly what to do instead of taking the initiative and pioneering new ventures and they are more interested in working in a team than entering entrepreneurial ventures where they have to solely take the lead and responsibility. They may also feel more sheltered and safe being employed by a larger organisation instead of entering entrepreneurial ventures.

Zimmerer *et al.* (2009:19) agree with this by mentioning that many young people from the Millennial Generation are fulfilling their dreams since young entrepreneur camps were established around the country teaching them how to launch and run a business.

It is evident that a paradigm shift is required, especially for the Millennial Generation, to move away from a job seeking mentality to an employment creation mindset in order to overcome the unemployment crisis as well as for Tibb Practitioners to create sustainable private practices in South Africa. For that to transpire, the Tibb Practitioners will have to be taught business and entrepreneurship skills and given clear direction and guidance on how to launch and successfully run a commercially sustainable private practice.

### **2.3.3 The Country: South Africa**

South Africa is a country characterised by rich natural resources, a good physical infrastructure and endless entrepreneurial possibilities. It is a country that captured the attention of the global community due to overcoming the challenge of apartheid and becoming a truly democratic nation in the 1994 elections.

Mohr *et al.* (2009:82) conclude that South Africa is neither a particularly rich nor a particularly poor country and that while the level of economic development is fairly high, the level of social development still leaves much to be desired. In addition Mohr *et al.* (2009:85)

say South Africa is a capital-poor country, yet Mohr *et al.* (2009:82) balance this view by stating in the African context South Africa is an economic giant.

South Africa is a country with many challenges like unemployment and poverty. However, the biggest challenge is probably the stated problem of the individual's mindset. Apartheid has been overcome, but the results thereof is still a problem in the mindsets of many, inhibiting the country from solving these challenges due to the constant internal need to still politicise matters instead of finding practical solutions. It is seen in South African government legislation when an attempt is made to solve the inequality of the past by basing current decisions on emotion rather than on strategy.

Herman Mashaba, renowned South African entrepreneur, as quoted by Symanowitz (2013:1) from a Finweek Magazine article confirms this statement by saying the entrepreneurial spirit in South Africa is dying largely because of suffocating labour laws together with uncompetitive minimum wages discouraging businesses from bringing on more workers. Entrepreneurship is discouraged as a result in a country that needs it most. Venter *et al.* (2011:22) agree that without a steady supply of entrepreneurs, South Africa is likely to stagnate and decline economically.

#### **2.3.4 The Industry: Healthcare**

Healthcare is an important industry in the economy of any country and also a growing industry, because as the population grows, the healthcare needs also grow.

KPMG (2012:4) concur that as populations grow, demographics shift and the gap between the rich and the poor become ever-larger, the demand for health services will rise significantly in both the developed and the developing world. Bezuidenhout (2010:11) agrees by saying a study of the health profile of the population will indicate the needs for healthcare.

In South Africa the growing healthcare industry is divided into two main arenas that offer various employment opportunities for medical and healthcare professionals, namely:

- Public Healthcare; and
- Private Healthcare.

The private healthcare arena offers excellent entrepreneurial opportunities for healthcare professionals to enter into private practices and in South Africa most medical practitioners have very sustainable practices leading to doctors becoming very wealthy in private practice.

### **2.3.5 The Sector: Allied Healthcare**

The allied healthcare sector is that part of the healthcare industry consisting of the believers in CAM and these practitioners professionally register with the AHPCSA offering them statutory recognition as well as formal practice numbers from the Board of Healthcare Funders (BHF) and these eleven professions regulated by the AHPCSA under the Allied Health Professions Act (AHP Act) can be listed as follows:

- Ayurvedic Practitioners;
- Chinese Medicine Practitioners;
- Chiropractors;
- Homeopaths;
- Naturopaths;
- Osteopaths;
- Phytotherapists;
- Therapeutic Aromatherapists;
- Therapeutic Massage Therapists;
- Therapeutic Reflexologists; and
- Unani-Tibb Practitioners.

As a result, allied healthcare practitioners are professionally recognised in South Africa just like medical practitioners registered with the Health Professions Council of South Africa (HPCSA), although this might not be the overall public perception.

The biggest difference between the medical and allied health practitioners as a result of this is employment opportunities. Conventional medical practitioners usually have a choice whether to enter public or private healthcare and whether to find employment or go into private practices.

In South Africa allied health practitioners usually function within private practices since the allied health sector does not offer employment opportunities within the mainline public healthcare industry, mainly because of the following two reasons:

- There are not enough Allied Healthcare Practitioners to justify their incorporation into the public healthcare sector. According to Bhikha (2013a:1) there are about 300 000 conventionally trained medical practitioners in South Africa compared to just under 3000 Allied Health Practitioners; and
- There are guidelines prohibiting medical practitioners from working with allied healthcare practitioners, thus making it impossible for allied healthcare practitioners to work within the public healthcare industry. Hirst (2013:1) made it clear that these guidelines do not come from the AHPCSA, but from the HPCSA. The HPCSA *Guidelines for Good Practice in the Health Care Professions* clearly states in rule 8A that a practitioner, registered under the Health Professions Act (HP Act), shall not share his or her rooms with a person or entity not registered in terms of that Act (HPCSA, 2008:12). Hoho (2013:1) explained that it is seen as unethical for practitioners registered with the HPCSA to share rooms with other practitioners not registered with the HP Act (including practitioners registered with the AHPCSA) since it helps to avoid touting and practitioners referring patients to other persons or entities; to share rooms practitioners must be registered with the HPCSA only.

Allied healthcare practitioners are consequently compelled to enter private practices, but that places them in the ideal setting to establish sustainable entrepreneurial ventures.

Venter *et al.* (2011:22) call entrepreneurial ventures that were created because entrepreneurs did not have any other choice, survivalist enterprises.

In the allied health sector in South Africa many practitioners might have this exact mindset and that can be one of the reasons many private practices in this sector is not sustainable and profitable. It is crucial to determine whether the allied health sector is actually a viable sector within which to establish entrepreneurial ventures or whether these private practices are in actual fact just survivalist enterprises or whether it has the potential to become sustainable entrepreneurial ventures. The CAM sector is a globally growing and multi-million dollar industry due to the worldwide need to live healthy and use more natural and organic products, including natural medication.

Verkerk (2009:8) declares that while Eastern and other traditions have always tended to abide by whole body and holistic principles, these approaches have been accepted mainly within the CAM world and have yet to receive sufficient acceptance by the mainstream medical community. Bhikha and Abdul Haq (2001:13) agree that scientific western medicine tends to reduce human bodies to discrete parts disembodied them to study what causes illness in them and that most so-called “alternative” medical approaches try to see the body as a whole, existing in a greater social and environmental whole and focusing on the processes that maintain health for whole systems.

In the global and South African context where unemployment is a huge socio-economic challenge characterised by affecting people in all dimensions including their emotional and psychological spheres, the growing need for allied healthcare is evident in that these primary healthcare practitioners will holistically take a patient’s whole being into consideration during consultations. They will include the emotional, social, physical, spiritual and even financial dimensions when examining and treating them.

Verkerk (2009:3) mentions that successful holistic healthcare systems that survived include Ayurveda, Unani, Tibetan, Traditional Chinese Medicine and a multitude of diverse healthcare traditions still existent in Japan, South-East Asia, Southern Africa, South America and elsewhere. This includes Tibb and Unani-Tibb is thus ideally situated within the context of the growing allied healthcare sector with the prospect of creating successful and sustainable entrepreneurial private practices.

### **2.3.6 The Curriculum: Tibb Education**

Tibb Practitioners study a five year programme at the School of Natural Medicine of the UWC, consisting of a three year Bachelor of Science degree in Complementary Health Sciences [B.Sc.(CHS)] followed by a two year Bachelor of Complementary Medicine degree in Unani-Tibb Medicine [BCM(UTM)],

The UWC used to offer a one year Post-Graduate Diploma (PG Dip.) in UTM for qualified medical doctors and primary healthcare nurses, but this programme has been discontinued due to changes in legislation. This PG Dip might be offered as a two year programme for medical

doctors and primary healthcare nurses at the Cape Peninsula University of Technology (CPUT) in the near future according to Anonymous (2010:7).

When mentioning CAM in South Africa, Homeopathy seems to be the most prominently associated profession with the industry. This is possibly due to its long history in the country having been introduced to South Africa in the 1820's and formally recognised and registered since 1982 according to Prinsloo (2010:1-6). Training of Homeopaths in South Africa is also a five year programme and takes place at the University of Johannesburg or the Durban University of Technology and not at the University of the Western Cape. Training for similar professions like Naturopathy and Phytotherapy, which also falls under the Professional Board of Homeopathy, Naturopathy and Phytotherapy of the AHPCSA, are offered at the UWC.

Comparing the difference in curricula of these professions might provide valuable information about the foundation these professions are built upon (Annexure G).

When comparing the various curricula it is evident that the training of medical practitioners is much more in-depth while extended training is given in understanding the functioning of the various bodily systems and practical clinical hours are being done from the second year already. Homeopathy training is of a very high standard and according to Le Roux (2013:1) the first number of years is exactly the same as the training in medicine. Prinsloo (2010:5) confirms this when stating that Homeopathic practitioners are recognised as a primary contact profession the same as Medical Practitioners. Practical clinical hours in Homeopathy commence in the third year already compared to only in the fifth year of training for Tibb, Naturopathy and Phytotherapy.

It seems that Homeopathic clinical training is of a higher standard than the training of Tibb Practitioners, Naturopaths and Phytotherapists, but all these curricula includes Ethics, Jurisprudence and Practice Management as subject. The difference observed is that according to the University of Johannesburg (2013a:223) this subject for Homeopathic training includes business and entrepreneurship skills, but according to the University of the Western Cape (2013:425) theirs do not, which is a clear lack in the entrepreneurial training of Tibb Practitioners.

Tibb Practitioners are leaving university qualified to diagnose and treat patients according to a holistic healthcare system, but they do not have the necessary entrepreneurship and business skills to make a success of their practices. In a sector where it is necessary for graduates to enter private practices to make a living, it is essential for them to be trained accordingly in business and entrepreneurship skills in order to ensure their commercial sustainability, especially since many of them are from the Millennial Generation specifically in need of these abilities.

Based upon this Tibb curriculum as the foundation of the profession of Tibb, it is suggested that the potential exists for entrepreneurial Tibb practices to be successful, profitable and sustainable within the growing CAM industry, but consideration should be given to improve the curriculum.

## **2.4 The Foundation for Entrepreneurial Sustainability**

### **2.4.1 Entrepreneurial Characteristics**

Schiller (2008:4) says the resources used to produce goods and services are called factors of production and mentions four such factors, namely:

- Land;
- Labour;
- Capital; and
- Entrepreneurship.

Mohr *et al.* (2009:1) agree and also list entrepreneurship as a factor of production, but in addition say natural resources and labour are primary factors of production while capital and entrepreneurship are called secondary factors.

This puts entrepreneurship in perspective, because Mohr *et al.* (2009:2) view the entrepreneur as the driving force behind production while Schiller (2008:5) views the entrepreneur as the person who sees the opportunity for new or better products and brings together the resources needed for producing them.

The characteristics motivating and differentiating entrepreneurs from other people are crucial for this study especially since that might be a key factor in determining why certain Tibb Practitioners are successful in private practices while others are unable to create sustainable ventures.

De V Maasdorp and Van Vuuren (1998:703-705) list twelve such entrepreneurial characteristics, namely:

- The achievement needs of successful entrepreneurs are to exceed their own previous achievements and that is what drives them to perform;
- They take personal responsibility for their lives and do not rely on fate for the outcome;
- People with high risk motivation would rather accept calculated risks than take chances or gamble;
- Successful entrepreneurs have the ability to cope with uncertainty;
- Entrepreneurs are not discouraged by failure;
- Entrepreneurs have self-confidence and believe in their own ability;
- They get involved in long-term activities that will result in success;
- Entrepreneurs take the initiative;
- They display a need to conclude tasks and to resolve problems;
- They excel according to their own high standards;
- Entrepreneurs are attentive listeners and quick to learn; and
- Entrepreneurs have an approach which results in identifying and acquiring expertise to support their objectives.

Venter *et al.* (2011:51-58) offer a much more compact list which basically includes all these characteristics, just in a more presentable format, namely:

- Self-efficacy;
- Commitment, self-reliance and persistence;
- Achievement needs-oriented;
- Problem-solving abilities;
- Internal locus of control; individuals who feel in charge of their own destiny; and
- High tolerance of ambiguity.

O'Connor (2011:1) summarises these characteristics for successful entrepreneurs very effectively as follows:

- Believe in yourself and stand behind your convictions;
- Innovate and invent constantly; and
- Move rapidly.

These are all characteristics making entrepreneurs successful in their ventures. Looking at the various characteristics it is interesting to note that entrepreneurs are people that believe in themselves and in their own ability while not allowing any challenges to hold them back, but instead find solutions to the problems they face.

They are people that inspire and motivate themselves by keeping the end result in mind in the midst of the challenges they face on the journey to success. Entrepreneurs are people believing in fulfilling their calling and passionately live a life of purpose instead of getting up in the morning just to do a job and as a result they identify and innovatively and creatively materialise opportunities into profit.

#### **2.4.2 Types of Entrepreneurs**

De V Maasdorp and Van Vuuren (1998:709-710) identify five types of entrepreneurs:

- The craftsman (technical) entrepreneur focuses strongly on the innovation of existing technology;
- The opportunistic entrepreneur focuses on continual change and the creation of new conditions and enterprises in order to seize any opportunities which may present themselves;
- The inventpreneur is motivated by the mental enrichment and reward associated with innovations;
- The “copy-cat” entrepreneur engages in business activities only after someone else has successfully introduced the invention or idea into the business environment; and
- The pioneering entrepreneur is prepared to be the first to introduce an invention or an idea to the business environment and usually takes the lead in the particular industry and is fully prepared to accept the risk.

Venter *et al.* (2011:370-581) confirm this, but term the five types of entrepreneurs differently as:

- Strategic entrepreneurship;
- Techno-entrepreneurship;
- Corporate entrepreneurship;
- Social entrepreneurship; and
- International entrepreneurship.

George and Jaber (2012:15) furthermore distinguish between two types of entrepreneurship:

- Commercial entrepreneurship, which represents the identification, evaluation and exploitation of opportunities leading profits; and
- Social entrepreneurship, which refers to the identification, evaluation and exploitation of opportunities leading to social value.

Tibb Practitioners can effectively function as opportunistic or corporate entrepreneurs within the TMC while the Ibn Sina Institute of Tibb uses social entrepreneurship to change society as part of its social responsibility aspect. Once Tibb Practitioners venture out into private practices they should become pioneering or strategic entrepreneurs while portraying entrepreneurial characteristics in their daily lives and activities.

### **2.4.3 Entrepreneurship versus Intrapreneurship**

“The essential activity of entrepreneurship, namely innovation, does not only occur in small and medium-sized enterprises. It also occurs in large corporate enterprises. An entrepreneur operating in a large enterprise is called an intrapreneur.” (De V Maasdorp and Van Vuuren, 1998:717-718)

Venter *et al.* (2011:498) agree with this by mentioning that corporate intrapreneurship focuses on the integration of entrepreneurship within the entire organisation and intrapreneurs are innovative employees who either rejuvenate existing organisations or create new ventures within a corporate structure.

Rwigema (2005:76) confirms that intrapreneurs are often described as internal or corporate entrepreneurs, the difference between them and entrepreneurs being that funding and ultimate control rest with top management.

Entrepreneurship is a concept that is not only relevant in Small-, Medium- and Micro Enterprises (SMME), but can be utilised in large organisations as well in the form of intrapreneurship.

Venter *et al.* (2011:500) make it clear that intrapreneurs operate on similar principles to (and share characteristics with) their entrepreneurial counterparts. Wickman (2006:293) agrees that the intrapreneur's role would parallel that of the entrepreneur. Maier and Zenovia (2011:975) concur that both entrepreneurship and intrapreneurship are instruments of innovation that help in creating new competencies and accessing new markets.

Intrapreneurship is a concept that poses a possible recommended solution to the Tibb Practitioners for overcoming the challenge of entering private practices and not being able to commercially sustain it, but this concept should be additionally investigated during the research stage. It does not seem as if the Tibb Practitioners functioning within the TMC in Cape Town see themselves as entrepreneurs within a larger organisation; they do not see themselves as intrapreneurs within a larger organisation.

Goosen (2002:23) states a basic element of entrepreneurship is the ability to recognise and take advantage of a business idea or opportunity and this is exactly what the concept of intrapreneurship can be to Tibb Practitioners; an idea or opportunity leading to a solution.

De V Maasdorp and Van Vuuren (1998:718) confirm this by saying the entrepreneur and intrapreneur do not differ in essence, but intrapreneurship is, in practice, mainly a method of gaining experience. This may be exactly what Tibb Practitioners need to become successful.

## **2.5 The Impacting Factors of Entrepreneurial Sustainability**

### **2.5.1 General Factors**

Venter *et al.* (2011:61) proclaim that entrepreneurs seek promising ideas and forge them into profitable ventures. Mullins (2006:14) concur by saying it takes healthy doses of motivation, persistence, tolerance of ambiguity and more to be a successful entrepreneur within the entrepreneurial life cycle portrayed in Figure 2.1:



**Figure 2.1: Entrepreneurial Life Cycle** (Mullins, 2006:14).

Successful entrepreneurship and the creation of sustainable entrepreneurial ventures are possible when certain general factors are adhered to. Venter *et al.* (2011:47-68, 520) list broad categories in which these general factors can be classified into, such as:

- Entrepreneurial Capital;
- Entrepreneurial Intelligence;
- Entrepreneurial Behaviour;
- Entrepreneurial Creativity and Innovation;
- Entrepreneurial Risks; and
- Social Entrepreneurship.

These categories include many general factors contributing and inhibiting the success and business sustainability of entrepreneurial ventures, such as:

- Acquiring Business Skills;
- Growth and Profitability;
- Entrepreneurial Orientation, consisting of autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness;
- Create a Competitive Advantage;
- Personality Variables;
- Psychological Factors; and
- Passion for a Profession or Industry (De V Maasdoorp and Van Vuuren, 1998:714; Venter *et al.*, 2011:505-506; Stephenson, 2009:1; Ayala Calvo and Manzano Garcia, 2010:267; Ekore and Okekeocha, 2012:515).

Dewi and Dhewanto (2012:57-58) mention four more general key success factors relating to Islamic Family Business that might be of special interest to the Ibn Sina Institute of Tibb operating as an Islamic business, as:

- Honesty and Ethics;
- Charity (Almsgiving, Zakat, Infaq);
- Good Intention; and
- Positive Thinking on Conflicts.

These factors are seen as general since they directly influence the success or failure related to entrepreneurial ventures of any kind regardless of the industry the business operates within.

### **2.5.2 Specific Factors**

Adhering to the general factors lay a good foundation for any entrepreneurial venture to succeed, but there are specific factors related to various industries and professions to be additionally adhered to for success to be ensured in a specific industry. The specific factors can be seen as the framework of success built upon the foundation of the general success factors.

Tibb Practitioners need more than just the general factors to ensure entrepreneurial sustainability, because Tibb practices fall within the Healthcare Industry and the Allied

Health Sector which means their private practices fall under a specific set of laws and regulations prohibiting certain business activities like advertising.

Silbiger (2004:34) mentions advertising as one of the promotional efforts business entities use to pull buyers to a store or to push the distribution channel to stock and sell. Schiller (2008:541) agrees by classifying advertising as the most prominent form of non-price competition used by imperfectly competitive firms to enhance their own product's image and thereby increasing the size of its captive market. Mohr *et al.* (2009:263) confirm the use of advertising to create product awareness and loyalty to well-known brands.

It is evident that advertising is an important factor to create awareness and to attract clients to an entrepreneurial venture, but according to rule 1A of the *Guidelines for Good Practice* any Allied Healthcare Practitioner is prohibited from advertising (AHPCSA, 2013:2). This does not only affect Tibb Practitioners, but all the professions regulated by the AHPCSA and during the research stage it should be determined whether this affects other allied health professions the same as it affects Tibb practices.

Medical Practitioners also function within the Healthcare Industry, but according to rule 3(1) of the *Guidelines for Good Practice in the Health Care Professions* they are allowed to advertise their services in a professional manner (HPCSA, 2008:9).

This is totally contradictory to the guidelines for good practice of the AHPCSA and therefore disadvantages any allied healthcare practice compared to conventional medical practices in South Africa, but also positions it very differently to entrepreneurial ventures from other industries that are not limited by such legislation.

Entrepreneurial creativity and innovation is therefore required to make these allied health practices commercially sustainable and profitable without breaking the law and for that to occur, there are certain specific success factors practitioners should adhere to which can be classified as private practice factors and impediment factors.

### 2.5.2.1 Private Practice Factors

Avery (2013:1-2) mentions specific factors pertaining to the success in private practice that can directly be applied to Tibb private practices, such as:

- Working part-time instead of full-time while building up a private practice on the side;
- Growing the practitioner's profile and level of activity in order to establish a more sustainable practice;
- Resilience;
- Self-Discipline;
- Focus;
- Maintaining a good reputation;
- Growing a vital network while building strong relationships with providers and clients;
- Remain visible by attending networking events;
- Build-up a referral system; and
- Network within your own profession as well.

Hartwell-Walker (2011:1-4) lists ten more tips for successful private practices that can also be seen as additional specific success factors:

- Go into private practice with a clear vision of its challenges as well as its rewards;
- Create a speciality for yourself by getting the training you need to be the local expert;
- Embrace the business end of the business;
- Take the time for some business training;
- Deal with your own issues around money;
- Invest in yourself with both money and time;
- Remember: Location, Location, Location;
- Accept that your time is not really your own and in the beginning it may be necessary to make yourself available when there is client demand;
- Perfect your paperwork; and
- Develop a marketing plan and revisit it every few months.

There are challenges in creating profitable and sustainable Tibb private practices, but when considering these specific private practice success factors, it gives valuable and practical

guidelines to follow in order to achieve entrepreneurial success. Private practices are unique entrepreneurial ventures and putting these private practice factors into place, are necessary to ensure entrepreneurial success within the healthcare industry.

### **2.5.2.2 Impediment Factors**

Impediment factors are those specific factors that need to be overcome in order to ensure commercially sustainable entrepreneurial ventures. Rohn (2013:1) mentions that enterprising people are not lazy, but are skilled enough, confident enough, creative enough and disciplined enough to seize opportunities that present themselves regardless of the economy while being creative and have the courage to be creative. Certain obstacles or impediment factors need to be overcome in order to have the courage to be creative.

Ekore and Okekeocha (2012:515-524) conducted a study to determine why university graduates are reluctant to choose entrepreneurship as career even when it is an attractive alternative to unemployment and it was found that psychological factors like the fear of entrepreneurship inhibit their courage. It was found that the fear of entrepreneurship reduces when the belief of being able and capable to succeed in entrepreneurship emerges.

The two main impediment factors to overcome are therefore fear and perception. An entrepreneur needs to overcome the fear of entrepreneurship along with the fear of failure and success. Furthermore the fear of uncertainty and the fear of change need to be overcome. Goodman (2013:1) mentions going from dream to decision by doing what you fear in small doses in an attempt to build confidence. As people deal with their fears, it will not only assist them in growing into becoming entrepreneurs and overcoming their reluctance to enter the field of entrepreneurship, but it also builds their confidence.

As the confidence of entrepreneurs grow, their perception will change as their belief in themselves and in their ability emerges while limiting their fear of dealing with the consequences. Tibb Practitioners need to overcome their fears and inhibitions while changing their perceptions of entering the arena of entrepreneurship in order to create sustainable private practices.

## **2.6 Conclusion**

This chapter commenced with an introduction about entrepreneurial sustainability and its impact on Tibb Practitioners. The introduction was followed by defining entrepreneurship, sustainability and ultimately entrepreneurial sustainability in order to provide the framework for the rest of the literature review.

It was followed by an overview of the context of entrepreneurial sustainability for this study by looking at the external environment and the unemployment crisis. The paradigm shift from a mindset of seeking employment to rather creating employment was viewed before looking at where entrepreneurial sustainability for Tibb Practitioners is positioned within the country of South Africa, the healthcare industry and the allied healthcare sector.

The foundation for entrepreneurial sustainability was investigated by looking at entrepreneurial characteristics displayed in entrepreneurs, followed by the types of entrepreneurs there are and lastly a distinction was made between entrepreneurship in Small, Medium and Micro Enterprises (SMME) and corporate entrepreneurship, termed intrapreneurship. It was suggested that intrapreneurship as concept should be investigated during the research phase in order to determine whether it might be a possible solution to the lack of sustainability of Tibb Practitioners in private practices.

Lastly the impacting factors of entrepreneurial sustainability were listed under general factors and specific factors, with specific mention made of private practice factors to encourage and impediment factors to overcome.

In the following chapter the research methodology used to conduct the study will be discussed in detail to clearly frame the foundation for the research to be conducted in order to determine the entrepreneurial sustainability of Tibb Practitioners.

# CHAPTER 3

## RESEARCH METHODOLOGY

### 3.1 Introduction

Welman, Kruger and Mitchell (2005:2) describe research as a process that involves obtaining subjective knowledge by means of various objective methods and procedures while research methodology considers and explains the logic behind the research methods and techniques. Saunders, Lewis and Thornhill (2009:595) confirm research methodology as the theory of how research should be undertaken while the research methods refer to the techniques and procedures used to obtain and analyse data.

This chapter subsequently looks at the research methodology that was used to conduct the research.

### 3.2 Rationale for the Research

The research was conducted with the purpose of investigating the entrepreneurial sustainability of Tibb Practitioners in Cape Town in order to determine which factors might have a direct or indirect impact on it.

### 3.3 Research Design

Gibbs (2011:32) explains research design as the framework for the research process involving the collection and analysis of data. The research design was therefore seen as the framework or structure that held the research together and according to Saunders *et al.* (2009:138-141) there are various research designs, such as:

- Explanatory studies;
- Descriptive studies; and
- Exploratory studies.

Explanatory research aims to explain the relationship between variables while descriptive research aims to describe trends or occurrence. Neither of these intends to explore a situation in order to find new insights and therefore the research design that was used for this study, was exploratory research in order to determine what factors are impacting entrepreneurial sustainability of Tibb Practitioners.

According to Saunders *et al.* (2009:140) there are three main ways of conducting exploratory research, such as:

- A literature search;
- Interviewing of “experts” in the field; and
- Conducting focus group interviews.

These three methods were taken into consideration when the rest of the research methodology was designed.

### **3.4 Research Philosophy**

Wegner (2009:18-19) describes quantitative or numeric data as real numbers that can be manipulated using arithmetic operations to produce meaningful results while qualitative or categorical data represents categories of outcomes of a random variable and is number-like codes arbitrarily assigned to different category labels. Saunders *et al.* (2009:595) confirm this by distinguishing between quantitative or statistical analysis and qualitative or non-statistical analysis techniques.

Quantitative research attempts to gather numeric data by using questionnaires and surveys to a large number of respondents, usually more than 100. Qualitative research, on the other hand, gathers categorical data by means of interviews or focus groups, with at least 10 respondents.

The target population for this research was too small to justify the use of quantitative research and since the research entailed the gathering of opinions, beliefs and mindsets of respondents, the researcher made use of qualitative research. This qualitative research was conducted by means of interviews, since interviews can be regarded as one of the foremost tools of the

behavioural scientist, not only for the purpose of obtaining qualitative data but also as a tool for measurement according to Taylor, Sinha and Ghoshal (2011:75).

### **3.5 Target Population**

Lind, Marchal and Wathen (2008:7) define population as the entire set of individuals or objects of interest or the measurements obtained from all individuals or objects of interest.

There were a total of 29 Tibb Practitioners in Cape Town according to the SATA at the time of the research and of these there were six working full-time as employees and 3 working part-time as locums within the TMC. Most of the other 20 underwent an internship in the TMC before progressing either into private practices or lecturing at the UWC, additional medical studies or alternative employment.

The target population was therefore all Tibb Practitioners in Cape Town.

### **3.6 Sampling Strategy**

Data had to be collected during the qualitative research interviews from the target population and in this research the target population was the Tibb Practitioners in Cape Town.

All the Tibb Practitioners in Cape Town were not available or willing to participate in this research and therefore sampling was used. Goddard and Melville (2001) make it clear that samples must be representative of the population being studied; otherwise no general observations about the population can be made from studying the sample. A well represented group of practitioners from various sub-groups within the Tibb fraternity in Cape Town were consequently used for sampling, such as:

- Tibb Practitioners working full-time at the TMC in Cape Town;
- Tibb Practitioners working as locums at the TMC in Cape Town while pursuing other ventures as well;
- Tibb Practitioners in private practices in Cape Town;

- Tibb Practitioners that left practicing in order to continue their studies;
- Tibb Practitioners that left practicing in order to lecture at the UWC; and
- Tibb Practitioners that started off as primary healthcare nurses and decided to complete a postgraduate diploma in Tibb Medicine in order to qualify and practice as dual nurses and Tibb Practitioners.

Encyclopaedia Britannica (2013) describes sampling as a process or method of drawing a representative group of individuals or cases from a particular population. Dawson (2010:55) agrees by calling it sampling if it is not possible to contact everyone in the research population and the researcher selects a number of people to contact. Shajahan (2009:25) justifies this by stating that a business research project will rarely involve examining the entire population relevant to the problem and for the most part, practical considerations dictate that a sample or a subset of the relevant population be used.

Wegner (2009:214-219) distinguishes between probability (random-based) sampling and non-probability (non-random) sampling, where probability sampling refers to sample members being selected from the target population on a purely random (chance) basis and non-probability sampling refers to sample members being selected non-randomly, but based on other criteria.

Gupta and Gupta (2011:48-50) list various forms of random sampling that can be used, namely:

- Simple random sampling;
- Stratified sampling;
- Multistage sampling;
- Cluster sampling; and
- Mixed sampling.

The target population of Tibb Practitioners in Cape Town was very small and probability sampling might not have ensured representation of practitioners from all the various sub-groups and it probably would have limited participation in the research because a practitioner that was randomly selected might not have been interested to participate in the research while interested practitioners might have been excluded. Dawson (2010:55) confirms that in

probability sampling, all people within the research population have a specifiable chance of being selected. However, just because there is a chance of being selected, does not ensure selection.

Non-probability sampling was used, because the small target population and the fact that all Tibb Practitioners in Cape Town know each other, disqualified probability sampling from being the ideal method of sample selection and non-probability sampling was used.

Wegner (2009:214-219) lists four non-probability sampling methods, namely:

- Convenience sampling;
- Judgement sampling;
- Quota sampling; and
- Snowball sampling.

Saunders *et al.* (2009:241) list a fifth non-probability sampling method, namely self-selection sampling which occurs when each case, usually individuals, are allowed to identify their desire to take part in the research.

Self-selection non-probability sampling was used as the sampling method for the Tibb Practitioners in Cape Town, giving practitioners from all the sub-groups the opportunity to respond and to take part in the research.

All Tibb Practitioners were informed about the prospective research through the SATA newsletter being sent out to all members and it was followed-up with personal communication in the form of face-to-face communication, telephonic communication or e-mail communication. Those who responded and indicated their willingness to participate in the research were used as the sample.

### **3.7 Sample Size**

Shajahan (2011:293) mentions four traditional methods of estimating sample size as:

- Availability;

- Minimum needed;
- Budget; and
- Standard error formula.

The sample size should have ideally consisted of a minimum of ten respondents for qualitative research, but it might have included up to the full target population consisting of 29 Tibb Practitioners.

After informing the Tibb Practitioners about the proposed research to be conducted and followed up by personal communication, sixteen indicated their willingness to participate and made themselves available for the interviews. The sample size that was used thus consisted of sixteen respondents.

### **3.8 The Research Instrument**

Data is defined by Saunders *et al.* (2009:590) as facts, opinions and statistics that have been collected together and recorded for reference or for analysis while Wegner (2009:18) defines data as the raw material of statistical analysis.

The collection of data occurs by means of a research instrument, such as:

- Quantitative research instrument like questionnaires or surveys; and
- Qualitative research instrument like interviews and case studies.

For the purpose of this qualitative research, interviews were chosen as the research instrument.

#### **3.8.1 Interviews**

Taylor *et al.* (2011:75) mention that interviews can be regarded as one of the foremost tools of the behavioural scientist, not only for the purpose of obtaining qualitative data but also as a tool for measurement. Cooper and Schindler (2005:193) concur by saying interviews are the

most widely used source for collecting information for evidence. The collection of data occurred during personal interviews with the Tibb Practitioners.

Wegner (2009:28) lists advantages of personal interviews for data collection as follows:

- A higher response rate is generally achieved;
- Questioning allows further probing into reasons;
- Data collection is immediate and the data is current;
- Greater data accuracy is generally ensured;
- Useful when the required data is of a technical nature;
- Non-verbal responses (body language; facial expression) can be observed and noted;
- Generally more questions can be asked;
- Responses are spontaneous and therefore more likely to be valid; and
- The use of aided-recall questions and other visual prompts is possible.

Dawson (2010:27) declares that in social research there are many types of interviews, but the most common are:

- Unstructured Interviews
- Semi-Structured Interviews
- Structured Interviews.

Saunders *et al.* (2009:320-321) describe these different forms of interviews as follows:

- Structured interviews use questionnaires based on a predetermined and “standardised” or identical set of questions and we refer to them as interviewer-administered questionnaires;
- Semi-structured interviews contain a list of themes and questions to be covered, although these may vary from interview to interview; and
- Unstructured interviews are informal and there is no predetermined list of questions to work through and the interviewee is given the opportunity to talk freely.

Dawson (2010:28) states that semi-structured interviewing is perhaps the most common type of interview used in qualitative social research.

For the data collection in this study, semi-structured interviews were used.

Dawson (2010:28) explains that in semi-structured interviews, the researcher wants to know specific information which can be compared and contrasted with information gained in other interviews and to do this, the same questions need to be asked in each interview. However, the researcher also wants the interview to remain flexible so that other important information can still arise.

### **3.8.1.1 The Interview Design**

A combination of open-ended and closed questions was used during the interviews to ensure a well balanced interview that supplied all the necessary information, but also gave an idea of the mentality or mindset of the respondents.

Taylor *et al.* (2011:77) explain that open-ended questions may be more suitable when the purpose is to ascertain a respondent's level of information, while closed questions are more suitable when the objective of the interview is primarily to classify the respondent with respect to particular sociological/psychological factors.

With the aim of the study in mind, the interviews consisted of six sections of questions as seen in Annexure B, D and E:

- Section A consisted of general questions to determine who exactly the respondent is;
- Section B contained closed questions to evaluate the respondents' reaction in answering it in an attempt to determine the respondent's unconscious mindset and paradigm about the successfulness and sustainability of Tibb practices;
- Section C contained questions about the identification of factors impacting entrepreneurial sustainability and which of these can be used to achieve entrepreneurial sustainability. This section focused on answering objectives one and three;
- Section D contained questions to determine why certain Tibb Practitioners are successful and others are struggling to sustain practices and thus answer objective two;
- Section E contained questions to determine what factors can be implemented to achieve entrepreneurial sustainability for Tibb Practitioners and consequently answer objective four; and

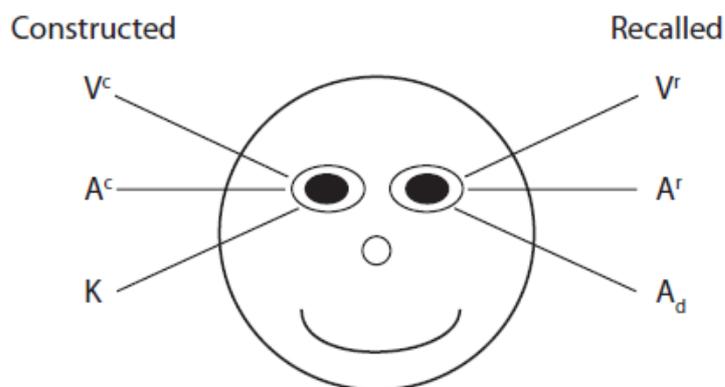
- Section F contained any additional questions that arose that are specific to the individual respondent's unique situation.

### 3.8.1.2 The Interview Structure

All the questions were provided to respondents beforehand to review prior to the interviews, except for the unprepared questions of Section B, used to observe the reactions of the respondents in answering them.

Section B consisted only of a yes or no answer, but the purpose was to try and determine the respondent's mindset in answering those questions. Therefore the interpretation depended on basic eye movements in reference to Neuro-Linguistic Programming (NLP) according to Bartkowiak (2012:451) that it is possible to determine whether the respondents were speaking from their own experiences or from their imagined experiences by watching their eye movements accompanying their verbal responses (Figure 3.1).

Based on this, when their eyes moved to the left they were constructing images rather than recalling them from their own experiences. Furthermore, if they looked up, they focused on what they saw (visual); when they looked to the side, they focused on what they heard (auditory); and when they looked down they focused on what they felt and did (kinaesthetic) (Annexure H).



**Figure 3.1: Eye referencing cues**

### 3.8.2 Pilot Study

Saunders *et al.* (2009:395) mention three reasons for the need of a pilot test for questionnaires that can actually be applied on qualitative research questions as well:

- To discover whether there are any questions for which visual aids should have been provided;
- To discover whether they have difficulty in finding their way through the questionnaire; and
- To discover whether they are recording answers correctly.

Taylor *et al.* (2011:84) agree that as with pilot testing a questionnaire, a sample of five or six pilot interviews will give much valuable information and that pilot tests should be conducted under exactly the same conditions as will be used for the survey proper and with subjects who are as similar as possible to those that will be involved in the interview survey proper.

A pilot study was conducted for this research with three respondents and the comments served the purpose of determining whether the interview questions were easy to understand and non-biased when asked.

The three respondents used for the pilot study were:

- A Therapeutic Reflexologist which is not a Tibb Practitioner, but another allied health practitioner registered with the AHPCSA which entered a private practice and experienced all the positives and negatives, yet overcame all the obstacles and made a success of private practice;
- A Tibb Practitioner that underwent the five year undergraduate training at the UWC and at the time of the interview worked full-time as the Health and Training Manager at the Ibn Sina Institute of Tibb; and
- A Tibb Practitioner that as a qualified primary healthcare nurse underwent the one year postgraduate training at the UWC after which he lectured and trained Tibb Practitioners, but at the time of the interview he practiced full-time in private practice.

Kothari (2011:100) mentions telephone interviews to be the method of collecting information by contacting respondents on telephone. Taylor *et al.* (2011:75) confirm this by making the

concept of interviews understandable by saying it is usually a face-to-face encounter, but can be extended to include telephone interviews and in today's context also video interviews.

For the pilot study this type of interviews had to be included due to distance challenges and the pilot study interviews were conducted as follows:

- The Therapeutic Reflexologist in Somerset West was interviewed face-to-face;
- The Health and Training Manager was located in Johannesburg and this interview took place online via video interviewing by means of Skype; and
- The Primary Healthcare Nurse turned Tibb Practitioner was located in East London and was interviewed telephonically.

To eliminate any miscommunication errors, these respondents were provided with the questions and asked to complete it and return it to the researcher before the interviews were conducted in order for the transcripts to be available to the researcher during the interviews for referencing purposes.

### **3.9 The Research Process**

#### **3.9.1 Conducting the Interviews**

An appointment was made with each available respondent for the interviews to be conducted and once the appointment was confirmed, the research invitation letter (Annexure C) as well as the interview template with the questions to be asked (Annexure D) were provided to each respondent.

The interviews were conducted face-to-face at the:

- Tibb Medical Centre (Saartjie Baartman Centre);
- Tibb Medical Centre (Langa Clinic);
- UWC;
- Private Tibb practices; and
- Private residence of a respondent.

During each interview the respondents were thanked for their willingness to participate in the research before the purpose of the research was fully explained to them. The prepared interview questions were asked according to the interview template before asking each respondent the unprepared interview questions as seen in Annexure E.

### **3.9.2 Recording the Data**

Certain respondents wrote down various answers on the interview template of the prepared questions as seen in Annexure D that were provided to them beforehand and brought those transcripts to the interviews and handed it over to the interviewer. The interviewer then conducted the interviews and wrote down their responses and any additional information on the interview templates. Other respondents did not complete the interview template and their responses were recorded in writing on a blank interview template during the interviews.

The yes or no responses to the questions of Section B were recorded in writing on the unprepared interview template as seen in Annexure E along with the respondents' eye movements accompanying their responses.

### **3.9.3 Limitations of the Study**

Data recording occurred by writing down the responses during the interviews. A voice recorder was not used. This might be seen as a limitation since responses cannot be verified.

### **3.9.4 Validity**

Saunders *et al.* (2009:603) describe “validity” as the extent to which the data collection method accurately measure what it was intended to measure as well as the extent to which research findings are really about what they profess to be about. Zikmund (2011:302) confirms that validity is the ability of a measure to measure what it is supposed to measure.

The research instrument was designed to measure the factors impacting entrepreneurial sustainability of Tibb Practitioners and it is therefore very relevant to the respondents in the study and according to face or content validity the research can thus be seen as valid, relevant and adequate. A pilot study was done with three different respondents, two Tibb Practitioners and one Therapeutic Reflexologist, in order to test and improve the validity of the interview questions.

### **3.9.5 Reliability**

Saunders *et al.* (2009:600) describe “reliability” as the extent to which data collection techniques will yield consistent findings, similar observations would be made or conclusions reached by other researchers or there is transparency in how sense was made from the raw data. Goddard and Melville (2001:41) agree that the term “reliability” means that measurements made are consistent and if the same experiment is performed under the same conditions, the same measurements will be obtained.

Golafshani (2003:601-604) states that the concept of reliability is irrelevant in qualitative research. This is a valid point, especially in this study, because the purpose of this research was to determine the Tibb Practitioners’ opinions of factors impacting entrepreneurial sustainability and an individual’s opinion may change over time.

It is argued, however, that the same opinions and thus results would have been obtained at the time the research was conducted, since that was the opinions of the Tibb Practitioners at that point in time, by any researcher and therefore the results can be seen as consistent and reliable.

### **3.9.6 Data Analysis**

The collected data needed to be analysed.

Saunders *et al.* (2009:490) clarify that there is no standardised procedure for analysing qualitative data, but it can be grouped into three main types of processes:

- Summarising (condensation) of meanings;
- Categorisation (grouping) of meanings; and
- Structuring (ordering) of meanings using narrative.

The data was coded according to the objectives of the study while an inductive approach was adopted; meaning that collected data was investigated to determine what aspects should be focused on for more exploration.

Thematic analysis was used for the coding process. Alhojailan (2012:10) describes thematic analysis as a type of qualitative analysis while Fereday and Muir-Cochrane (2006:82) describe it as a form of pattern recognition within the data where emerging themes become the categories for analysis.

The use of the NVIVO software for qualitative data was utilised for data analysis, as well as the Statistical Programme for Social Sciences (SPSS) software for the quantitative aspects of the demographics and unprepared closed-ended questions in Section B

### **3.10 Ethical Considerations**

Hill (2011:124) defines the term “ethics” as referring to accepted principles of right or wrong that govern the conduct of a person, the members of a profession, or the actions of an organisation. Hough *et al.* (2008:189) state that ethics provides a framework for all societies at the heart of sustainable strategy. Certain considerations ensured this research was conducted ethically.

#### **3.10.1 Ensuring respondents have given informed consent**

Saunders *et al.* (2009:593) state that informed consent is a position achieved when intended respondents are fully informed about the nature, purpose and use of research to be undertaken and their role within it, and where their consent to participate, if provided, is freely given.

All respondents were fully informed about the nature and purpose of the research and their written consent were obtained. This was firstly done by providing each respondent with a letter clearly informing them accordingly along with the list of prepared interview questions, but excluding the unprepared questions of Section B. Secondly, the nature and purpose of the research were explained to the respondents before commencement of the interviews. Written consent was obtained on the interview answer sheet during the interviews.

### **3.10.2 Ensuring no harm comes to respondents**

Welman *et al.* (2005:201) declare that respondents should be given the assurance that they will be indemnified against any physical and emotional harm.

Goddard and Melville (2001:49) confirm that you must guard against both physical and psychological harm in order to avoid harming people.

It was ensured that no harm came to respondents through the research by following all the appropriate channels and obtaining the necessary permission and consent to conduct the research within the Tibb organisations (Annexure A).

### **3.10.3 Ensuring confidentiality and anonymity**

Saunders *et al.* (2009:587-588) see anonymity as the process of concealing the identity of respondents in all documents resulting from the research, while confidentiality relates to the right of access to the data provided by the respondents and in particular the need to keep these data secret or private.

The target population of Tibb Practitioners was very small and respondents knew each other. The participation in the research was therefore not anonymous and respondents provided written consent on the interview template that they voluntarily participated in the research.

Respondents were protected by offering them anonymity and confidentiality pertaining to their individual responses. It was emphasised to all respondents that their responses carried full anonymity and confidentiality by not linking their responses to their names.

#### **3.10.4 Ensuring that permission was obtained**

Formal permission to conduct the study was obtained from the Ibn Sina Institute of Tibb; letter attached as Annexure A.

Written permission from all respondents was obtained on the interview template clearly indicating that they voluntarily participated in the research.

#### **3.11 Conclusion**

The research methodology for this qualitative study was described in this chapter looking at the rationale for the study by explaining the research design, the research philosophy, the research instrument and the research process while taking the ethical considerations into account.

In the following chapter the findings of the conducted research will be discussed and interpreted.

# CHAPTER 4

## FINDINGS, INTERPRETATION AND DISCUSSION

### 4.1 Introduction

Saunders *et al.* (2009:587) define data analysis as the ability to break down data and clarify the nature of the component parts and the relationship between them. The method of data analysis used is dependent on the type of research conducted. Welman *et al.* (2005:8) explain this by stating that the purpose of quantitative research is to evaluate objective data consisting of numbers while qualitative research deals with subjective data that is produced by the minds of respondents and therefore qualitative data are presented in language instead of numbers.

Exploratory qualitative research was conducted by interviewing 16 respondents who made themselves available by means of self-selection non-probability sampling. This occurred in order to evaluate the factors impacting entrepreneurial sustainability of Tibb Healthcare Practitioners in Cape Town by collecting data through semi-structured interviews. The findings will be presented, interpreted and discussed in this chapter.

The findings from the literature review formed the foundation for entrepreneurial sustainability of commercial ventures in general, and for private practices in particular, while the primary data from the research interviews provided specific information about the entrepreneurial sustainability of Tibb private practices.

To obtain the research findings, the data needs to be analysed using content analysis or thematic analysis. A mixed-method approach was undertaken to analyse the results from the interview questions. Firstly, a quantitative analysis involving a content analysis, and basic descriptives were used to analyse section A of the interview regarding demographics (section 4.2) as well as section B of the interview regarding the closed-ended questions (section 4.3).

Dawson (2010:122) states that a content analysis denotes that the researcher systematically work through each transcript assigning codes, which may be numbers or words, to specific characteristics within the text. Welman *et al.* (2011:221) describe content analysis in depth as

a quantitative analysis of qualitative data; which is the basic technique that involves counting the frequencies and sequencing of particular words, phrases or concepts in order to identify keywords or themes. Content analysis is seen as more of a quantitative analysis of data.

Thereafter a thematic analysis was used to analyse the qualitative component of the interview. Qualitative analysis of data (according to section 3.8.6) was deemed appropriate for this analysis as per Alhojailan (2012:10) who considers it the most appropriate method of analysis for any study that seeks to discover using interpretations.

Zhang and Wildemuth (date unknown:1) describe quantitative content analysis as deductive, intending to test hypotheses or address questions generated from theories or previous empirical research. Furthermore, qualitative content analysis is mainly inductive, grounding the examination of topics and themes as well as the inferences drawn from them in the data. For this study a qualitative inductive content analysis is more suitable due to obtaining data during interviews in an attempt to gain an understanding of the perspectives of Tibb Practitioners rather than imposing preconceived ideas on them. This approach is deemed best to answer the research questions for this study.

Saunders *et al.* (2009:590-593) confirm this view by seeing a deductive research approach as involving the testing of a theoretical proposition by the employment of a research strategy specifically designed for the purpose of its testing, while an inductive research approach is seen as involving the development of a theory as a result of the observation of empirical data.

Braun and Clarke (2006:11) effectively summarise inductive analysis as a process of coding the data without trying to fit it into a pre-existing coding frame or the researcher's preconceptions. The research data of this study is thus coded using an inductive approach.

Welman *et al.* (2005:214) describe codes as tags or labels that attach meaning to the raw data collected during field work with the purpose of analysing and making sense of the data in order to categorise it according to particular themes.

Thomas (2003:4-5) identifies the steps of the inductive coding process, which were used in this study, as:

- Close reading of the text;

- Consideration of the multiple meanings in the text;
- Identification of meaningful text segments;
- Labelling or categorising the text segments;
- Adding additional text to the categories;
- Describing meaning to categories; and
- Linking categories together in various relationships.

Data was captured during the interviews by accurately writing down the respondents' individual responses in an attempt to eliminate bias and maintain objectivity. The fact that the interviews were not audibly recorded can be seen as a limitation leading to only the researcher hearing the individual responses. Individual transcripts were separately imported into the Office Word programme and from there each respondent's transcript was imported into NVIVO software for qualitative data analysis.

Data transcripts were imported into NVIVO-10.1 software by an unbiased statistician and codes were assigned and applied to the transcripts where after themes were developed as emergent from the codes, while SPSS-21 software was used to generate the quantitative aspects regarding the demographics and the unconscious mindset of respondents.

As a feature of NVIVO, various codes were identified based on frequently used words (Annexure S and T) from the interviews which had a response rate of 100% since 16 respondents indicated their willingness to participate in this research and all 16 were interviewed. The emergent codes were:

- Advertising;
- Awareness;
- Buffering effect of Tibb;
- Ensuring entrepreneurial sustainability;
- Lack of appropriate training;
- Lack of entrepreneurial view;
- Limitations of:
  - Cost;
  - Location;
  - Medical Aid;

- Medication;
- Modality;
- Public Sector and integration;
- Beliefs;
- Demographics; and
- Perception and resistance;
- Practitioner to demand ratio;
- Success versus struggling;
- Sustainability; and
- Way forward.

The purpose for making use of an inductive thematic analysis of the qualitative interview data is to answer the research questions (section 1.6) in order to fulfil the research objectives of this study (section 1.5). Furthermore, by drawing codes inductively from the data it is possible to gain an insider understanding instead of merely imposing them upon the data as per theory.

The presentation, interpretation and discussion of findings is going to unfold firstly by looking at the quantitative data under the heading of demographics and then the heading of unconscious mindset and paradigm based on the closed-ended questions. Secondly the qualitative data will unfold under the headings of the identified themes in this section as it emerged from the above mentioned emergent codes.

## 4.2 Demographics

### 4.2.1 Title

**Table 4.1: Respondents by Title**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Dr	16	100.0	100.0	100.0

Table 4.1 shows that 100% of the respondents hold the title of “Doctor” which is evident to the fact that all respondents are qualified Tibb Practitioners and since it is a diagnostic profession, they are referred to accordingly. This means that all respondents are highly

trained professionals holding a minimum of a five-year qualification in the CAM field and as such they should be regarded as practitioners benchmarked to other diagnostic professionals like Homeopaths, Naturopaths etcetera.

They are not seen as on equivalent level with allopathic medical practitioners since the latter are trained much more in-depth and in surgical procedures with a much broader scope of practice, although the Tibb Practitioners’ scope of practice does include minor surgery as a possibility that differentiates them from other CAM Practitioners (Annexure W).

The meaning of “minor surgery” is a grey area with no clear guidelines of what it actually means and it is only assumed as to refer to wet cupping when a scalpel is used to cut the skin before applying the cups during the procedure of cupping.

Tibb Practitioners are known for the procedure of cupping where plastic cups are applied to pressure points on the body to treat different conditions and distinction is made between dry cupping and wet cupping. Dry cupping refers to cups being applied on the skin to stimulate blood flow to the area while also acting as pain relief method. Wet cupping refers to the skin being cut with a scalpel before cups are applied on the area in order to draw out blood and other body fluids. Tibb Practitioners use cupping as a complementary medical procedure to treat various conditions, differentiating them from other practitioners. Minor surgery is not part of the scope of practice of other CAM Practitioners. Tibb Practitioners are differentiated as professionals from their CAM Practitioner peers even in scope of practice, but whether they perceive themselves as such, will be considered in their interview answers.

**4.2.2 Profession**

**Table 4.2: Respondents by Profession**

	Frequency	Percent	Valid Percent	Cumulative Percent
Tibb Practitioner	12	75.0	75.0	75.0
Tibb Practitioner and Lecturer	3	18.8	18.8	93.8
Valid Tibb Practitioner and Lecturer, Med Doc	1	6.3	6.3	100.0
Total	16	100.0	100.0	

**Figure 4.1 Pie Chart of Respondents Profession**

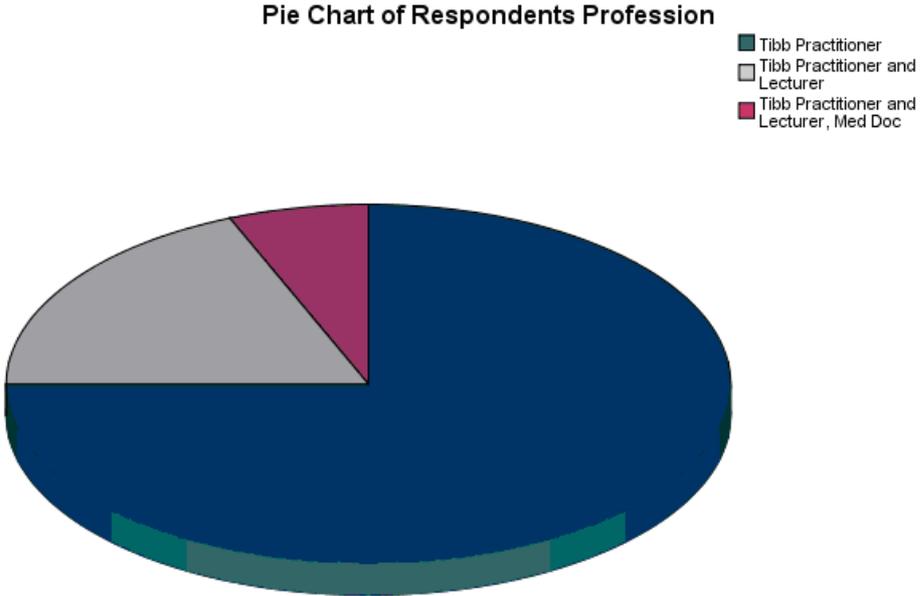


Table 4.2 and Figure 4.1 indicate that 100% of the respondents are qualified Tibb Practitioners; the majority (75%) are practicing Tibb Practitioners while the remainder of the respondents (25%) are all functioning as lecturers. One of these lecturers (6.3%) is both qualified as a Tibb Practitioner as well as a Medical Practitioner. This means that the interview responses are very well balanced giving a practical perspective, an academic perspective as well as an integrative perspective.

**4.2.3 Employment**

**Table 4.3: Respondents by Employment**

	Frequency	Percent	Valid Percent	Cumulative Percent
Private Practice	4	25.0	25.0	25.0
Large Company (Full-time)	6	37.5	37.5	62.5
Large Company (Locum) & University (Student)	2	12.5	12.5	75
University (Lecturer)	4	25	25	100.0
Total	16	100.0	100.0	

Table 4.3 specifies that the majority of respondents (37.5%) are employed by a large organisation while 25% are in private practices, with an additional 25% working at the university as lecturers. The remainder of 12.5% are full-time students at the university in

different directions (Allopathic Medicine and Phytotherapy) while working part-time for a large organisation as locum Tibb Practitioners. The employment of respondents definitely affects their responses, since only 25% are responding from an entrepreneurial private practice perspective while the majority are responding from the perspective of an employee.

The minority (12.5%) of respondents respond from the perspective where they decided to continue their studies in different fields due to various reasons, but it stands to reason that they decided that alternatives are more attractive than the profession of Tibb they have been practicing. This mentality seems to be affecting their responses, but is providing valuable information about what needs to change in order to make Tibb as profession more sustainable.

Five of the 16 respondents were asked why they decided to leave practicing Tibb and rather become lecturers or continue their studies in different fields. Their responses varied, but the two respondents that had decided to continue their studies felt that there are certain aspects lacking in the Tibb course that they try to rectify by studying in a different healthcare direction.

Respondent two:

“Treatment limitations of Tibb Therapy, which requires constant referrals to the day hospital or specialists; I want to be on the other side of that referral letter.”

Respondent sixteen:

“Some things are lacking in the Tibb course: single herbs and compounding medications specifically for individuals, because then you are not dependent on a company to manufacture products for you.”

The one respondent also feels that there are too many limitations in the public sector for practicing Tibb and only having two career options available of either working at the TMC or entering private practice, are too limited since functioning in hospitals are desirable. They do not see a career as Tibb Practitioner to be lucrative enough.

Respondent two:

“I was not comfortable with the fact that my only two options were Tibb Medical Centres or private practice.”

The respondents that changed career paths to become full-time lecturers responded by indicating that the monotonous nature of practicing is a factor since they do not feel as if they are reaching their full potential in that environment and needed new knowledge and skills to be in the academic stimulating environment.

Respondent nine:

“Practicing is monotonous in seeing the same type of conditions daily. I need new things and accumulation of knowledge.”

Respondent eleven:

“I felt I was limited in private practice and never felt fulfilled in private practice. I needed the teaching aspect. I felt limited in that I did not reach my full potential...”

**4.2.4 Gender**

**Table 4.4: Respondents by Gender**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	2	12.5	12.5	12.5
Valid Female	14	87.5	87.5	100.0
Total	16	100.0	100.0	

**Figure 4.2: Pie Chart of Respondents Gender**

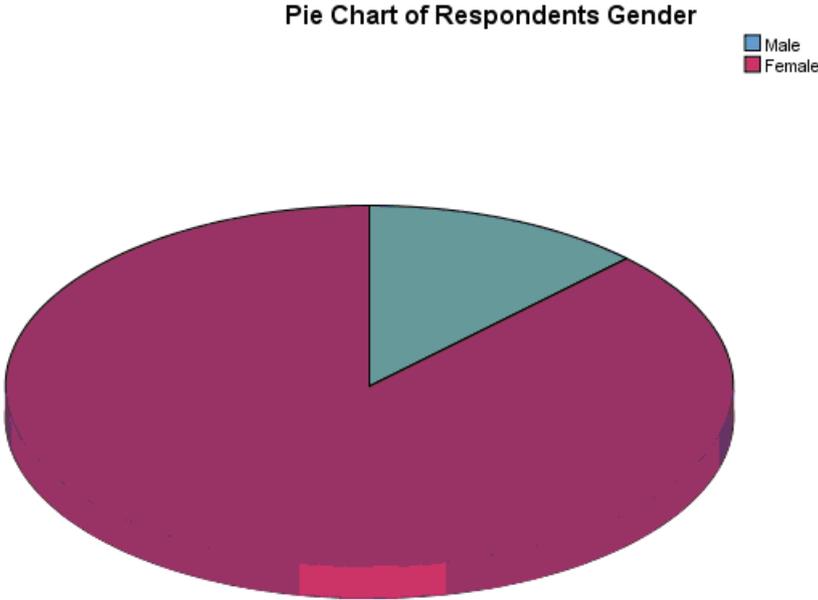


Table 4.4 and Figure 4.2 illustrate the distribution of respondents according to gender; the majority of the respondents (87.5%) are female, while the minority (12.5%) are male. The fact that there are more female than male respondents is indicative of the Tibb Profession in South Africa, since there are more female than male Tibb Practitioners according to the lists of registered practitioners from the AHPCSA (2013c:1-2) and SATA (2013:1-9).

The reasons why more females than males are choosing Tibb as a career are highly speculative, but seven of the 16 respondents answer the question of why they decided to become Tibb Practitioners with interesting indications that may provisionally answer this.

A male respondent became a Tibb Practitioner due to religious reasons after doing religious studies, since Tibb is in line with his religion.

Respondent eleven:

“Religious reasons after doing religious studies; I saw Tibb was in line with it and I wanted to help people accordingly.”

A female respondent chose Tibb as a second choice because she was not selected for allopathic medical training.

Respondent two:

“I did not get into M.B.Ch.B. straight out of matric and took Tibb as the next closest option. I always had an interest in herbs and alternative therapies.”

The other respondents chose Tibb due to their interest in healthcare and especially in practicing integrative medicine. Their interest to enter the health field, but not study allopathic medicine is a main reason for being in the field, combined with their desire to be able to help people.

It is highly speculative, but it stands to reason that more females become Tibb Practitioners due to their nurturing nature and wanting to help people holistically, but not necessarily by making use of the more invasive allopathic medical procedures.

#### 4.2.5 Age

**Table 4.5: Respondents by Age**

	Frequency	Percent	Valid Percent	Cumulative Percent
18-25	3	18.8	18.8	18.8
26-35	9	56.3	56.3	75.0
Valid 36-45	2	12.5	12.5	87.5
45+	2	12.5	12.5	100.0
Total	16	100.0	100.0	

**Figure 4.3: Pie Chart of Respondents Age**

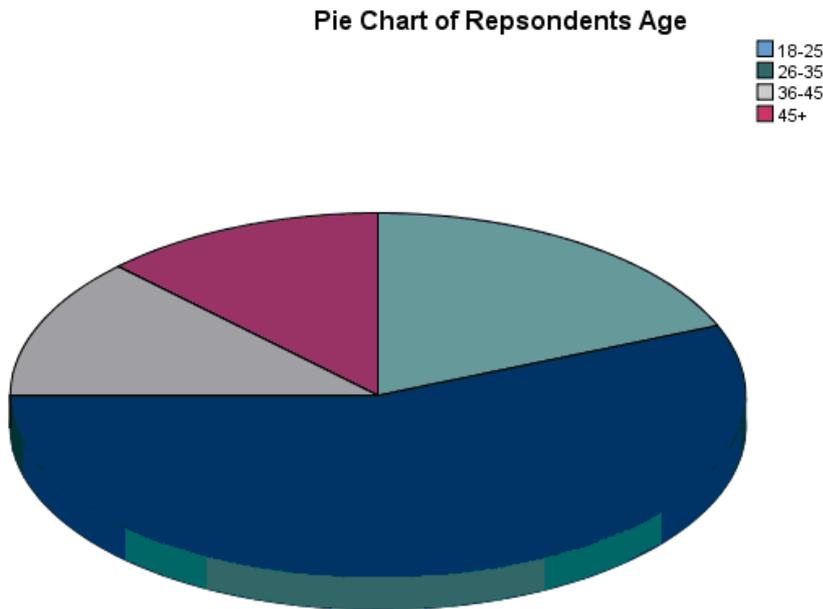


Table 4.5 and Figure 4.3 illustrate that the majority of the respondents (75%) are younger than 35 years, while 12.5% of respondents are between the age of 36 and 45 while only 12.5% are 45 years of age or older.

This clearly indicates that according to Strauss and Howe (1991:279-342) the majority of Tibb Practitioners interviewed are from the Millennial Generation (ages up to 31) and the minority from Generation X (ages 30 to 52). This table does not specify whether the respondents in the category of 45 years and older (12.5%) are actually older than 52, which would have put them in the Boom Generation. This correlates with the information (section 2.3.2) indicating that the Millennial Generation is prone to an employee rather than an entrepreneurial mentality which may be a contributing factor of why certain Tibb Practitioners are struggling in private practice; they need clear step-by-step instructions.

#### 4.2.6 Website

**Table 4.6: Respondents' Websites**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	4	25.0	25.0	25.0
No	12	75.0	75.0	100.0
Total	16	100.0	100.0	

**Figure 4.4: Pie Chart of Respondents who have a Private Website**

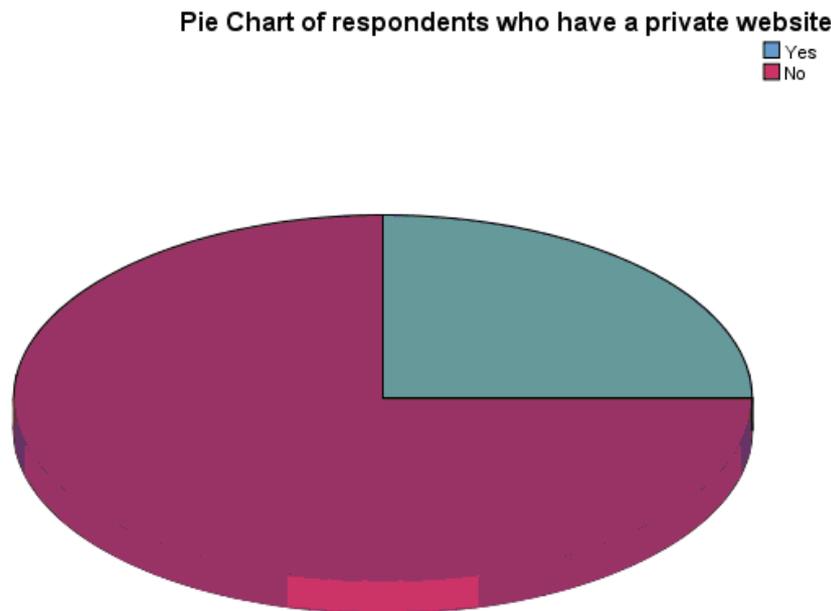


Table 4.6 and Figure 4.4 reveal that only 25% of the respondents had their own websites, while 75% of the respondents do not have websites. This is a very surprising fact when considering that Venter *et al.* (2011:465) state that in South Africa e-commerce plays a potentially vital role in stimulating growth of new ventures and it is an important driver of global expansion.

The majority of respondents do not have websites and with reference to Table 4.5 the majority are younger than 35 years of age indicating that they grew up in a technologically advanced era. It is assumed that they are all computer literate since they took Computer Literacy as subject in their first year of study (Annexure G) and therefore they should be aware of the value in having a website to create awareness and use it to grow their private practices. However, there is a lack of involvement in private practice and with reference to Table 4.3 the majority of respondents are not in private practice to support this claim that having a website is valuable in building their practices.

According to Statistics South Africa (2010:110-112) households with access to the internet increased from 7.2% in 2007 to 11.1% in 2009 and mobile cellular subscriptions per capita increased 364% from 2001 to 2007. The Central Intelligence Agency (2013:13-14) mentions that in 2009 there were 4.42 million internet users in South Africa and 4.761 million internet hosts in 2012. Statistics South Africa (2012:101) furthermore declares that 35.2% of households in South Africa have access to the internet of which 2 356 921 people access the internet from their cellular phones.

In a technologically advanced era with a growing internet and mobile cellular population, it is very surprising that 75% of Tibb Practitioners are not making use of this valuable resource in order to build an online presence and grow their entrepreneurial ventures accordingly.

Respondent fourteen who is in private practice confirmed this:

“I redesigned my website, because I get more enquiries from the website than through printed media. Website and word of mouth is better than print media.”

Given this fact that there is this need to have a website in order to increase awareness, but also use it as a legal way of advertising not restricted by the regulations of the AHPCSA, it should be determined why Tibb Practitioners are not embracing it.

There is a level of passivity in all the respondents that were interviewed. They know what the problems are, but they just accept it instead of challenging it by being entrepreneurial and try to creatively and innovatively overcome it. This is seen in that most respondents indicated there needs to be an increase in awareness, yet they do not act innovatively by creating websites to accomplish this, as seen in the following response:

Respondent thirteen:

“Go into the community, even voluntarily, to be seen by the public.”

However, respondent 13 does not have a website to create public awareness.

Respondent fifteen explains the reason for this:

“Doctors at the Tibb Medical Centres lack the necessary skills and knowledge relating to running and managing of a sustainable practice.”

The reason for the passivity may be due to the fact that they are faced with too many limitations or perhaps they feel overwhelmed leading to a sense of helplessness and inability (due to lack of skills) to deal with it accordingly. Despite the fact that Tibb Practitioners are aware of the need to advertise and raise awareness, they are stuck or entrapped; not only by limiting factors, but also by the fact that the Tibb Institute itself buffers the limitations and take the strain off practitioners to think entrepreneurial.

The Tibb Institute fosters employees and gives them a safety net from which all of the limitations of being a Tibb Practitioner are buffered, with the effect that they do not see themselves as entrepreneurs. It seems like the Tibb Practitioners are entrapped; they are not looking actively to promote despite the recognised need to.

This points to the legal limitations enforced on them from the AHPCSA not to advertise, but also shows how the TMC protect them from having to think of ways around this advertising itself; for example, using a website. Acar and Acar (2012:685) align with this by stating that innovativeness is a key capability which provides competitive advantage in the healthcare sector as well as in many other industries. Zimmerer *et al.* (2009:43) agree that successful entrepreneurs come up with ideas and then find ways to make them work to solve a problem or to fill a need.

In the next section the mindset of Tibb Practitioners is considered to determine if they see themselves as entrepreneurs in an attempt of comprehending why they are not acting creatively and innovatively.

### **4.3 Respondents' Mindset**

Respondents answered seven closed-ended questions (Annexure E) and their verbal responses along with their eye movements that accompanied their responses were recorded in Table 4.7. This quantitative aspect of the interviews intended to determine the mindset of respondents; the verbal responses signifying the conscious mindset while the accompanying eye movements signify the unconscious mindset.

**Table 4.7: Verbal Responses and NLP Eye Movements**

Question	Verbal Responses n (%)		Frequent NLP Eye Movements (%)						
	Yes	No	Vc	Ac	Kc	Ctr	Vr	Ar	Kr
(1) Do you think Tibb Practitioners can be successful in private practice?	13 (81.2%)	3 (18.8%)	0	12.5	18.8	12.5	18.8	12.5	25
(2) Do you think Tibb Practitioners can make a living in private practice?	12 (75%)	4 (25%)	18.8	18.8	18.8	6.3	25	0	12.5
(3) Do you think Tibb private practices are financially sustainable (viable) in the long-term?	10 (62.5%)	6 (37.5%)	12.5	12.5	12.5	0	25	18.8	18.8
(4) Have you ever considered opening a private practice?	15 (93.8%)	1 (6.2%)	12.5	18.8	12.5	25	18.8	6.3	6.3
(5) Do you think Allied Healthcare is a sustainable industry in South Africa?	12 (75%)	4 (25%)	6.3	25	6.3	18.8	18.8	12.5	12.5
(6) Do you think Tibb Practitioners can be just as successful in private practice as other allied health practitioners?	12 (75%)	4 (25%)	6.3	18.8	31.3	6.3	18.8	0	18.8
(7) Do you think Tibb Practitioners will be more successful being employed by a larger organisation like the Ibn Sina Institute of Tibb instead of entering private practices?	11 (68.8%)	5 (31.3%)	25	18.8	12.5	6.3	18.8	0	18.8

Table 4.7 illustrates responses and accompanying eye movements of respondents.

All respondents answered the unprepared closed-ended questions (Annexure E) with a simple yes or no answer which was recorded along with their eye movements, scored based on the NLP eye movements (Annexure H). The scale is used to measure whether responses are constructed from their imagined experiences or recalled from their own experience.

### **4.3.1 Conscious Mindset**

Based on their verbal answers, it can be said that the majority of respondents believe that Tibb Practitioners can be successful in private practice (81.2%) and that the practices can be financially viable in the long term (62.5%). They also indicate that they believe that allied healthcare is a sustainable industry in South Africa and it is widely believed that Tibb Practitioners can be equally successful in private practice as other allied health practitioners (75%). The majority of respondents indicate that they have considered opening a private practice (93.8%), however, 68.8% believe that they will be more successful being employed by a larger organisation as Tibb Practitioners instead of entering into private practices. This is surprising since the majority of respondents do believe that Tibb Practitioners can be successful in private practices.

The majority of the respondents (75%) do not have websites, indicating that even though they believe in the viability of Tibb private practices, they are not willing to take the next step by risking putting their beliefs into action. This is in line with the opinion of Shane (2013:1) when stating that despite the relatively large number of Americans who want to be in business for themselves and believe it feasible in the near future, a few would-be entrepreneurs actually take the initiative, because of being faced with obstacles and due to fear for personal failure which include a fear for bankruptcy and fear of irregular income. This mindset can be directly related to South Africans in general and Tibb Practitioners specifically.

The assumption is made that this mindset of restraint based upon the fear of leaving their comfort zone is leading to professional mediocrity and the lack of initiative to actively overcome the obstacles preventing them from pursuing successful and sustainable private practices by creating an online presence for themselves and increased awareness for their profession.

Tibb Practitioners may feel that there are just too many factors of resistance preventing them from entering successful private practices, resulting in them surrendering even before endeavouring to pursue success.

**Figure 4.5: The Factors influencing the success and sustainability of Tibb Practitioners in private practice**

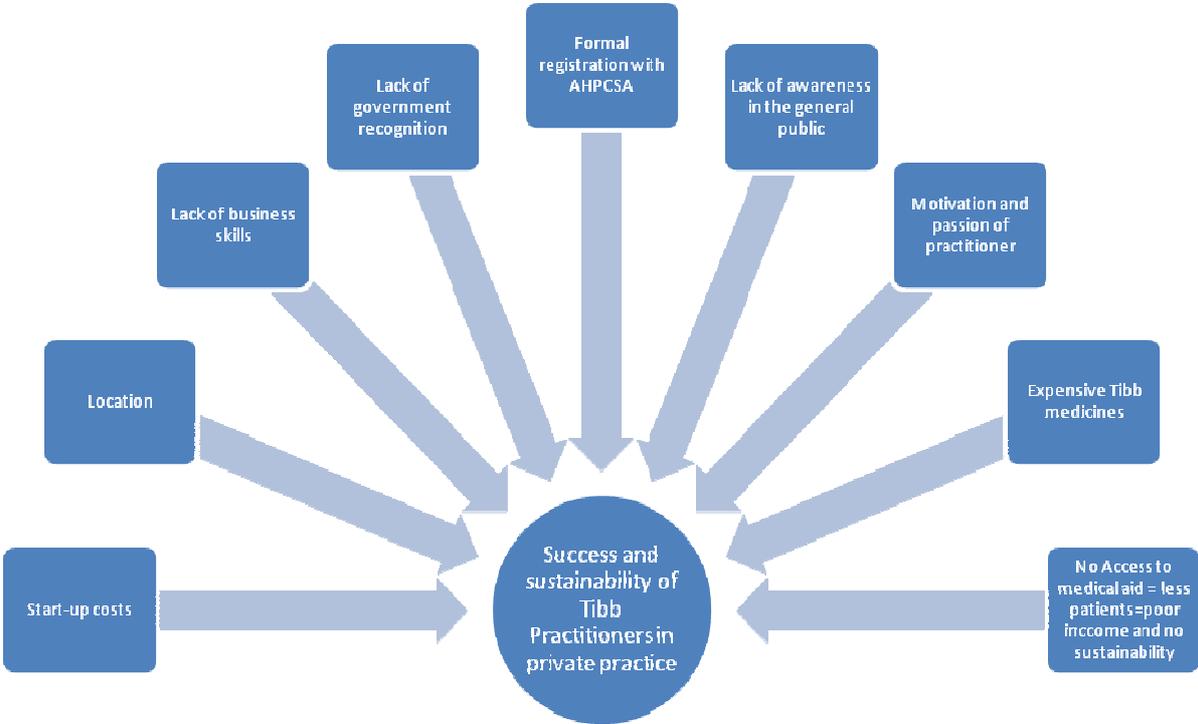


Figure 4.5 summarises numerous factors respondents mentioned as pertinent to the success and sustainability of Tibb Practitioners in private practice (Annexure R). These factors are correlating with the general and specific factors of entrepreneurial sustainability (section 2.5) while being specific to Tibb private practices.

The majority of respondents highlight location, costs and competition as major contributors, but it is clear that many lack the business skills required to sustain a business. The main concern is not being recognised as a medical profession by government’s public healthcare system resulting in not having access to benefits like allopathic practitioners, who have superior access to medical aid claim payouts. These factors are also grouped into the emergent themes from the interview transcripts and evaluated in the following sections of this chapter.

It seems that Tibb Practitioners believe consciously that they can be successful, but are hesitant to take the chance of venturing into private practices due to certain limitations. The question arises whether they unconsciously believe in the possibility of success.

### 4.3.2 Unconscious Mindset

In an attempt to determine the unconscious mindset of respondents, their eye movements that accompanied their verbal responses on the unprepared closed-ended questions were recorded.

The significance between the respondents' answers and their accompanied NLP eye movements are determined through various statistical testing (Annexure I to Q).

A Chi-Square test of independence determines if there is an association between the age of the respondents, their profession and whether or not they have a website. This test compares the proportion of cases occurring within each category with the values that would be expected if there is no association between the two variables being measured. There is no association found between age and having a website ( $\chi^2=1.5$  df=3 p=0.7 (p>0.05)), as well as between profession and having a website ( $\chi^2=0.9$  df=3 p=0.8 (p>0.05)).

Furthermore, all assumptions for the Analysis of Variance (ANOVA) have not been met, but ANOVA is robust and even though the assumptions have been violated, the test is pretty elastic in handling these slight deviations to give accurate output. Underlying assumptions are present since the data is not ratio or interval level data and does not meet these requirements and therefore it is normally distributed. Homogeneity of variance test has been assumed and a normality plot was roughly met.

No statistical significance is found between:

- The responses and the accompanying eye movements;
- Age and the yes/no answers;
- Age and eye movement;
- Age and having a website;
- Profession and having a website; and
- Having a website and eye movement.

It has to be concluded that the attempt to tap into the respondents' unconscious mindsets by determining their NLP eye movement as they answered affirmatively or negatively on the various questions, is unsuccessful. It is not possible to positively establish that the researcher

achieved tapping into the respondents' unconscious mindsets and bias is also at play since the researcher is the only person that recorded the eye movements and the researcher is also not an expert on Neuro-linguistic programming. The NLP eye movements can therefore not be used as evidence for determining the respondents' unconscious mindset.

What is unambiguous from the responses is that respondents answered the closed-ended questions and while doing so, either looked to the left or to the right indicating their answers are both constructed from their imagined experiences as well as recalled from their own experiences (Annexure H). This is not surprising, since a number of respondents' responses are founded in their experience as practitioners in private practice, while others' responses are founded in their experience as employees in the TMC or the UWC.

This concludes the quantitative aspects of the study and in the rest of the chapter the emergent themes from the qualitative aspects of the interviews unfold.

#### **4.4 Emergent Themes**

Various emergent codes from the qualitative interviews (section 4.1) are categorised in five major themes. The rest of the chapter will unfold under these emergent themes, which are:

- Recognised needs;
- Barriers to sustainable Tibb practices;
- Entrepreneurial mentality;
- Entrepreneurial sustainability; and
- The future of Tibb.

##### **4.4.1 Recognised Needs**

Respondents recognise various needs to grow Tibb as a brand in South Africa leading to them having more sustainable private practices. The need for advertising and the need to extend their market reach especially through increased awareness are the two codes that emerge into this theme of recognised needs.

Advertising is a factor that seems to overshadow the responses of Tibb Practitioners, especially the fact that they believe that more advertising should be done to ensure entrepreneurial sustainability, but since they are registered with the AHPCSA they are not allowed to advertise.

Respondent one:

“Marketing themselves is a problem due to AHPCSA restrictions.”

Respondent three:

“Advertising plays a big role since there are restrictions and there is not enough advertising.”

The biggest concern is not that there are restrictions on advertising for Tibb Practitioners, but rather the sense of helplessness stemming from it.

Respondent one:

“Marketing, but can you market the practice?”

The need for advertising is evident, but Tibb Practitioners seem to not understand how to creatively market themselves.

Respondent five:

“Patients need to know what a Tibb Practitioner is, but advertising and marketing is not legal; how do you do it? The AHPCSA should change their advertising rules.”

It seems that most Tibb Practitioners are conditioned in their responses by seeing the restrictions on advertising and feeling helpless to do anything about it, except wanting the AHPCSA to change their advertising regulations.

This indicates a clear lack of an entrepreneurial thinking process, because instead of innovatively thinking about a solution to the problem, they would rather just keep on stating the problem and wishing for things to change instead of doing something about it.

Only a few showed some creativity in getting around the limitation by bending the rules a bit.

Respondent two:

“A few practitioners are advertising ‘illegally’ or ‘bend the rules’ to increase awareness and in this way bring in more patients.”

Respondent one:

“Marketing, but can you market the practice? Market Tibb instead.”

Certain Tibb Practitioners, however, are using limited entrepreneurial thinking to overcome this advertising obstacle, but they are still conditioned to not think outside the comfort zone.

Respondent six:

“Radio plays a huge role for advertising or rather marketing; do radio talks.”

This is referring to talks being done on Radio 786, a Muslim radio station in Cape Town.

Respondent seven:

“Interviews on the television like on the ITV programme; use peoples other than Muslims, it shows it is for all people.”

This respondent recommends people from other nationalities should be used to market Tibb, but still within the comfort zone of the ITV programme which is a Muslim television station.

Tibb Practitioners are entrapped in that where they are advertising (Radio 786 and ITV); they are once again reinforcing existing perceptions regarding demographics, because they are promoting themselves on platforms that are largely Muslim. This lack of creative thinking to find ways of extending their services demographically beyond merely a Muslim clientele along with their lack of thinking of ways to effectively advertise without breaking the law, strongly indicate that most Tibb Practitioners have a sense of defeat and merely hide within the ambit of the TMC to make ends meet.

There are those rare Tibb Practitioners that do understand the need for innovative marketing.

Respondent twelve:

“Promote yourself without calling it advertising, for example an article in the Natural Medicine magazine.”

This is the only respondent that suggested a legal form of advertising reaching beyond the normal Muslim borders.

The Tibb Institute is a Muslim based organisation and resultantly markets within the ambits of the Muslim community which is not a problem per se, but for Tibb Practitioners not innovatively thinking as entrepreneurs, this has become a comfort zone and they use it as platform for advertising without thinking beyond the boundaries of existing Muslim media.

The result is that they continue to act as employees instead of operating entrepreneurial; realising the need to advertise and create awareness, but failing to practically implement it.

Awareness about Tibb appears to be an underlying premise throughout the responses, especially the lack of awareness that negatively affects the profession and sustainability of private practices due to a lack of credibility that accompanies it. Kotler and Keller (2009:567) confirm that credibility can be build by raising awareness in the media by focusing attention on a product, service, person, organisation or idea.

Respondent twelve explains the need for creating awareness effectively:

“Get into the Department of Health; they need us, but do not know of us. We need more exposure to those people to et us in the system.”

Respondent fourteen also feels that the creation of awareness will lead to Tibb Practitioners being integrated into primary healthcare and medical aid.

When viewing awareness of the profession, the majority of respondents agree that other Allied Healthcare Practitioners are more successful in private practice than Tibb Practitioners, although they believe that Tibb Practitioners can be just as successful. It seems that the general assumption is that Homeopaths are more successful than Tibb Practitioners, but not necessarily other Allied Healthcare Practitioners like Naturopaths or Phytotherapists.

The main reasons for this are that Homeopaths are better known in the public, they have a wide range of diagnostic tools that make treatment highly effective, the practitioners have set fees resulting in access to medical aid which always ensure patient visits.

This is evident in the responses from various respondents all indicating that other Allied Healthcare Practices like Homeopathy is better known by the public resulting in a higher level of entrepreneurial sustainability of those practices.

Respondent one:

“Allopathic medicine in South Africa is well-known and longer in South Africa than Tibb; people know allopathics is better and works (according to their perception).”

Respondent fourteen:

“Nobody knows what Unani Medicine is; people know of Therapeutic Reflexology, Homeopathy etcetera, but not Tibb,”

Respondent fifteen:

“Despite having gained experience working at the Tibb clinic and being fortunate to have an internship unlike other modalities, having a practice in Homeopathy would be more sustainable due to the fact that people can identify to the area of practice and often mistake Tibb Practitioners to be Homeopaths. People are ignorant and lack basic understanding of the methods and treatment associated with Tibb compared to that of Homeopathy as they are aware what is offered, what treatment entails and what is required of them in order for treatment to be successful. Therefore, I would say a Homeopathy practice is far more sustainable than that of a Tibb practice.”

The fact that Tibb is not well known is contributing to the lack of success of Tibb Practitioners in private practice; therefore increasing awareness of Tibb will improve the sustainability of Tibb private practices as well as the credibility of the profession.

Tibb stands a good chance of becoming sustainable in the future as awareness increases, as in the instance of Homeopathy, but then Tibb Practitioners need to take responsibility to raise awareness, initially by having websites and spiralling from there, but they fail to do this due to certain barriers to sustainable Tibb practices.

#### **4.4.2 Barriers to sustainable Tibb Practices**

Barriers to sustainable Tibb practices are identified as legal restrictions, various limitations and the buffering effect of the TMC. These barriers are seen as the main reasons why Tibb Practitioners are not actively pursuing the development of their profession although they are fully aware of the need to do so.

There are legal restrictions imposed on Tibb Practitioners by the AHPCSA which are seen as barriers to sustainable Tibb practices, that is:

- AHPCSA registered practitioners are not allowed to advertise according to Rule 1 of the AHPCSA (2013b:2); and
- AHPCSA registered practitioners are not allowed to practice in public by offering treatments at health fairs and expos (AHPCSA, 2013a:1).

These legal restrictions are imposed on practitioners in order to increase the professionalism of the profession, but it also creates barriers in developing sustainable private practices. Tibb Practitioners seem to be very despondent as a result of these restrictions instead of finding creative alternatives that can be legally used to increase awareness and develop the profession.

Respondent six:

“Advertising by using doctors at functions like wellness days and having stands.”

This respondent advises very creatively how to overcome the restriction on advertising, but the advice is contradictory to the restriction that AHPCSA registered practitioners are not allowed to practice in public. Respondent six is not even aware of this restriction, indicating that they are not proactively keeping abreast of legal requirements from the AHPCSA.

It stands to reason that Tibb Practitioners should have been aware of these legal restrictions when they chose to enter a career in complementary medicine and thereafter by constantly keeping up to date with the restrictions. The restrictions appear to be used as an excuse for not finding innovative solutions to the barriers rather than motivate them to dynamic problem solving. The result seems to be a sense of helplessness that is amplified by various limitations generating a succession of barriers that in turn reinforces powerlessness.

Cost is a foremost limitation to entering private practices and numerous respondents mention start-up cost to be a setback. Respondent one furthermore mentions that cash flow for the first six to twelve months is a problem and respondent twelve confirms this when saying the first year is difficult due to the set-up costs. Respondent four mentions fixed costs like rental, advertising, equipment and salaries as additional cost limitations.

Set-up costs and the normal fixed costs per month exist for any entrepreneurial venture, not only for Tibb private practices. If an entrepreneur really wants to start a business, solutions to this cost limitation will be sourced.

Respondent three mentions that a spouse's income might help during the start-up phase, which is a valuable thought, because if a practitioner can have another income while setting up a practice, it will definitely help to overcome this financial strain with cash flow. A good way of entering a private practice may therefore be to start the practice part-time while still earning a salary by working full-time. Respondent nine additionally suggests that practitioners start-up at home in order to keep costs to a minimum.

Respondent seven offers a valuable solution by suggesting the doctor should endeavour to build a good reputation and at the same time use hands-on therapies like cupping that do not require the use of expensive medication.

Start-up costs will be there, but instead of seeing this as a limitation to the point of preventing practitioners from entering private practices, they should rather search for practical solutions on how to increase their cash flow while reducing costs in order to make the practice viable in the shortest possible time.

Tibb medication is seen as another limitation following the limitation of cost, specifically:

- The cost of Tibb medication to practitioners, especially since it is provided at reduced rates to the TMC in order to serve the broader community with low-cost healthcare;
- Effective Tibb medication continually being discontinued; and
- Tibb Health Sciences is seen as a monopoly, as respondent twelve indicates: "Within scope of practice we can compound our own medication, but we were not taught that because this is a monopoly. We are obliged to use Tibb medication that is expensive."

The latter is a very unilateral view based solely on the perception of the respondent; because no effort is being made from the practitioners' side to gain the skills they are apparently lacking in order to compound their own medication. Instead allegations are made against the pharmaceutical manufacturer which is based on a personal opinion instead of on facts.

The cost of medication and products being discontinued is definitely a limitation to the viability of Tibb private practices, but nothing prevents Tibb Practitioners from becoming innovative by gaining the necessary skills to compound their own medication or to source alternative products from different suppliers. As in any business, the practitioner should always endeavour to negotiate the best possible prices when purchasing products.

Respondent three mentions another problem relating to medication:

“The biggest problem is that people can buy Tibb medication over the counter and there needs to be more restrictions in this regard.”

This is a limitation experienced by all CAM practitioners due to the fact that natural and herbal products are not regulated like allopathic medication, distinguishing between over-the-counter products that everyone has access to, compared to prescription products that can only be prescribed by a medical practitioner.

Practitioners should attempt to solve this limitation, maybe by having a range of products that is not available over the counter, as certain manufacturers like Wings Herbal that provides herbal products only to qualified practitioners.

Linking on to the limitation of cost is the limitation of medical aid which is seen by all respondents as the biggest limitation to an entrepreneurially sustainable private practice.

Respondent one says:

“Medical aid plays a big role; patients want medical aid to pay.”

Respondent eight confirms this:

“The fact that we are unable to see people with medical aid needs to change. We are losing lots of people; patients themselves are desperate to be seen by Tibb Practitioners.”

Respondent fourteen agrees:

“Current economic recession: no disposable income. They pay medical aid and have not extra to pay for more health services.”

The fact of medical aids not paying for consultations is a very valid limitation to the entrepreneurial sustainability of private practices.

Respondent one:

“Medical aid; even in low income groups they will come back more regularly. Medical private practices depend on medical aid patients (depending on its location) and medical aids contribute highly to income as well as patient visits to a doctor.”

Tibb Practitioners seem to have this conditioning that because of the medical aid limitation, the whole profession and all their efforts are in vain, but what is preventing medical aids from paying for the consultations of Tibb Practitioners? They are formally registered with the AHPCSA and have valid practice numbers, so are they not paying or is it the perception of practitioners that they do not pay?

Certain medical aids do pay for CAM services, including the services of Tibb Practitioners as can be seen first-hand at the TMC when numerous patients get reimbursed by their medical aids for services rendered by Tibb Practitioners. However, many medical aids do not pay for these services and it is a matter of the Tibb Profession to approach the individual medical aids in order to encourage them to pay, but certain prerequisites need to be adhered to as respondent twelve mentions.

Respondent twelve:

“Medical aid; set consultation fees like medical doctors. The TMC make us unsustainable due to the low cost they charge, it is major competition and there should not be private practices in a ten kilometer radius from there.”

Putting the prerequisites in place by having standardised consultation fees and medical aid codes for the procedures relating to the Tibb profession will assist in getting medical aids to pay for the services, but then Tibb Practitioners need to take the initiative to approach individual medical aids and commence negotiations. If they are not going to pursue it, it is not going to happen.

In South Africa it is seen more often that various medical and healthcare professionals require patients to pay their consultation fees and then personally claim it back from their respective medical aids. However, the medical aids reimbursing the patients are covering the services being rendered by the professionals and Tibb should endeavour to be recognised accordingly in order to eliminate this limitation of medical aids which also flows into integration into the public healthcare system. Tibb not being integrated in the public healthcare sector is seen as a

big limitation by all Tibb Practitioners, because this result in limited employment opportunities.

Respondent fourteen:

“Tibb Practitioners are basically unemployable; not only Tibb, but other CAM Practitioners too, although they are more well-known. People in government and medical aids do not know about CAM. Lot of Tibb doctors see themselves as inferior.”

Respondent two:

“Tibb Practitioners need a place in primary healthcare facilities like day hospitals and community clinics. Medical doctors need to be educated (during their studies) and made aware of the Tibb Practitioner’s place in treatment programmes. There needs to be more respect and communication among medical doctors and Tibb Practitioners.”

Respondent twelve:

“India acknowledges practitioners although they do not practice Tibb, but they practice aspects of Tibb and can work in hospitals. South Africa must get there.”

The limitation of not being part of the public healthcare system is once again the perception of Tibb Practitioners thinking from a mentality of seeking employment instead of from an entrepreneurial paradigm.

This limitation may be easily overcome if Tibb Practitioners realise they should stop passively waiting for the government to change the public healthcare system in order for them to obtain jobs, but instead they should think like entrepreneurs and how they can actively overcome this obstacle.

Respondent nine makes a valuable suggestion in this regard:

“Connect at community level for example day hospital through free talks etcetera instead of trying to do it at government level and do volunteer work. The community need can eventually reach government.”

Tibb Practitioners will overcome this limitation and many others when they comprehend that change is in their hands and once they actively think of innovative solutions and implement it instead of passively waiting for someone else to do it, they will begin to see entrepreneurial doors opening for their sustainable practices. Before integration into the public healthcare system can occur, Tibb as modality should first be effectively differentiated.

Respondent fourteen:

“People heard of Tibb products and they think Tibb Practitioners are just prescribing Tibb medication; there is a conflict of interest between the Tibb Modality and the Tibb products.”

There is a valid limitation due to the lack of awareness about Tibb resulting in the general public being unaware of what a Tibb Practitioner is and what their scope of practice entail.

Tibb Practitioners appear to accept that their only methods of treatment are Tibb medication and cupping therapy, but they fail to appreciate the fact that they can “do additional therapies” as respondent seven suggests. Respondent two indicates that Tibb alone is insufficient and additional modalities should be studied to fill the gaps, but it is the practitioners’ responsibility to enroll for these courses and learn the skills.

Cupping therapy is unique to Tibb Practitioners and definitely a modality differentiating them from other practitioners, but nothing is preventing them from adding additional modalities to their practices.

Respondent ten:

“The holistic approach draws patients and they want more than the medical treatment.”

Respondent eight:

“Tibb doctors must also do lots of cupping and other hands-on methods as they are very good and highly appreciated by most patients”.

It appears that Tibb Practitioners have not fully differentiated themselves from other professionals and do not really understand what makes them unique and before they attempt to understand their competitive advantage, they will never be able to differentiate the modality resulting in it continuing to be a limitation. Once Tibb as modality is effectively differentiated, it may also change the general public perception about the profession and industry.

The CAM industry may not be fully understood by the general public resulting in its resistance, due to being against the status quo of allopathic medicine.

Respondent fourteen:

“Medical aid and government should acknowledge Tibb as a modality and profession. It will eliminate resistance. Government does not make use of the skills at their disposal like Tibb Practitioners, yet they talk about skills shortage.”

It is interesting to note that this respondent believes that public resistance will be reduced when government acknowledges Tibb; referring to it being incorporated into the public healthcare system. However, this respondent fails to perceive the reality, which is that there are hardly any Tibb Practitioners in South Africa and for government to incorporate them into the public healthcare system is a frivolous exercise, because there are not even enough Tibb Practitioners to be integrated into the public healthcare system in one city.

Respondent two:

“I must add that if I had known about the difficulties experienced once qualified and if I was aware of the un-preparedness of South Africa as a whole for Tibb Practitioners, I would not have pursued this career.”

The idea may be formulated that this is not the only respondent feeling exactly the same; leading to the perception that Tibb Practitioners lack perseverance when they experience any form of resistance. The reason for this is perceived to be the third barrier to sustainable Tibb practices that can be phrased as the buffering effect of the TMC.

The TMC buffers Tibb Practitioners against the need to venture out and gain the necessary skills for making medication or advertise effectively, because the Tibb Institute is doing it on their behalf. .

The TMC buffers Tibb Practitioners from the reality of entering private practices, by providing them with a safety net of employment. Interesting enough is that respondent sixteen decided to become a Tibb Practitioner due to the fact that Tibb offered employment opportunities within the TMC. After working as Tibb Practitioner for a while this respondent makes the statement that certain things are lacking in the Tibb training, especially the compounding of medication as they are too dependent on Tibb to manufacture products for them.

It seems that the reason this respondent entered the profession, became the reason of dissatisfaction.

Respondent nine:

“The junior doctor programme at TMC is a huge advantage serving as buffer and you build up clientele and you are allowed to take your patients with you when you leave for entering private practice. They need to realise they have a hub for support in Tibb and a safety net, for example, getting free printed materials other natural health practitioners do not have.”

This is seen as an important statement, especially since numerous of the respondents see the TMC as direct competition to their private practices, particularly because they have to compete with the lower consultations fees as charged by the TMC based on the sponsorship through its Zakaat fund.

It appears that the perception of the Tibb Practitioners is a major factor in whether they perceive the TMC as competition or whether it is perceived as a support structure.

Respondent fifteen

“Having to compete with the TMC’s prices is a factor as patients would rather choose the cheaper option than pay.”

Respondent fourteen:

“TMC are not competition to me because it is not in the same area. Muslim people sometimes prefer Muslim doctors and might go to the TMC.”

Respondent fourteen’s statement is made from a position of having clearly defined a target market and not feeling threatened by the TMC and patients preferring to go there to be seen by a Muslim doctor. It should be noted that the TMC are part of the Ibn Sina Institute of Tibb, which is a Muslim organisation and they cater mainly for the Muslim community and due to established relationships, market almost exclusively to the Muslim communities.

Instead of seeing this as a limitation, it should be viewed as the benefit it provides Tibb Practitioners since the TMC cater for a niche market, leaving all the other communities available as possible market in which to pioneer Tibb private practices without directly competing with the TMC.

Respondent one:

“Tibb has a connection with Muslims and it should be cross-cultural, that is why it is not sustainable.”

Respondent six:

“White people want Tibb in their areas as well.”

Respondent seven who is a Muslim Tibb Practitioner:

“Get out to more communities and not just Muslim and Indian communities.”

Respondent five:

“South Africa is a third world country and natural healthcare is more for first world countries; socio-economic factors”

The TMC provide low-cost healthcare mainly to the (Muslim) communities that cannot afford to pay for healthcare services. Tibb Practitioners need to take note of this, because in order to create sustainable private practices, that is not the market they should focus their attention on since it is the niche market of the TMC; they should rather focus on higher income communities in order to financially sustain their practices. By doing this, they are also not competing directly with the TMC, thus eliminating demographics as limitation.

Surprisingly is the perception of respondent three that in Cape Town there is an over population of practitioners, especially since respondent nine indicates that in the Northern Suburbs of Cape Town not many know about Tibb. Location may thus be seen as a limitation for opening a private practice based on the perception of the practitioner.

Tibb Practitioners tend to be stuck in this spiral of not thinking innovatively and continuing to market only to Muslim communities, even though most of them perceives the TMC as direct competition and many of them are aware that they need to expand outside the borders of the Muslim community. It is noted again that Tibb Practitioners know what they should do, but yet they fail to do it due to the safeguarding effect of the TMC.

Respondent six:

“The Tibb Medical Centres are comfortable since everything is set up already and administration is taken care of.”

Respondent one:

“Tibb Practitioners feel safe in the Tibb Medical Centres.”

Respondent two:

“Being an employee at the TMC delays the process of setting up a private practice as it is easy to become complacent in the stability and routine of working for an employer.”

Respondent thirteen:

“The TMC are a comfort zone.”

The TMC has a buffering effect on practitioners since it acts as comfort zone inhibiting them from taking the step of entering private practices. This correlates with the beliefs of the SAIE (2013:1) that entrepreneurship is about taking giant leaps from a comfort zone into unknown territory.

The buffering effect of the TMC is leading to passivity amongst the Tibb Practitioners and it does not help that the Tibb Institute is providing the solution and the safety net while not equipping their practitioners accordingly to survive outside the TMC.

It is almost as though the limitations to practice as well as entrepreneurship create a tension that is relieved by the Tibb Institute. This has an accumulative effect in that Tibb Practitioners working for the TMC do not see themselves as entrepreneurs.

#### **4.4.3 Entrepreneurial Mentality**

Tibb Practitioners, especially the ones working within the TMC, appear to see themselves as employees instead of entrepreneurs and their lack of entrepreneurial view is evident in their responses.

Respondent Two:

“Being a Tibb Practitioner within the TMC is not entrepreneurial by definition of the word, as we are employees rather than entrepreneurs who have set up on our own.”

Respondent Five:

“It is not entrepreneurial working at the TMC.”

Respondent Twelve:

“I do not feel like an entrepreneur here. We have to clear with management for anything additional we do. Maybe give doctors more free reign to be entrepreneurs.”

This seems to be the general view about working within the TMC, but why are they not seeing themselves as entrepreneurs? This lack of entrepreneurial view may be deeper seated than just due to the fact of working for a larger organisation, because even though a person is employed, the entrepreneurial view and entrepreneurial spirit can still be evident. However, with the Tibb Practitioners this entrepreneurial mentality is not evident and the possibility of a deeper reason is reflected.

Respondent six:

“Tibb Practitioners working at the TMC are not driven and do not have the drive in them”

Respondent twelve:

“Being a good practitioner is not a factor when it comes to having an entrepreneurial sustainable practice, because it is more motivated people that want to make a practice viable.”

The lack of entrepreneurial view amongst the practitioners may be due to not being motivated to be entrepreneurial, but the question still remains why they are not?

Respondent four states that successful practitioners are the ones with the ability to market themselves with a unique skill or product that others do not have yet, while respondent fifteen says that the doctors at the TMC lack the necessary skills and knowledge relating to running and managing a sustainable practice. Their lack of motivation may therefore very well be due to not having the necessary business skills.

Respondents continuously refer to the lack of appropriate training in their responses as a main factor affecting the entrepreneurial sustainability of Tibb private practices and the development of Tibb as a profession in South Africa, in particular the following training:

- Clinical skills; and
- Business and marketing skills.

Clinical training is seen as not good enough for the training of Tibb Practitioners due to too many things lacking. Respondent five even mentions that a more credible university course is needed with a more medical course outline, because the Tibb course does not qualify them enough and based on that they do not deserve the title of “doctor”.

Respondent one:

“The Tibb Curriculum is lacking certain skills as well as a longer internship since it will provide practitioners an opportunity to gain more confidence and experience, like the Homeopathy and Chiropractic training that is similar to medical doctor training.”

The overall feeling is that Homeopathic training is far superior to that of other Allied Healthcare professions due to its medico-scientific foundation.

Comparing curriculum (Annexure G), it is evident that the Tibb curriculum can be improved by including more clinical and medical training, especially more training in understanding the functioning of the body, for example subjects like anatomy, physiology and pathology in order for Tibb Practitioners to be more easily able to find the root cause of symptoms. It will also benefit them to have access to more treatment modalities in order to broaden their range of available treatment methods. This will increase their confidence and competence levels tremendously and once they believe in their abilities, they may be confident enough to enter private practices without feeling inferior to other professionals.

The general feeling amongst respondents is that they lack business and marketing skills and therefore the entrepreneurial sustainability of Tibb private practices are in jeopardy.

Respondent nine:

“A business module is not offered in the undergraduate training due to a too full curriculum”.

This exacerbates the problem of Tibb Practitioners not venturing into private practices, because the university is not fostering entrepreneurs, but instead they are creating employees through their curriculum.

This lack of appropriate training in clinical skills and business skills is not going to be solved for already qualified Tibb Practitioners since they already completed the five-year degree

programme. They are all aware of this lack in their training, but nobody seems to take the initiative to do something about it, apart from being conditioned to complain about their training not being on a specific level.

It is the responsibility of each practitioner to make the most of the training they received and to take the responsibility to improve their training in the areas where they lack training. Many short courses are available in business skills and even in clinical skills, but instead of the practitioners taking the responsibility to enrol for these courses, they passively sit back and wait for the Tibb Institute to provide the solution in the form of training or corrective measures.

This indicates how the buffering effect of the TMC has conditioned Tibb Practitioners to develop an entitlement mentality feeling that they are entitled to certain things and they await the Tibb Institute to provide it instead of actively pursuing it themselves. It seems that the buffering effect of the TMC is in fact creating employees out of Tibb Practitioners instead of developing entrepreneurial practitioners. Tibb Practitioners should take a more active approach by following the advice of respondent four.

Respondent four:

“Successful practitioners have the ability to market themselves with a unique skill or product that others do not have”.

This means that Tibb Practitioners create a competitive advantage by taking responsibility for their own training, the upgrading thereof and for entering the future competent and confident by being fully qualified and prepared.

The lack of skills is a valid point, but still seems to be a superficial reason for the absence of an entrepreneurial mentality, because the practitioners can attend a short course in business skills to rectify the situation, yet they do not. The deeper reason for the lack of an entrepreneurial view is considered to be exactly what respondent one indicated when referring to Tibb Practitioners.

Respondent one:

“They studied Tibb, but do not believe in it!”

Not believing in Tibb definitely explains why Tibb Practitioners have this lack of entrepreneurial view without the motivation to enter private practices. This also explains why they do not have the drive to overcome the obvious obstacles and the determination to do something about the obstacles like medical aid and the integration into public healthcare.

It is proposed that the lack of entrepreneurial view is due to the fact that Tibb Practitioners do not believe in their profession, medication and competency.

Respondent one:

“They do not have a passion for Tibb or private practice.”

Respondent eleven:

“A factor of entrepreneurial sustainability in private practice is the individual self with the accompanying passion and belief in their medicine.”

This is an important limitation to take note of, because a person’s beliefs direct any action taken or not taken. If Tibb Practitioners do not believe in their form of medicine, how can they expect anybody else to buy into it? It is necessary to believe in a product before effectively being able to sell it.

Respondent nine summarises it effectively:

“Passion: if you are passionate about something, you will make it work. How badly do you want to make it work? This is a new area you can capitalise on that. Your passion drives it. Other people are attracted to you enjoying yourself.”

This lack of belief in Tibb in turn affects and decreases the entrepreneurial spirit to the extent that it no longer exists; as evident in the lack of enthusiasm in getting what they want and know they should be doing to obtain it. They know they need to create awareness, but the majority of practitioners do not even have websites. The lack of belief also affects the Tibb modality and the recognition thereof. They state plenty of times that Homeopathy is better known and that the medications are too expensive and that there is a lack of recognition of Tibb as modality, but despite these they are not doing anything proactively about it.

Kotler and Keller (2009:211) define the attempt to alter beliefs about a brand as psychological repositioning. It is suggested that Tibb Practitioners need to experience psychological

repositioning about their brand; Tibb. They will continually feel incompetent and lack confidence in their medication and treatment methods while constantly feel inferior to other CAM and allopathic practitioners, until they change their beliefs about Tibb and its effectiveness.

It is proposed that when Tibb Practitioners change their beliefs, many other limitations will also be conquered since they will function from a level of confidence that may lead to active involvement in the solutions instead of passively waiting for things to change.

Believing in Tibb as a product and profession will lead to the development of an entrepreneurial mentality that will ultimately contribute to the entrepreneurial sustainability of Tibb private practices. This can only occur once Tibb Practitioners take responsibility for their profession.

#### **4.4.4 Individual Responsibility**

Factors to ensure sustainability of Tibb private practices have been identified already, but they are all dependent on the creative and innovative implementation by the Tibb Practitioner. Respondent thirteen places the responsibility directly on every practitioner:

Respondent thirteen:

“Marketing your practice and yourself; go into the community, even voluntarily, to be seen by the public. Uplift and empower yourself.”

The entrepreneurial sustainability of Tibb practices is solely dependent on the entrepreneurial innovation and personal drive of every practitioner in making their dreams a reality.

Respondent six believes entrepreneurial sustainability of Tibb practices is possible while respondent thirteen agrees by mentioning why certain Tibb Practitioners are successful while others are not.

Respondent six:

“You can survive in private practice. It is about how you set yourself up.”

Respondent thirteen:

“Some have the drive and motivation. Successful ones know they have to make it work, because it is their only source of income; constant marketing instead of waiting for patients to come to you.”

It is believed that Tibb Practitioners can be successful in private practice, but they have to actively work towards making a success of their profession instead of passively waiting around for things to happen and obstacles to disappear. It appears that the practitioners' drive and motivation is integral factors in ensuring entrepreneurial sustainability since that will lead to their active participation in making their profession a success.

The lack of motivation to act entrepreneurial is evident in most Tibb Practitioners.

Badi and Badi (2006:29) mention that the factors that inspire an entrepreneur are entrepreneurial motivation broadly categorised in internal and external factors. Tu, Hwang, Chen and Chang (2012:369) confirm that entrepreneurial motive is often classified into internal and external motives.

Tibb Practitioners should be reminded of the reasons they entered the profession in the first place; the majority of respondents indicate it is to practice integrative medicine. They should realise that Tibb falls in the CAM industry and as a result they have to be entrepreneurial in order to make that dream a reality. Making this realisation a reality may help them to stop waiting for things to change, but instead become actively creative and innovative in finding solutions to the obstacles in their way. They should become entrepreneurial and pioneer their dreams into reality by taking individual responsibility through effectively motivating themselves both internally and externally by keeping in mind why they entered the profession originally.

#### **4.4.5 The Future of Tibb**

The future of Tibb as a viable profession in South Africa is to make Tibb private practices entrepreneurial sustainable entities. This is only possible with dedicated Tibb Practitioners taking responsibility for their own profession and taking on an active role in making things happen and removing the necessary barriers to success.

Active innovation is necessary to rethink the profession and clearly distinguishing it from other CAM practitioners in order to market a standardised message to the public to create awareness by focusing on the competitive advantage of Tibb. Marketing can only be effective once differentiation occurred and then all Tibb Practitioners will also be in a position to inform the public of exactly what they are doing within the profession and what makes them different from other practitioners.

Respondent four:

“Offer more skills that are specific to the African sub-continent like TB, HIV, trauma skills and stress management.”

Respondent fourteen:

“We should have CAM clinics like Medi-clinics, in other words, group practices.”

Respondent eleven:

“Community engagement activities in areas where there are practices; each practitioner should take responsibility for that.”

The way forward is in increasing awareness about Tibb by reaching communities other than the usual Muslim community and for each Tibb Practitioner to take responsibility for the profession by actively reaching the community from a local level by innovatively finding ways to be visible and build sustainable private practices.

The “personality and persona of the doctor” as respondent six pronounce, appears to be the underlying tone amongst the respondents as distinguishing factor of what makes practitioners successful, leading to what respondent seven calls the “reputation the doctor builds up”.

Respondent five:

“Success depends on you as an individual and patients come back vouching for you when they are treated well and then you will also get referrals to you.”

The future of Tibb in South Africa is believed to be in each Tibb Practitioner taking the responsibility of building their own private practices as well as profession and in the process increasing awareness nationally and not only in one community. The responsibility for the future of Tibb in South Africa is on the shoulders of every Tibb Practitioner and not on the Tibb Institute and therefore practitioners should venture out from the protection of the TMC.

## **4.5 Conclusion**

The collected data from the interviews were analysed and the findings were presented in this chapter, revealing very interesting facts that directly correlate with the literature review in chapter two, but also disclosed additional information unique to the profession of Tibb.

It seems like there is an overall perception that all CAM Practitioners are struggling in private practice, not only Tibb Practitioners. However, Homeopaths are seen as more successful than other CAM Practitioners due to the view that their training is of a higher standard and quality as well as the fact that they have been in South Africa for a longer period causing them to be better known.

Many factors impacting the entrepreneurial sustainability of Tibb Practitioners were identified and interpreted leading to the conclusion that the research fully answered all four the research objectives that were set out to be achieved in chapter one.

Chapter five will build upon these research findings in order to make the final conclusions and recommendations to fully fulfil the fourth research objective, which is to provide recommendations on ensuring entrepreneurial sustainability for Tibb Practitioners.

# **CHAPTER 5**

## **CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

With the commencement of the research, one of the objectives was to make recommendations in order to ensure entrepreneurial sustainability of Tibb Practitioners. This chapter builds upon the research findings in an attempt to make these recommendations.

### **5.2 Research Findings**

#### **5.2.1 Findings from Literature Review**

The literature review shows general and specific factors that ensure sustainability of entrepreneurial ventures. The specific factors consist of private practice factors and impediment factors that directly relate to entrepreneurial sustainability of private practices in general.

#### **5.2.2. Findings from the Research**

The research findings are presented, discussed and interpreted in chapter four; clearly correlating with the literature review, but also providing additional information that is specific to the entrepreneurial sustainability of private practices of Tibb Practitioners.

### **5.3 Research Objective Conclusions**

The research objectives presented in chapter one was all fully achieved in this study (Annexure R).

### **5.3.1 Research Objective One**

To evaluate the factors impacting entrepreneurial sustainability of Tibb Practitioners in Cape Town is the first research objective. These factors are divided into TMC factors and private practice factors.

TMC factors are identified as:

- Job security and satisfaction;
- TMC have everything already set up;
- Subsidy from Zakaat fund;
- Competition and cost;
- Lack of skills and fear;
- Costs of private practitioners; Number of practitioners; and
- Lack of mentorship.

Private practice factors are identified as:

- Start-up costs and maintaining business;
- Location;
- Marketing and lack of business skills;
- Lack of awareness;
- Lack of formal recognition and costs of Tibb Medicine;
- Competition with allopathic practitioners; and
- Different treatments; Medicines are often discontinued.

These factors were evaluated and therefore the objective has been accomplished.

### **5.3.2 Research Objective Two**

The second research objective is to investigate why some Tibb Practitioners own successful private practices while others do not. The factors distinguishing successful from unsuccessful Tibb Practitioners are identified as follows:

- Location;

- Personality of practitioners;
- Skills and experience;
- Type and culture of patient;
- Funding; and
- Good marketing skills, awareness and good patient treatment.

These factors were investigated and therefore this objective has been achieved.

### **5.3.3 Research Objective Three**

The third research objective is to identify what factors can be utilised to ensure entrepreneurial sustainability of Tibb Practitioners in Cape Town and are identified as:

- Professional registration;
- Skills development: Marketing and business skills;
- Inclusion into primary healthcare sector and public health;
- Affordability of Tibb medicine;
- Increase awareness through community education;
- Lower marketing restrictions and improve referral system; and
- Tibb Practitioners feel inferior to allopathic practitioners.

These factors have been identified to be utilised and therefore this research objective has been fulfilled.

### **5.3.4 Research Objective Four**

The fourth research objective is to provide recommendations on ensuring entrepreneurial sustainability for Tibb Practitioners.

Ensuring entrepreneurial sustainability has been identified with factors increasing viability of the Tibb profession, factors increasing viability of private practice and factors needing to change in South Africa.

Factors increasing viability of the Tibb profession are identified as:

- Increase skill training;
- Increase awareness to groups other than Muslims;
- Quality of education;
- Participate in public health sector including inclusion in medical aid; and
- Increase communication and marketing in academic medical institutions to attract more Tibb students.

Factors increasing viability of Tibb private practices are identified as:

- Improve education and skills training;
- Access to medical aid and affordability of Tibb medicine;
- Increase awareness through marketing;
- Include therapy training that does not require medication; and
- Location; sharing practice with colleagues.

What needs to change to make Tibb Practitioners achieve entrepreneurial sustainability in South Africa is identified as:

- Cooperation with government, AHPCSA and SATA;
- Costs of running a private practice;
- Inclusion in National Health Insurance and medical aid to attract more patients;
- Awareness and education about Tibb; and
- Support at TMC; Change public's mindset; broadening treatments.

These identified factors on how to ensure entrepreneurial sustainability of Tibb Practitioners in South Africa culminate in recommendations being presented in this chapter resulting in this research objective being achieved.

## **5.4 Recommendations**

The data analysis revealed various factors influencing Tibb Practitioners in South Africa leading to various recommendations being presented in this section to different entities for possible implementation to ensure entrepreneurial sustainability of Tibb Practitioners.

#### **5.4.1 Allied Health Professions Council of South Africa (AHPCSA)**

It seems that Allied Health Practitioners in general are struggling with similar problems, not only Tibb Practitioners and therefore the recommendations for the AHPCSA are:

- Lower restrictions on advertising; Rule 1 of the AHPCSA (2013b:2) prohibit Allied Health Practitioners from advertising at all, but Medical Practitioners are allowed to advertise according to Rule 3 of the HPCSA (2008:9). These practitioners are all functioning within the healthcare industry and it is counterproductive for Allied Health Practitioners to be prohibited to advertise while Medical Practitioners are not.
- Challenge Rule 8A of the HPCSA (2008:12) prohibiting registered practitioners of the HPCSA to share rooms with registered practitioners of the AHPCSA. This rule is based on the HP Act which was established in 1974 and in that year the AHPCSA was not established yet and it should be taken into consideration to be revised to read as follows: “not share rooms with practitioners not registered under the HP Act or other relevant acts like the AHP Act”. Bhikha (2013b:1) states that although this rule is there it has not been applied over the past number of years because of the overlap between the different professions. Hoho (2013:1) disagrees and declare that HPCSA practitioners may share rooms with other practitioners registered with the HPCSA only.

This rule is contradicted by Rule 27 of the HPCSA (2008:19) making provision for practitioners of the HPCSA to be registered with another statutory council as well leading to dual registration of the practitioner. Prinsloo (2010:5) confirms this when mentioning that Medical Practitioners registered with the HPCSA with additional qualifications in Homeopathy are allowed dual registration with the AHPCSA as well in order to prescribe homeopathic medicine. Loosely interpreted, this is in actual fact sharing rooms with a practitioner registered under a different act.

The need to challenge this rule is therefore in the best interest of the entrepreneurial sustainability of the whole Allied Health Industry, especially since the various practitioners can work well together if each practitioner stays within the scope of practice of the profession being practiced instead of seeing each other as competition.

#### **5.4.2 South African Tibb Association (SATA)**

Recommendations for SATA are:

- Create more national awareness about the Tibb profession by expanding consciousness to all South Africans and not only the Muslim community;
- Actively pursue recognition by various medical aids by getting the necessary procedural codes in place along with standardised consultation fees;
- Attempt to get involved in public healthcare by entering on local community level instead of trying to enforce it nationally; and
- Create workshops for Continuing Professional Development (CPD), especially in the areas where Tibb Practitioners are lacking the necessary clinical and business skills and knowledge.

#### **5.4.3 Tibb Health Sciences**

Recommendations for Tibb Health Sciences are:

- Attempt to streamline operations in order to reduce the prices at which Tibb medication are provided to Tibb Practitioners;
- Ensure continuity of Tibb medication instead of recurrently discontinuing effective products; and
- Make a range of effective products available only for use by Tibb Practitioners in order for it to be almost like a prescription range that is not available over the counter to encourage patients to seek consultations instead of self-medicating.

#### **5.4.4 Tibb Institute (Ibn Sina Institute of Tibb)**

Recommendations for the Ibn Sina Institute of Tibb are:

- Continue to create national awareness of Tibb in general by means of social development, the school's programme, Tibb research, television and radio programmes, but attempt to expand to a broader community than only the Muslim

community which will drastically increase the market share Tibb Practitioners can reach;

- Attempt to resolve the personal conflict that exists between Tibb and the AHPCSA in an effort to ensure the continued existence of Tibb in South Africa, but also to create awareness that there is a future for Tibb in the country which will encourage more Tibb students to enter the programme at the UWC; and
- Actively resolve the conflict and antagonism between Tibb and the AHPCSA to give students more confidence in the long-term sustainability of Tibb in South Africa.

#### **5.4.5 Tibb Medical Centres (TMC)**

The TMC are creating employees instead of entrepreneurs and therefore the recommendations for this division of the Ibn Sina Institute of Tibb are:

- Use the internship year to allow newly qualified Tibb Practitioners to gain as much practical and clinical experience as possible in order to gain confidence in how they deal with patients, how they diagnose and treat effectively while a senior practitioner is available to coach and mentor them in the process;
- Create a paradigm shift in the minds of the Tibb Practitioners by making them realise they are entrepreneurs within the TMC and not only employees and they should take the responsibility to act accordingly;
- Encourage Tibb Practitioners to market themselves on the radio and to take part in various awareness campaigns where they can not only tell the community about Tibb, but at the same time market themselves as practitioners in order to build their own practices. This should be done while keeping legal restrictions in mind;
- Badi and Badi (2006:113) mention that a multidiscipline team approach needs to be encouraged. This can be done effectively within the TMC by involving different practitioners from the Allied Health community like Homeopaths, Chiropractors, Phytotherapists etcetera, thus developing group practices; and
- Stop employing Tibb Practitioners and in the process buffer them from the reality by putting them in a comfort zone instead of encouraging them to venture into private practices. This can be done by implementing an intrapreneurship approach where Tibb Practitioners that completed their internship year are not employed full-time at a

full salary by the TMC, but instead they are employed at a basic salary only and given the opportunity to build their own practices at the same time by making use of the facilities in the TMC. For such an intrapreneurship approach to work, it will be necessary for each Tibb Practitioner to bring unique skills to the TMC differentiating themselves as practitioners from the rest of the team, but at the same time the TMC must be mature enough to not be threatened by practitioners using their facilities to also build their own practices and clientele.

#### **5.4.6 Tibb Practitioners**

Recommendations for Tibb Practitioners are varied, but centres around the fact that they need to take responsibility for their own profession and their own futures and thus are:

- Become more creative and innovate in marketing and business skills;
- Become more skilled in clinical expertise;
- Actively find training opportunities to expand knowledge about clinical modalities, but also to increase business and marketing skills;
- Create opportunities to promote themselves;
- Take the initiative to approach hospitals to innovatively create opportunities where they can work in public health on a local level;
- Take the initiative to submit claims to medical aids in order for them to see the demand for the services of Tibb Practitioners;
- Realise that medical aid payout will only occur with time, but even that is not ensured, because changes are occurring and more healthcare practitioners are expecting patients or clients to pay them directly and then claim back from their own medical aids afterwards. By not using this as a constant excuse for their failure in private practice, Tibb Practitioners may in actual fact be able to think more innovatively about solutions instead of being trapped in a mould of self-pity and despair;
- Joubert (2012:72-73) mentions that in order to achieve goals, there should be motivation, the right attitude, effectiveness, clarity of goals and an over-arching goal. This is very good advice for every Tibb Practitioner to take responsibility to motivate them which will lead to a good attitude and effectiveness as a practitioner ensuring patients will come back and thus they will build up clientele. Set goals as practitioner

and attempt to reach them one at a time, but all goals have to subject to the over-arching goal of living out the purpose of a Tibb Practitioner; and

- Shift focus away from an employee mentality towards an entrepreneurial mentality. Tibb Practitioners sometimes struggle with the fact that they need to charge patients money for their services, but they should realise that they are entrepreneurs and should understand that their practices are also their business and their means of income. It is suggested that they see themselves as Social Entrepreneurs which is perfectly described by Zimmerer *et al.* (2009:25-26) when it is stated that social entrepreneurs use their skills not only to create profitable business ventures, but also to achieve social and environmental goals for the common good and their businesses often have a triple bottom line that encompasses economic, social and environmental objectives. This change in mindset will make Tibb Practitioners realise that they are good enough and have the necessary competence and belief in their ability and in their profession and products to actually charge for their services, because it is not only about them, but about a bigger goal of making a difference in a whole community.

#### **5.4.7 University of the Western Cape (UWC)**

The recommendations for the UWC are:

- Create more awareness around the School of Natural Medicine in order to encourage students to choose Allied Healthcare as a study option, including Unani-Tibb Medicine;
- Adjust the Tibb curriculum to include more in-depth training in understanding body functions (Anatomy, Physiology and Pathology) in order for Tibb Practitioners to become more skilled in their clinical understanding of how the body functions to be more effective in finding the root cause of conditions;
- Adjust the Tibb curriculum to include more practical clinical hours in order for students to gain more confidence and competence in dealing with patients; and
- Include a subject in the curriculum on Practice Management which includes business, marketing and entrepreneurship skills in order to create a graduate with an entrepreneurial mindset ready to leave university with the intention of creating work instead of having a mentality of having to find a job.

## **5.5 Suggestions for Further Research**

It is recommended that additional research should be done to:

- Develop and implement an effective intrapreneurship model within the TMC;
- Efficiently adjust the Tibb curriculum at the UWC; and
- Develop an awareness campaign that will promote Tibb nationally outside the Muslim community.

## **5.6 Conclusion**

In this chapter it was concluded that all the research objectives have been accomplished in the research and it clearly correlated to the literature review theory. Based on the analysis of the collected data during the research process combined with relevant literature, there were recommendations made to the various entities directly involved in the entrepreneurial sustainability of Tibb Practitioners.

It is finally concluded that based on the evaluation of the factors impacting entrepreneurial sustainability of Tibb Practitioners in Cape Town, it is possible for them to develop commercially sustainable private practice, but to accomplish this certain aspects need to change, as it was recommended.

Tibb Practitioners can be successful, but for that to occur, they cannot just be doctors, they need to be entrepreneurs as well.

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# ANNEXURE A:

## LETTER OF PERMISSION TO CONDUCT THE RESEARCH

institute



A Science of Medicine  
The Art of Care

12 February 2013

To whom it may concern

### Letter of Permission to Conduct Research

One of our employees, Christo A. Scheepers, is a M.B.A. student with the Management College of Southern Africa (MANCOSA) and will be conducting research this year on the topic of:

**Evaluation of the factors impacting entrepreneurial sustainability of Tibb Healthcare Practitioners within the Tibb Medical Centres in Cape Town.**

On behalf of the Tibb Medical Centres in Cape Town, a division of the Ibn Sina Institute of Tibb, I am herewith indicating my awareness hereof and grant full permission for this research to be conducted within the organisation.

Yours faithfully

.....  
**Prof. Rashid Bhikha, B.Pharm., Ph.D.**  
**Chairman**  
Ibn Sina Institute of Tibb  
NPO – 930 008 390

.....  
**Ms. Caroline Davids**  
**Provincial Manager: Western-Cape**  
Ibn Sina Institute of Tibb  
NPO – 930 008 390

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## **ANNEXURE B:**

### **DRAFT OF THE INTERVIEW QUESTIONS**

#### Section A:

- What is your name? Age Group? Gender? Profession? Qualifications? Place of study? Place of work?
- Do you want to stay anonymous for this research? If not, do you give permission that your comments may be quoted giving reference to you?

#### Section B:

- Do you think Tibb Practitioners can be successful in private practice?
- Do you think Tibb Practitioners can make a living in private practice?
- Do you think Tibb private practices are financially sustainable (viable) in the long-term?
- Have you ever considered opening a private practice?
- Do you think Allied Healthcare is a sustainable industry in South Africa?
- Do you think Tibb Practitioners can be just as successful in private practice as other allied health practitioners like homeopaths, naturopaths, therapeutic reflexologists?
- Do you think Tibb Practitioners will be more successful being employed by a larger organisation like the Ibn Sina Institute of Tibb instead of entering private practices?

#### Section C:

- What factors do you think affect the entrepreneurial sustainability of Tibb Practitioners within the Tibb Medical Centres in Cape Town?
- What factors do you think affect the entrepreneurial sustainability of Tibb Practitioners within private practices?
- What factors do you think can be utilised to ensure entrepreneurial sustainability of Tibb Practitioners in the Tibb Medical Centres as well as in private practice?

#### Section D:

- Why do you think certain Tibb Practitioners are successful in private practices while others are struggling to make a living?

- What do you think distinguishes successful Tibb Practitioners from struggling ones?

#### Section E:

- What do you think can be done to make Unani-Tibb as profession more viable in South Africa?
- What do you think can be done to make Tibb private practices more viable?
- What do you think needs to change in order for Tibb Practitioners to achieve entrepreneurial sustainability in South Africa?

#### Section F:

This section is dependent on the respondent being interviewed and only one of these questions may be appropriate for a specific individual.

- What did you do to become successful in private practice?
- Why did you choose to leave the Tibb profession in order to study conventional medicine?
- Why did you decide to go study Phytotherapy?
- Why did you as a medical doctor decide to study Tibb as well?
- Why did you as a primary healthcare nurse decide to study Tibb Medicine as well?
- Why did you decide to rather go work for the UWC instead of practicing full-time?
- What do you think are the reasons for the low student numbers in Tibb at UWC?
- Do you have a website (personal or for business)?
- Do you think a medical practice is more sustainable than a Tibb practice?
- Do you think a nursing practice is more sustainable than a Tibb practice? Why did you decide to study Tibb Medicine?
- Do you think entering a Tibb private practice will be easier if you do not have to be concerned about an income for the first year?
- Would you consider going into a Tibb private practice if you do not have to be concerned about an income for the first year? Please motivate your answer.
- Do you think other allied health practitioners like homeopaths, naturopaths etcetera are more successful in private practice and please explain your answer?
- Do you think your nursing background makes you more successful in private practice?

## ANNEXURE C: RESEARCH INVITATION LETTER

### **Evaluation of the factors impacting entrepreneurial sustainability of Tibb Healthcare Practitioners in Cape Town**

**Research conducted by:** Christo A. Scheepers (Student Number 114095)

**Department:** Mancosa Graduate School of Business  
**Institution:** Management College of Southern Africa  
**Course:** Master of Business Administration (M.B.A.) degree  
**Supervisor:** Prof. M.S. Bayat (Mancosa Cape Town)  
**Research Director:** Prof. Adolf Lowies (Mancosa Durban)  
**Research Coordinator:** Tanita Lachman (Mancosa Durban)  
**Statisticians:** Janine Upton (Mancosa Durban); and  
Dr. Natasha Mothapo (University of Stellenbosch)

**The Purpose of the Research:**

The purpose of this study is to evaluate the factors impacting entrepreneurial sustainability of Tibb Practitioners in order to determine which factors can be utilised and effectively implemented so that recommendations may be made and a possible model presented to management to ensure sustainability of the Tibb Practitioners within the Tibb Medical Centres and as a successful method into sustainable private practices.

*Dear Respondent,*

*Thank you for being willing to participate in this research project. Your time and input is valued and highly appreciated.*

*The research interview consists of two parts:*

- *Part 1 consists of some questions that are herewith attached for you to review and you are welcome to even answer these questions on the template provided and just bring that along to the physical interview which will save considerable time*
- *Part 2 consists of the actual interview during which the above questions will be worked through together with a few additional unprepared questions that only require a Yes or No answer.*

*The interview will take approximately 15 to 30 minutes depending on whether you completed the Part 1 questions beforehand or not. All information will be handled as confidential and with the highest ethical standards. Results will be professionally analysed and made available to all Tibb Practitioners on completion of the dissertation.*

*Regards  
Christo*

**ANNEXURE D:  
PREPARED QUESTIONS INTERVIEW TEMPLATE**

Title:		
Full Name & Surname:		
Profession:		
Qualifications:		
Places of Study:		
Place of Work:		
Gender:	<input type="checkbox"/>	Male
	<input type="checkbox"/>	Female
Age Group:	<input type="checkbox"/>	18-25
	<input type="checkbox"/>	26-35
	<input type="checkbox"/>	36-45
	<input type="checkbox"/>	45+

<b>What factors do you think affect the entrepreneurial sustainability of Tibb Practitioners within the Tibb Medical Centres in Cape Town?</b>
<b>What factors do you think affect the entrepreneurial sustainability of Tibb Practitioners within private practices?</b>
<b>What factors do you think can be utilised to ensure entrepreneurial sustainability of Tibb Practitioners in the Tibb Medical Centres as well as in private practice?</b>

**Why do you think certain Tibb Practitioners are successful in private practices while others are struggling to make a living?**

**What do you think distinguishes successful Tibb Practitioners from struggling ones?**

**What do you think can be done to make Unani-Tibb as profession more viable in South Africa?**

**What do you think can be done to make Tibb private practices more viable?**

**What do you think needs to change in order for Tibb Practitioners to achieve entrepreneurial sustainability in South Africa?**

**Additional Questions:**


**Do you want to stay anonymous?**

- |                          |                              |
|--------------------------|------------------------------|
| <input type="checkbox"/> | Yes, keep me anonymous       |
| <input type="checkbox"/> | No, you may quote me by name |

**I voluntarily participated in this research conducted by Christo A. Scheepers (Student Number 114095) of the Mancosa Graduate School of Business as a study for completion of the Master of Business Administration (M.B.A.) degree with the Management College of Southern Africa.**

**Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/2013**

## ANNEXURE E: UNPREPARED QUESTIONS INTERVIEW TEMPLATE

Do you think Tibb Practitioners can be successful in private practice?	YES	NO	Vc		Vr
			Ac		Ar
			Kc		Kr

Do you think Tibb Practitioners can make a living in private practice?	YES	NO	Vc		Vr
			Ac		Ar
			Kc		Kr

Do you think Tibb private practices are financially sustainable (viable) in the long-term?	YES	NO	Vc		Vr
			Ac		Ar
			Kc		Kr

Have you ever considered opening a private practice?	YES	NO	Vc		Vr
			Ac		Ar
			Kc		Kr

Do you think Allied Healthcare is a sustainable industry in South Africa?	YES	NO	Vc		Vr
			Ac		Ar
			Kc		Kr

Do you think Tibb Practitioners can be just as successful in private practice as other allied health practitioners like homeopaths, naturopaths, therapeutic reflexologists?	YES	NO	Vc		Vr
			Ac		Ar
			Kc		Kr

Do you think Tibb Practitioners will be more successful being employed by a larger organisation like the Ibn Sina Institute of Tibb instead of entering private practices?	YES	NO	Vc		Vr
			Ac		Ar
			Kc		Kr

# ANNEXURE F:

## OPENING OF REGISTER FOR UNANI-TIBB

STAATSKOERANT, 14 SEPTEMBER 2007

No. 30286 7

No. 848

14 September 2007

### ALLIED HEALTH PROFESSIONS ACT, 1982

#### INCLUSION OF THE PROFESSION OF UNANI TIBB UNDER THE PROVISIONS OF THE ALLIED HEALTH PROFESSIONS ACT, 1982 (ACT 63 OF 1982)

I, Dr M E Tshabalala-Msimang, Minister of Health, acting in terms of section 16 of the Allied Health Professions Act, 1982 (Act 63 of 1982), and in consultation with the Allied Health Professions Council of South Africa, hereby declare the provisions of the said Act to be applicable to the profession of Unani Tibb, which profession has as its object the promotion of health, the treatment, prevention or relief of physical or mental defects, illness or deficiencies in humans.



**DR ME TSHABALALA-MSIMANG**  
**MINISTER OF HEALTH**

AHPCSA (2007:1)

**ANNEXURE G:  
CURRICULUM COMPARISON**

<b>Y E A R</b>	<b>MEDICAL SCIENCE</b>	<b>HOMEOPATHY</b>	<b>NATURO- PATHY</b>	<b>PHYTO- THERAPY</b>	<b>UNANI-TIBB</b>
	<b>US</b>	<b>UJ</b>	<b>UWC</b>	<b>UWC</b>	<b>UWC</b>
<b>1</b>	Natural Sciences like Biology and Chemistry; Basic health; Personal & Professional Development; Basic principles of body function disturbance during illness and treatment of illness	Physics; Chemistry; Social Studies; Anatomy & Physiology; Biology; and Philosophy Principles & History	Chemistry; Medical Bioscience; Physics; Life Sciences; Computer Literacy; IPOC (Natural Medicine); PHC (Natural Medicine); Principal of Natural Healing System; and Language Elective (English, Xhosa or Afrikaans)	Chemistry; Medical Bioscience; Physics; Life Sciences; Computer Literacy; IPOC (Natural Medicine); PHC (Natural Medicine); Principal of Natural Healing System; and Language Elective (English, Xhosa or Afrikaans)	Chemistry; Medical Bioscience; Physics; Life Sciences; Computer Literacy; IPOC (Natural Medicine); PHC (Natural Medicine); Principal of Natural Healing System; and Language Elective (English, Xhosa or Afrikaans)
<b>2</b>	Clinical Medicine covering	Anatomy; Biology; Medical;	Biotechnology; Medical Bioscience;	Biotechnology; Medical Bioscience;	Biotechnology; Medical Bioscience;

	theoretical and practical aspects of the normal structures and functions of the body's various organ systems and their disorders in an integrated way.	Microbiology; Physiology; Immunology; and Epidemiology	Medical Microbiology; Nutrition; Complementary Healing Systems; and Health Promotion	Medical Microbiology; Nutrition; Complementary Healing Systems; and Health Promotion	Medical Microbiology; Nutrition; Complementary Healing Systems; and Health Promotion
<b>3</b>	Practical Clinical Hours in Clinical Rotation modules from the second semester of the second year to the first semester of the fifth year	Diagnostics; Psychopathology; Materia Medica; General Pathology; Systemic Pathology; Radiographic Anatomy; Auxiliary Therapeutics; and Practical Clinical Hours	Pharmacology; Human Development; Health Psychology; Nutritional Medicine; Pathology; General Medicine; and Herbal Pharmacognosy	Pharmacology; Human Development; Health Psychology; Nutritional Medicine; Pathology; General Medicine; and Herbal Pharmacognosy	Pharmacology; Human Development; Health Psychology; Nutritional Medicine; Pathology; General Medicine; and Herbal Pharmacognosy
			<b>B.Sc.(CHS) degree</b>	<b>B.Sc.(CHS) Degree</b>	<b>B.Sc.(CHS) degree</b>
<b>4</b>	Compulsory four week practical elective in CAM in year	Diagnostics; Clinical Homeopathy; Homeopharmaceutics; Materia Medica; Research Methods and Techniques; and Practical Clinical Hours	Differential Diagnosis for Naturopathy; Clinical Practice; Treatment Modalities for Naturopathy; Ethics, Jurisprudence & Practice	Clinical Practice (Phytotherapy); Materia Medica; Clinical Phytotherapy; Herbal Pharmacology; Clinical Diagnosis;	Clinical Practice; Philosophy and Aetiology of Tibb; Pharmacology of Tibb; Therapeutics of Tibb; Regimental Therapies; Ethics, Jurisprudence &

	four of which some students completed their elective with the Tibb Medical Centres in Cape Town in 2012		Management; General Medicine; Clinical Diagnosis; and Research Methods	General Medicine; Differential Diagnosis for Phytotherapy; Ethics, Jurisprudence & Practice Management; and Research Methods	Practice Management; General Medicine; Clinical Diagnosis; Pathology Diagnosis of Tibb; and Research Methods
5	Practical training in Clinical Environment from the second semester in the fifth year  Compulsory four week practical elective in CAM in year five of which some students completed their elective with the Tibb Medical Centres in	Practice Management and Jursiprudence; Clinical Homeopathy; Materia Medica; Research Project and Dissertation; and Practical Clinical Hours	Emergency Care; Counselling Skills; Research Project; Treatment Modalities for Naturopahty; Clinical Practice	Emergency Care; Counselling Skills; Research Project; Materia Medica; Clinical Phytotherapy; Herbal Pharmacy; and Clinical Practice	Emergency Care; Counselling Skills; Research Project; Illness Management; and Clinical Practice

	Cape Town in 2012				
		<b>M.Tech.(Hom.) Degree</b>	<b>BCM(NAT) degree</b>	<b>BCM(PHYT) degree</b>	<b>BCM(UTM) degree</b>
		Compulsory Internship (1 Year)			Recommended Internship (1 Year)
<b>6</b>	Practical Training in the Clinical Environment				
	<b>M.B.Ch.B. degree</b>				
	Compulsory Internship (2 Years)				
	Compulsory Community Service (1 Year)				
<b>Professional Registration to practice the profession with:</b>					
	<b>HPCSA</b>	<b>AHPCSA</b>	<b>AHPCSA</b>	<b>AHPCSA</b>	<b>AHPCSA</b>

(Van der Merwe, 2013:43; University of Johannesburg, 2013b:1-2; University of the Western Cape, 2013:60-91).

**ANNEXURE H:  
NLP EYE MOVEMENT EXPLANATION**

<i>(Left)</i>	<i>(Straight Ahead)</i>	<i>(Right)</i>
<b>CONSTRUCTING (IMAGINING)</b>	<b>VISUALISING</b>	<b>RECALLING (REMEMBERING)</b>
<b>Vc</b>		<b>Vr</b>
<b>Constructed Visual</b>		<b>Recalled Visual</b>
Imagining something that was not seen before		Remembering an event that has happened
<b>Ac</b>	<b>Ctr</b>	<b>Ar</b>
<b>Constructed Auditory</b>	<b>Visualising</b>	<b>Recalled Auditory</b>
Imagining something that was not heard before	Creating pictures	Remembering a sound that was heard before
<b>Kc</b>		<b>Kr</b>
<b>Constructed Kinaesthetic</b>		<b>Recalled Kinaesthetic</b>
Accessing Senses (Exploring feelings or a physical experience)		Busy with internal dialogue

(Bartkowiak, J., 2012:451-453; Dilts, R., 1998:-4).

**ANNEXURE I:**  
**FREQUENCY TABLES OF CLOSED-ENDED QUESTIONS**

**successful\_private\_practice**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	13	81.3	81.3	81.3
	No	3	18.8	18.8	100.0
	Total	16	100.0	100.0	

**successful\_private\_practice1**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Vr	3	18.8	18.8	18.8
	Ac	2	12.5	12.5	31.3
	Ar	2	12.5	12.5	43.8
	Kc	3	18.8	18.8	62.5
	Kr	4	25.0	25.0	87.5
	Centre	2	12.5	12.5	100.0
	Total	16	100.0	100.0	

**make\_living\_private\_practice**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	75.0	75.0	75.0
	No	4	25.0	25.0	100.0
	Total	16	100.0	100.0	

**make\_living\_private\_practice1**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Vc	3	18.8	18.8	18.8
	Vr	4	25.0	25.0	43.8
	Ac	3	18.8	18.8	62.5
	Kc	3	18.8	18.8	81.3
	Kr	2	12.5	12.5	93.8
	Centre	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

**financially\_viable**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	10	62.5	62.5	62.5
	No	6	37.5	37.5	100.0
	Total	16	100.0	100.0	

**financially viable1**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Vc	2	12.5	12.5	12.5
Vr	4	25.0	25.0	37.5
Ac	2	12.5	12.5	50.0
Ar	3	18.8	18.8	68.8
Kc	2	12.5	12.5	81.3
Kr	3	18.8	18.8	100.0
Total	16	100.0	100.0	

**Opening private practice**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	15	93.8	93.8	93.8
No	1	6.3	6.3	100.0
Total	16	100.0	100.0	

**Opening private practice1**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Vc	2	12.5	12.5	12.5
Vr	3	18.8	18.8	31.3
Ac	3	18.8	18.8	50.0
Ar	1	6.3	6.3	56.3
Kc	2	12.5	12.5	68.8
Kr	1	6.3	6.3	75.0
Centre	4	25.0	25.0	100.0
Total	16	100.0	100.0	

**Allied Health Care Sustainable**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	12	75.0	75.0	75.0
No	4	25.0	25.0	100.0
Total	16	100.0	100.0	

**Allied Health Care Sustainable1**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Vc	1	6.3	6.3	6.3
Vr	3	18.8	18.8	25.0
Ac	4	25.0	25.0	50.0
Ar	2	12.5	12.5	62.5
Kc	1	6.3	6.3	68.8
Kr	2	12.5	12.5	81.3
Centre	3	18.8	18.8	100.0
Total	16	100.0	100.0	

**Tibb Practitioners successful**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	12	75.0	75.0	75.0
Valid No	4	25.0	25.0	100.0
Total	16	100.0	100.0	

**Tibb Practitioners successful1**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Vc	1	6.3	6.3	6.3
Vr	3	18.8	18.8	25.0
Ac	3	18.8	18.8	43.8
Valid Kc	5	31.3	31.3	75.0
Kr	3	18.8	18.8	93.8
Centre	1	6.3	6.3	100.0
Total	16	100.0	100.0	

**Emplied Larger organisations**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	11	68.8	68.8	68.8
Valid No	5	31.3	31.3	100.0
Total	16	100.0	100.0	

**Emplied Larger organisations1**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Vc	4	25.0	25.0	25.0
Vr	3	18.8	18.8	43.8
Ac	3	18.8	18.8	62.5
Valid Kc	2	12.5	12.5	75.0
Kr	3	18.8	18.8	93.8
Centre	1	6.3	6.3	100.0
Total	16	100.0	100.0	

## ANNEXURE J: DESCRIPTIVES STATISTICAL FINDINGS

### Descriptives<sup>a</sup>

		Statistic	Std. Error	
Profession	Mean	1.31	.151	
	95% Confidence Interval for Mean	Lower Bound Upper Bound	.99 1.63	
	5% Trimmed Mean	1.24		
	Median	1.00		
	Variance	.363		
	Std. Deviation	.602		
	Minimum	1		
	Maximum	3		
	Range	2		
	Interquartile Range	1		
	Skewness	1.890	.564	
	Kurtosis	3.035	1.091	
	Mean	1.88	.085	
	95% Confidence Interval for Mean	Lower Bound Upper Bound	1.69 2.06	
Gender	5% Trimmed Mean	1.92		
	Median	2.00		
	Variance	.117		
	Std. Deviation	.342		
	Minimum	1		
	Maximum	2		
	Range	1		
	Interquartile Range	0		
	Skewness	-2.509	.564	
	Kurtosis	4.898	1.091	
	Mean	2.19	.228	
	95% Confidence Interval for Mean	Lower Bound Upper Bound	1.70 2.67	
	5% Trimmed Mean	2.15		
	Age	Median	2.00	
Variance		.829		
Std. Deviation		.911		
Minimum		1		
Maximum		4		
Range		3		
Interquartile Range		1		
Skewness		.797	.564	
Kurtosis		.412	1.091	
Mean		1.75	.112	
Website		95% Confidence Interval for Mean	Lower Bound Upper Bound	1.51 1.99

	5% Trimmed Mean		1.78	
	Median		2.00	
	Variance		.200	
	Std. Deviation		.447	
	Minimum		1	
	Maximum		2	
	Range		1	
	Interquartile Range		1	
	Skewness		-1.278	.564
	Kurtosis		-.440	1.091
	Mean		1.19	.101
	95% Confidence Interval for Mean	Lower Bound	.97	
		Upper Bound	1.40	
	5% Trimmed Mean		1.15	
	Median		1.00	
	Variance		.163	
successful_private_practice	Std. Deviation		.403	
	Minimum		1	
	Maximum		2	
	Range		1	
	Interquartile Range		0	
	Skewness		1.772	.564
	Kurtosis		1.285	1.091
	Mean		4.56	.438
	95% Confidence Interval for Mean	Lower Bound	3.63	
		Upper Bound	5.50	
	5% Trimmed Mean		4.57	
	Median		5.00	
	Variance		3.063	
successful_private_practice 1	Std. Deviation		1.750	
	Minimum		2	
	Maximum		7	
	Range		5	
	Interquartile Range		3	
	Skewness		-.247	.564
	Kurtosis		-1.273	1.091
	Mean		1.25	.112
	95% Confidence Interval for Mean	Lower Bound	1.01	
		Upper Bound	1.49	
	5% Trimmed Mean		1.22	
	Median		1.00	
	Variance		.200	
make_living_private_practice	Std. Deviation		.447	
	Minimum		1	
	Maximum		2	
	Range		1	
	Interquartile Range		1	
	Skewness		1.278	.564
	Kurtosis		-.440	1.091
	Mean		3.38	.499
	95% Confidence Interval for Mean	Lower Bound	2.31	
		Upper Bound	4.44	
make_living_private_practice e1	5% Trimmed Mean		3.31	

	Median	3.00	
	Variance	3.983	
	Std. Deviation	1.996	
	Minimum	1	
	Maximum	7	
	Range	6	
	Interquartile Range	3	
	Skewness	.440	.564
	Kurtosis	-1.207	1.091
	Mean	1.38	.125
	95% Confidence Interval for Mean	Lower Bound Upper Bound	
		1.11 1.64	
	5% Trimmed Mean	1.36	
	Median	1.00	
	Variance	.250	
financially_viable	Std. Deviation	.500	
	Minimum	1	
	Maximum	2	
	Range	1	
	Interquartile Range	1	
	Skewness	.571	.564
	Kurtosis	-1.934	1.091
	Mean	3.50	.438
	95% Confidence Interval for Mean	Lower Bound Upper Bound	
		2.57 4.43	
	5% Trimmed Mean	3.50	
	Median	3.50	
	Variance	3.067	
financially_viable1	Std. Deviation	1.751	
	Minimum	1	
	Maximum	6	
	Range	5	
	Interquartile Range	3	
	Skewness	.128	.564
	Kurtosis	-1.314	1.091
	Mean	1.06	.063
	95% Confidence Interval for Mean	Lower Bound Upper Bound	
		.93 1.20	
	5% Trimmed Mean	1.01	
	Median	1.00	
	Variance	.063	
Opening_private_practice	Std. Deviation	.250	
	Minimum	1	
	Maximum	2	
	Range	1	
	Interquartile Range	0	
	Skewness	4.000	.564
	Kurtosis	16.000	1.091
	Mean	4.06	.559
	95% Confidence Interval for Mean	Lower Bound Upper Bound	
		2.87 5.25	
Opening_private_practice1	5% Trimmed Mean	4.07	
	Median	3.50	

	Variance		4.996	
	Std. Deviation		2.235	
	Minimum		1	
	Maximum		7	
	Range		6	
	Interquartile Range		5	
	Skewness		.157	.564
	Kurtosis		-1.523	1.091
	Mean		1.25	.112
	95% Confidence Interval for Mean	Lower Bound	1.01	
		Upper Bound	1.49	
	5% Trimmed Mean		1.22	
	Median		1.00	
Allied_Health_Care_Sustainable	Variance		.200	
	Std. Deviation		.447	
	Minimum		1	
	Maximum		2	
	Range		1	
	Interquartile Range		1	
	Skewness		1.278	.564
	Kurtosis		-.440	1.091
	Mean		4.06	.504
	95% Confidence Interval for Mean	Lower Bound	2.99	
		Upper Bound	5.14	
	5% Trimmed Mean		4.07	
	Median		3.50	
Allied_Health_Care_Sustainable1	Variance		4.063	
	Std. Deviation		2.016	
	Minimum		1	
	Maximum		7	
	Range		6	
	Interquartile Range		4	
	Skewness		.294	.564
	Kurtosis		-1.296	1.091
	Mean		1.25	.112
	95% Confidence Interval for Mean	Lower Bound	1.01	
		Upper Bound	1.49	
	5% Trimmed Mean		1.22	
	Median		1.00	
Tibb_Practitioners_successful	Variance		.200	
	Std. Deviation		.447	
	Minimum		1	
	Maximum		2	
	Range		1	
	Interquartile Range		1	
	Skewness		1.278	.564
	Kurtosis		-.440	1.091
	Mean		4.13	.455
	95% Confidence Interval for Mean	Lower Bound	3.15	
		Upper Bound	5.10	
Tibb_Practitioners_successful1	5% Trimmed Mean		4.14	
	Median		5.00	
	Variance		3.317	

	Std. Deviation		1.821	
	Minimum		1	
	Maximum		7	
	Range		6	
	Interquartile Range		4	
	Skewness		-.210	.564
	Kurtosis		-1.266	1.091
	Mean		1.31	.120
	95% Confidence Interval for Mean	Lower Bound	1.06	
		Upper Bound	1.57	
	5% Trimmed Mean		1.29	
	Median		1.00	
Emplied_Larger_organisati ons	Variance		.229	
	Std. Deviation		.479	
	Minimum		1	
	Maximum		2	
	Range		1	
	Interquartile Range		1	
	Skewness		.895	.564
	Kurtosis		-1.391	1.091
	Mean		3.38	.531
	95% Confidence Interval for Mean	Lower Bound	2.24	
		Upper Bound	4.51	
	5% Trimmed Mean		3.31	
	Median		3.00	
	Variance		4.517	
Emplied_Larger_organisati ons1	Std. Deviation		2.125	
	Minimum		1	
	Maximum		7	
	Range		6	
	Interquartile Range		5	
	Skewness		.388	.564
	Kurtosis		-1.427	1.091

a. title is constant. It has been omitted.

# ANNEXURE K: CORRELATIONS STATISTICAL FINDINGS

## Correlations

		title	Profession	Gender	Age	Website	successful_private_practice1	make_living_private_practice1	financially_viable1	Opening_private_practice1	Allied_Health_Care_Sustainable1	Tibb_Practitioners_successful1	Employed_Larger_organisations1
title	Pearson Correlation	.a	.a	.a	.a	.a	.a	.a	.a	.a	.a	.a	.a
	Sig. (2-tailed)												
	N	16	16	16	16	16	16	16	16	16	16	16	16
Profession	Pearson Correlation	.a	1	-.122	.129	.062	-.494	-.548*	.158	-.313	-.072	.023	.319
	Sig. (2-tailed)			.654	.633	.820	.052	.028	.559	.238	.791	.933	.228
	N	16	16	16	16	16	16	16	16	16	16	16	16
Gender	Pearson Correlation	.a	-.122	1	.080	.218	-.209	-.024	-.557*	.011	.303	.027	.161
	Sig. (2-tailed)		.654		.767	.417	.437	.928	.025	.968	.255	.922	.552
	N	16	16	16	16	16	16	16	16	16	16	16	16
Age	Pearson Correlation	.a	.129	.080	1	.123	-.029	.142	.397	-.104	.465	.065	.581*
	Sig. (2-tailed)		.633	.767		.651	.916	.599	.128	.700	.069	.810	.018
	N	16	16	16	16	16	16	16	16	16	16	16	16
Website	Pearson Correlation	.a	.062	.218	.123	1	-.575*	.261	-.170	-.050	.018	-.205	.386
	Sig. (2-tailed)		.820	.417	.651		.020	.328	.528	.854	.946	.447	.140
	N	16	16	16	16	16	16	16	16	16	16	16	16
successful_private_practice1	Pearson Correlation	.a	-.494	-.209	-.029	.575*	1	.279	.381	.076	.008	.395	-.150
	Sig. (2-tailed)		.052	.437	.916	.020		.295	.146	.781	.976	.130	.579
	N	16	16	16	16	16	16	16	16	16	16	16	16
make_living_private_practice1	Pearson Correlation	.a	-.548*	-.024	.142	.261	.279	1	.172	.488	.044	.280	.012
	Sig. (2-tailed)		.028	.928	.599	.328	.295		.525	.055	.873	.294	.965
	N	16	16	16	16	16	16	16	16	16	16	16	16

financially_viable1	Pearson Correlation	. <sup>a</sup>	.158	-.557*	.397	-.170	.381	.172	1	-.247	.009	.272	.287
	Sig. (2-tailed)		.559	.025	.128	.528	.146	.525		.356	.972	.309	.282
	N	16	16	16	16	16	16	16	16	16	16	16	16
Opening_private_practice1	Pearson Correlation	. <sup>a</sup>	-.313	.011	-.104	-.050	.076	.488	-.247	1	-.001	.047	-.230
	Sig. (2-tailed)		.238	.968	.700	.854	.781	.055	.356		.997	.863	.392
	N	16	16	16	16	16	16	16	16	16	16	16	16
Allied_Health_Care_Sustained1	Pearson Correlation	. <sup>a</sup>	-.072	.303	.465	.018	.008	.044	.009	-.001	1	-.529*	-.037
	Sig. (2-tailed)		.791	.255	.069	.946	.976	.873	.972	.997		.035	.892
	N	16	16	16	16	16	16	16	16	16	16	16	16
Tibb_Practitioners_successful1	Pearson Correlation	. <sup>a</sup>	.023	.027	.065	-.205	.395	.280	.272	.047	-.529*	1	.263
	Sig. (2-tailed)		.933	.922	.810	.447	.130	.294	.309	.863	.035		.326
	N	16	16	16	16	16	16	16	16	16	16	16	16
Employed_Larger_organizations1	Pearson Correlation	. <sup>a</sup>	.319	.161	.581*	.386	-.150	.012	.287	-.230	-.037	.263	1
	Sig. (2-tailed)		.228	.552	.018	.140	.579	.965	.282	.392	.892	.326	
	N	16	16	16	16	16	16	16	16	16	16	16	16

\*. Correlation is significant at the 0.05 level (2-tailed).

a. Cannot be computed because at least one of the variables is constant.

**ANNEXURE L:**  
**TESTS FOR AGE AND VERBAL YES/NO ANSWERS**

**Test of Homogeneity of Variances**

	Levene Statistic	df1	df2	Sig.
Website	2.277	3	12	.132
successful_private_practice1	1.793	3	12	.202
make_living_private_practice1	.784	3	12	.525
financially_viable1	1.979	3	12	.171
Opening_private_practice1	.771	3	12	.532
Allied_Health_Care_Sustainable1	1.735	3	12	.213
Tibb_Practitioners_successful1	.058	3	12	.981
Employed_Larger_organisations1	2.227	3	12	.138

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Website	Between Groups	.278	3	.093	.408	.750
	Within Groups	2.722	12	.227		
	Total	3.000	15			
successful_private_practice1	Between Groups	.049	3	.016	.004	1.000
	Within Groups	45.889	12	3.824		
	Total	45.938	15			
make_living_private_practice1	Between Groups	8.583	3	2.861	.671	.586
	Within Groups	51.167	12	4.264		
	Total	59.750	15			
financially_viable1	Between Groups	13.444	3	4.481	1.652	.230
	Within Groups	32.556	12	2.713		
	Total	46.000	15			
Opening_private_practice1	Between Groups	14.271	3	4.757	.941	.451
	Within Groups	60.667	12	5.056		
	Total	74.938	15			
Allied_Health_Care_Sustainable1	Between Groups	14.882	3	4.961	1.293	.322
	Within Groups	46.056	12	3.838		
	Total	60.938	15			
Tibb_Practitioners_successful1	Between Groups	1.194	3	.398	.098	.959
	Within Groups	48.556	12	4.046		
	Total	49.750	15			
Employed_Larger_organisations1	Between Groups	23.694	3	7.898	2.151	.147
	Within Groups	44.056	12	3.671		
	Total	67.750	15			

## Post Hoc Tests

### Multiple Comparisons

#### Tukey HSD

Dependent Variable	(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
						Lower Bound	Upper Bound	
Website		26-35	-.111	.318	.985	-1.05	.83	
		18-25	.167	.435	.980	-1.12	1.46	
		45+	-.333	.435	.868	-1.62	.96	
		18-25	.111	.318	.985	-.83	1.05	
		26-35	.278	.372	.877	-.83	1.38	
		45+	-.222	.372	.931	-1.33	.88	
		18-25	-.167	.435	.980	-1.46	1.12	
		36-45	-.278	.372	.877	-1.38	.83	
		45+	-.500	.476	.725	-1.91	.91	
		18-25	.333	.435	.868	-.96	1.62	
		45+	.222	.372	.931	-.88	1.33	
		36-45	.500	.476	.725	-.91	1.91	
		26-35	.111	1.304	1.000	-3.76	3.98	
		18-25	.167	1.785	1.000	-5.13	5.47	
	successful_private_practice1		45+	.167	1.785	1.000	-5.13	5.47
		18-25	-.111	1.304	1.000	-3.98	3.76	
		26-35	.056	1.529	1.000	-4.48	4.59	
		45+	.056	1.529	1.000	-4.48	4.59	
		18-25	-.167	1.785	1.000	-5.47	5.13	
		36-45	-.056	1.529	1.000	-4.59	4.48	
		45+	.000	1.956	1.000	-5.81	5.81	
		18-25	-.167	1.785	1.000	-5.47	5.13	
		45+	-.056	1.529	1.000	-4.59	4.48	
		36-45	.000	1.956	1.000	-5.81	5.81	
		26-35	-1.000	1.377	.885	-5.09	3.09	
		18-25	.667	1.885	.984	-4.93	6.26	
		45+	-1.833	1.885	.767	-7.43	3.76	
		18-25	1.000	1.377	.885	-3.09	5.09	
make_living_private_practice1			26-35	1.667	1.614	.734	-3.13	6.46
		45+	-.833	1.614	.954	-5.63	3.96	
		18-25	-.667	1.885	.984	-6.26	4.93	
		36-45	-1.667	1.614	.734	-6.46	3.13	
		45+	-2.500	2.065	.632	-8.63	3.63	
		18-25	1.833	1.885	.767	-3.76	7.43	
		45+	.833	1.614	.954	-3.96	5.63	
		36-45	2.500	2.065	.632	-3.63	8.63	
		26-35	-2.222	1.098	.233	-5.48	1.04	
		18-25	-1.833	1.504	.627	-6.30	2.63	
		45+	-2.833	1.504	.285	-7.30	1.63	
		18-25	2.222	1.098	.233	-1.04	5.48	
		26-35	.389	1.288	.990	-3.43	4.21	
		45+	-.611	1.288	.963	-4.43	3.21	
	financially_viable1		18-25	1.833	1.504	.627	-2.63	6.30
		36-45	-.389	1.288	.990	-4.21	3.43	
		45+	-1.000	1.647	.928	-5.89	3.89	
		18-25	2.833	1.504	.285	-1.63	7.30	
		45+	.611	1.288	.963	-3.21	4.43	
		36-45	1.000	1.647	.928	-3.89	5.89	
		26-35	2.333	1.499	.437	-2.12	6.78	
		18-25	.667	2.053	.988	-5.43	6.76	
		45+	1.667	2.053	.848	-4.43	7.76	
		18-25	-2.333	1.499	.437	-6.78	2.12	
Opening_private_practice1			26-35	-1.667	1.758	.780	-6.89	3.55
			45+	-.667	1.758	.981	-5.89	4.55
			18-25	-.667	2.053	.988	-6.76	5.43
			36-45	1.667	1.758	.780	-3.55	6.89
			45+	1.000	2.248	.969	-5.68	7.68

		18-25	-1.667	2.053	.848	-7.76	4.43
	45+	26-35	.667	1.758	.981	-4.55	5.89
		36-45	-1.000	2.248	.969	-7.68	5.68
		26-35	-1.778	1.306	.545	-5.66	2.10
	18-25	36-45	-2.667	1.788	.472	-7.98	2.64
		45+	-3.167	1.788	.333	-8.48	2.14
		18-25	1.778	1.306	.545	-2.10	5.66
	26-35	36-45	-.889	1.531	.936	-5.44	3.66
		45+	-1.389	1.531	.802	-5.94	3.16
Allied_Health_Care_Sustainable1		18-25	2.667	1.788	.472	-2.64	7.98
	36-45	26-35	.889	1.531	.936	-3.66	5.44
		45+	-.500	1.959	.994	-6.32	5.32
		18-25	3.167	1.788	.333	-2.14	8.48
	45+	26-35	1.389	1.531	.802	-3.16	5.94
		36-45	.500	1.959	.994	-5.32	6.32
		26-35	.444	1.341	.987	-3.54	4.43
	18-25	36-45	-.167	1.836	1.000	-5.62	5.29
		45+	-.167	1.836	1.000	-5.62	5.29
		18-25	-.444	1.341	.987	-4.43	3.54
	26-35	36-45	-.611	1.572	.979	-5.28	4.06
		45+	-.611	1.572	.979	-5.28	4.06
Tibb_Practitioners_successful1		18-25	.167	1.836	1.000	-5.29	5.62
	36-45	26-35	.611	1.572	.979	-4.06	5.28
		45+	.000	2.012	1.000	-5.97	5.97
		18-25	.167	1.836	1.000	-5.29	5.62
	45+	26-35	.611	1.572	.979	-4.06	5.28
		36-45	.000	2.012	1.000	-5.97	5.97
		26-35	-1.444	1.277	.679	-5.24	2.35
	18-25	36-45	-3.333	1.749	.276	-8.53	1.86
		45+	-3.833	1.749	.181	-9.03	1.36
		18-25	1.444	1.277	.679	-2.35	5.24
	26-35	36-45	-1.889	1.498	.603	-6.34	2.56
		45+	-2.389	1.498	.417	-6.84	2.06
Emplyed_Larger_organisations1		18-25	3.333	1.749	.276	-1.86	8.53
	36-45	26-35	1.889	1.498	.603	-2.56	6.34
		45+	-.500	1.916	.993	-6.19	5.19
		18-25	3.833	1.749	.181	-1.36	9.03
	45+	26-35	2.389	1.498	.417	-2.06	6.84
		36-45	.500	1.916	.993	-5.19	6.19

**ANNEXURE M:  
TESTS FOR AGE AND EYE MOVEMENTS**

**Test of Homogeneity of Variances**

	Levene Statistic	df1	df2	Sig.
successful_private_practice	3.129	3	12	.066
make_living_private_practice	3.129	3	12	.066
financially_viable	27.622	3	12	.000
Opening_private_practice	1.143	3	12	.371
Allied_Health_Care_Sustainable	2.277	3	12	.132
Tibb_Practitioners_successful	2.277	3	12	.132
Emplied_Larger_organisations	2.277	3	12	.132
Website	2.277	3	12	.132

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
successful_private_practice	Between Groups	.215	3	.072	.388	.764
	Within Groups	2.222	12	.185		
	Total	2.438	15			
make_living_private_practice	Between Groups	.778	3	.259	1.400	.291
	Within Groups	2.222	12	.185		
	Total	3.000	15			
financially_viable	Between Groups	.861	3	.287	1.192	.354
	Within Groups	2.889	12	.241		
	Total	3.750	15			
Opening_private_practice	Between Groups	.049	3	.016	.219	.882
	Within Groups	.889	12	.074		
	Total	.938	15			
Allied_Health_Care_Sustainable	Between Groups	.278	3	.093	.408	.750
	Within Groups	2.722	12	.227		
	Total	3.000	15			
Tibb_Practitioners_successful	Between Groups	.278	3	.093	.408	.750
	Within Groups	2.722	12	.227		
	Total	3.000	15			
Emplied_Larger_organisations	Between Groups	.715	3	.238	1.051	.406
	Within Groups	2.722	12	.227		
	Total	3.438	15			
Website	Between Groups	.278	3	.093	.408	.750
	Within Groups	2.722	12	.227		
	Total	3.000	15			

# Post Hoc Tests

## Multiple Comparisons

### Tukey HSD

Dependent Variable	(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
						Lower Bound	Upper Bound	
successful_private_practice	18-25	26-35	.111	.287	.979	-.74	.96	
		36-45	.333	.393	.830	-.83	1.50	
		45+	.333	.393	.830	-.83	1.50	
	26-35	18-25	-.111	.287	.979	-.96	.74	
		36-45	.222	.336	.910	-.78	1.22	
		45+	.222	.336	.910	-.78	1.22	
	36-45	18-25	-.333	.393	.830	-1.50	.83	
		26-35	-.222	.336	.910	-1.22	.78	
		45+	.000	.430	1.000	-1.28	1.28	
	make_living_private_practice	45+	18-25	-.333	.393	.830	-1.50	.83
			26-35	-.222	.336	.910	-1.22	.78
			36-45	.000	.430	1.000	-1.28	1.28
18-25		26-35	.444	.287	.441	-.41	1.30	
		36-45	.667	.393	.367	-.50	1.83	
		45+	.667	.393	.367	-.50	1.83	
26-35		18-25	-.444	.287	.441	-1.30	.41	
		36-45	.222	.336	.910	-.78	1.22	
		45+	.222	.336	.910	-.78	1.22	
36-45		18-25	-.667	.393	.367	-1.83	.50	
		26-35	-.222	.336	.910	-1.22	.78	
		45+	.000	.430	1.000	-1.28	1.28	
financially_viable	45+	18-25	-.667	.393	.367	-1.83	.50	
		26-35	-.222	.336	.910	-1.22	.78	
		36-45	.000	.430	1.000	-1.28	1.28	
	18-25	26-35	-.222	.327	.903	-1.19	.75	
		36-45	.333	.448	.877	-1.00	1.66	
		45+	.333	.448	.877	-1.00	1.66	
	26-35	18-25	.222	.327	.903	-.75	1.19	
		36-45	.556	.384	.495	-.58	1.69	
		45+	.556	.384	.495	-.58	1.69	
	36-45	18-25	-.333	.448	.877	-1.66	1.00	
		26-35	-.556	.384	.495	-1.69	.58	
		45+	.000	.491	1.000	-1.46	1.46	
Opening_private_practice	45+	18-25	-.333	.448	.877	-1.66	1.00	
		26-35	-.556	.384	.495	-1.69	.58	
		36-45	.000	.491	1.000	-1.46	1.46	
	18-25	26-35	-.111	.181	.926	-.65	.43	
		36-45	.000	.248	1.000	-.74	.74	
		45+	.000	.248	1.000	-.74	.74	
	26-35	18-25	.111	.181	.926	-.43	.65	
		36-45	.111	.213	.952	-.52	.74	
		45+	.111	.213	.952	-.52	.74	
	36-45	18-25	.000	.248	1.000	-.74	.74	
		26-35	-.111	.213	.952	-.74	.52	
		45+	.000	.272	1.000	-.81	.81	
Allied_Health_Care_Sustainable	45+	18-25	.000	.248	1.000	-.74	.74	
		26-35	-.111	.213	.952	-.74	.52	
		36-45	.000	.272	1.000	-.81	.81	
	18-25	26-35	.111	.318	.985	-.83	1.05	
		36-45	.333	.435	.868	-.96	1.62	
		45+	-.167	.435	.980	-1.46	1.12	
	26-35	18-25	-.111	.318	.985	-1.05	.83	
		36-45	.222	.372	.931	-.88	1.33	
		45+	-.278	.372	.877	-1.38	.83	
	36-45	18-25	-.333	.435	.868	-1.62	.96	
		26-35	-.222	.372	.931	-1.33	.88	
		45+	-.500	.476	.725	-1.91	.91	
Tibb_Practitioners_successful	45+	18-25	.167	.435	.980	-1.12	1.46	
		26-35	.278	.372	.877	-.83	1.38	
		36-45	.500	.476	.725	-.91	1.91	
	18-25	26-35	.111	.318	.985	-.83	1.05	
		36-45	-.167	.435	.980	-1.46	1.12	
		45+	.333	.435	.868	-.96	1.62	
	26-35	18-25	-.111	.318	.985	-1.05	.83	
		36-45	-.278	.372	.877	-1.38	.83	
		45+	.222	.372	.931	-.88	1.33	

		18-25	.167	.435	.980	-1.12	1.46
	36-45	26-35	.278	.372	.877	-.83	1.38
		45+	.500	.476	.725	-.91	1.91
		18-25	-.333	.435	.868	-1.62	.96
	45+	26-35	-.222	.372	.931	-1.33	.88
		36-45	-.500	.476	.725	-1.91	.91
		26-35	.444	.318	.523	-.50	1.39
	18-25	36-45	.667	.435	.449	-.62	1.96
		45+	.167	.435	.980	-1.12	1.46
		18-25	-.444	.318	.523	-1.39	.50
	26-35	36-45	.222	.372	.931	-.88	1.33
		45+	-.278	.372	.877	-1.38	.83
Employed_Larger_organisations		18-25	-.667	.435	.449	-1.96	.62
	36-45	26-35	-.222	.372	.931	-1.33	.88
		45+	-.500	.476	.725	-1.91	.91
		18-25	-.167	.435	.980	-1.46	1.12
	45+	26-35	.278	.372	.877	-.83	1.38
		36-45	.500	.476	.725	-.91	1.91
		26-35	-.111	.318	.985	-1.05	.83
	18-25	36-45	.167	.435	.980	-1.12	1.46
		45+	-.333	.435	.868	-1.62	.96
		18-25	.111	.318	.985	-.83	1.05
	26-35	36-45	.278	.372	.877	-.83	1.38
		45+	-.222	.372	.931	-1.33	.88
Website		18-25	-.167	.435	.980	-1.46	1.12
	36-45	26-35	-.278	.372	.877	-1.38	.83
		45+	-.500	.476	.725	-1.91	.91
		18-25	.333	.435	.868	-.96	1.62
	45+	26-35	.222	.372	.931	-.88	1.33
		36-45	.500	.476	.725	-.91	1.91

## Homogeneous Subsets

### successful\_private\_practice

TukeyHSD<sup>a,b</sup>

Age	N	Subset for alpha = 0.05	
		1	
36-45	2	1.00	1.00
45+	2	1.00	1.00
26-35	9	1.22	1.22
18-25	3	1.33	1.33
Sig.		.799	

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.769.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

### make\_living\_private\_practice

TukeyHSD<sup>a,b</sup>

Age	N	Subset for alpha = 0.05	
		1	
36-45	2	1.00	1.00
45+	2	1.00	1.00
26-35	9	1.22	1.22
18-25	3	1.67	1.67
Sig.		.310	

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.769.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

### financially\_viable

TukeyHSD<sup>a,b</sup>

Age	N	Subset for alpha = 0.05	
		1	
36-45	2	1.00	1.00
45+	2	1.00	1.00
18-25	3	1.33	1.33
26-35	9	1.56	1.56
Sig.		.561	

### Opening\_private\_practice

TukeyHSD<sup>a,b</sup>

Age	N	Subset for alpha = 0.05	
		1	
18-25	3	1.00	1.00
36-45	2	1.00	1.00
45+	2	1.00	1.00
26-35	9	1.11	1.11
Sig.		.962	

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.769.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

#### Allied\_Health\_Care\_Sustainable

TukeyHSD<sup>a,b</sup>

Age	N	Subset for alpha = 0.05	
		1	
36-45	2		1.00
26-35	9		1.22
18-25	3		1.33
45+	2		1.50
Sig.			.618

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.769.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.769.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

#### Tibb\_Practitioners\_successful

TukeyHSD<sup>a,b</sup>

Age	N	Subset for alpha = 0.05	
		1	
45+	2		1.00
26-35	9		1.22
18-25	3		1.33
36-45	2		1.50
Sig.			.618

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.769.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

#### Employed\_Larger\_organisations

TukeyHSD<sup>a,b</sup>

Age	N	Subset for alpha = 0.05	
		1	
36-45	2		1.00
26-35	9		1.22
45+	2		1.50
18-25	3		1.67
Sig.			.391

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.769.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

#### Website

TukeyHSD<sup>a,b</sup>

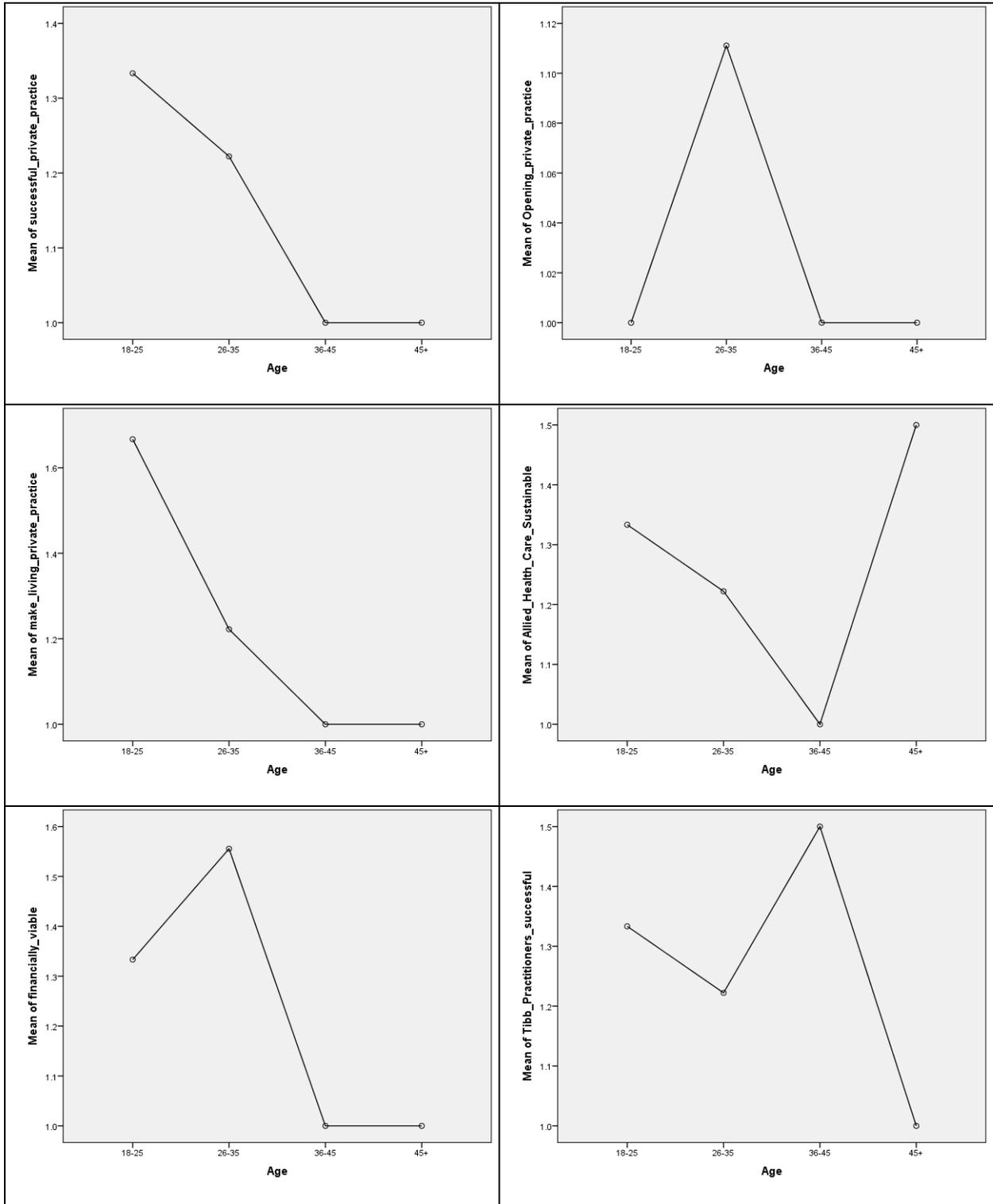
Age	N	Subset for alpha = 0.05	
		1	
36-45	2		1.50
18-25	3		1.67
26-35	9		1.78
45+	2		2.00
Sig.			.618

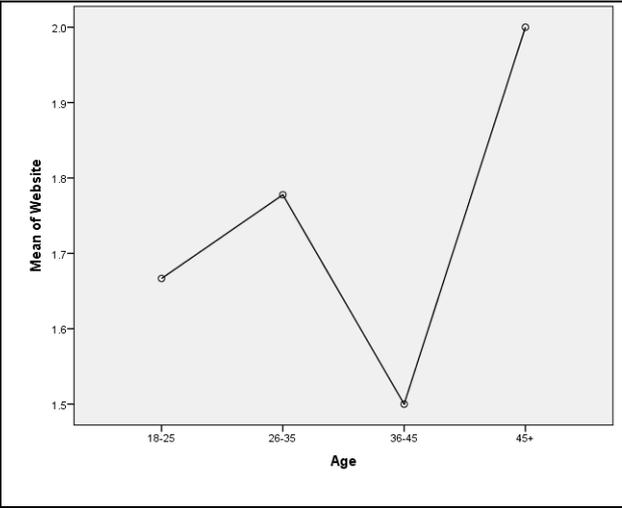
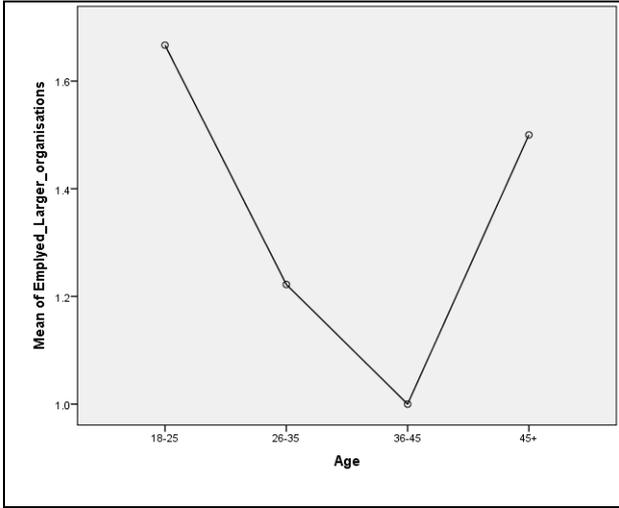
Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.769.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

# ANNEXURE N: MEAN PLOTS FOR THE RELATIONSHIP BETWEEN AGE AND EYE MOVEMENT





**ANNEXURE O**  
**TESTS FOR WEBSITE AND EYE MOVEMENTS**

**Test of Homogeneity of Variances**

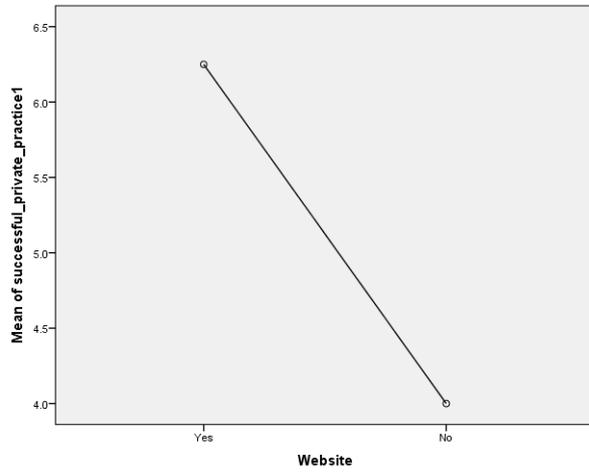
	Levene Statistic	df1	df2	Sig.
successful_private_practice1	1.994	1	14	.180
make_living_private_practice1	.371	1	14	.552
financially_viable1	.000	1	14	1.000
Opening_private_practice1	.181	1	14	.677
Allied_Health_Care_Sustainable1	4.301	1	14	.057
Tibb_Practitioners_successful1	4.094	1	14	.063
Emplied_Larger_organisations1	10.904	1	14	.005

**ANOVA**

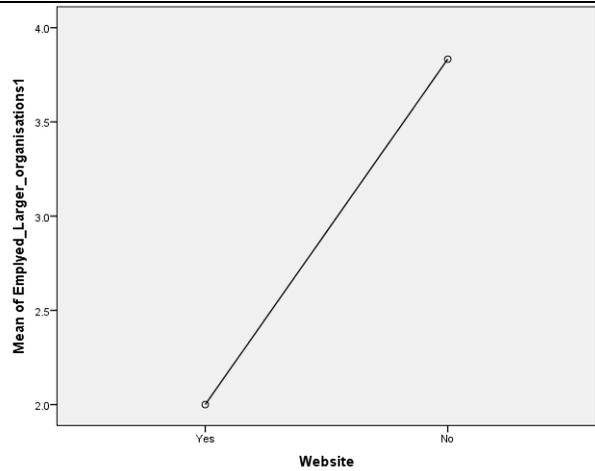
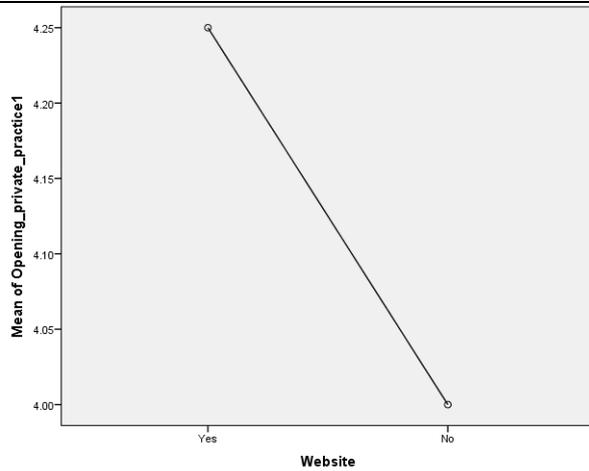
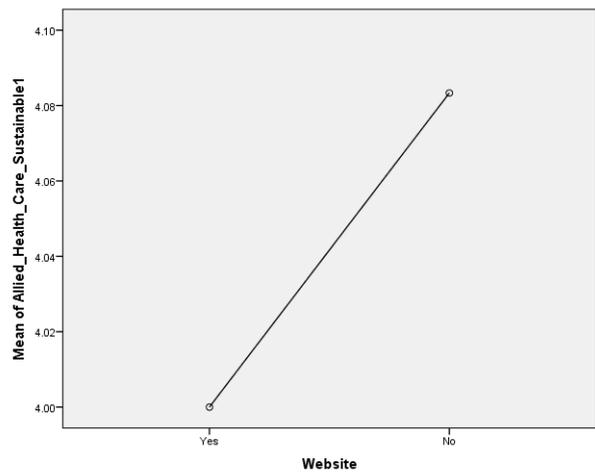
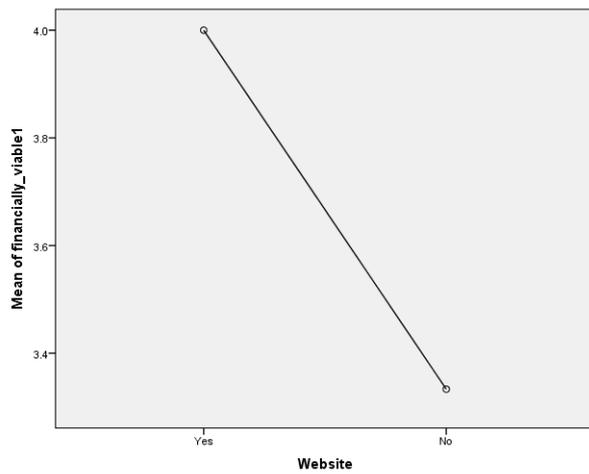
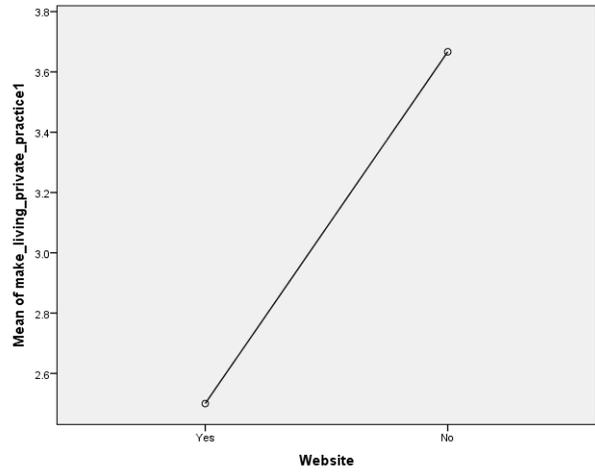
		Sum of Squares	df	Mean Square	F	Sig.
successful_private_practice1	Between Groups	15.188	1	15.188	6.915	.020
	Within Groups	30.750	14	2.196		
	Total	45.938	15			
make_living_private_practice1	Between Groups	4.083	1	4.083	1.027	.328
	Within Groups	55.667	14	3.976		
	Total	59.750	15			
financially_viable1	Between Groups	1.333	1	1.333	.418	.528
	Within Groups	44.667	14	3.190		
	Total	46.000	15			
Opening_private_practice1	Between Groups	.188	1	.188	.035	.854
	Within Groups	74.750	14	5.339		
	Total	74.938	15			
Allied_Health_Care_Sustainable1	Between Groups	.021	1	.021	.005	.946
	Within Groups	60.917	14	4.351		
	Total	60.938	15			
Tibb_Practitioners_successful1	Between Groups	2.083	1	2.083	.612	.447
	Within Groups	47.667	14	3.405		
	Total	49.750	15			
Emplied_Larger_organisations1	Between Groups	10.083	1	10.083	2.448	.140
	Within Groups	57.667	14	4.119		
	Total	67.750	15			

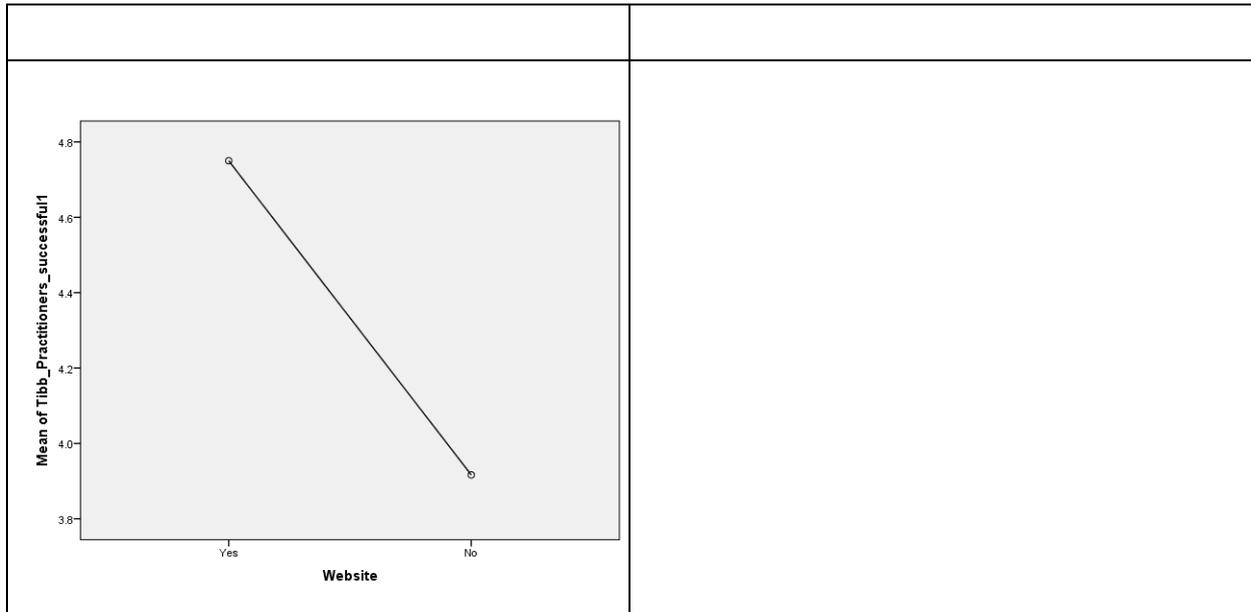
**ANNEXURE P:**  
**MEAN PLOTS FOR THE RELATIONSHIP BETWEEN**  
**WEBSITE AND EYE MOVEMENT**

## Negative Linear Correlations:



## Positive Linear Correlations:





## ANNEXURE Q

### CHI-SQUARE TESTS FOR CLOSED-ENDED QUESTIONS

**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q1 * NLP EM1	16	100.0%	0	0.0%	16	100.0%

Q1 * NLP EM2	16	100.0%	0	0.0%	16	100.0%
Q1 * NLP EM3	16	100.0%	0	0.0%	16	100.0%
Q1 * NLP EM4	16	100.0%	0	0.0%	16	100.0%
Q1 * NLP EM5	16	100.0%	0	0.0%	16	100.0%
Q1 * NLP EM6	16	100.0%	0	0.0%	16	100.0%
Q1 * NLP EM7	16	100.0%	0	0.0%	16	100.0%
Q2 * NLP EM1	16	100.0%	0	0.0%	16	100.0%
Q2 * NLP EM2	16	100.0%	0	0.0%	16	100.0%
Q2 * NLP EM3	16	100.0%	0	0.0%	16	100.0%
Q2 * NLP EM4	16	100.0%	0	0.0%	16	100.0%
Q2 * NLP EM5	16	100.0%	0	0.0%	16	100.0%
Q2 * NLP EM6	16	100.0%	0	0.0%	16	100.0%
Q2 * NLP EM7	16	100.0%	0	0.0%	16	100.0%
Q3 * NLP EM1	16	100.0%	0	0.0%	16	100.0%
Q3 * NLP EM2	16	100.0%	0	0.0%	16	100.0%
Q3 * NLP EM3	16	100.0%	0	0.0%	16	100.0%
Q3 * NLP EM4	16	100.0%	0	0.0%	16	100.0%
Q3 * NLP EM5	16	100.0%	0	0.0%	16	100.0%
Q3 * NLP EM6	16	100.0%	0	0.0%	16	100.0%
Q3 * NLP EM7	16	100.0%	0	0.0%	16	100.0%
Q4 * NLP EM1	16	100.0%	0	0.0%	16	100.0%
Q4 * NLP EM2	16	100.0%	0	0.0%	16	100.0%
Q4 * NLP EM3	16	100.0%	0	0.0%	16	100.0%
Q4 * NLP EM4	16	100.0%	0	0.0%	16	100.0%
Q4 * NLP EM5	16	100.0%	0	0.0%	16	100.0%
Q4 * NLP EM6	16	100.0%	0	0.0%	16	100.0%
Q4 * NLP EM7	16	100.0%	0	0.0%	16	100.0%
Q5 * NLP EM1	16	100.0%	0	0.0%	16	100.0%
Q5 * NLP EM2	16	100.0%	0	0.0%	16	100.0%
Q5 * NLP EM3	16	100.0%	0	0.0%	16	100.0%
Q5 * NLP EM4	16	100.0%	0	0.0%	16	100.0%
Q5 * NLP EM5	16	100.0%	0	0.0%	16	100.0%
Q5 * NLP EM6	16	100.0%	0	0.0%	16	100.0%
Q5 * NLP EM7	16	100.0%	0	0.0%	16	100.0%
Q6 * NLP EM1	16	100.0%	0	0.0%	16	100.0%
Q6 * NLP EM2	16	100.0%	0	0.0%	16	100.0%
Q6 * NLP EM3	16	100.0%	0	0.0%	16	100.0%
Q6 * NLP EM4	16	100.0%	0	0.0%	16	100.0%
Q6 * NLP EM5	16	100.0%	0	0.0%	16	100.0%
Q6 * NLP EM6	16	100.0%	0	0.0%	16	100.0%
Q6 * NLP EM7	16	100.0%	0	0.0%	16	100.0%
Q7 * NLP EM1	16	100.0%	0	0.0%	16	100.0%
Q7 * NLP EM2	16	100.0%	0	0.0%	16	100.0%

Q7 * NLP EM3	16	100.0%	0	0.0%	16	100.0%
Q7 * NLP EM4	16	100.0%	0	0.0%	16	100.0%
Q7 * NLP EM5	16	100.0%	0	0.0%	16	100.0%
Q7 * NLP EM6	16	100.0%	0	0.0%	16	100.0%
Q7 * NLP EM7	16	100.0%	0	0.0%	16	100.0%

### Q1 \* NLP EM1

Crosstab

		NLP EM1					Total	
		2.00	3.00	4.00	5.00	6.00		7.00
Q1	Count	2	2	2	2	2	3	13
	% within Q1	15.4%	15.4%	15.4%	15.4%	15.4%	23.1%	100.0%
	1.00 % within NLP EM1	100.0%	66.7%	100.0%	66.7%	100.0%	75.0%	81.2%
	% of Total	12.5%	12.5%	12.5%	12.5%	12.5%	18.8%	81.2%
	Count	0	1	0	1	0	1	3
	% within Q1	0.0%	33.3%	0.0%	33.3%	0.0%	33.3%	100.0%
	2.00 % within NLP EM1	0.0%	33.3%	0.0%	33.3%	0.0%	25.0%	18.8%
	% of Total	0.0%	6.2%	0.0%	6.2%	0.0%	6.2%	18.8%
Total	Count	2	3	2	3	2	4	16
	% within Q1	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%
	% within NLP EM1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.325 <sup>a</sup>	5	.803
Likelihood Ratio	3.306	5	.653
Linear-by-Linear Association	.071	1	.790
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .38.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.381	.803
	Cramer's V	.381	.803
N of Valid Cases		16	

- a. Not assuming the null hypothesis.  
b. Using the asymptotic standard error assuming the null hypothesis.

### Q1 \* NLP EM2

#### Crosstab

		NLP EM2						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q1	Count	3	3	2	1	3	1	13
	% within Q1	23.1%	23.1%	15.4%	7.7%	23.1%	7.7%	100.0%
	1.00 % within NLP EM2	100.0%	100.0%	66.7%	100.0%	75.0%	50.0%	81.2%
	% of Total	18.8%	18.8%	12.5%	6.2%	18.8%	6.2%	81.2%
	Count	0	0	1	0	1	1	3
	% within Q1	0.0%	0.0%	33.3%	0.0%	33.3%	33.3%	100.0%
	2.00 % within NLP EM2	0.0%	0.0%	33.3%	0.0%	25.0%	50.0%	18.8%
	% of Total	0.0%	0.0%	6.2%	0.0%	6.2%	6.2%	18.8%
	Count	3	3	3	1	4	2	16
	% within Q1	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%
	Total % within NLP EM2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.419 <sup>a</sup>	5	.636
Likelihood Ratio	4.352	5	.500
Linear-by-Linear Association	2.077	1	.150
N of Valid Cases	16		

- a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .19.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.462	.636
	Cramer's V	.462	.636
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q1 \* NLP EM3**

**Crosstab**

		NLP EM3						Total
		1.00	2.00	3.00	5.00	6.00	7.00	
Q1	Count	2	2	1	3	3	2	13
	% within Q1	15.4%	15.4%	7.7%	23.1%	23.1%	15.4%	100.0%
	1.00 % within NLP EM3	100.0%	100.0%	50.0%	75.0%	100.0%	66.7%	81.2%
	% of Total	12.5%	12.5%	6.2%	18.8%	18.8%	12.5%	81.2%
	Count	0	0	1	1	0	1	3
	% within Q1	0.0%	0.0%	33.3%	33.3%	0.0%	33.3%	100.0%
	2.00 % within NLP EM3	0.0%	0.0%	50.0%	25.0%	0.0%	33.3%	18.8%
	% of Total	0.0%	0.0%	6.2%	6.2%	0.0%	6.2%	18.8%
	Count	2	2	2	4	3	3	16
	% within Q1	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%
	Total % within NLP EM3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.419 <sup>a</sup>	5	.636
Likelihood Ratio	4.352	5	.500
Linear-by-Linear Association	.258	1	.612
N of Valid Cases	16		

- a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .38.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.462	.636
	Cramer's V	.462	.636
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q1 \* NLP EM4**

**Crosstab**

		NLP EM4							Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Q1	Count	0	3	2	3	3	2	0	13
	% within Q1	0.0%	23.1%	15.4%	23.1%	23.1%	15.4%	0.0%	100.0%
	1.00 % within NLP EM4	0.0%	100.0%	100.0%	75.0%	100.0%	100.0%	0.0%	81.2%
	% of Total	0.0%	18.8%	12.5%	18.8%	18.8%	12.5%	0.0%	81.2%
	Count	1	0	0	1	0	0	1	3
	% within Q1	33.3%	0.0%	0.0%	33.3%	0.0%	0.0%	33.3%	100.0%
	2.00 % within NLP EM4	100.0%	0.0%	0.0%	25.0%	0.0%	0.0%	100.0%	18.8%
	% of Total	6.2%	0.0%	0.0%	6.2%	0.0%	0.0%	6.2%	18.8%
	Total	Count	1	3	2	4	3	2	1
% within Q1	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%	
% within NLP EM4	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.077 <sup>a</sup>	6	.086
Likelihood Ratio	10.944	6	.090
Linear-by-Linear Association	.005	1	.943
N of Valid Cases	16		

- a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .19.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.832	.086
	Cramer's V	.832	.086
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q1 \* NLP EM5**

**Crosstab**

		NLP EM5							Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Q1	Count	1	2	1	3	2	2	2	13
	% within Q1	7.7%	15.4%	7.7%	23.1%	15.4%	15.4%	15.4%	100.0%
	1.00 % within NLP EM5	100.0%	50.0%	100.0%	100.0%	66.7%	100.0%	100.0%	81.2%
	% of Total	6.2%	12.5%	6.2%	18.8%	12.5%	12.5%	12.5%	81.2%
	Count	0	2	0	0	1	0	0	3
	% within Q1	0.0%	66.7%	0.0%	0.0%	33.3%	0.0%	0.0%	100.0%
	2.00 % within NLP EM5	0.0%	50.0%	0.0%	0.0%	33.3%	0.0%	0.0%	18.8%
	% of Total	0.0%	12.5%	0.0%	0.0%	6.2%	0.0%	0.0%	18.8%
	Total	Count	1	4	1	3	3	2	2
% within Q1	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%	
% within NLP EM5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.060 <sup>a</sup>	6	.536
Likelihood Ratio	6.078	6	.414
Linear-by-Linear Association	1.138	1	.286
N of Valid Cases	16		

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .19.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.562	.536
	Cramer's V	.562	.536
N of Valid Cases		16	

- a. Not assuming the null hypothesis.  
b. Using the asymptotic standard error assuming the null hypothesis.

### Q1 \* NLP EM6

#### Crosstab

		NLP EM6					Total
		2.00	3.00	4.00	5.00	7.00	
Q1	Count	3	4	1	2	3	13
	1.00 % within Q1	23.1%	30.8%	7.7%	15.4%	23.1%	100.0%
	% within NLP EM6	75.0%	80.0%	100.0%	66.7%	100.0%	81.2%
	% of Total	18.8%	25.0%	6.2%	12.5%	18.8%	81.2%
	Count	1	1	0	1	0	3
	2.00 % within Q1	33.3%	33.3%	0.0%	33.3%	0.0%	100.0%
	% within NLP EM6	25.0%	20.0%	0.0%	33.3%	0.0%	18.8%
	% of Total	6.2%	6.2%	0.0%	6.2%	0.0%	18.8%
	Total	Count	4	5	1	3	3
% within Q1	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	
% within NLP EM6	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.450 <sup>a</sup>	4	.836
Likelihood Ratio	2.121	4	.714
Linear-by-Linear Association	.397	1	.529
N of Valid Cases	16		

- a. 10 cells (100.0%) have expected count less than 5. The minimum expected count is .19.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.301	.836
	Cramer's V	.301	.836
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q1 \* NLP EM7**

**Crosstab**

		NLP EM7						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q1	Count	3	2	1	1	3	3	13
	% within Q1	23.1%	15.4%	7.7%	7.7%	23.1%	23.1%	100.0%
	1.00 % within NLP EM7	75.0%	66.7%	50.0%	100.0%	100.0%	100.0%	81.2%
	% of Total	18.8%	12.5%	6.2%	6.2%	18.8%	18.8%	81.2%
	Count	1	1	1	0	0	0	3
	2.00 % within Q1	33.3%	33.3%	33.3%	0.0%	0.0%	0.0%	100.0%
	% within NLP EM7	25.0%	33.3%	50.0%	0.0%	0.0%	0.0%	18.8%
	% of Total	6.2%	6.2%	6.2%	0.0%	0.0%	0.0%	18.8%
	Total	Count	4	3	2	1	3	3
% within Q1	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%	
% within NLP EM7	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.419 <sup>a</sup>	5	.636
Likelihood Ratio	4.352	5	.500
Linear-by-Linear Association	1.640	1	.200
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .19.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.462	.636
	Cramer's V	.462	.636
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q2 \* NLP EM1**

**Crosstab**

		NLP EM1						Total
		2.00	3.00	4.00	5.00	6.00	7.00	
Q2	Count	2	1	2	2	2	3	12
	% within Q2	16.7%	8.3%	16.7%	16.7%	16.7%	25.0%	100.0%
	1.00 % within NLP EM1	100.0%	33.3%	100.0%	66.7%	100.0%	75.0%	75.0%
	% of Total	12.5%	6.2%	12.5%	12.5%	12.5%	18.8%	75.0%
	Count	0	2	0	1	0	1	4
	% within Q2	0.0%	50.0%	0.0%	25.0%	0.0%	25.0%	100.0%
	2.00 % within NLP EM1	0.0%	66.7%	0.0%	33.3%	0.0%	25.0%	25.0%
	% of Total	0.0%	12.5%	0.0%	6.2%	0.0%	6.2%	25.0%
	Count	2	3	2	3	2	4	16
% within Q2	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%	
Total	% within NLP EM1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.889 <sup>a</sup>	5	.430
Likelihood Ratio	5.858	5	.320
Linear-by-Linear Association	.102	1	.749
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .50.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.553	.430
	Cramer's V	.553	.430
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q2 \* NLP EM2**

**Crosstab**

		NLP EM2						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q2	Count	3	3	1	1	3	1	12
	% within Q2	25.0%	25.0%	8.3%	8.3%	25.0%	8.3%	100.0%
	1.00 % within NLP EM2	100.0%	100.0%	33.3%	100.0%	75.0%	50.0%	75.0%
	% of Total	18.8%	18.8%	6.2%	6.2%	18.8%	6.2%	75.0%
	Count	0	0	2	0	1	1	4
	2.00 % within Q2	0.0%	0.0%	50.0%	0.0%	25.0%	25.0%	100.0%
	% within NLP EM2	0.0%	0.0%	66.7%	0.0%	25.0%	50.0%	25.0%
	% of Total	0.0%	0.0%	12.5%	0.0%	6.2%	6.2%	25.0%
	Total	Count	3	3	3	1	4	2
% within Q2	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%	
% within NLP EM2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.778 <sup>a</sup>	5	.328
Likelihood Ratio	6.904	5	.228
Linear-by-Linear Association	1.333	1	.248
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.601	.328
	Cramer's V	.601	.328
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q2 \* NLP EM3**

**Crosstab**

		NLP EM3						Total
		1.00	2.00	3.00	5.00	6.00	7.00	
Q2	Count	1	2	1	3	3	2	12
	% within Q2	8.3%	16.7%	8.3%	25.0%	25.0%	16.7%	100.0%
	1.00 % within NLP EM3	50.0%	100.0%	50.0%	75.0%	100.0%	66.7%	75.0%
	% of Total	6.2%	12.5%	6.2%	18.8%	18.8%	12.5%	75.0%
	Count	1	0	1	1	0	1	4
	% within Q2	25.0%	0.0%	25.0%	25.0%	0.0%	25.0%	100.0%
	2.00 % within NLP EM3	50.0%	0.0%	50.0%	25.0%	0.0%	33.3%	25.0%
	% of Total	6.2%	0.0%	6.2%	6.2%	0.0%	6.2%	25.0%
	Total	Count	2	2	2	4	3	3
% within Q2	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%	
% within NLP EM3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.111 <sup>a</sup>	5	.683
Likelihood Ratio	4.132	5	.531
Linear-by-Linear Association	.225	1	.635
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .50.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.441	.683
	Cramer's V	.441	.683
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q2 \* NLP EM4**

**Crosstab**

		NLP EM4							Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Q2	Count	0	3	2	2	3	2	0	12
	% within Q2	0.0%	25.0%	16.7%	16.7%	25.0%	16.7%	0.0%	100.0%
	1.00 % within NLP EM4	0.0%	100.0%	100.0%	50.0%	100.0%	100.0%	0.0%	75.0%
	% of Total	0.0%	18.8%	12.5%	12.5%	18.8%	12.5%	0.0%	75.0%
	Count	1	0	0	2	0	0	1	4
	% within Q2	25.0%	0.0%	0.0%	50.0%	0.0%	0.0%	25.0%	100.0%
	2.00 % within NLP EM4	100.0%	0.0%	0.0%	50.0%	0.0%	0.0%	100.0%	25.0%
	% of Total	6.2%	0.0%	0.0%	12.5%	0.0%	0.0%	6.2%	25.0%
	Total	Count	1	3	2	4	3	2	1
% within Q2	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%	
% within NLP EM4	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.667 <sup>a</sup>	6	.099
Likelihood Ratio	12.450	6	.053
Linear-by-Linear Association	.007	1	.932
N of Valid Cases	16		

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.816	.099
	Cramer's V	.816	.099
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q2 \* NLP EM5**

**Crosstab**

		NLP EM5							Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Q2	Count	1	1	1	3	2	2	2	12
	% within Q2	8.3%	8.3%	8.3%	25.0%	16.7%	16.7%	16.7%	100.0%
	1.00 % within NLP EM5	100.0%	25.0%	100.0%	100.0%	66.7%	100.0%	100.0%	75.0%
	% of Total	6.2%	6.2%	6.2%	18.8%	12.5%	12.5%	12.5%	75.0%
	Count	0	3	0	0	1	0	0	4
	% within Q2	0.0%	75.0%	0.0%	0.0%	25.0%	0.0%	0.0%	100.0%
	2.00 % within NLP EM5	0.0%	75.0%	0.0%	0.0%	33.3%	0.0%	0.0%	25.0%
	% of Total	0.0%	18.8%	0.0%	0.0%	6.2%	0.0%	0.0%	25.0%
	Count	1	4	1	3	3	2	2	16
% within Q2	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%	
Total	% within NLP EM5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.444 <sup>a</sup>	6	.207
Likelihood Ratio	9.677	6	.139
Linear-by-Linear Association	2.509	1	.113
N of Valid Cases	16		

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.726	.207
	Cramer's V	.726	.207
N of Valid Cases		16	

- a. Not assuming the null hypothesis.  
 b. Using the asymptotic standard error assuming the null hypothesis.

### Q2 \* NLP EM6

#### Crosstab

		NLP EM6					Total
		2.00	3.00	4.00	5.00	7.00	
Q2	Count	3	3	1	2	3	12
	1.00 % within Q2	25.0%	25.0%	8.3%	16.7%	25.0%	100.0%
	% within NLP EM6	75.0%	60.0%	100.0%	66.7%	100.0%	75.0%
	% of Total	18.8%	18.8%	6.2%	12.5%	18.8%	75.0%
	Count	1	2	0	1	0	4
	2.00 % within Q2	25.0%	50.0%	0.0%	25.0%	0.0%	100.0%
	% within NLP EM6	25.0%	40.0%	0.0%	33.3%	0.0%	25.0%
	% of Total	6.2%	12.5%	0.0%	6.2%	0.0%	25.0%
	Total	Count	4	5	1	3	3
% within Q2	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	
% within NLP EM6	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.044 <sup>a</sup>	4	.728
Likelihood Ratio	2.947	4	.567
Linear-by-Linear Association	.742	1	.389
N of Valid Cases	16		

- a. 10 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.357	.728
	Cramer's V	.357	.728
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q2 \* NLP EM7**

**Crosstab**

		NLP EM7						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q2	Count	3	1	1	1	3	3	12
	% within Q2	25.0%	8.3%	8.3%	8.3%	25.0%	25.0%	100.0%
	1.00 % within NLP EM7	75.0%	33.3%	50.0%	100.0%	100.0%	100.0%	75.0%
	% of Total	18.8%	6.2%	6.2%	6.2%	18.8%	18.8%	75.0%
	Count	1	2	1	0	0	0	4
	2.00 % within Q2	25.0%	50.0%	25.0%	0.0%	0.0%	0.0%	100.0%
	% within NLP EM7	25.0%	66.7%	50.0%	0.0%	0.0%	0.0%	25.0%
	% of Total	6.2%	12.5%	6.2%	0.0%	0.0%	0.0%	25.0%
	Total	Count	4	3	2	1	3	3
% within Q2	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%	
% within NLP EM7	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.778 <sup>a</sup>	5	.328
Likelihood Ratio	6.904	5	.228
Linear-by-Linear Association	2.368	1	.124
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.601	.328
	Cramer's V	.601	.328
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q3 \* NLP EM1**

**Crosstab**

		NLP EM1						Total
		2.00	3.00	4.00	5.00	6.00	7.00	
Q3	Count	2	0	2	2	2	2	10
	% within Q3	20.0%	0.0%	20.0%	20.0%	20.0%	20.0%	100.0%
	1.00 % within NLP EM1	100.0%	0.0%	100.0%	66.7%	100.0%	50.0%	62.5%
	% of Total	12.5%	0.0%	12.5%	12.5%	12.5%	12.5%	62.5%
	Count	0	3	0	1	0	2	6
	% within Q3	0.0%	50.0%	0.0%	16.7%	0.0%	33.3%	100.0%
	2.00 % within NLP EM1	0.0%	100.0%	0.0%	33.3%	0.0%	50.0%	37.5%
	% of Total	0.0%	18.8%	0.0%	6.2%	0.0%	12.5%	37.5%
	Count	2	3	2	3	2	4	16
	% within Q3	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%
	Total % within NLP EM1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.889 <sup>a</sup>	5	.114
Likelihood Ratio	11.806	5	.038
Linear-by-Linear Association	.020	1	.886
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .75.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.745	.114
	Cramer's V	.745	.114
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q3 \* NLP EM2**

**Crosstab**

		NLP EM2						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q3	Count	2	3	1	1	2	1	10
	% within Q3	20.0%	30.0%	10.0%	10.0%	20.0%	10.0%	100.0%
	1.00 % within NLP EM2	66.7%	100.0%	33.3%	100.0%	50.0%	50.0%	62.5%
	% of Total	12.5%	18.8%	6.2%	6.2%	12.5%	6.2%	62.5%
	Count	1	0	2	0	2	1	6
	% within Q3	16.7%	0.0%	33.3%	0.0%	33.3%	16.7%	100.0%
	2.00 % within NLP EM2	33.3%	0.0%	66.7%	0.0%	50.0%	50.0%	37.5%
	% of Total	6.2%	0.0%	12.5%	0.0%	12.5%	6.2%	37.5%
	Total	Count	3	3	3	1	4	2
% within Q3	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%	
% within NLP EM2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.911 <sup>a</sup>	5	.562
Likelihood Ratio	5.214	5	.390
Linear-by-Linear Association	.600	1	.439
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .38.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.494	.562
	Cramer's V	.494	.562
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q3 \* NLP EM3**

**Crosstab**

		NLP EM3						Total
		1.00	2.00	3.00	5.00	6.00	7.00	
Q3	Count	1	2	1	3	2	1	10
	% within Q3	10.0%	20.0%	10.0%	30.0%	20.0%	10.0%	100.0%
	1.00 % within NLP EM3	50.0%	100.0%	50.0%	75.0%	66.7%	33.3%	62.5%
	% of Total	6.2%	12.5%	6.2%	18.8%	12.5%	6.2%	62.5%
	Count	1	0	1	1	1	2	6
	% within Q3	16.7%	0.0%	16.7%	16.7%	16.7%	33.3%	100.0%
	2.00 % within NLP EM3	50.0%	0.0%	50.0%	25.0%	33.3%	66.7%	37.5%
	% of Total	6.2%	0.0%	6.2%	6.2%	6.2%	12.5%	37.5%
	Count	2	2	2	4	3	3	16
	% within Q3	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%
	Total % within NLP EM3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.844 <sup>a</sup>	5	.724
Likelihood Ratio	3.488	5	.625
Linear-by-Linear Association	.332	1	.564
N of Valid Cases	16		

- a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .75.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.422	.724
	Cramer's V	.422	.724
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q3 \* NLP EM4**

**Crosstab**

		NLP EM4							Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Q3	Count	0	3	1	3	3	0	0	10
	% within Q3	0.0%	30.0%	10.0%	30.0%	30.0%	0.0%	0.0%	100.0%
	1.00 % within NLP EM4	0.0%	100.0%	50.0%	75.0%	100.0%	0.0%	0.0%	62.5%
	% of Total	0.0%	18.8%	6.2%	18.8%	18.8%	0.0%	0.0%	62.5%
	Count	1	0	1	1	0	2	1	6
	% within Q3	16.7%	0.0%	16.7%	16.7%	0.0%	33.3%	16.7%	100.0%
	2.00 % within NLP EM4	100.0%	0.0%	50.0%	25.0%	0.0%	100.0%	100.0%	37.5%
	% of Total	6.2%	0.0%	6.2%	6.2%	0.0%	12.5%	6.2%	37.5%
	Count	1	3	2	4	3	2	1	16
% within Q3	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%	
Total	% within NLP EM4	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.667 <sup>a</sup>	6	.099
Likelihood Ratio	13.899	6	.031
Linear-by-Linear Association	1.061	1	.303
N of Valid Cases	16		

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .38.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.816	.099
	Cramer's V	.816	.099
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q3 \* NLP EM5**

**Crosstab**

		NLP EM5							Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Q3	Count	1	2	1	3	1	0	2	10
	% within Q3	10.0%	20.0%	10.0%	30.0%	10.0%	0.0%	20.0%	100.0%
	1.00 % within NLP EM5	100.0%	50.0%	100.0%	100.0%	33.3%	0.0%	100.0%	62.5%
	% of Total	6.2%	12.5%	6.2%	18.8%	6.2%	0.0%	12.5%	62.5%
	Count	0	2	0	0	2	2	0	6
	% within Q3	0.0%	33.3%	0.0%	0.0%	33.3%	33.3%	0.0%	100.0%
	2.00 % within NLP EM5	0.0%	50.0%	0.0%	0.0%	66.7%	100.0%	0.0%	37.5%
	% of Total	0.0%	12.5%	0.0%	0.0%	12.5%	12.5%	0.0%	37.5%
	Total	Count	1	4	1	3	3	2	2
% within Q3	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%	
% within NLP EM5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.889 <sup>a</sup>	6	.180
Likelihood Ratio	11.806	6	.066
Linear-by-Linear Association	.192	1	.661
N of Valid Cases	16		

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .38.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.745	.180
	Cramer's V	.745	.180
N of Valid Cases		16	

- a. Not assuming the null hypothesis.  
b. Using the asymptotic standard error assuming the null hypothesis.

### Q3 \* NLP EM6

#### Crosstab

		NLP EM6					Total
		2.00	3.00	4.00	5.00	7.00	
Q3	Count	3	1	1	2	3	10
	1.00 % within Q3	30.0%	10.0%	10.0%	20.0%	30.0%	100.0%
	% within NLP EM6	75.0%	20.0%	100.0%	66.7%	100.0%	62.5%
	% of Total	18.8%	6.2%	6.2%	12.5%	18.8%	62.5%
	Count	1	4	0	1	0	6
	2.00 % within Q3	16.7%	66.7%	0.0%	16.7%	0.0%	100.0%
	% within NLP EM6	25.0%	80.0%	0.0%	33.3%	0.0%	37.5%
	% of Total	6.2%	25.0%	0.0%	6.2%	0.0%	37.5%
	Total	Count	4	5	1	3	3
% within Q3	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	
% within NLP EM6	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.542 <sup>a</sup>	4	.162
Likelihood Ratio	7.848	4	.097
Linear-by-Linear Association	1.680	1	.195
N of Valid Cases	16		

- a. 10 cells (100.0%) have expected count less than 5. The minimum expected count is .38.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.639	.162
	Cramer's V	.639	.162
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q3 \* NLP EM7**

**Crosstab**

		NLP EM7						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q3	Count	4	1	1	1	2	1	10
	% within Q3	40.0%	10.0%	10.0%	10.0%	20.0%	10.0%	100.0%
	1.00 % within NLP EM7	100.0%	33.3%	50.0%	100.0%	66.7%	33.3%	62.5%
	% of Total	25.0%	6.2%	6.2%	6.2%	12.5%	6.2%	62.5%
	Count	0	2	1	0	1	2	6
	% within Q3	0.0%	33.3%	16.7%	0.0%	16.7%	33.3%	100.0%
	2.00 % within NLP EM7	0.0%	66.7%	50.0%	0.0%	33.3%	66.7%	37.5%
	% of Total	0.0%	12.5%	6.2%	0.0%	6.2%	12.5%	37.5%
	Count	4	3	2	1	3	3	16
	% within Q3	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%
	Total % within NLP EM7	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.333 <sup>a</sup>	5	.377
Likelihood Ratio	6.940	5	.225
Linear-by-Linear Association	1.316	1	.251
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .38.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.577	.377
	Cramer's V	.577	.377
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q4 \* NLP EM1**

**Crosstab**

		NLP EM1						Total
		2.00	3.00	4.00	5.00	6.00	7.00	
Q4	Count	1	3	2	3	2	4	15
	% within Q4	6.7%	20.0%	13.3%	20.0%	13.3%	26.7%	100.0%
	1.00 % within NLP EM1	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%	93.8%
	% of Total	6.2%	18.8%	12.5%	18.8%	12.5%	25.0%	93.8%
	Count	1	0	0	0	0	0	1
	% within Q4	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	2.00 % within NLP EM1	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%
	% of Total	6.2%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%
	Count	2	3	2	3	2	4	16
	% within Q4	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%
	Total % within NLP EM1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.467 <sup>a</sup>	5	.188
Likelihood Ratio	4.709	5	.452
Linear-by-Linear Association	2.469	1	.116
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.683	.188
	Cramer's V	.683	.188
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q4 \* NLP EM2**

**Crosstab**

		NLP EM2						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q4	Count	3	2	3	1	4	2	15
	% within Q4	20.0%	13.3%	20.0%	6.7%	26.7%	13.3%	100.0%
	1.00 % within NLP EM2	100.0%	66.7%	100.0%	100.0%	100.0%	100.0%	93.8%
	% of Total	18.8%	12.5%	18.8%	6.2%	25.0%	12.5%	93.8%
	Count	0	1	0	0	0	0	1
	% within Q4	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	2.00 % within NLP EM2	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	6.2%
	% of Total	0.0%	6.2%	0.0%	0.0%	0.0%	0.0%	6.2%
Total	Count	3	3	3	1	4	2	16
	% within Q4	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%
	% within NLP EM2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.622 <sup>a</sup>	5	.464
Likelihood Ratio	3.662	5	.599
Linear-by-Linear Association	.600	1	.439
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.537	.464
	Cramer's V	.537	.464
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q4 \* NLP EM3**

**Crosstab**

		NLP EM3						Total
		1.00	2.00	3.00	5.00	6.00	7.00	
Q4	Count	1	2	2	4	3	3	15
	% within Q4	6.7%	13.3%	13.3%	26.7%	20.0%	20.0%	100.0%
	1.00 % within NLP EM3	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%	93.8%
	% of Total	6.2%	12.5%	12.5%	25.0%	18.8%	18.8%	93.8%
	Count	1	0	0	0	0	0	1
	2.00 % within Q4	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	% within NLP EM3	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%
	% of Total	6.2%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%
	Total	Count	2	2	2	4	3	3
% within Q4	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%	
% within NLP EM3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.467 <sup>a</sup>	5	.188
Likelihood Ratio	4.709	5	.452
Linear-by-Linear Association	2.783	1	.095
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.683	.188
	Cramer's V	.683	.188
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q4 \* NLP EM4**

**Crosstab**

		NLP EM4							Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Q4	Count	1	2	2	4	3	2	1	15
	% within Q4	6.7%	13.3%	13.3%	26.7%	20.0%	13.3%	6.7%	100.0%
	1.00 % within NLP EM4	100.0%	66.7%	100.0%	100.0%	100.0%	100.0%	100.0%	93.8%
	% of Total	6.2%	12.5%	12.5%	25.0%	18.8%	12.5%	6.2%	93.8%
	Count	0	1	0	0	0	0	0	1
	% within Q4	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	2.00 % within NLP EM4	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%
	% of Total	0.0%	6.2%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%
	Total	Count	1	3	2	4	3	2	1
% within Q4	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%	
% within NLP EM4	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.622 <sup>a</sup>	6	.593
Likelihood Ratio	3.662	6	.722
Linear-by-Linear Association	1.399	1	.237
N of Valid Cases	16		

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.537	.593
	Cramer's V	.537	.593
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q4 \* NLP EM5**

**Crosstab**

		NLP EM5							Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Q4	Count	1	4	1	2	3	2	2	15
	% within Q4	6.7%	26.7%	6.7%	13.3%	20.0%	13.3%	13.3%	100.0%
	1.00 % within NLP EM5	100.0%	100.0%	100.0%	66.7%	100.0%	100.0%	100.0%	93.8%
	% of Total	6.2%	25.0%	6.2%	12.5%	18.8%	12.5%	12.5%	93.8%
	Count	0	0	0	1	0	0	0	1
	% within Q4	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	2.00 % within NLP EM5	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	6.2%
	% of Total	0.0%	0.0%	0.0%	6.2%	0.0%	0.0%	0.0%	6.2%
	Total	Count	1	4	1	3	3	2	2
% within Q4	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%	
% within NLP EM5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.622 <sup>a</sup>	6	.593
Likelihood Ratio	3.662	6	.722
Linear-by-Linear Association	.001	1	.973
N of Valid Cases	16		

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.537	.593
	Cramer's V	.537	.593
N of Valid Cases		16	

- a. Not assuming the null hypothesis.  
b. Using the asymptotic standard error assuming the null hypothesis.

### Q4 \* NLP EM6

#### Crosstab

		NLP EM6					Total
		2.00	3.00	4.00	5.00	7.00	
Q4	Count	3	5	1	3	3	15
	1.00 % within Q4	20.0%	33.3%	6.7%	20.0%	20.0%	100.0%
	% within NLP EM6	75.0%	100.0%	100.0%	100.0%	100.0%	93.8%
	% of Total	18.8%	31.2%	6.2%	18.8%	18.8%	93.8%
	Count	1	0	0	0	0	1
	2.00 % within Q4	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	% within NLP EM6	25.0%	0.0%	0.0%	0.0%	0.0%	6.2%
	% of Total	6.2%	0.0%	0.0%	0.0%	0.0%	6.2%
	Total	Count	4	5	1	3	3
% within Q4	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	
% within NLP EM6	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.200 <sup>a</sup>	4	.525
Likelihood Ratio	2.983	4	.561
Linear-by-Linear Association	1.179	1	.278
N of Valid Cases	16		

- a. 10 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.447	.525
	Cramer's V	.447	.525
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q4 \* NLP EM7**

**Crosstab**

		NLP EM7						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q4	Count	3	3	2	1	3	3	15
	% within Q4	20.0%	20.0%	13.3%	6.7%	20.0%	20.0%	100.0%
	1.00 % within NLP EM7	75.0%	100.0%	100.0%	100.0%	100.0%	100.0%	93.8%
	% of Total	18.8%	18.8%	12.5%	6.2%	18.8%	18.8%	93.8%
	Count	1	0	0	0	0	0	1
	2.00 % within Q4	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	% within NLP EM7	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%
	% of Total	6.2%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%
	Total	Count	4	3	2	1	3	3
% within Q4	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%	
% within NLP EM7	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.200 <sup>a</sup>	5	.669
Likelihood Ratio	2.983	5	.703
Linear-by-Linear Association	1.316	1	.251
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.447	.669
	Cramer's V	.447	.669
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q5 \* NLP EM1**

**Crosstab**

		NLP EM1						Total
		2.00	3.00	4.00	5.00	6.00	7.00	
Q5	Count	0	3	2	2	2	3	12
	% within Q5	0.0%	25.0%	16.7%	16.7%	16.7%	25.0%	100.0%
	1.00 % within NLP EM1	0.0%	100.0%	100.0%	66.7%	100.0%	75.0%	75.0%
	% of Total	0.0%	18.8%	12.5%	12.5%	12.5%	18.8%	75.0%
2.00	Count	2	0	0	1	0	1	4
	% within Q5	50.0%	0.0%	0.0%	25.0%	0.0%	25.0%	100.0%
	% within NLP EM1	100.0%	0.0%	0.0%	33.3%	0.0%	25.0%	25.0%
	% of Total	12.5%	0.0%	0.0%	6.2%	0.0%	6.2%	25.0%
Total	Count	2	3	2	3	2	4	16
	% within Q5	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%
	% within NLP EM1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.444 <sup>a</sup>	5	.133
Likelihood Ratio	9.677	5	.085
Linear-by-Linear Association	.918	1	.338
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .50.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.726	.133
	Cramer's V	.726	.133
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q5 \* NLP EM2**

**Crosstab**

		NLP EM2						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q5	Count	3	1	3	1	2	2	12
	% within Q5	25.0%	8.3%	25.0%	8.3%	16.7%	16.7%	100.0%
	% within NLP EM2	100.0%	33.3%	100.0%	100.0%	50.0%	100.0%	75.0%
	% of Total	18.8%	6.2%	18.8%	6.2%	12.5%	12.5%	75.0%
2.00	Count	0	2	0	0	2	0	4
	% within Q5	0.0%	50.0%	0.0%	0.0%	50.0%	0.0%	100.0%
	% within NLP EM2	0.0%	66.7%	0.0%	0.0%	50.0%	0.0%	25.0%
	% of Total	0.0%	12.5%	0.0%	0.0%	12.5%	0.0%	25.0%
Total	Count	3	3	3	1	4	2	16
	% within Q5	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%
	% within NLP EM2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.111 <sup>a</sup>	5	.213
Likelihood Ratio	8.630	5	.125
Linear-by-Linear Association	.000	1	1.000
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.667	.213
	Cramer's V	.667	.213
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q5 \* NLP EM3**

**Crosstab**

		NLP EM3						Total
		1.00	2.00	3.00	5.00	6.00	7.00	
Q5	Count	1	1	2	3	2	3	12
	% within Q5	8.3%	8.3%	16.7%	25.0%	16.7%	25.0%	100.0%
	1.00 % within NLP EM3	50.0%	50.0%	100.0%	75.0%	66.7%	100.0%	75.0%
	% of Total	6.2%	6.2%	12.5%	18.8%	12.5%	18.8%	75.0%
	Count	1	1	0	1	1	0	4
	2.00 % within Q5	25.0%	25.0%	0.0%	25.0%	25.0%	0.0%	100.0%
	% within NLP EM3	50.0%	50.0%	0.0%	25.0%	33.3%	0.0%	25.0%
	% of Total	6.2%	6.2%	0.0%	6.2%	6.2%	0.0%	25.0%
	Total	Count	2	2	2	4	3	3
% within Q5	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%	
% within NLP EM3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.111 <sup>a</sup>	5	.683
Likelihood Ratio	4.132	5	.531
Linear-by-Linear Association	1.035	1	.309
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .50.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.441	.683
	Cramer's V	.441	.683
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q5 \* NLP EM4**

**Crosstab**

		NLP EM4							Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Q5	Count	1	1	2	3	3	1	1	12
	% within Q5	8.3%	8.3%	16.7%	25.0%	25.0%	8.3%	8.3%	100.0%
	1.00 % within NLP EM4	100.0%	33.3%	100.0%	75.0%	100.0%	50.0%	100.0%	75.0%
	% of Total	6.2%	6.2%	12.5%	18.8%	18.8%	6.2%	6.2%	75.0%
	Count	0	2	0	1	0	1	0	4
	% within Q5	0.0%	50.0%	0.0%	25.0%	0.0%	25.0%	0.0%	100.0%
	2.00 % within NLP EM4	0.0%	66.7%	0.0%	25.0%	0.0%	50.0%	0.0%	25.0%
	% of Total	0.0%	12.5%	0.0%	6.2%	0.0%	6.2%	0.0%	25.0%
	Total	Count	1	3	2	4	3	2	1
% within Q5	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%	
% within NLP EM4	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% of Total	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.778 <sup>a</sup>	6	.449
Likelihood Ratio	6.904	6	.330
Linear-by-Linear Association	.357	1	.550
N of Valid Cases	16		

- a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.601	.449
	Cramer's V	.601	.449
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q5 \* NLP EM5**

**Crosstab**

		NLP EM5						Total	
		1.00	2.00	3.00	4.00	5.00	6.00		7.00
Q5	Count	1	3	0	2	3	1	2	12
	% within Q5	8.3%	25.0%	0.0%	16.7%	25.0%	8.3%	16.7%	100.0%
	1.00 % within NLP EM5	100.0%	75.0%	0.0%	66.7%	100.0%	50.0%	100.0%	75.0%
	% of Total	6.2%	18.8%	0.0%	12.5%	18.8%	6.2%	12.5%	75.0%
	Count	0	1	1	1	0	1	0	4
	% within Q5	0.0%	25.0%	25.0%	25.0%	0.0%	25.0%	0.0%	100.0%
	2.00 % within NLP EM5	0.0%	25.0%	100.0%	33.3%	0.0%	50.0%	0.0%	25.0%
	% of Total	0.0%	6.2%	6.2%	6.2%	0.0%	6.2%	0.0%	25.0%
	Count	1	4	1	3	3	2	2	16
% within Q5	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%	
Total	% within NLP EM5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.778 <sup>a</sup>	6	.449
Likelihood Ratio	6.904	6	.330
Linear-by-Linear Association	.142	1	.706
N of Valid Cases	16		

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.601	.449
	Cramer's V	.601	.449
N of Valid Cases		16	

- a. Not assuming the null hypothesis.  
b. Using the asymptotic standard error assuming the null hypothesis.

### Q5 \* NLP EM6

#### Crosstab

		NLP EM6					Total
		2.00	3.00	4.00	5.00	7.00	
Q5	Count	2	4	1	2	3	12
	1.00 % within Q5	16.7%	33.3%	8.3%	16.7%	25.0%	100.0%
	% within NLP EM6	50.0%	80.0%	100.0%	66.7%	100.0%	75.0%
	% of Total	12.5%	25.0%	6.2%	12.5%	18.8%	75.0%
	Count	2	1	0	1	0	4
	2.00 % within Q5	50.0%	25.0%	0.0%	25.0%	0.0%	100.0%
	% within NLP EM6	50.0%	20.0%	0.0%	33.3%	0.0%	25.0%
	% of Total	12.5%	6.2%	0.0%	6.2%	0.0%	25.0%
	Total	Count	4	5	1	3	3
% within Q5	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	
% within NLP EM6	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.844 <sup>a</sup>	4	.584
Likelihood Ratio	3.626	4	.459
Linear-by-Linear Association	1.380	1	.240
N of Valid Cases	16		

- a. 10 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.422	.584
	Cramer's V	.422	.584
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q5 \* NLP EM7**

**Crosstab**

		NLP EM7						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q5	Count	2	3	1	1	3	2	12
	% within Q5	16.7%	25.0%	8.3%	8.3%	25.0%	16.7%	100.0%
	1.00 % within NLP EM7	50.0%	100.0%	50.0%	100.0%	100.0%	66.7%	75.0%
	% of Total	12.5%	18.8%	6.2%	6.2%	18.8%	12.5%	75.0%
	Count	2	0	1	0	0	1	4
	2.00 % within Q5	50.0%	0.0%	25.0%	0.0%	0.0%	25.0%	100.0%
	% within NLP EM7	50.0%	0.0%	50.0%	0.0%	0.0%	33.3%	25.0%
	% of Total	12.5%	0.0%	6.2%	0.0%	0.0%	6.2%	25.0%
	Total	Count	4	3	2	1	3	3
% within Q5	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%	
% within NLP EM7	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.444 <sup>a</sup>	5	.487
Likelihood Ratio	5.858	5	.320
Linear-by-Linear Association	.263	1	.608
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.527	.487
	Cramer's V	.527	.487
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q6 \* NLP EM1**

**Crosstab**

		NLP EM1						Total
		2.00	3.00	4.00	5.00	6.00	7.00	
Q6	Count	1	1	2	2	2	4	12
	% within Q6	8.3%	8.3%	16.7%	16.7%	16.7%	33.3%	100.0%
	1.00 % within NLP EM1	50.0%	33.3%	100.0%	66.7%	100.0%	100.0%	75.0%
	% of Total	6.2%	6.2%	12.5%	12.5%	12.5%	25.0%	75.0%
	Count	1	2	0	1	0	0	4
	% within Q6	25.0%	50.0%	0.0%	25.0%	0.0%	0.0%	100.0%
	2.00 % within NLP EM1	50.0%	66.7%	0.0%	33.3%	0.0%	0.0%	25.0%
	% of Total	6.2%	12.5%	0.0%	6.2%	0.0%	0.0%	25.0%
	Count	2	3	2	3	2	4	16
	% within Q6	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%
	Total % within NLP EM1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.222 <sup>a</sup>	5	.285
Likelihood Ratio	7.584	5	.181
Linear-by-Linear Association	3.673	1	.055
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .50.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.624	.285
	Cramer's V	.624	.285
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q6 \* NLP EM2**

**Crosstab**

		NLP EM2						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q6	Count	2	2	1	1	4	2	12
	% within Q6	16.7%	16.7%	8.3%	8.3%	33.3%	16.7%	100.0%
	1.00 % within NLP EM2	66.7%	66.7%	33.3%	100.0%	100.0%	100.0%	75.0%
	% of Total	12.5%	12.5%	6.2%	6.2%	25.0%	12.5%	75.0%
	Count	1	1	2	0	0	0	4
	2.00 % within Q6	25.0%	25.0%	50.0%	0.0%	0.0%	0.0%	100.0%
	% within NLP EM2	33.3%	33.3%	66.7%	0.0%	0.0%	0.0%	25.0%
	% of Total	6.2%	6.2%	12.5%	0.0%	0.0%	0.0%	25.0%
	Total	Count	3	3	3	1	4	2
% within Q6	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%	
% within NLP EM2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.333 <sup>a</sup>	5	.377
Likelihood Ratio	6.537	5	.257
Linear-by-Linear Association	2.083	1	.149
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.577	.377
	Cramer's V	.577	.377
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q6 \* NLP EM3**

**Crosstab**

		NLP EM3						Total
		1.00	2.00	3.00	5.00	6.00	7.00	
Q6	Count	0	2	1	4	2	3	12
	% within Q6	0.0%	16.7%	8.3%	33.3%	16.7%	25.0%	100.0%
	1.00 % within NLP EM3	0.0%	100.0%	50.0%	100.0%	66.7%	100.0%	75.0%
	% of Total	0.0%	12.5%	6.2%	25.0%	12.5%	18.8%	75.0%
	Count	2	0	1	0	1	0	4
	% within Q6	50.0%	0.0%	25.0%	0.0%	25.0%	0.0%	100.0%
	2.00 % within NLP EM3	100.0%	0.0%	50.0%	0.0%	33.3%	0.0%	25.0%
	% of Total	12.5%	0.0%	6.2%	0.0%	6.2%	0.0%	25.0%
	Total	Count	2	2	2	4	3	3
% within Q6	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%	
% within NLP EM3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.778 <sup>a</sup>	5	.082
Likelihood Ratio	11.403	5	.044
Linear-by-Linear Association	3.353	1	.067
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .50.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.782	.082
	Cramer's V	.782	.082
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q6 \* NLP EM4**

**Crosstab**

		NLP EM4							Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Q6	Count	0	1	2	3	3	2	1	12
	% within Q6	0.0%	8.3%	16.7%	25.0%	25.0%	16.7%	8.3%	100.0%
	1.00 % within NLP EM4	0.0%	33.3%	100.0%	75.0%	100.0%	100.0%	100.0%	75.0%
	% of Total	0.0%	6.2%	12.5%	18.8%	18.8%	12.5%	6.2%	75.0%
	Count	1	2	0	1	0	0	0	4
	% within Q6	25.0%	50.0%	0.0%	25.0%	0.0%	0.0%	0.0%	100.0%
	2.00 % within NLP EM4	100.0%	66.7%	0.0%	25.0%	0.0%	0.0%	0.0%	25.0%
	% of Total	6.2%	12.5%	0.0%	6.2%	0.0%	0.0%	0.0%	25.0%
	Total	Count	1	3	2	4	3	2	1
% within Q6	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%	
% within NLP EM4	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.444 <sup>a</sup>	6	.207
Likelihood Ratio	9.677	6	.139
Linear-by-Linear Association	5.306	1	.021
N of Valid Cases	16		

- a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.726	.207
	Cramer's V	.726	.207
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q6 \* NLP EM5**

**Crosstab**

		NLP EM5							Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Q6	Count	1	2	1	2	2	2	2	12
	% within Q6	8.3%	16.7%	8.3%	16.7%	16.7%	16.7%	16.7%	100.0%
	1.00 % within NLP EM5	100.0%	50.0%	100.0%	66.7%	66.7%	100.0%	100.0%	75.0%
	% of Total	6.2%	12.5%	6.2%	12.5%	12.5%	12.5%	12.5%	75.0%
	Count	0	2	0	1	1	0	0	4
	% within Q6	0.0%	50.0%	0.0%	25.0%	25.0%	0.0%	0.0%	100.0%
	2.00 % within NLP EM5	0.0%	50.0%	0.0%	33.3%	33.3%	0.0%	0.0%	25.0%
	% of Total	0.0%	12.5%	0.0%	6.2%	6.2%	0.0%	0.0%	25.0%
	Total	Count	1	4	1	3	3	2	2
% within Q6	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%	
% within NLP EM5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.556 <sup>a</sup>	6	.737
Likelihood Ratio	4.811	6	.568
Linear-by-Linear Association	.961	1	.327
N of Valid Cases	16		

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.471	.737
	Cramer's V	.471	.737
N of Valid Cases		16	

- a. Not assuming the null hypothesis.  
b. Using the asymptotic standard error assuming the null hypothesis.

### Q6 \* NLP EM6

#### Crosstab

		NLP EM6					Total
		2.00	3.00	4.00	5.00	7.00	
Q6	Count	3	3	1	3	2	12
	1.00 % within Q6	25.0%	25.0%	8.3%	25.0%	16.7%	100.0%
	% within NLP EM6	75.0%	60.0%	100.0%	100.0%	66.7%	75.0%
	% of Total	18.8%	18.8%	6.2%	18.8%	12.5%	75.0%
	Count	1	2	0	0	1	4
	2.00 % within Q6	25.0%	50.0%	0.0%	0.0%	25.0%	100.0%
	% within NLP EM6	25.0%	40.0%	0.0%	0.0%	33.3%	25.0%
	% of Total	6.2%	12.5%	0.0%	0.0%	6.2%	25.0%
	Total	Count	4	5	1	3	3
% within Q6	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	
% within NLP EM6	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.044 <sup>a</sup>	4	.728
Likelihood Ratio	2.947	4	.567
Linear-by-Linear Association	.055	1	.814
N of Valid Cases	16		

- a. 10 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.357	.728
	Cramer's V	.357	.728
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q6 \* NLP EM7**

**Crosstab**

		NLP EM7						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q6	Count	3	2	1	0	3	3	12
	% within Q6	25.0%	16.7%	8.3%	0.0%	25.0%	25.0%	100.0%
	% within NLP EM7	75.0%	66.7%	50.0%	0.0%	100.0%	100.0%	75.0%
	% of Total	18.8%	12.5%	6.2%	0.0%	18.8%	18.8%	75.0%
2.00	Count	1	1	1	1	0	0	4
	% within Q6	25.0%	25.0%	25.0%	25.0%	0.0%	0.0%	100.0%
	% within NLP EM7	25.0%	33.3%	50.0%	100.0%	0.0%	0.0%	25.0%
	% of Total	6.2%	6.2%	6.2%	6.2%	0.0%	0.0%	25.0%
Total	Count	4	3	2	1	3	3	16
	% within Q6	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%
	% within NLP EM7	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.778 <sup>a</sup>	5	.328
Likelihood Ratio	6.904	5	.228
Linear-by-Linear Association	1.053	1	.305
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.601	.328
	Cramer's V	.601	.328
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q7 \* NLP EM1**

**Crosstab**

		NLP EM1						Total
		2.00	3.00	4.00	5.00	6.00	7.00	
Q7	Count	1	2	1	2	2	3	11
	% within Q7	9.1%	18.2%	9.1%	18.2%	18.2%	27.3%	100.0%
	% within NLP EM1	50.0%	66.7%	50.0%	66.7%	100.0%	75.0%	68.8%
	% of Total	6.2%	12.5%	6.2%	12.5%	12.5%	18.8%	68.8%
2.00	Count	1	1	1	1	0	1	5
	% within Q7	20.0%	20.0%	20.0%	20.0%	0.0%	20.0%	100.0%
	% within NLP EM1	50.0%	33.3%	50.0%	33.3%	0.0%	25.0%	31.2%
	% of Total	6.2%	6.2%	6.2%	6.2%	0.0%	6.2%	31.2%
Total	Count	2	3	2	3	2	4	16
	% within Q7	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%
	% within NLP EM1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.648 <sup>a</sup>	5	.895
Likelihood Ratio	2.193	5	.822
Linear-by-Linear Association	.673	1	.412
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .63.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.321	.895
	Cramer's V	.321	.895
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q7 \* NLP EM2**

**Crosstab**

		NLP EM2						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q7	Count	2	2	1	1	3	2	11
	% within Q7	18.2%	18.2%	9.1%	9.1%	27.3%	18.2%	100.0%
	1.00 % within NLP EM2	66.7%	66.7%	33.3%	100.0%	75.0%	100.0%	68.8%
	% of Total	12.5%	12.5%	6.2%	6.2%	18.8%	12.5%	68.8%
2.00	Count	1	1	2	0	1	0	5
	% within Q7	20.0%	20.0%	40.0%	0.0%	20.0%	0.0%	100.0%
	% within NLP EM2	33.3%	33.3%	66.7%	0.0%	25.0%	0.0%	31.2%
	% of Total	6.2%	6.2%	12.5%	0.0%	6.2%	0.0%	31.2%
Total	Count	3	3	3	1	4	2	16
	% within Q7	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%
	% within NLP EM2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	18.8%	18.8%	18.8%	6.2%	25.0%	12.5%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.200 <sup>a</sup>	5	.669
Likelihood Ratio	3.919	5	.561
Linear-by-Linear Association	.891	1	.345
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .31.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.447	.669
	Cramer's V	.447	.669
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q7 \* NLP EM3**

**Crosstab**

		NLP EM3						Total
		1.00	2.00	3.00	5.00	6.00	7.00	
Q7	Count	1	1	1	2	3	3	11
	% within Q7	9.1%	9.1%	9.1%	18.2%	27.3%	27.3%	100.0%
	1.00 % within NLP EM3	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	68.8%
	% of Total	6.2%	6.2%	6.2%	12.5%	18.8%	18.8%	68.8%
	Count	1	1	1	2	0	0	5
	% within Q7	20.0%	20.0%	20.0%	40.0%	0.0%	0.0%	100.0%
	2.00 % within NLP EM3	50.0%	50.0%	50.0%	50.0%	0.0%	0.0%	31.2%
	% of Total	6.2%	6.2%	6.2%	12.5%	0.0%	0.0%	31.2%
	Total	Count	2	2	2	4	3	3
% within Q7	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%	
% within NLP EM3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	12.5%	12.5%	12.5%	25.0%	18.8%	18.8%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.364 <sup>a</sup>	5	.498
Likelihood Ratio	6.012	5	.305
Linear-by-Linear Association	2.459	1	.117
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .63.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.522	.498
	Cramer's V	.522	.498
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q7 \* NLP EM4**

**Crosstab**

		NLP EM4							Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Q7	Count	1	2	2	2	2	1	1	11
	% within Q7	9.1%	18.2%	18.2%	18.2%	18.2%	9.1%	9.1%	100.0%
	1.00 % within NLP EM4	100.0%	66.7%	100.0%	50.0%	66.7%	50.0%	100.0%	68.8%
	% of Total	6.2%	12.5%	12.5%	12.5%	12.5%	6.2%	6.2%	68.8%
	Count	0	1	0	2	1	1	0	5
	% within Q7	0.0%	20.0%	0.0%	40.0%	20.0%	20.0%	0.0%	100.0%
	2.00 % within NLP EM4	0.0%	33.3%	0.0%	50.0%	33.3%	50.0%	0.0%	31.2%
	% of Total	0.0%	6.2%	0.0%	12.5%	6.2%	6.2%	0.0%	31.2%
	Count	1	3	2	4	3	2	1	16
% within Q7	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%	
Total	% within NLP EM4	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	6.2%	18.8%	12.5%	25.0%	18.8%	12.5%	6.2%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.812 <sup>a</sup>	6	.832
Likelihood Ratio	3.919	6	.688
Linear-by-Linear Association	.175	1	.676
N of Valid Cases	16		

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .31.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.419	.832
	Cramer's V	.419	.832
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q7 \* NLP EM5**

**Crosstab**

		NLP EM5							Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Q7	Count	0	3	0	3	3	1	1	11
	% within Q7	0.0%	27.3%	0.0%	27.3%	27.3%	9.1%	9.1%	100.0%
	1.00 % within NLP EM5	0.0%	75.0%	0.0%	100.0%	100.0%	50.0%	50.0%	68.8%
	% of Total	0.0%	18.8%	0.0%	18.8%	18.8%	6.2%	6.2%	68.8%
	Count	1	1	1	0	0	1	1	5
	% within Q7	20.0%	20.0%	20.0%	0.0%	0.0%	20.0%	20.0%	100.0%
	2.00 % within NLP EM5	100.0%	25.0%	100.0%	0.0%	0.0%	50.0%	50.0%	31.2%
	% of Total	6.2%	6.2%	6.2%	0.0%	0.0%	6.2%	6.2%	31.2%
	Total	Count	1	4	1	3	3	2	2
% within Q7	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%	
% within NLP EM5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	6.2%	25.0%	6.2%	18.8%	18.8%	12.5%	12.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.855 <sup>a</sup>	6	.249
Likelihood Ratio	9.831	6	.132
Linear-by-Linear Association	.137	1	.711
N of Valid Cases	16		

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .31.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.701	.249
	Cramer's V	.701	.249
N of Valid Cases		16	

- a. Not assuming the null hypothesis.  
b. Using the asymptotic standard error assuming the null hypothesis.

### Q7 \* NLP EM6

#### Crosstab

		NLP EM6					Total
		2.00	3.00	4.00	5.00	7.00	
Q7	Count	3	3	1	2	2	11
	1.00 % within Q7	27.3%	27.3%	9.1%	18.2%	18.2%	100.0%
	% within NLP EM6	75.0%	60.0%	100.0%	66.7%	66.7%	68.8%
	% of Total	18.8%	18.8%	6.2%	12.5%	12.5%	68.8%
	Count	1	2	0	1	1	5
	2.00 % within Q7	20.0%	40.0%	0.0%	20.0%	20.0%	100.0%
	% within NLP EM6	25.0%	40.0%	0.0%	33.3%	33.3%	31.2%
	% of Total	6.2%	12.5%	0.0%	6.2%	6.2%	31.2%
	Total	Count	4	5	1	3	3
% within Q7	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	
% within NLP EM6	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	25.0%	31.2%	6.2%	18.8%	18.8%	100.0%	

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.718 <sup>a</sup>	4	.949
Likelihood Ratio	1.008	4	.909
Linear-by-Linear Association	.008	1	.927
N of Valid Cases	16		

- a. 10 cells (100.0%) have expected count less than 5. The minimum expected count is .31.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.212	.949
	Cramer's V	.212	.949
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

**Q7 \* NLP EM7**

**Crosstab**

		NLP EM7						Total
		1.00	2.00	3.00	4.00	5.00	7.00	
Q7	Count	3	2	1	1	2	2	11
	% within Q7	27.3%	18.2%	9.1%	9.1%	18.2%	18.2%	100.0%
	1.00 % within NLP EM7	75.0%	66.7%	50.0%	100.0%	66.7%	66.7%	68.8%
	% of Total	18.8%	12.5%	6.2%	6.2%	12.5%	12.5%	68.8%
	Count	1	1	1	0	1	1	5
	% within Q7	20.0%	20.0%	20.0%	0.0%	20.0%	20.0%	100.0%
	2.00 % within NLP EM7	25.0%	33.3%	50.0%	0.0%	33.3%	33.3%	31.2%
	% of Total	6.2%	6.2%	6.2%	0.0%	6.2%	6.2%	31.2%
	Total	Count	4	3	2	1	3	3
% within Q7	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%	
% within NLP EM7	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	25.0%	18.8%	12.5%	6.2%	18.8%	18.8%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.873 <sup>a</sup>	5	.972
Likelihood Ratio	1.146	5	.950
Linear-by-Linear Association	.014	1	.905
N of Valid Cases	16		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .31.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.234	.972
	Cramer's V	.234	.972
N of Valid Cases		16	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

### Crosstabs

#### Notes

Output Created		16-APR-2013 11:31:27
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	29
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS
		/TABLES=VAR00031 BY VAR00032
		/FORMAT=AVALUE TABLES
		/STATISTICS=CHISQ PHI
		/CELLS=COUNT ROW COLUMN TOTAL
		/COUNT ROUND CELL.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02
	Dimensions Requested	2
	Cells Available	174762

**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Easier * Consider it	7	24.1%	22	75.9%	29	100.0%

**Easier \* Consider it Crosstabulation**

		Consider it		Total
		1.00	2.00	
Easier	Count	4	2	6
	1.00 % within Easier	66.7%	33.3%	100.0%
	% within Consider it	100.0%	66.7%	85.7%
	% of Total	57.1%	28.6%	85.7%
	Count	0	1	1
	2.00 % within Easier	0.0%	100.0%	100.0%
% within Consider it	0.0%	33.3%	14.3%	
% of Total	0.0%	14.3%	14.3%	
Total	Count	4	3	7
	% within Easier	57.1%	42.9%	100.0%
	% within Consider it	100.0%	100.0%	100.0%
	% of Total	57.1%	42.9%	100.0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.556 <sup>a</sup>	1	.212	.429	.429
Continuity Correction <sup>b</sup>	.024	1	.876		
Likelihood Ratio	1.923	1	.166		
Fisher's Exact Test					
Linear-by-Linear Association	1.333	1	.248		
N of Valid Cases	7				

a. 4 cells (100.0%) have expected count less than 5. The minimum expected count is .43.

b. Computed only for a 2x2 table

**Symmetric Measures**

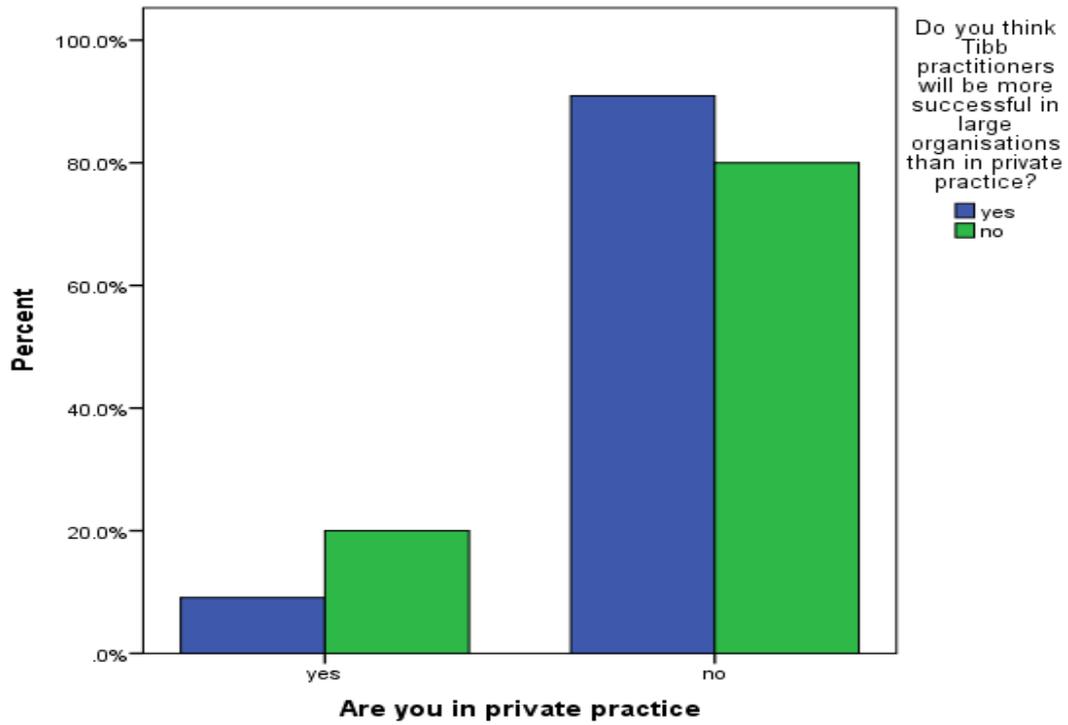
	Value	Approx. Sig.

Nominal by Nominal	Phi	.471	.212
	Cramer's V	.471	.212
N of Valid Cases		7	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

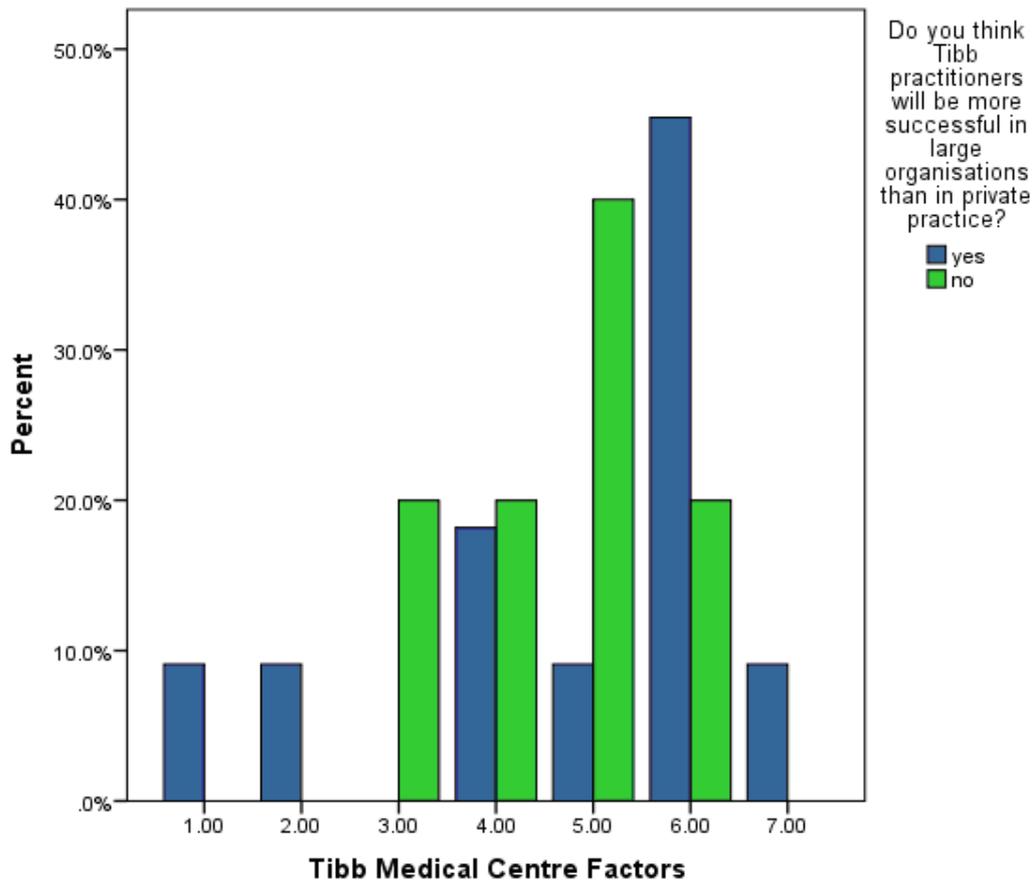
**ANNEXURE R:  
GRAPHS RELATING TO INTERVIEW QUESTIONS**

**Are you in private Practice?**



**TMC Factors:**

**Responses when asked about what factors influence entrepreneurial success and sustainability of Tibb Practitioners within the TMC in Cape Town?**

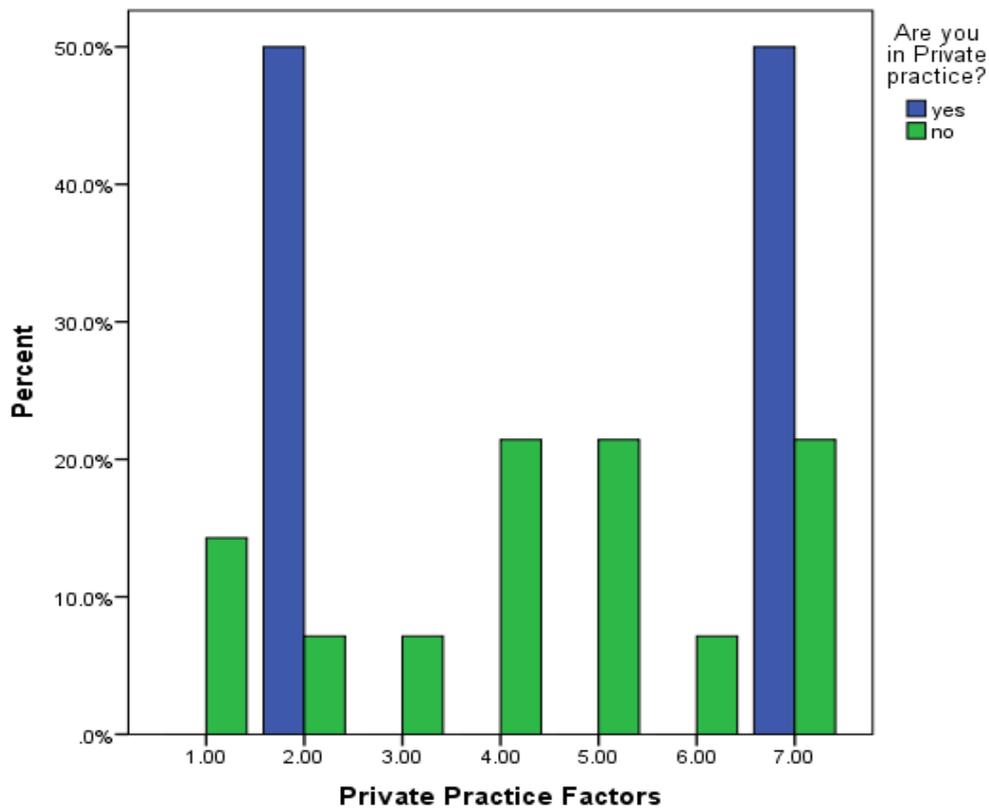


**Response Categories:**

1. Job security and satisfaction;
2. The TMC have everything already set up;
3. Subsidy from Zakaat fund;
4. Competition and costs;
5. Lack of skills and fear;
6. Other: Costs of private practitioners; Number of practitioners; and
7. Lack of mentorship.

**Private Practice Factors:**

**Responses when asked about what factors influence entrepreneurial success and sustainability of Tibb Practitioners in private practice.**

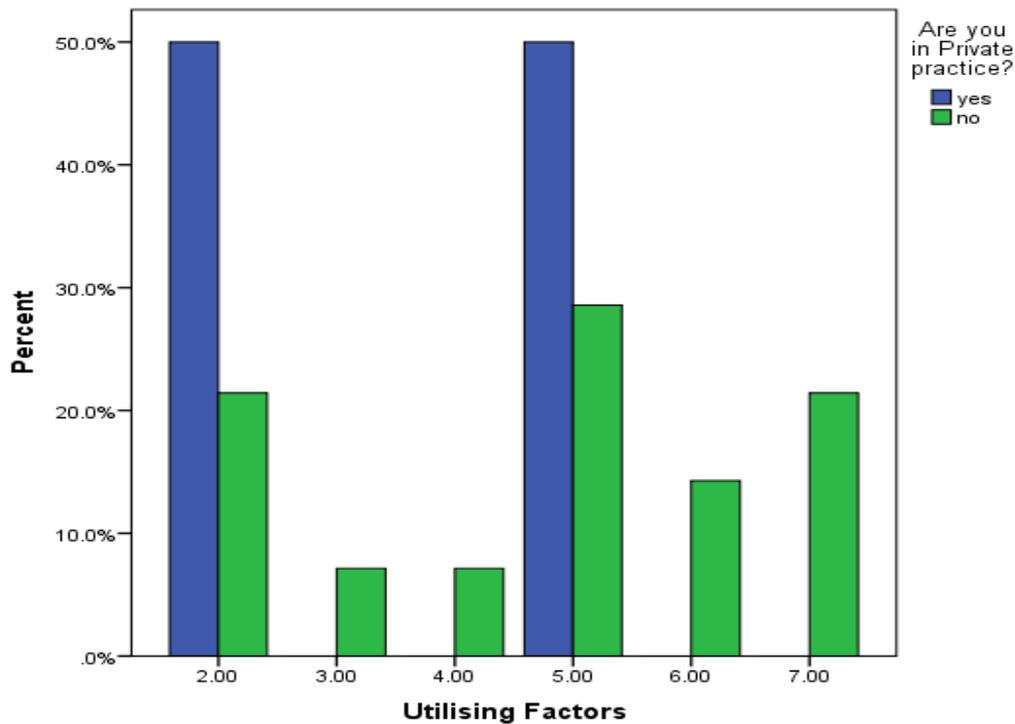


### Response Categories:

1. Start-up costs and maintaining business;
2. Location;
3. Marketing and lack of business skills;
4. Lack of awareness;
5. Lack of formal recognition and costs of Tibb medicine;
6. Competition with allopathic practitioners; and
7. Other: Different treatments; Medicines are often discontinued.

### Utilising Factors:

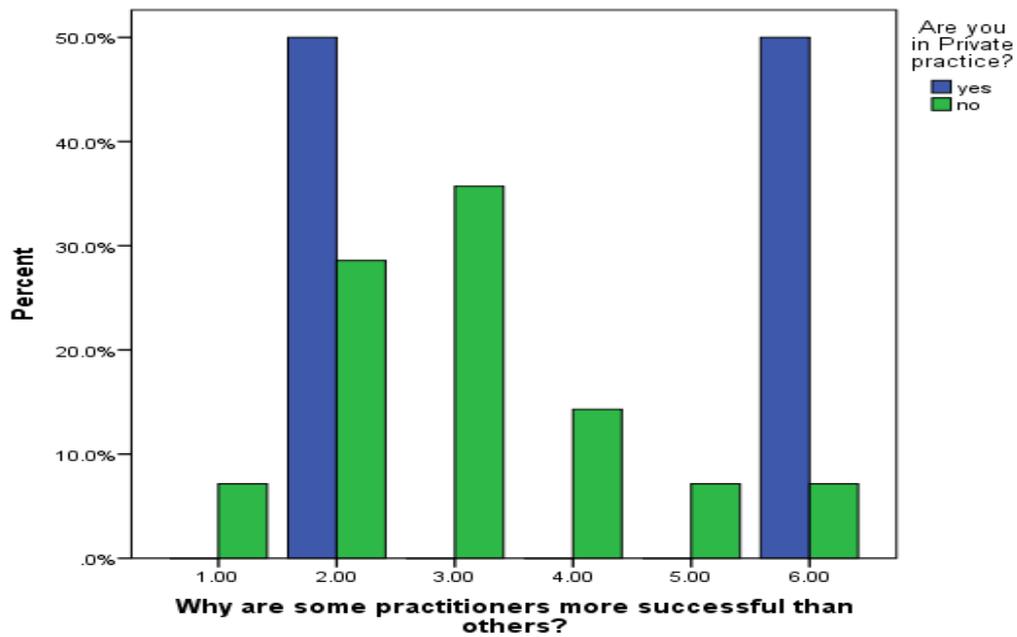
**Responses with regard to what can be done to improve entrepreneurial success both in TMC and in private practice.**



**Response Categories:**

1. Professional registration;
2. Skills development: Marketing, Business skills;
3. Inclusion into primary healthcare sector and public health;
4. Affordability of Tibb medicine;
5. Increase awareness through community education;
6. Lower marketing restrictions and improve referral system; and
7. Other: Tibb Practitioners feel inferior to allopathic practitioners.

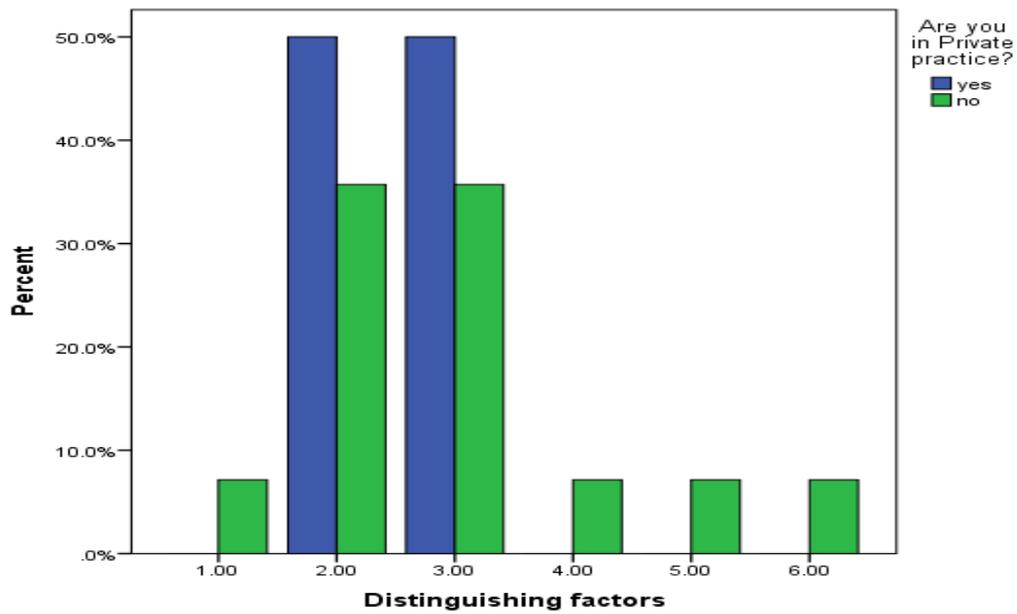
**Why are only some Tibb Practitioners successful in private practice?**



**Response Categories:**

1. Location;
2. Personality of practitioners;
3. Skills and experience;
4. Type and culture of patient;
5. Funding; and
6. Other: Good marketing skills, awareness and good patient treatment.

**What are the distinguishing factors for success in private practice?**

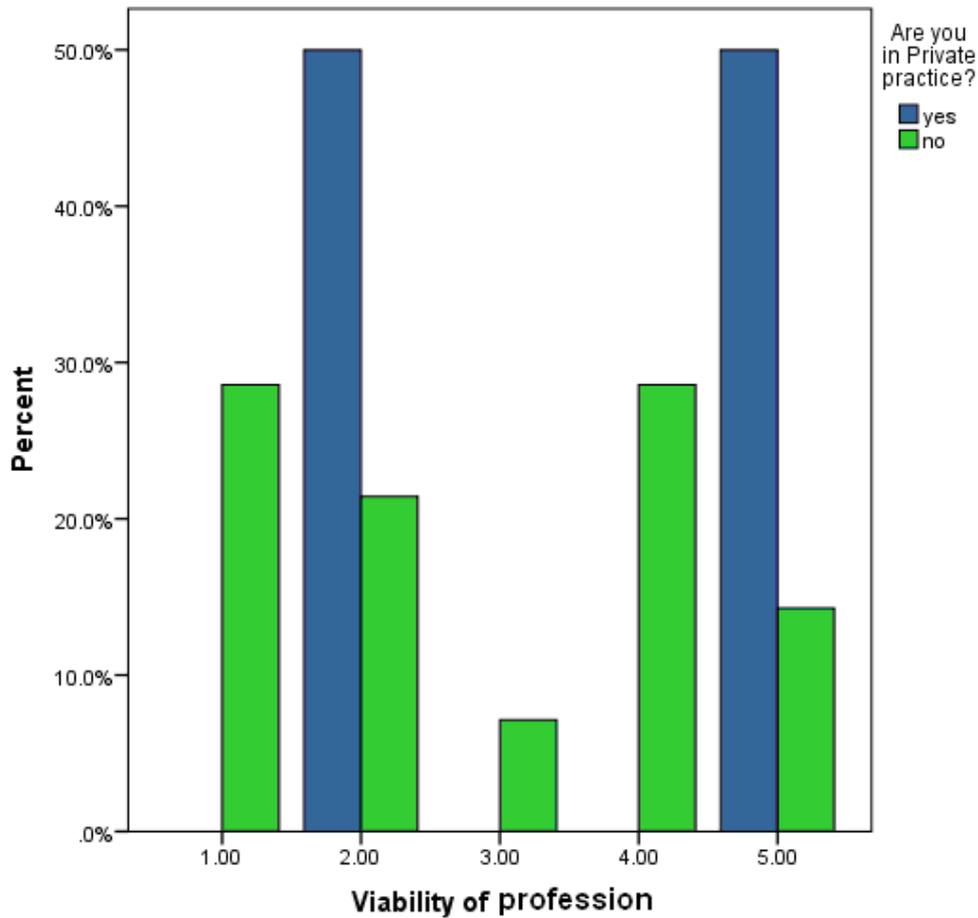


**Response Categories:**

1. Age;
2. Personality, motivation and passion;
3. Skills: Business, treatment and speaking to people;
4. Location;
5. Funding for start-up; and
6. Other: Good marketing skills.

**Viability of Profession:**

**Responses with regards to what can be done to make Unani-Tibb as profession more viable in South Africa**

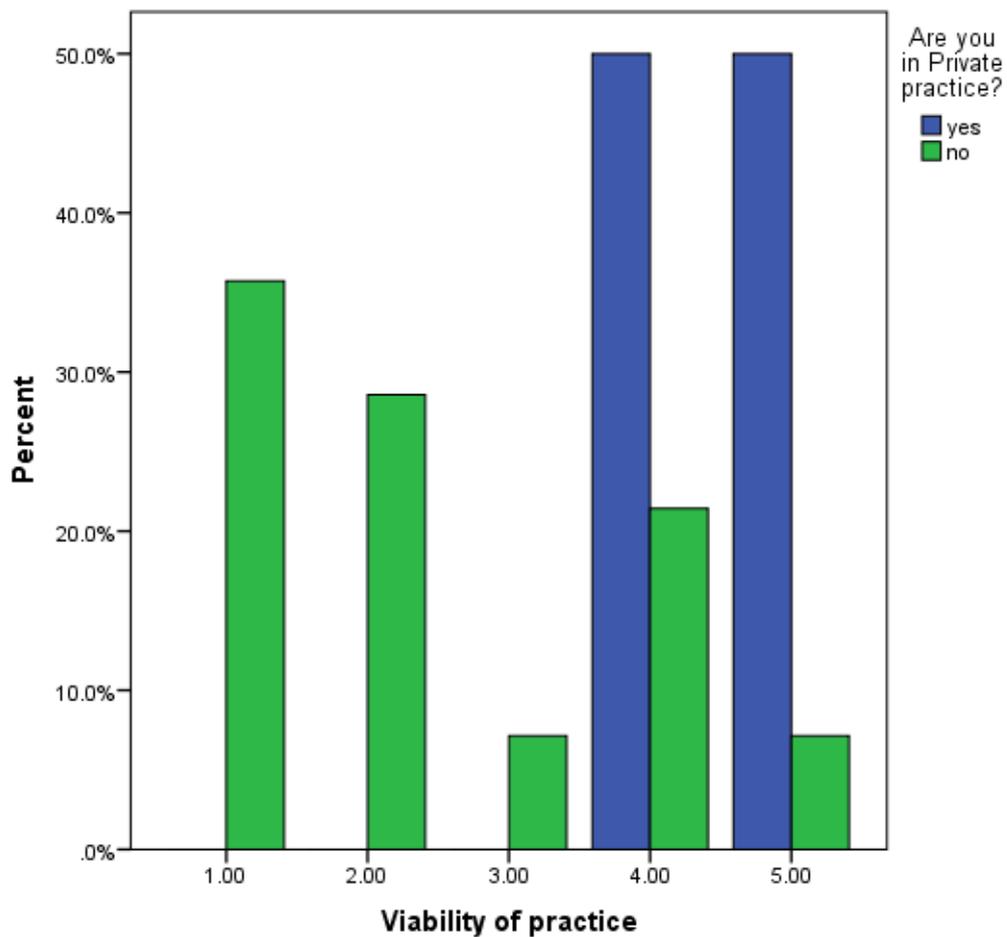


### Response Categories:

1. Increase skill training;
2. Increase awareness to groups other than Muslims;
3. Quality of education;
4. Participate in public health sector including inclusion in medical aid; and
5. Other: Increase communication and marketing in academic medical institutions to attract more practitioners.

### Viability of Practice:

**Responses with regards to what can be done to make Tibb private practices more viable**

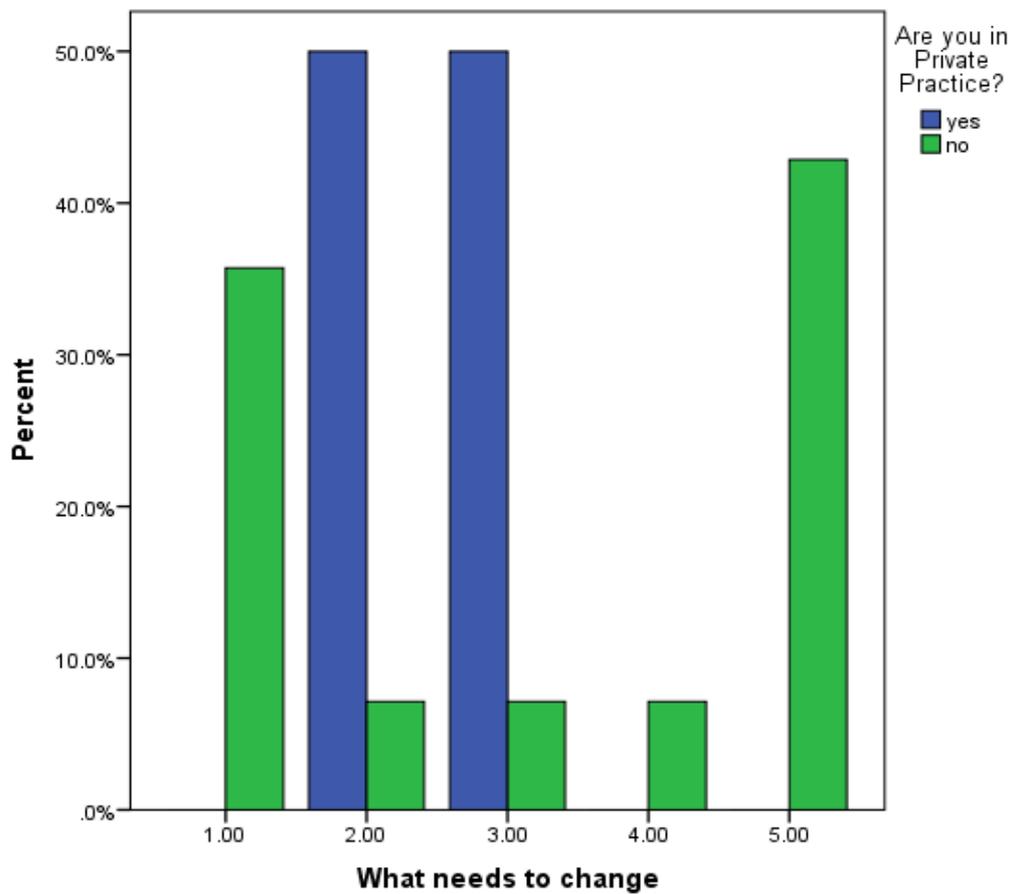


#### Response Categories:

1. Improve education and skills training;
2. Access to medical aid and affordability of Tibb medicine;
3. Increase awareness through marketing;
4. Include therapy training that does not require medication; and
5. Other: Location, sharing practice with colleagues.

#### What needs to change?

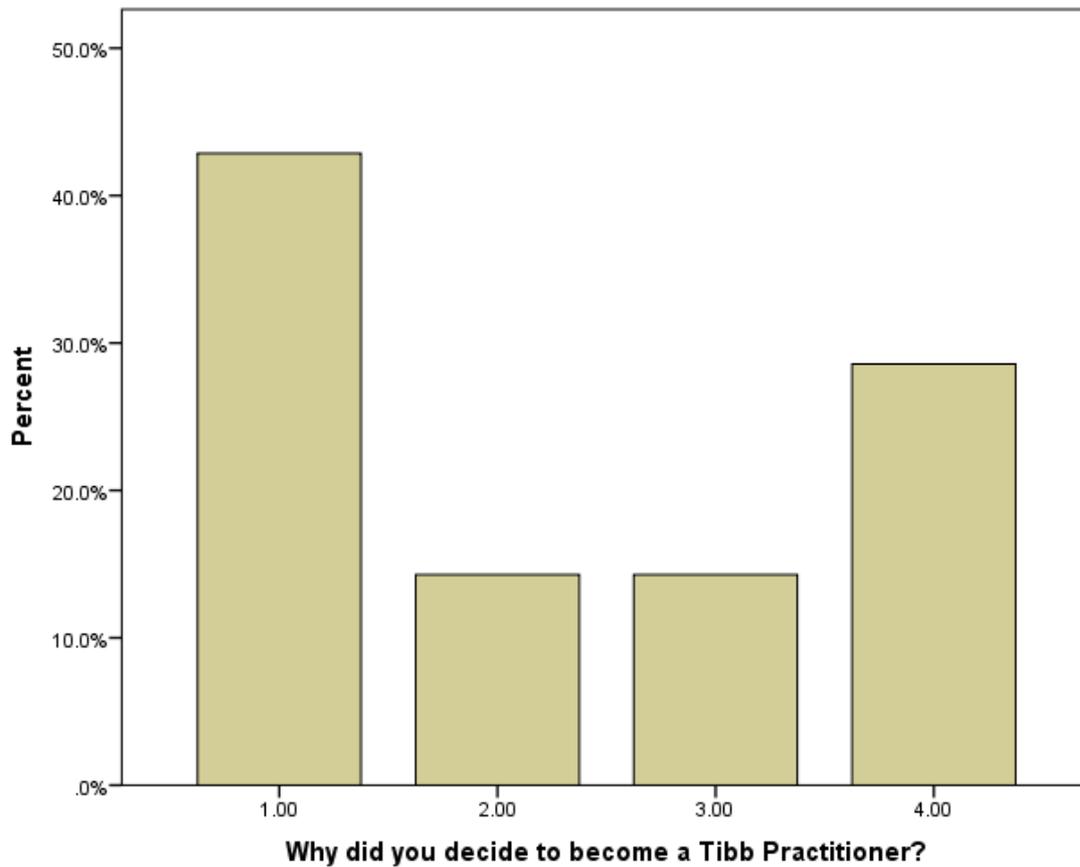
**Responses with regards to what needs to change to make Tibb Practitioners achieve entrepreneurial sustainability in South Africa**



**Response Categories:**

1. Cooperation with government, AHPCSA and SATA;
2. Costs of running a private practice;
3. Inclusion in National Health Insurance and medical aid to attract more patients;
4. Awareness and education about Tibb; and
5. Other: Support at TMC; Change public's mindset; broadening treatments.

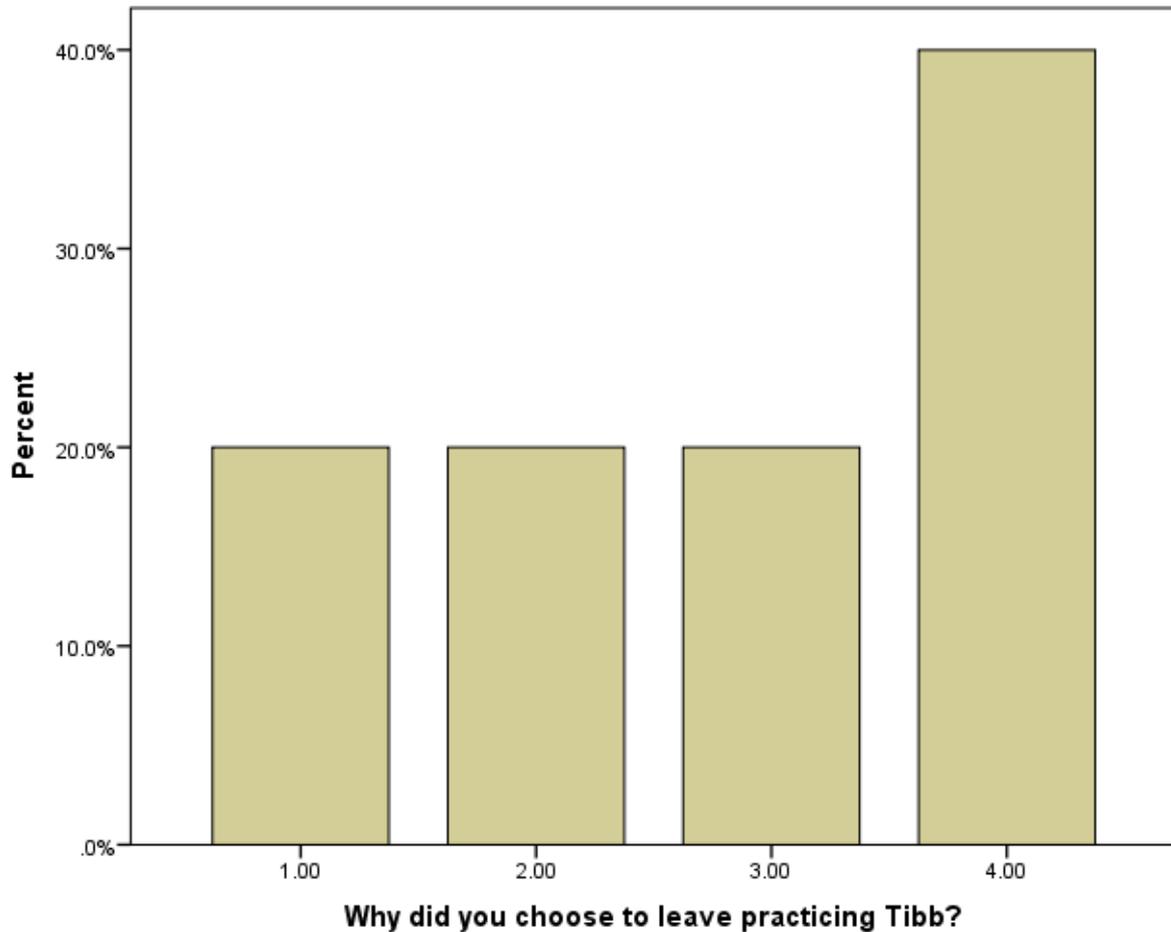
**Why did you decide to become a Tibb Practitioner?**



**Response Categories:**

1. Interest in integrative medicine, natural herbs and alternative therapies;
2. Expand knowledge and give back to the community;
3. Wanted to get into medicine, did not qualify for medical school; and
4. Religious Reasons.

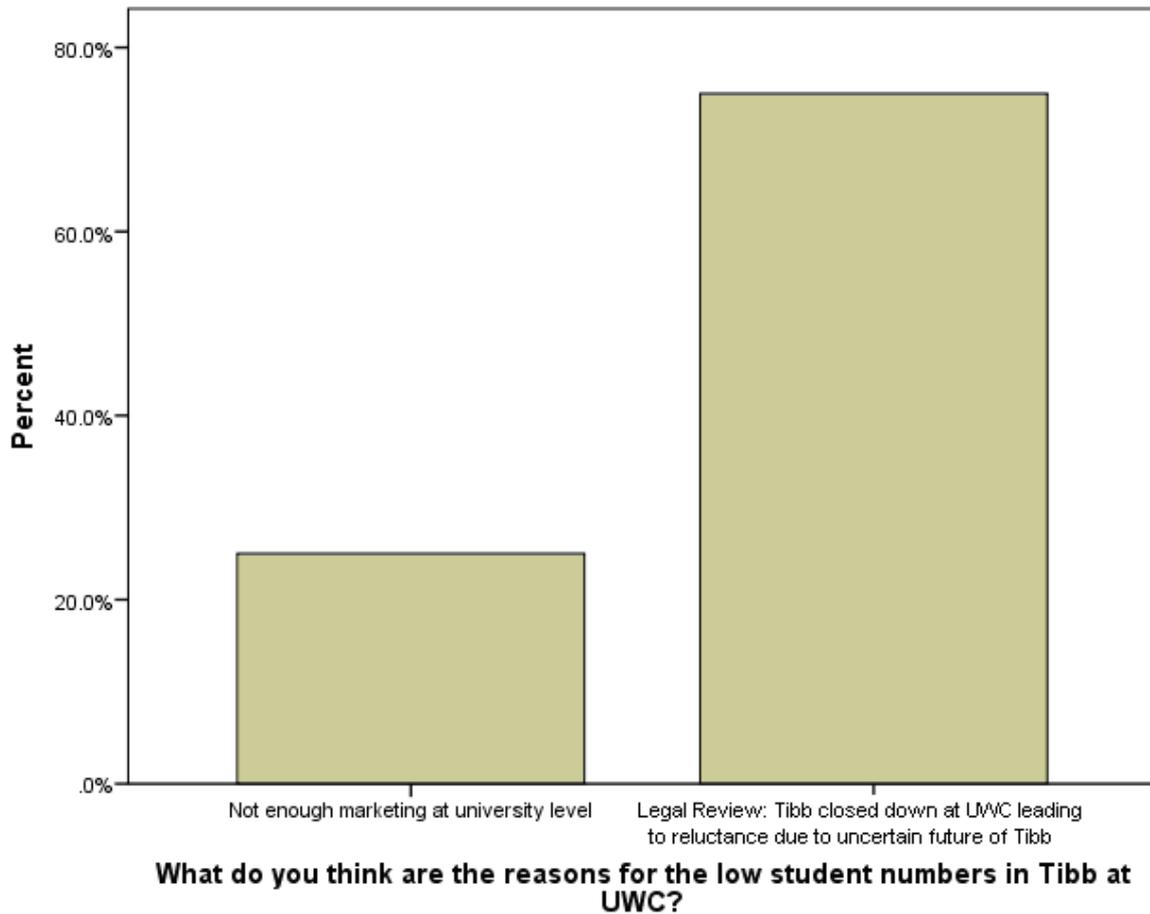
**Why did you choose to leave practicing Tibb?**



**Response Categories:**

1. Profession not lucrative enough, want to work in public health;
2. Need new knowledge, skills and stimulating environment;
3. Lack of confidence and competence due to poor mentoring; and
4. Other: Dependence on company for medications; lack of awareness; unsuccessful treatment methods.

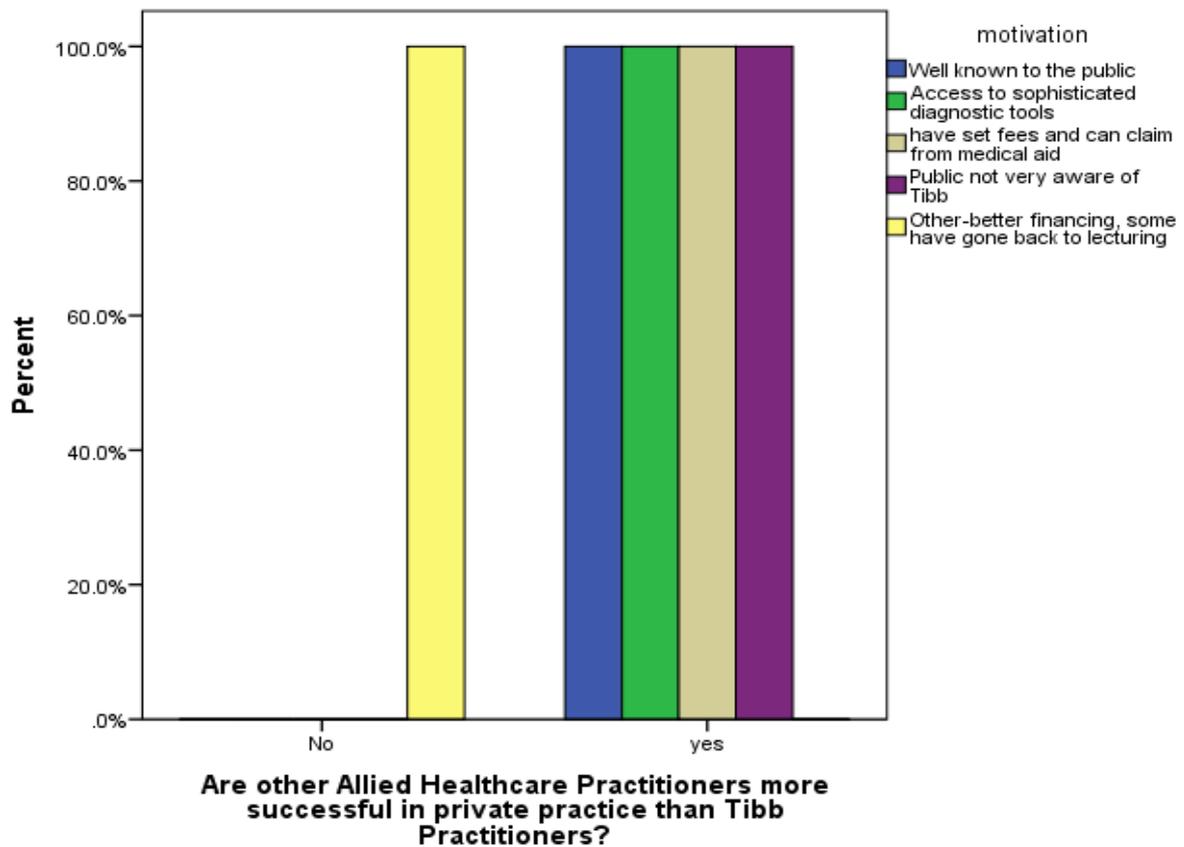
**What do you think are the reasons for the low student numbers in Tibb at UWC?**



**Response Categories:**

1. Not enough marketing at university level;
2. Tibb closed down for 1 year not accepting any new students in 2011 – caused reluctance in students due to uncertain future;
3. Low student numbers in natural medicine; and
4. Other: Do not know about the future of Tibb, training materials need improvement.

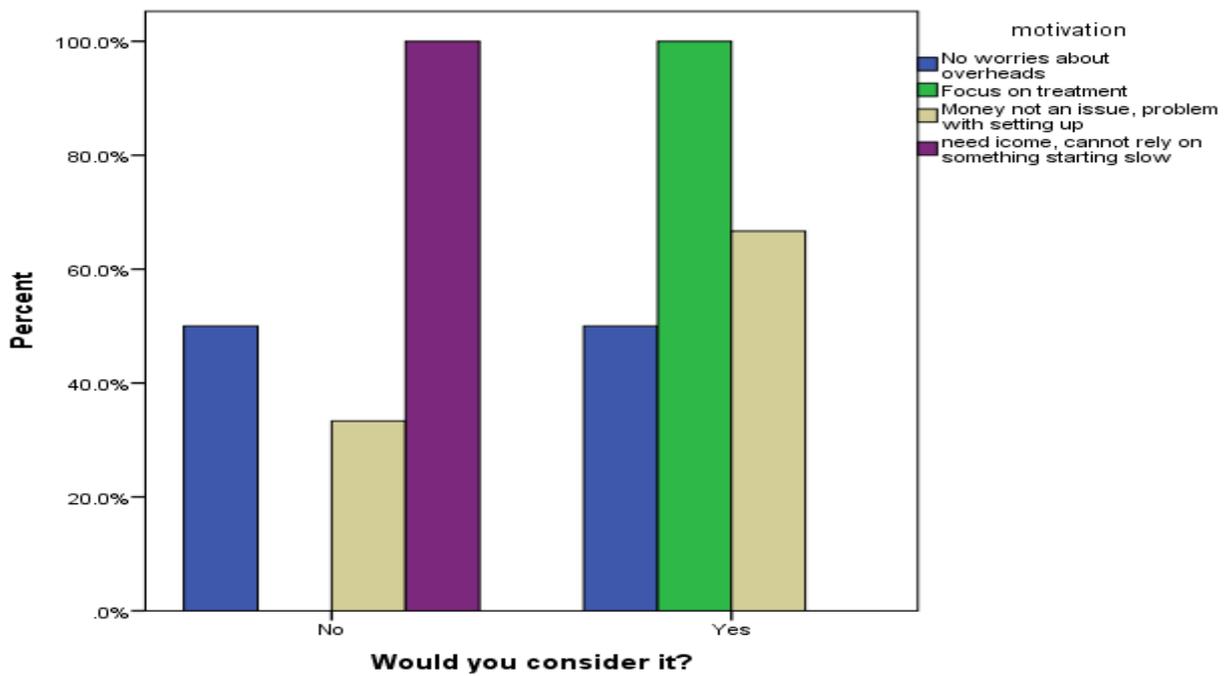
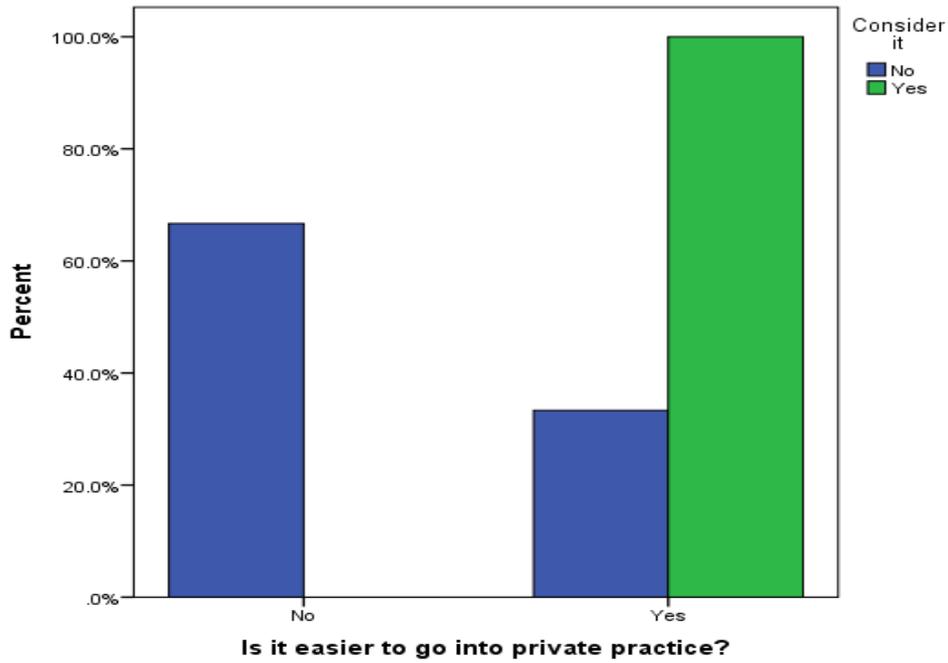
**Do you think other allied health practitioners like homeopaths, naturopaths, etcetera are more successful in private practice?**



**Response Categories:**

1. Well know in the public;
2. Access to sophisticated diagnostic tools;
3. Can claim from medical aid and has set fees;
4. Public not very aware of Tibb; and
5. Other: Better financing, lecturing.

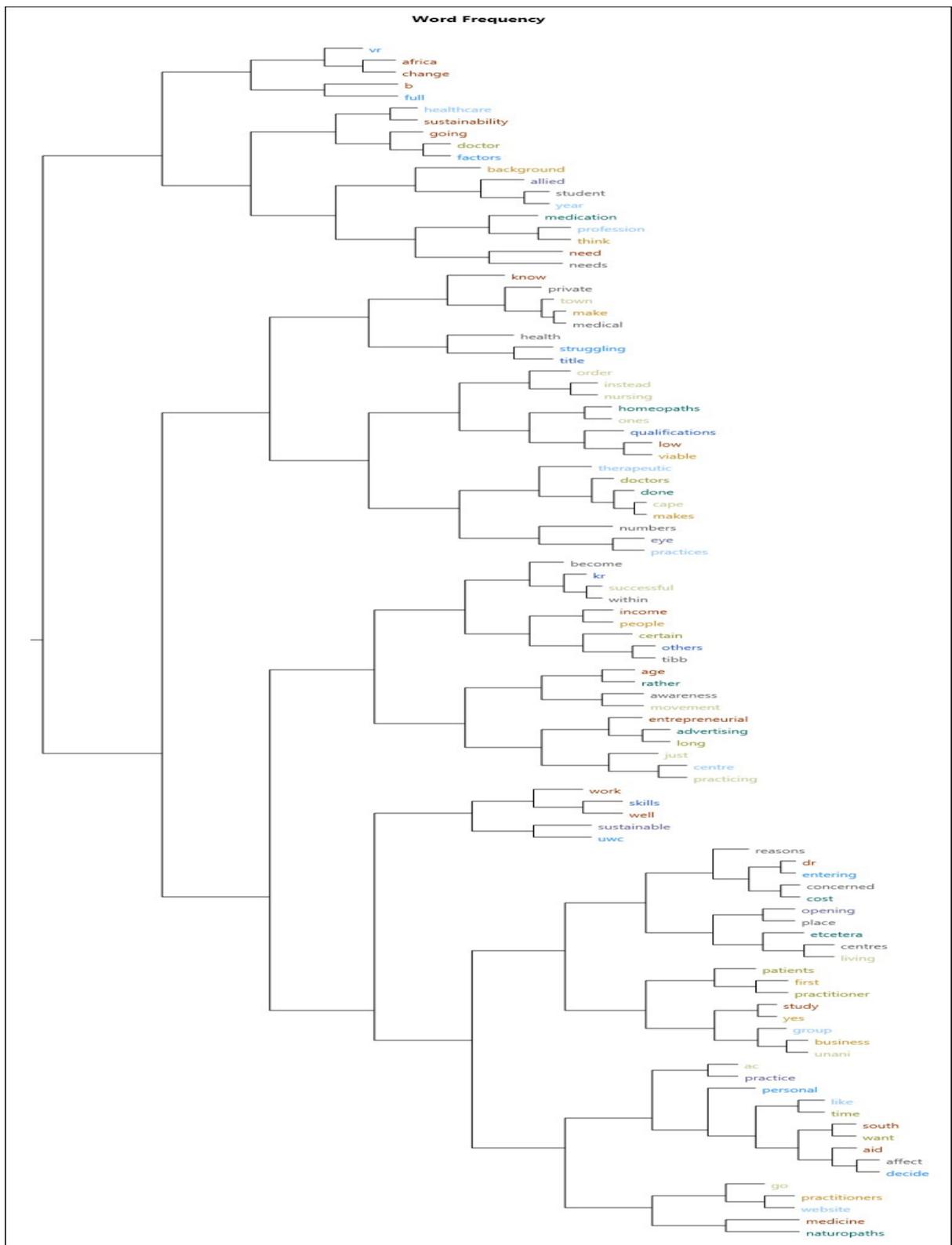
**Is it easier going into a Tibb private practice if you do not have to be concerned about an income for the first year and would you consider it?**



**Response Categories:**

1. Not always about money;
2. Setting up costs are the issue;
3. Other: Need of income; cupping is 100 to 200% profit.

**ANNEXURE S:  
TREE DIAGRAM OF WORD FREQUENCY**



**ANNEXURE T:  
TAG CLOUD OF FREQUENTLY USED WORDS**

ac advertising affect africa age aid allied awareness b background become business cape  
centre centres certain change concerned cost **decide** doctor doctors done dr entering  
entrepreneurial etcetera **eye** factors first full go going group health healthcare  
homeopaths income instead just know kr like living long low **make** makes  
**medical** medication medicine movement naturopaths need needs  
numbers nursing ones opening order others patients people personal **place**

**practice** practices practicing practitioner

**practitioners private** profession qualifications rather  
reasons skills south struggling student study **successful** sustainability

sustainable therapeutic **think tibb** time title town unani

uwc viable vr want website well within work year **yes**

**ANNEXURE U:  
E-MAIL FROM AHPCSA**

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## Allied Health Act Enquiry

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Beverley <beverley@ahpcs.co.za>

Tue, Apr 2, 2013 at 9:02 AM

To: iinfo@christoscheepers.com

Cc: Registrar <registrar@ahpcs.co.za>, Assistant Registrar <assist-registrar@ahpcs.co.za>, anneke@ahpcs.co.za

Dear Mr Scheepers

Thank you for your enquiry.

The legislation (Act or Rules) that you are referring to comes from the Health Professions Council of South Africa (HPCSA), not the AHPCSA.

Please direct your enquiry directly to the HPCSA.

Kind regards

MS BEVERLEY HIRST  
DIRECTOR OF OPERATIONS: AHPCSA  
61 ROSE STREET, RIVIERA, PRETORIA 0084  
PRIVATE BAG X4, QUEENSWOOD 0121  
TEL (012) 329 40 01, FAX (012) 329 22 79

Fax to email: 0865074092  
email: beverley@ahpcs.co.za

**ANNEXURE V:  
E-MAIL FROM HPCSA**

**Christo Scheepers**

Mar 26 ☆

Hi, I am a M.B.A.-student with the Management College of Southern Africa (Man...)

7 older messages

**Nati Hoho**

May 20 (2 days ago) ☆

to me ▾

Dear Mr. Scheepers

Answer to your query:

(1) It is considered as unethical to share rooms with other persons or entities not registered with the Act - HPCSA. This helps in avoiding touting and practitioners referring patients to other persons or entities.

Example: a practitioner sharing a rooms or referring patients to a herbalist etc

(2) Yes this includes practitioners registered with the AHPCSA. Practitioners must be registered with the HPCSA only.

Hope I have answered your query.

Regards

**Mrs Nati Hoho**Committee Coordinator - Office of the Registrar/ CEO  
**HEALTH PROFESSIONS COUNCIL OF SOUTH AFRICA**

553 Madiba Street, Arcadia, 0083

PO Box 205, Pretoria, 0001

Tel: [+27 \(0\) 12 338 9322](tel:+270123389322)Fax: [+27 \(0\) 12 338 9322](tel:+270123389322)Web: <http://www.hpcsa.co.za>Email: [natih@hpcsa.co.za](mailto:natih@hpcsa.co.za)

## ANNEXURE W:

## UNANI-TIBB SCOPE OF PRACTICE



## The Allied Health Professions Council of South Africa

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61 Rose Street, Riviera, Pretoria, 0084. Private Bag X4, Queenswood, 0121  
Telephone (012) 329-4001 Fax: (012) 329-2279 e-mail: [registrar@ahpcsa.co.za](mailto:registrar@ahpcsa.co.za)  
Website: [www.ahpcsa.co.za](http://www.ahpcsa.co.za)

### **The acts specifically pertaining to a Unani-Tibb practitioner (Scope of Practice)**

1. An Unani-Tibb practitioner shall examine a person in order to diagnose and detect illness and deficiency, which examination shall include the following:
  - a. taking a case history including the recording of vital signs.
  - b. perform a physical examination, including the drawing of samples and request pathological procedures and analysis and humoral and temperamental evaluation.
  - c. make a diagnosis according to the principals and philosophies of Unani-Tibb.
2. An Unani-Tibb practitioner shall provide or prescribe treatment for such disease, illness or deficiencies in humans according to Unani-Tibb principles and philosophies, which treatment may include:
  - a. dietetics and nutrition;
  - b. minor surgery as per training;
  - c. lifestyle management (governing factors)
  - d. regimental therapies – including but not limited to purgation, massage, enema, cupping, acupressure, exercise, heat therapy, diuresis, emesis, leeching, nasal inhalation, hydrotherapy, breathing techniques and meditation; and
  - e. counselling, caring and nurturing.
3. Notwithstanding the provisions of the Medicine and Related Substances Control Act 101 of 1965, prescribe or dispense medicine for the treatment for such disease, illness or deficiencies in humans by the use of medicines and scheduled substances provided that such acts shall be based on and in accordance with Unani-Tibb principles and philosophies.
4. Notwithstanding the provisions of the Medicine and Related Substances Control Act 101 of 1965, an Unani-Tibb practitioner shall be entitled to personally compound, dispense or supply Unani-Tibb remedies compounded and dispensed in terms of Unani-Tibb principles and philosophies which are prescribed by him or herself, or by another practitioner with whom he or she is in partnership or with whom he or she is associated as principal as assistant or locum tenens, for the use by a patient under treatment of such practitioner or of such other practitioner provided that an Unani-Tibb practitioner shall not keep an open shop.

(Maple, 2013:2)