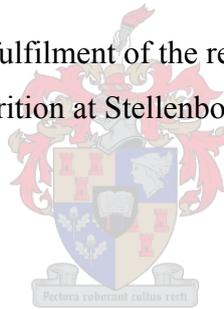


Job Satisfaction of South African Registered Dietitians.

Annabel Mackenzie

Thesis presented in partial fulfilment of the requirements for the degree of
Master of Nutrition at Stellenbosch University.



Study Leader: D Marais
Study Co-Leader: J Visser
Statistician: Prof. DG Nel
Degree of Confidentiality: A

Graduation: December 2008

DECLARATION

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own original work, that I am the owner of the copyright thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Date: June 2008

Signature:

A handwritten signature in black ink, appearing to read "A. Magz ie". The letters are cursive and somewhat stylized, with a large loop for the 'A' and a long tail for the 'ie'.

**Copyright © 2008 Stellenbosch University
All rights reserved**

ABSTRACT

Job satisfaction of registered dietitians (RDs) is a very poorly researched subject on a global scale. Apart from a handful of studies conducted in the United States of America (USA) from the 1980's through to the early 1990's and only one recently published in 2006, there is no other published information relating to this topic. As a result a cross-sectional descriptive study was conducted using a national survey of all 1509 dietitians registered with the Health Professions Council of South Africa (HPCSA). Data was collected using a 2 part self-administered questionnaire, the first part collected demographic data and the second part collected data pertaining to job satisfaction attitude. The job satisfaction questionnaire was based on the Job Satisfaction Survey (JSS), measuring nine themes of: salary, promotion, knowledge and skills, professional colleagues, members of the multi-disciplinary team, communication, the work environment, rewards of the job and nature of work. Based on the registration contact details of RDs, the questionnaires were distributed by either e-mail or post, giving a final response rate of 22,5% (n=340), representing over a fifth of the dietetic workforce registered with the HPCSA.

Overall the data indicated that South African RDs were only slightly satisfied (65,7%) with their current employment, with no significant difference in overall job satisfaction between those working and living overseas (68,4%)(n=23) and those in South Africa (65,7%)(n=317). Despite there being a positive attitude towards the nature of work (tending towards confirmation of career satisfaction), lower levels of satisfaction were primarily found to be due to poor salaries, lack of promotional opportunities and a perception of low professional image. No extreme levels of satisfaction were found.

In regard to associations between demographic variables and job satisfaction, a significant positive correlation was found to occur between age (Spearman's $p=0,036$), professional experience (Mann-Whitney U $p=0,035$), area of expertise (Mann-Whitney U $p=0,001$), hours of work (Kruskal-Wallis $p=0,021$) and the location of work (rural versus urban based work) (Mann-Whitney U $p=0,00001$). Therefore it is predicted that over the next five years, there will be poor staff retention of RDs in dietetic posts, where the greatest loss will be in the Department of Health (DOH), where approximately 83% of current DOH staff (n=113) will be searching for alternative employment.

Recommendations therefore include that there should be a re-evaluation of RD pay scales, career-pathing with promotional opportunities, boosting the RD professional image and enhancing dietetic undergraduates programs by including the teaching of non-dietetic skills such a business skills and entrepreneurship, required to support dietetic practice on a broader scale.

OPSOMMING

Werksbevreëdiging van geregistreeerde dieetkundiges (GDs) is wêreldwyd 'n swak nagevorsde onderwerp. Afgesien van 'n handjievool studies wat van die 1980's tot die vroeë 1990's in die Verenigde State van Amerika (VSA) gedoen is en een onlangse publikasie in 2006, is daar geen ander gepubliseerde inligting ten opsigte van hierdie onderwerp nie. 'n Dwarssnit beskrywende studie is dus onderneem, deur gebruik te maak van 'n nasionale opname van al 1509 dieetkundiges wat by die *Health Professions Council of South Africa (HPCSA)* geregistreeer is. Data is versamel deur middel van 'n self-geadministreeerde vraelys met twee dele. Die eerste deel het demografiese data verkry en die tweede deel het data ten opsigte van houding tot werksbevreëdiging verkry. Die werksbevreëdiging vraelys is op die *Job Satisfaction Survey (JSS)* gebaseer en meet nege temas oor salaris, bevordering, kennis en vaardighede, professionele kollegas, lid van die multi-dissiplinêre span, kommunikasie, die werksomgewing, werksbeloning en tipe werk. Die vraelys is deur middel van e-pos of pos versprei (volgens die registrasie inligting van GDs) en 'n finale deelname van 22,5% (n=340) is verkry wat meer as 'n vyfde van die dieetkundiges wat geregistreeer is by die HPCSA verteenwoordig.

Oorkoepelend het die data getoon dat Suid-Afrikaanse GDs net gedeeltelik tevrede is (65,7%) met hul huidige werk, maar daar was geen statistiese beduidende verskil in algehele werksbevreëdiging tussen GDs wat oorsee woon en werk (68,4%)(n=23) en GDs in Suid-Afrika (65,7%)(n=317) nie. Ten spyte daarvan dat daar 'n positiewe houding tot die tipe werk was (wat 'n tendens tot loopbaansgenot bevestig) is laer vlakke van bevreëdiging meestal gevind as gevolg van swak salarisse, tekort aan bevorderingsgeleenthede, en 'n persepsie van 'n lae professionele beeld. Geen uiterste vlakke van bevreëdiging is gevind nie.

Ten opsigte van verhoudings tussen demografiese veranderlikes en werksbevreëdiging was daar 'n statisties beduidende positiewe korrelasie tussen ouderdom (Spearman's $p=0,036$), professionele ervaring (Mann-Whitney U $p=0,035$), spesialiteitsarea (Mann-Whitney U $p=0,001$), werksure Kruskal-Wallis $p=0,021$) en die ligging van die werksplek (landelik teenoor stedelik-gebaseerde werk) (Mann-Whitney U $p=0,00001$). Dit word voorspel dat daar gedurende die volgende vyf jaar swak personeel retensie van GDs in dieetkunde poste sal wees, en dat die grootste verlies by die Departement van

Gesondheid (DVG) sal plaasvind waar 83% van die huidige DVG personeel (n=113) aangedui het dat hul alternatiewe werksgeleenthede sal soek.

Aanbevelings sluit dus in 'n herevaluering van GDs se salarisskale, hul loopbaanontwikkeling ten opsigte van bevorderingsgeleenthede, die verbetering van die GDs se professionele beeld en die verryking van dieetkunde voorgraadse programme deur die insluiting van meer nie-dieetkunde vaardighede soos besigheidsvaardighede en entrepreneurskap wat nodig is om dieetkunde praktyk op 'n breër skaal te ondersteun.

ACKNOWLEDGEMENTS

I would like to acknowledge and thank the following people for their support and co-operation in making this research possible. Firstly to Grant Mackenzie (my husband), for his patience, guidance, support and sponsorship throughout the duration of the study. In addition to my 2 young children, Jessica and Cameron Mackenzie, for being relatively well behaved during periods of when I could not give them my full attention, who, without the help of Nintendo Wii, would not have been able to maintain a commendable behaviour.

On a professional level, to both of my supervisors: Debbie Marais and Janicke Visser, who, despite their own professional and personal commitments, provided me with expert guidance, support, supervision, communication and time. Without their help nor know-how, the co-ordination and execution of this study would have proved most difficult and very challenging.

Those who also assisted in the study, thanks goes to Professor Daan Nel (Statistician) for his speedy and comprehensive statistical analysis of the data, Raleah Gouws, for co-ordinating the postal portion of the study and to Rene Smalberger (ADSA President) and ADSA, in assisting with the electronic distribution portion of the study. Lastly and most importantly, to those dietitians who gave up their precious time in participating in the study.

TABLE OF CONTENTS

	page
Declaration	ii
Abstract	iii
Opsomming	v
Acknowledgements	vii
List of Tables	xi
List of Figures	xii
List of Appendices	xiii
List of Abbreviations	xiv
CHAPTER 1: LITERATURE REVIEW	1
1.1 Introduction	1
1.2 Theories of job satisfaction	3
1.3 Job satisfaction in the health professions	5
1.4 Variables of job satisfaction	7
1.4.1. Demographic variables	7
1.4.1.1. <i>Age</i>	7
1.4.1.2. <i>Gender</i>	8
1.4.1.3. <i>Family and marital status</i>	9
1.4.1.4. <i>Level of education</i>	9
1.4.1.5. <i>Professional experience</i>	9
1.4.1.6. <i>Professional expertise</i>	9
1.4.2. Work task variables	10
1.4.2.1. <i>Autonomy</i>	10
1.4.2.2. <i>Workload and work task diversity</i>	11
1.4.2.3. <i>Achievements of the job</i>	11
1.4.3. The work environment	11
1.4.3.1. <i>Salary, rewards and benefits</i>	11
1.4.3.2. <i>Contract</i>	11
1.4.3.3. <i>Hours of work</i>	12
1.4.3.4. <i>The physical environment</i>	12
1.4.3.5. <i>Rural versus urban based work</i>	12
1.4.3.6. <i>Public versus the private sector</i>	13
1.4.3.7. <i>Professional development</i>	13

1.4.3.8. <i>Professional status</i>	13
1.5 Measurement of job satisfaction	14
1.6 Current trends in South Africa	15
1.7 The role of the registered dietitian	15
1.8 Summary	17
CHAPTER 2: METHODOLOGY	18
2.1 Aim and objectives	18
2.1.1. Aim	18
2.1.2. Objectives	18
2.2 Study Design	18
2.3 Participants	18
2.3.1 Study population	18
2.3.2. Selection criteria	18
2.4 Data collection	19
2.4.1. Data collection tools	19
2.4.1.1. <i>Demographic questionnaire</i>	19
2.4.1.2. <i>Job satisfaction questionnaire</i>	19
2.4.1.3. <i>Pilot study</i>	20
2.4.2. Job satisfaction survey	21
2.5 Data Analysis	22
2.6 Ethics and legal aspects	23
2.7 Assumptions and limitations	23
2.7.1. Assumptions	23
2.7.2. Limitations	23
CHAPTER 3: RESULTS	25
3.1 Response rate	25
3.2 Demographics	25
3.3 Job satisfaction	27
3.3.1. Job satisfaction in relation to themes	27
3.3.2. Job satisfaction in relation to overseas based RDs	30
3.3.3. Job satisfaction in relation to demographic variables	32
3.3.4. Job satisfaction in relation to dietetic qualifications and expertise	35
3.3.5. Job satisfaction in relation to current employment	37
3.4 Forecast of dietitian movement in job sectors in 2012	40

CHAPTER 4: DISCUSSION	43
4.1 Expertise and experience	44
4.2 Salary	44
4.3 Promotion	45
4.4 Staff turnover	45
4.5 Professional status/image	47
4.6 Location of work	48
CHAPTER 5 :CONCLUSIONS AND RECOMMENDATIONS	49
5.1 Salary	49
5.2 Promotion	49
5.3 Professional image	50
5.4 Educational institutions	50
5.5 Future studies	50
LIST OF REFERENCES	52
APPENDICES	63

LIST OF TABLES

- Table 3.1: Demographic characteristics of the respondents of South African RDs (n=340)
- Table 3.2: Demographic characteristics of respondents related to overall job satisfaction (n=340)
- Table 3.3: Dietetic qualifications and expertise related to overall job satisfaction (n=340)
- Table 3.4: Current employment of RDs related to overall job satisfaction (n=340)

LIST OF FIGURES

- Figure 3.1: Job satisfaction scores per theme and overall for South African RDs (n=340)
- Figure 3.2: Job satisfaction scores per theme and overall for South African-based RDs (n=317) and UK-based RDs (n=23)
- Figure 3.3: Forecast of RD movement in different job sectors by 2012

LIST OF APPENDICES

- Appendix 1: Demographic Questionnaire
- Appendix 2: Job Satisfaction Questionnaire
- Appendix 3: Electronic Format Cover Letter
- Appendix 4: Postal Cover Letter
- Appendix 5: Letter to ADSA Requesting Assistance
- Appendix 6: Letter of Ethics Approval for Research from the Committee for Human Research

LIST OF ABBREVIATIONS

ADSA	Association for Dietetics in South Africa
AHP	Allied Health Professional
AJSS	Adapted Job Satisfaction Survey
ANOVA	Analysis of Variance
CPD	Continuing Professional Development
CS	Community Service
DOH	Department of Health
DVG	Departement van Gesondheid
FSM	Food Service Management
GD	Geregistreerde Dieetkundige
JIG	Job in General
JDI	Job Descriptive Index
JS	Job Satisfaction
JSS	Job Satisfaction Survey
HPCSA	Health Professions Council of South Africa
ICU	Intensive Care Unit
MDT	Multidisciplinary Team
NHS	National Health Service
OT	Occupational Therapist
RD	Registered Dietitian
SA	South Africa
SAPO	South African Post Office
SD	Standard Deviation
UK	United Kingdom
VSA	Verenigde State van Amerika

CHAPTER 1

LITERATURE REVIEW

1.1 INTRODUCTION

Job satisfaction is simply defined as the extent to which one is generally fulfilled in their current job.¹ Herzberg (1966)² defined it as the pleasure that one derives from their current job and working conditions. From the very beginning it is important to note that the opposite of satisfaction in this context is not dissatisfaction, but rather a low satisfaction, as an individual may not be necessarily dissatisfied with their job, but rather less satisfied.²

In general, the key aspects that contribute to job satisfaction have been identified as recognition in the job, level of salary, opportunities for promotion and achievement of personal goals.³⁻⁷ Experts therefore believe that job satisfaction directly affects the labour market behaviour and economic efficiency, by impacting on productivity and staff turnover. Similarly job satisfaction plays a direct role on the individual worker in their overall health and well-being. This demonstrates that job satisfaction is important for both employers and employees, and in the case of health care professionals, it is important in the interests of the patient/client and the multi-disciplinary teams within which the health care professional is engaged.⁵

Despite there being an extensive body of research in the field of job satisfaction, very little is known with regard to registered dietitians (RDs). A review of the literature on the topic only produces a handful of published studies that were conducted in the 1980's to early 1990's^{3,4,8,9} and only one recently conducted in 2006.⁷ To further bias this review most of this research stems from the United States of America (USA). In comparison to other medical professions, nursing has been extensively researched in this regard,¹⁰⁻²⁵ as job satisfaction in nursing has become critical to assess due to the harsh decline and hence high demand for nursing staff on a global scale.

The role of the RD is to make nutritional recommendations through evidence-based practice after holistically assessing the situation in question, by considering the ethical, political, social and clinical dimensions in prevention or treatment of disease.²⁶ These

nutritional-based recommendations are translated from scientific guidelines into practical advice for appropriate lifestyle and eating practice on a scale ranging from individual clinical cases to national and even global policies. It can therefore be said that RDs play a long-term role towards ensuring and maintaining the health and well-being of all individuals, irrespective of health status.

In comparison to the South African nursing workforce, which stands at over 100 000 nurses, the South African dietetic workforce is only 1509 RD members.²⁷ Thus, demonstrating how small a 'voice' the South African dietetic workforce has, especially when problems exist within the profession. The focus and main concern of past studies on job satisfaction in health care professionals, has been based on low levels of job satisfaction having a negative influence on an individuals job performance^{4,12,13,15,28} and further still, fuelling intent to leave a profession.^{5,6,11,13,15,17,29} It is concerning that this phenomenon could have a similar effect on the South African dietetic workforce and furthermore, when extrapolating its potential effect through the role of the profession, on the population in general. A consequence that could evolve simply due to an unidentified strained or reduced minority health workforce.

As a result, a descriptive study was designed to address 5 research questions (stated in Chapter 2: Methodology), using a demographic questionnaire together with an Adapted Job Satisfaction Survey (AJSS) (adapted from the work of Spector)³⁰, which was sent out to all dietitians registered with the Health Professions Council of South Africa (HPCSA) by either e-mail or post. The objective of this study is therefore to determine the level of job satisfaction and the influencing factors on South African RDs, and where negative issues exist, provide a direction for the dietetic profession on a variety of levels (including: training institutions, professionally active RDs, employers, the professional board and the professional association), in an effort to protect and maintain job satisfaction of active members and hence the profession. Thus on a larger scale this research aims to contribute additional information to the matrix of health care as another small step towards ensuring and maintaining a healthy nation.

1.2 THEORIES OF JOB SATISFACTION

In the early 1900's Frederik W. Taylor, an American mechanical engineer, started to research and apply what he described as principles of scientific management. Taylor devised a method and philosophy that factory and blue collar workers should be assigned small specific tasks in the production line, in an effort to enhance industrial productivity, reduce inefficiency and enhance job security, therefore bringing about securing a '*maximum prosperity*' (as Taylor put it) to both the employer and employee.³¹ At the time this theory of "Taylorism" was hailed as a break-through in industrial management and was hence adopted as a management style in industries almost overnight across the USA and spread rapidly to Europe influencing industry in Britain, France and Germany.³² Although his methods played an enormous role in industry, they were however, controversial, as these specifically assigned tasks resulted in workers becoming tired and disgruntled with their work, and feeling dehumanised by having to do specified tasks in a specified way and within a specified time. This systematic production line under which workers were controlled, did not allow them to think, excel or achieve in their work, there were no incentives to work harder, but rather to become robotic in behaviour. In addition to this, workers could not maintain the expected high level of performance in their work throughout the day, resulting in a high margin of error and hence significantly affecting productivity.³² Prior to this era in industrialisation, job satisfaction was considered irrelevant and insignificant to managers, as an individuals' job or occupation was usually pre-determined by that of their parents' occupation or social standing. As a result, over time, as workers tried to work against management, psychologists slowly stepped in to analyse the emerging phenomenon of job satisfaction.^{2,33}

It was only in 1954 that Abraham Maslow, an American psychologist, proposed what is considered one of the most influential theories: *The Hierarchy of Needs*.³³ Maslow's theory was not developed as a theory for job satisfaction, but rather a theory for human needs. Researchers of job satisfaction, have related this theory of instinctive human behaviour and applied it into levels of job satisfaction, in an effort to better understand human behaviour in job satisfaction.³⁴ Maslow's Hierarchy of Needs Theory puts forward that the most basic human needs are located at the bottom of a diagrammatic ladder, leading in a stepwise progression, up to the most complex of needs. It is postulated that once the most basic of needs are met, then an individual will instinctively strive to achieve

the next level of proposed needs and so forth, until the highest level is obtained.³³ In adapting this to job satisfaction the levels of satisfaction start from the most basic being physiological needs (a job, space to work, resources to do the job) and safety (safety of the work environment, a contract), to being more complex: as a means of belonging (being accepted and respected as a member of the workforce team, such as the multi-disciplinary team (MDT)), esteem (confidence to work, respect of colleagues and respect by colleagues) and lastly, self-actualisation (creativity, morality, problem-solving, autonomy). This theory has been regarded by some researchers to have laid the foundations for the theory of job satisfaction where it is instinctive for individuals to strive to satisfy these 5 specific levels.³⁴ Benson and Dundis (2003)³⁴ found that the application of Maslow's Hierarchy of Needs in health care employees helped employers to understand and motivate their employees in such a way to make the health carers feel secure, needed and appreciated in their positions.

Five years later in 1959, Frederick Herzberg, also an American psychologist, published his theories on job satisfaction. His theory was titled the *Two-Factor Theory*, where he looked at aspects that could either promote or reduce levels of job satisfaction.² Herzberg formulated two lists of factors that he believed influenced job satisfaction. The first list was called the *Motivators*, which are intrinsic, internal or directly related to the job, such as achievement, recognition, responsibility, the work itself and the ability to grow and advance. The second list was named the *Hygiene-factors*, which are extrinsic or indirectly related to the work itself. The hygiene factors include salary, job status, job security, supervision, inter-personal relationships with colleagues, personal life and company policies. An important aspect of these hygiene-factors, is that if they are absent they would create a negative attitude, however, their presence does not necessarily create satisfaction.²

Consequently to Maslow and Herzberg there have been many who have studied and attempted to create models, frameworks and theories of job satisfaction, mostly coming to similar conclusions.³⁵⁻³⁸ The simplest framework was put forward by Souza-Poza and Souza-Poza (2000),³⁹ where they simply postulated that job satisfaction is a balance between those factors in ones job that create 'pleasure' versus those that create 'pain'. Naturally an imbalance will occur between the two to predict either satisfaction or not.³⁹

1.3 JOB SATISFACTION IN THE HEALTH PROFESSIONS

Job satisfaction in health care professionals is not only important for both employers (in terms of work productivity) and employees (in terms of their personal health and well being),⁵ but it also plays a role in patient satisfaction and their quality of care^{7,26} and the work productivity of the MDT. Thus job satisfaction in health care professionals has a 4-directional role. This can however be taken further in that job satisfaction can be extrapolated into a reason for individuals to either leave a profession or even their area/country of residence in search of greater job satisfaction.^{29,40}

For some time now, there has been a highly criticized shortage of nursing staff on a global scale, so much so that it is predicted there will be a shortfall of nurses by 30% by the year 2020 in the USA.¹⁵ Kavanaugh (2006)⁴¹ claims that there will also be a shortage of physical therapists, occupational therapists and technicians in the USA in the foreseeable future (yet no mention of RDs), which will create an overall healthcare labour shortage. In the short-term, a shortage of Allied Health Professionals (AHPs) will not create a heightened frenzy in healthcare recruitment. In theory as departments become understaffed, it will result in staff restructuring and maximal staff utilisation, creating a definite decline in job satisfaction. This has already been demonstrated in RDs in the USA due to cost-reduction in healthcare systems, forcing a reduction in dietetic staff and hence an increased pressure and workload through maximal staff utilisation. This forces RDs to become more generalist in practice and overworked, causing a rapid decrease in the level of job satisfaction, resulting in the remaining dietetic workforce to want to leave their current job⁴². Various studies have proposed that a key to reduce the intention of staff to leave is to address job satisfaction issues within the profession^{15,29,43-45}, which naturally, in the case of Kwon's (2001)⁴² study, would have to address the issues of workload and opportunity to practice in an area of expertise.

Most of the literature on job satisfaction within the medical field has been conducted on nurses and doctors,^{10-12,14,16-19,22,24,25,46-71} with few studies being conducted on AHPs^{5,6,40,72-77} and even fewer still, on RDs.^{3,4,7,9,78,79} A review of the literature, shows that research on job satisfaction of health professionals has been measured far and wide across the globe, spanning from USA (nurses,^{41,53,64} doctors,⁴⁷ OTs^{70,75} and RDs^{3,4,7,9,78}), Canada (nurses¹⁷), Ireland (nurses⁵⁸), United Kingdom (UK)(nurses,⁶⁶ doctors⁴⁹ and AHPs^{40,75}), Iceland

(nurses¹⁹), Norway (doctors and nurses,¹⁸ and nurses²¹), Denmark (doctors⁶²), Finland (physicians⁶⁷), Belgium (nurses⁵⁵), Germany (nurses⁶⁵), Hungary (nurses⁵⁶), Italy (nurses⁶¹), Jordan (nurses²²), Mainland China (nurses^{20,24}), Taiwan (nurses⁵¹), Hong Kong (nurses⁴⁸), Japan (nurses^{11,16} and doctors⁵⁰), Australia (nurses,⁷⁰ OTs^{5,6} and other AHPs⁷⁵), New Zealand (psychiatrists⁶³) and ultimately to South Africa (nurses^{46,68,69,71} and doctors^{54,57}).

In summary most of the studies reported a slight to moderate level of job satisfaction amongst health professionals, where no trends of extreme satisfaction were found.

Nurses were satisfied with the social climate and nature of their work⁸⁰. However there were strong trends of low job satisfaction in nurses with regard to low levels of responsibility and autonomy,^{17,21,23,44,45} inadequate salaries,^{12,17,21,46,55,68,69,71} high level of job stress,^{19,23,82} heavy workload,^{24,44,45,69,71,80} poor organizational management,^{51,61} lack of training opportunities^{21,46,68} and a lack of opportunities for promotion.^{11,12,46} In contrast, doctors showed a low level of job satisfaction from being overworked, understaffed, having demanding administrative tasks and inadequate salaries.^{18,51-54,57}

Despite the weight of this research being dedicated to the nursing profession, Crow *et al* (2006)⁸² maintains that the measure and interest in job satisfaction is not a phenomenon unique to nurses alone, but rather all health care professionals face dissatisfying aspects of their jobs. Although these dissatisfying aspects cannot be removed entirely, they can most certainly be reduced in an effort to increase job satisfaction levels.⁸²

As previously mentioned, research on job satisfaction in AHPs is limited. The research showed similar trends found in the nursing studies, where strong trends in satisfaction stemmed from a perceived achievement, interpersonal relationships with colleagues and the nature of the work itself.⁷⁶ Yet lower levels of job satisfaction were predominantly from their perception of members from the MDT perceiving their profession as having a lower status,⁵ poor salary,⁷² lack of promotional opportunities^{72,76} and a lack of autonomy.^{72-74,76}

The research done on job satisfaction in RDs has predominantly been done in the USA. Agriesti-Johnston *et al* (1982)⁹ was the first to document this work, where they initially

sampled the whole USA dietetic population and with time, slowly zoning in geographically on specific states (e.g. South Carolina)³ and later zoning into a city (e.g. New York)^{4,78} with the most recent study focussed on a specific area of expertise in a specified state (i.e. Sullivan *et al* (2006)⁷ looked at job satisfaction in renal dietitians in Ohio). In summary this American-strong research demonstrated that RDs were generally satisfied with their work when having recognition of expertise with the public⁷⁸ and recognition of contribution within the MDT with health care professionals.⁵² Yet there were strong trends with low levels of satisfaction due to poor salaries,^{3,4,7,78} insufficient opportunity for career growth,^{3,4,7} lack of respect from health care professionals,⁷⁸ competition of dietetic colleagues creating professional isolation,⁷⁸ difficulty in maintaining professional development⁸³ and a negative public perception of the RD – being described as the “food police”.⁷⁸

1.4 VARIABLES OF JOB SATISFACTION

The ‘pushers and pullers’ or ‘pleasure and pains’ that define job satisfaction can impact on an individual either independently or in combination with other factors. Job satisfaction variables have been associated with personal, interpersonal and organizational factors, which are measured from demographic variables, variables of the work task itself and variables that are part of the work environment.^{84,85}

1.4.1 Demographic variables

1.4.1.1. Age

It is well reported that a positive correlation exists between job satisfaction and age,⁸⁶⁻⁸⁸ yet there is a discrepancy on the shape of this relationship. It is disputed that the relationship between age and job satisfaction is linear, in that, satisfaction increases with age.^{86,87} The reasons behind this associated relationship are that at different ages, individuals experience different values, expectations and needs. Janson *et al* (1982)⁸⁶ and Bernal *et al* (1998)⁸⁷ found that the younger workforce generally wanted a challenge and responsibility which is not readily available to them due to their inexperience, whereas older workers have had time to move into more rewarding and desirable roles creating a greater job satisfaction. One can also dispute the fact that there is a generational gap in values and education, thus creating a difference in expectations.^{86,87}

In contrast Hochwater (2001)⁸⁸ and his co-workers suggested and demonstrated that this age to job satisfaction association is a U-shaped curve. They described the younger generation to be new, highly motivated and enthusiastic, experiencing high levels of job satisfaction, which gradually reduces with time. Yet, as individuals grow older they gain more insight and experience to obtain more desirable posts in their work, increasing their level of satisfaction.⁸⁸

1.4.1.2. Gender

The difference in job satisfaction between the genders has been a long debated and researched topic in the literature, primarily due to the gender earnings gap. Despite the evidence presented and many conclusive findings made, there appears to be no consensus between studies as to which gender experiences a greater job satisfaction.⁸⁹⁻⁹³ Theories lie in the probability of differences in satisfaction occurring between the genders due to differences in values and attitudes of each gender.^{90,94} However it seems that the impact of other variables influences the differences in attitudes, for example, Long (2005)⁹⁰ found differences purely based on the level of education, where, simply both males and females who had lower levels of education were in lower skilled jobs and thus showed lower levels of job satisfaction. In contrast women with higher levels of education, were found to have lower levels of satisfaction than their male counterparts, where the differences were based on differences in expectations.

From this perspective dietetics is a female dominant profession,⁹⁵ and can thus hold the potential to yield a biased report pertaining to the true level of job satisfaction experienced in the profession.

1.4.1.3. Family and marital status

There is a definitive difference between the genders based on their marital status and having children with regard to job satisfaction. Paull (2008)⁹⁶ clearly demonstrated how women of childbearing age tend to prefer part-time work due to the demands of raising a family, where this need tends to drop after 10 years after the birth of their firstborn. In contrast, men are satisfied with full-time work irrespective of having a family or not: provided they did not have to work overtime hours.⁹⁷ Again, considering the dietetic

workforce is predominantly female dominant, having a family could theoretically influence their level of job satisfaction in relation to working full or part-time.

1.4.1.4. Level of education

The level of education is assumed to increase one's ability in obtaining a job and more so, a job that one is interested in together with a greater earning potential. In nursing, studies have suggested that employers and educational facilities should support employees in taking higher nursing education programmes of Masters and Doctoral degrees, as a means to improving nursing job satisfaction. In fact, so much so that some learning institutions have developed a 'fast-track' graduate program for nursing students to earn their higher degrees faster.⁴⁴ Yet Lu (2007)²⁰ demonstrated in nurses in Mainland China, that those with lower levels of training had greater job satisfaction than those with a Bachelors degree or higher. Greger (2007),⁹⁸ reviewed this opportunity in RDs in the USA. His findings were that no matter how qualified a dietitian is (from a Bachelors degree to a PhD) it did not enhance the level of job satisfaction. RDs were quoted to still earn 25% less than the average for AHPs, irrespective of their level of education.

1.4.1.5. Professional experience

The trend of professional experience related to job satisfaction is similar to the trend as found in age related to job satisfaction. Kavanaugh *et al* (2006)⁴¹ demonstrated in doctors, that the years of professional experience has a positive linear association with job satisfaction. The reasons for this association have been linked to having a change in status, increase in salary and greater autonomy, but for the individual it is more that they develop confidence and sense of self-pride and self-worth which correlates with Maslow's Hierarchy of Needs Theory. In this way human needs are being met and hence influence job satisfaction positively.

1.4.1.6. Professional expertise

The type of work or rather area of expertise within which one works has been shown to play a role in job satisfaction. Studies have shown health care professionals working in the fields of oncology and mental health tend to have a higher prevalence of burnout, psychological stress and low level of job satisfaction.^{56,81} This outcome resulted in professionals providing a poor quality of service and hence a high resignation rate of

professional positions. This left institutions to suffer high costs due to high staff turnover, patients to receive inadequate health care and professional bodies to decline in number due to professionals leaving the profession.^{15,16,56,81,100,101}

In the initial job satisfaction studies done on RDs in the USA by Agriesti-Johnson *et al* (1982)⁹, it was found that generalist RDs found their jobs less satisfying, whereas those with an area of expertise demonstrated higher levels of job satisfaction. Mortenson *et al* (2002),⁹⁹ found that RDs tended to demonstrate a positive increase in job satisfaction when there was an increase in professional involvement (defined by higher skill development, a stimulating job environment, larger workload and increased responsibility).⁹⁹

Thus the area of professional expertise can influence job satisfaction either way, depending on the nature of the expertise being emotionally draining, stressful or even as simple as having the opportunity to develop an area of expertise.

1.4.2. Work task variables

Work task variables refer to the nature of the work and thus there are a variety of these variables. It is easy to tie up the nature of work into the nature of career choice and hence career satisfaction. As previously stated, the measure of career satisfaction is not the intention of this study and hence for the sake of the current investigation, the focus of work task variables will only be in relation to job satisfaction. The work task variables are the intrinsic factors or motivators as described in Herzbergs (1966) *Two Factor Theory*.² The presence and quality of these factors only increase the level of job satisfaction.

1.4.2.1. Autonomy

Autonomy is the ability for an individual to self-govern through using rational thought to make an informed, independent decision or action.^{48,76} Reflecting this concept back to Taylorism, conflict came when workers had little to no autonomy in their job role, hence bringing about very low levels of job satisfaction.³² Similarly when applied to health professionals, the absence of autonomy in the job role has consistently showed in the research to lower levels of job satisfaction.^{5,72-74,76} Bailey (1990)⁷² conducted a study of Australian Occupational Therapists (OT) (n=696) and found that the lack of autonomy was one of the main reasons for OTs leaving the profession.⁷²

1.4.2.2. *Workload and work task diversity*

This does not need much explanation in that the greater the level of workload and stress in a job, the less job satisfaction is found and in extreme cases the higher the rate of staff turnover.^{56,81} Similarly the greater the monotony and less diversity of the work done, the lower the level of satisfaction, due to boredom and inability for professionals to make use of their knowledge and skills to their highest potential.^{6,40,50,75}

1.4.2.3. *Achievements of the job*

Achievement in the job is more an incentive for employees which demonstrates their worth and sense of doing a good job. This relates to Maslow's Hierarchy of Needs Theory where achievement is a sense of being needed and appreciated. In the case of RDs when a patient/client is pleased with the work done or has reached goals, this is seen as a reward of a good job done by both parties. This emotion boosts job satisfaction and motivates the RD to reach similar if not better goals.⁴⁰

1.4.3. The work environment

1.4.3.1. *Salary, rewards and benefits*

Salary and payment for efforts is a main driving force behind job satisfaction. It is not only a financial reward for ones efforts, but also an indicator to an individual of their value in what they do. Instinctively people strive to try and earn more, however Greger (2007),⁹⁸ wrote that despite the efforts of RDs in the USA to improve their salaries, they are the lowest paid within the AHP grouping, with earnings less than 25% for the average income for AHPs. However in contrast Australia appears to offer more competitive incomes for RDs in comparison to the other health professionals,¹⁰² where on average RDs earn the same with the potential to earn 8% more than the average for AHPs. In South Africa the salary packages are varied based on public and private fee structures, and it is not known how competitive they are with other AHPs.

1.4.3.2. *Contract*

A contract is seen as giving an individual a sense of security in their employment combined with direction and definition of their job role and tasks. It is suggested in the literature that having a contract influences attitude, behaviour and commitment to their position, creating

an overall increase in job satisfaction, irrespective of the contract being for a temporary or permanent position.¹⁰³

1.4.3.3. Hours of work

It has been shown in doctors that a reduction of hours worked, reduced occupational stress and hence increased job satisfaction, irrespective of gender, marital status and family.^{49,50,54} There is naturally a feeling of discontent when the employer expects overtime work without financially rewarding the employee.⁹²

1.4.3.4. The physical environment

Work environment plays a role in the health and work stability of health care professionals^{104,105} and can thus impact on job satisfaction. For example Rossberg *et al* (2004),¹⁰⁵ explored the influence of the work environment in mental health wards on job satisfaction of health care professionals. They found that factors such as patient conflict, depression and complaints contributed to very low levels of job satisfaction.¹⁰⁵ Work environment can range from the physical set-up such as access to toilet facilities or internet and the physical space to work in, to more complex issues such as organizational management.¹⁰⁴ The work environment is a variable that can easily be changed or adapted to improve job satisfaction. The absence or limitation of essential factors that create a psychological stress, are important in an effort towards increasing job satisfaction.¹⁰⁶

1.4.3.5. Rural versus urban based work

Globally studies are very much in agreement in demonstrating that rurally-based health professionals are significantly less satisfied than their urban-based counterparts. These studies are in agreement from a variety of countries, including Japan,⁵⁰ South Africa⁵⁴ and Australia.⁷⁵ Matsumoto *et al* (2005)⁵⁰ found from rural-based doctors in Japan only 27% of currently rural-based doctors had intentions of remaining in long-term rural-based service. The 'push' factors on these health professionals in rural areas include: few opportunities for professional development, having to interact with municipal governments,⁵⁰ high workload, understaffing, limited resources, professional isolation⁵⁴ and lack of security⁵⁴. Eick (1981)⁷⁹ found in RD's in Minnesota, USA that a major factor in reducing levels of satisfaction in rurally-based RD's were due to the positions forcing the RD's to remain generalist in their practice, hence inhibiting their ability to develop an area of expertise.

1.4.3.6. *Public versus private sector*

Doctors working in public sector hospitals in South Africa have shown to carry a greater occupational stress, leading to poor levels of job satisfaction.⁵⁷ This has been documented in other countries such as Australia¹⁰⁷ and Nigeria.¹⁰⁸ This stress comes from: low staff morale, long working hours, limited budgets, lack of resources, inadequate security, poor salaries and poor opportunities for promotion. Private enterprises always seem more appealing due to the practitioner having more control of their work load and salary structure, however it can also carry an occupational stress of having to administer and financially support the enterprise, which medical professionals are not always appropriately trained to do.⁶⁷

1.4.3.7. *Professional development*

The field of dietetics is constantly changing in practice as research is becoming more advanced and abundant. As a result dietitians need to keep up to date with these new trends and information, making continuing professional development (CPD) an essential aspect not only for the job that they are in, but also for career development and maintenance of professional registration.¹⁰⁹ If a job does not support CPD, then it is up to the individual to spend personal time to maintain their CPD status, or alternatively miss CPD activities that are hosted during working hours, or take leave to attend these activities. Lack of support by employers for CPD can most certainly create low job satisfaction as individuals find it stressful if they cannot meet their required quota for the registration year.¹¹⁰

1.4.3.8. *Professional status*

Professions can have a stigma or stereotype linked to them, where for example Goodin (2003)⁴⁴ reported that nurses were portrayed as the 'Physicians Handmaiden'. Such negative images give the impression of a profession to be undervalued without having a full understanding of what they actually do and contribute to the medical team.⁴ AHPs in Australia reported a similar negative attitude of their respective disciplines not being respected by fellow medical professionals⁵ and RDs in New York were described by the public as the 'Food Police'.⁷⁸ Boyhtari *et al* (1997)¹¹¹ described the evolution of RDs in the health care industry in looking at the role of the clinical RDs as perceived by physicians. Summarising from the appropriate authors, they found that in the early 1970's,

55% of physicians in the USA, did not believe that RDs should contribute to the decision-making within a health care team. By the 1980's physicians started to acknowledge that clinical support RDs had a role to play in the health care team and the 1990's only 11-35% of physicians believed that RDs should be the primary decision makers on nutritionally-related aspects of patient care. Naturally the perceived role of the RD in each of these cases, was significantly different in RDs, in comparison to the physicians.¹¹¹

Dietetic intervention is generally long term, where results from active practice are not immediate and hence, as results are slowly achieved over a long duration of intervention, it can be misperceived by other professionals as irrelevant in patient health care.¹¹²

1.5 MEASUREMENT OF JOB SATISFACTION

Job satisfaction is subjective, based on individuals' attitudes and expectations, together with the impact of those variables, as discussed above that can act either independently or in combination to influence the overall attitude. This complexity and variety of variables in addition to unknown or undefined variables, makes measurement very difficult.^{38,106} In fact Van Saane *et al* (2003)¹¹³ clearly stated that there is no 'gold standard' for measuring job satisfaction, especially considering there are no standardized variables by which one can measure job satisfaction. Quite easily a study can have opposing results from 2 different people in the same job, simply due to the fact that the aspects, by which they use to self determine their extent of job satisfaction, are different.^{106, 114}

A variety of methods and tools have been used in past studies in an attempt to best measure job satisfaction. Literature has quoted the use of focus groups,⁴⁰ individual interviews either directly^{45,61,80} or telephonically¹¹⁵ and the most widely used has been self administered questionnaires.^{11-13,16-21,24,46,51,53,55-58,68,69,71,81,116-118}

Questionnaires as a tool for the measurement of job satisfaction have in themselves been highly variable, in that they have been generalised to fit all types of occupations. Such questionnaire examples include the Job In General (JIG),¹¹⁹ the Job Descriptive Index (JDI),¹²⁰ the Job Satisfaction Survey (JSS),³⁰ and the Minnesota Survey Questionnaire (MSQ).¹²¹ On the other hand some tools have been designed to be occupationally specific, such as the Nurse Satisfaction Scale (NSS)¹²² for nurses, Dentist Satisfaction Survey

(DSS)¹²³ for dentists and Quality of Teacher work life (QTWL)¹²⁴ for teachers. No such specifically designed tool has been developed to measure job satisfaction in dietitians. All the above-mentioned tools were considered for this research, however, a tool was required to be universal towards assessing all types of roles and sectors within which dietitians are employed (ranging from business, sport, food industry, media, public health, foodservice, education, research, self-employment and in the clinical setting) and be sensitive towards specific aspects of dietetic roles. As a result the JSS was selected as it provided the best-fit option to assess general attitudes, however it was adapted to fit that of the dietitians working environment. Adaptation and the use of the JSS is further discussed in Chapter 2: Methodology, under subsection 2.4.1.2, titled Job satisfaction questionnaire.

1.6 CURRENT TRENDS IN SOUTH AFRICA

Although there is no published literature that directly assesses job satisfaction of RDs in South Africa, a study by Visser *et al* (2006)¹²⁵ followed up dietetic students after the completion of their year in compulsory community service. Twenty-six percent indicated plans of working overseas with only 28% planning to follow a career as a dietitian within the public sector in SA. This trend was predominantly due to the students being allocated posts in the Department of Health (DOH) where resources, budgets and staff are limited, in addition to be being in an area that was not necessarily the student's choice. Although these figures demonstrate over a quarter of newly trained dietetic skills leaving the country, the statistics of the Health Professions Council of South Africa for dietetic registrations over the last 16 years have reflected an average annual increase of 5,1%.²⁷ Growth in the professional registration is currently greater than those deregistering for whatever the reason may be.

1.7 THE ROLE OF THE REGISTERED DIETITIAN

RDs contribute towards the health and well-being of patients/clients and therefore is considered to play a role in the MDT in patient care. Their role is to identify nutritional needs and translate evidence-based practice into practical guidelines and intervention for individuals to make more informed decisions when it comes to food choices and lifestyle behaviour. However it is essential to recognise that the role of the RD is not only in treatment of disease, but rather and more importantly in the prevention of disease. Thus the role of the RD is diverse, acting on all individuals irrespective of their health status.¹²⁶⁻¹²⁸

Traditionally the role of the RD was based in institutional foodservice, but with time the profession has evolved to become more involved on a clinical basis in the health care industry, government, education, research, media, business as well as the food and pharmaceutical industry.

The main problem is that the work of the RD has a slow and long-term effect, thus where results are not seen immediately, it is difficult for those who are unaware of the effects, to acknowledge the worth of the therapy.¹²⁶ Thus in the long term, RDs play a role not only in the health of the nation by reducing avoidable diseases, but in the case of serious disease, reduce the cost effect of its treatment through reducing duration of disease and length of stay in hospitals.^{129,130} It is well known (amongst RDs!) that undernourished patients in hospital have shown to increase costs due to their impaired immunity and decreased wound healing.¹³¹ Due to this undernourished patients therefore need more intensive nursing to reduce the clinical complications together with the increased costs due to increased duration of hospital stay, a greater risk for readmission and naturally a higher rate for comorbidities and mortality. It is quoted that often patients only become undernourished due to poor management from nurses and doctors due to their inadequate nutritional assessment and poor nutritional knowledge and practice.^{132,133}

To practice as a RD, the professional body is statutorily regulated and governed by a strict ethical code set by the HPCSA, to ensure consistency and the highest standard of dietetic practice.¹⁰⁹ As previously stated, job satisfaction of the RD directly acts on 4 factors where the ultimate goal is to ensure maximum benefit for the patient/client. As Sullivan (2007)⁷ put it ‘ *there is an intriguing possibility that the health outcomes of patients may depend on the job satisfaction of health care providers*’. Therefore should RDs experience low levels of satisfaction it could have the potential to impact on their quality of work, thus impacting on the patient/client and ultimately result in individuals leaving the profession. In perspective a loss of dietetic workforce will in itself impact on patient/client requirements and hence health.

1.8 SUMMARY

Taking into consideration the current low levels of job satisfaction found in healthcare professionals throughout the world, this study is intended to investigate the level of job satisfaction in South African registered dietitians and determine what variables influence job satisfaction levels.

CHAPTER 2

METHODOLOGY

2.1 AIM AND OBJECTIVES

2.1.1 Aim

The aim of the study was to determine the overall level and influencing factors of job satisfaction of South African RDs.

2.1.2. Objectives

The objectives were to determine (1) the overall level of job satisfaction of South African RDs, (2) if there is a difference in job satisfaction between RDs employed within and outside of South Africa (3) what parameters of dietetic jobs provide the greatest level of job satisfaction (4) what parameters of dietetic jobs provide the least level of job satisfaction and (5) identify relationships that may occur between demographic factors and factors that contribute to job satisfaction.

2.2 STUDY DESIGN

The study followed a cross-sectional descriptive design.

2.3 PARTICIPANTS

2.3.1 Study population

A census of 1702 RDs, registered with the HPCSA for the year ending 2007, was conducted.

2.3.2 Selection Criteria

All RDs on the HPCSA register for 2007 were included in the sample, except for those RDs in their community service (CS) year, as the CS RDs are in a temporary post that is designated by the South African Department of Health (DOH), thus these individuals have the potential to give a biased report of job satisfaction. CS RDs have a unique registration number with the HPCSA, which enabled easy extraction from the list. In total there were 193 CS dietitians for 2007, leaving 1509 RDs in the sample. Thus, all 1509 RDs who met the selection criteria were included in this national survey.

2.4 DATA COLLECTION

Due to the wide geographic distribution of the sample across the country, a self-administered questionnaire was deemed the most practical tool for data collection. The questionnaire consisted of 2 sections to collect data pertaining to demographics and the level of job satisfaction.

2.4.1. Data collection tools

2.4.1.1. Demographic questionnaire

A demographic questionnaire (Appendix 1) was designed by the investigator to collect the relevant demographic data of the RDs. The questionnaire contained 23 questions in total. Twenty-one of the questions were close-ended to yield information on: non-identity related personal details, general information on dietetic qualifications and activity, current employment details and future intentions within current employment. There were also two open-ended questions, for participants to discuss their primary likes and dislikes of current employment. The aim of this questionnaire was to describe the nature of the respondents and target the fifth objective of the study, by identifying any relationships that may occur between job satisfaction and demographic factors.

2.4.1.2. Job satisfaction questionnaire

Ideally, using the same questionnaire as used in previous dietetic-related research, would enable comparisons to be made. However, considering the majority of the research was conducted in the 1980's and based in the USA, where the employment profile of the RDs at that time was primarily institution-based, this did not pose as a good comparison to present day dietitians in South Africa. The role of the RDs has slowly evolved over the last 28 years to become more involved as consultants for the food industry, media and business, thus requiring questions on a wider scale.

Despite the range of job satisfaction questionnaires available, the Job Satisfaction Survey (JSS) questionnaire, designed by Professor Spector (1985)³⁰ was used and adapted to contain questions that are more relevant or appropriate to RDs. This JSS has been used successfully to assess job satisfaction in a number of professions.³⁰ Plus, due to its simple framework and theme selection, the questions are easily adaptable to obtain responses that are more appropriate to the dietetic profession.

The adapted JSS (AJSS)(Appendix 2) thus contained 9 themes and 36 questions (4 questions per theme) with a 6 point Likert Scale for participants to rate their responses. It was important to maintain an even Likert scale in order to ascertain either a positive or negative attitude in response to the theme, therefore the option for a neutral attitude was not included. The range of the Likert Scale ranged from 1-6 as disagree very much, disagree moderately, disagree slightly, agree slightly, agree moderately and agree very much, respectively.

The themes or variables of the questionnaire were based on past findings of job satisfaction in dietitians and allied health professionals. These themes included: salary,^{4,134} promotion opportunities,^{4,134} professional development,^{4,83} relationship with fellow dietitians,⁷⁸ recognition from other health professionals,^{9,78,99,134} rewards of the job, nature of the job, the working environment⁷⁹ and communication as a RD.

The questions were randomly negatively or positively worded such that no apparent pattern occurred, thus negating the respondent to become indolent in their answering of the questions. Therefore the questionnaire yielded a score for both job satisfaction in total and for each variable.

A cover letter [Electronic format (Appendix 3) or Postal format (Appendix 4)] was sent out with each questionnaire to introduce and explain the purpose of the research and included notification of ethical approval, the information required from the participant, the time required to complete and return the questionnaire and assurance of maintaining anonymity and confidentiality of all participants.

2.4.1.3 Pilot study

The questionnaire was piloted on a convenience sample of South African RDs who had studied and worked in South Africa, but were no longer registered with the HPCSA, due to their having left the country to live and work abroad. A sample of 10 RDs from a list of 22 known ex-colleagues of the researcher were randomly selected and used in the pilot study. The aim of the pilot was to test the face and content validity of both the demographic and job satisfaction questionnaires. As a result of the pilot, 2 questions needed modification in terms of display and wording.

2.4.2. Job satisfaction survey

In the interests of ease of communication, reduction of postal and paper costs and independence from the postal system, e-mail was the preferable method of contact. Despite the advantages, the response rate from e-mail from previous surveys done on RDs has demonstrated to be on average 15%¹³⁵ to 29%¹³⁶, as measured in Canadian and British based studies respectively. The HPCSA database does not contain e-mail addresses and thus the assistance of the Association for Dietetics in South Africa (ADSA) was requested (Appendix 5) in the utilisation of their current e-mail database. In total 811 dietitians were contacted using this method, representing 53,7% of the RDs registered with the HPCSA. Instructions were provided on how to return the completed questionnaires in addition to having a specifically designated e-mail address set up for the purposes of the research so as to maintain anonymity and professionalism of the project.

All HPCSA non-ADSA members were contacted by post, the list of these individuals were simply done by extracting the ADSA members from the HPCSA database by using the HPCSA registration numbers, by which members are registered with both organisations. This method also maintained anonymity and eliminated any problems with regard to name changes (especially as the dietetic community is predominantly female and often members maintain registration in their maiden name and practice under their married name or visa versa). The 2007 HPCSA database was obtained from the Division of Human Nutrition at Stellenbosch University, where the division had already purchased the database and obtained permission to make use of it for advertising and research purposes for the year. This method was used to make contact with 698 RDs, representing 46,3% of the RDs registered with the HPCSA.

Past studies that have made use of a postal self-administered questionnaire on RDs who are geographically widespread, the response rate has been demonstrated to range on average from 36%⁸³ to 52%³. However these studies have been predominantly American-based.

Research on surveys have repeatedly shown that reminders have a positive effect on response rates.¹³⁷ Thus in an effort to increase the response rate, irrespective of the communication method used in this survey and regardless of reasons for non-response, a reminder was sent out. The postal reminders were sent out only to those who did not

respond, where non-responders were identified by the postal questionnaires being numbered. For the electronic formats, reminders were sent out in the associations' monthly newsletter. Reminders were thus sent out 6 weeks following the initial posting and consisted of the same material as initially sent out. Both the initial and reminder batches requested for the completed questionnaires to be returned within a month of the date received.

2.5. DATA ANALYSIS

Nine themes were identified and each represented by 4 questions, these themes included: salary (questions 1, 10, 19 and 28), promotion (questions 2, 11, 20 and 33), knowledge and skills/CPD (questions 2, 12, 21 and 30), dietetic colleagues (questions 4, 13, 22 and 29), rewards of the job (questions 5, 14, 23 and 32), the work environment (questions 6, 15, 24 and 31), non-dietetic colleagues/members of the MDT team (questions 7, 16, 25, 34), nature of work (questions 8, 17, 27 and 36) and communication (questions 9, 18, 26 and 36). This provided 36 individual questions, which respondents gave a score ranging from 1 to 6, where 1 represents the least satisfaction and 6 represents the most.

Scoring the questionnaire was based on the score provided by the participant (ranging from 1 to 6). However 17 of the 36 questions were negatively worded (questions: 2, 4, 8, 10, 12, 13, 14, 15, 16, 19, 20, 23, 24, 26, 29, 31 and 32) thus, those scores had to be reversed, which was done by subtracting their value from 7, such that all values were in continuity with the scores from the positively worded questions.²⁶ For the ease of interpreting data, these scores were translated into percentages of the total possible satisfaction level (highest possible level =216). These percentages were categorised into the 6 categories to represent levels of satisfaction: very low satisfaction (0-17%), moderately low satisfaction (17,1-33%), slightly low satisfaction (33,1-50%) slightly satisfied (50,1-66%), moderately satisfied (66,1-83%) and very satisfied (83,1-100%).²⁶

The data was captured in an Excel worksheet and analysed using Statistica 8.0. From this, the response rates were calculated using the percentages of the total number of replies divided by the total number of questionnaires posted out. The response rate helps to determine the accuracy of the survey, where the greater response, the greater the accuracy

of the results. Frequencies for the demographic data were calculated to demonstrate and describe the nature of the respondents.

In regard to the statistical inferential analysis, where continuous variables were compared to nominal variables, an analysis of variance (ANOVA) test was used to determine the difference between the levels of the nominal variables. In those cases, where the data had a normal distribution, the ANOVA F-test was used to calculate significance, whereas data not normally distributed was measured using the Mann-Whitney U test (for assessing 2 groups) or the Kruskal-Wallis test (for assessing 3 or more groups). When continuous variables were compared against another continuous variable, a regression and correlation analysis was used. Where variables were not normally distributed the data was interpreted using the Spearman rank correlation analysis. When comparing nominal variables with other nominal variables, to determine their influence on each other as opposed to acting independently, the Pearson's chi-square test was used. Thus any relationships that exist between the demographic data and level of job satisfaction could be demonstrated. Statistical significance was set at a p-value of less than 0,05.

2.6 ETHICS AND LEGAL ASPECTS

The protocol was approved by the Committee for Human Research, Faculty of Health Science at Stellenbosch University (N07/09/212) (Appendix 6).

2.7 ASSUMPTIONS & LIMITATIONS

2.7.1 Assumptions

The assumptions made in this study were that:

1. Respondents will respond truthfully.
2. All respondents read and understood the questions correctly.
3. All respondents can read and speak English, as the questionnaire was only distributed in English.

2.7.2. Limitations

The limitations of the study include:

1. The response rate is dependant on a variety of aspects such as: time available to participate, participants interest in the study, reliability of postal service and the goodwill of RDs participating in the study (incentives were not provided for answering or partaking in the survey).

2. This is the first study done on RDs job satisfaction in South Africa, in addition to very few having been done elsewhere in the world, limiting its comparison of results.
3. Lack of measurement tool for job satisfaction for RDs.
4. Limited budget/sponsorship.
5. Data from RDs may be limited, as those who have decided to permanently leave South Africa, may not maintain their registration with the HPCSA, as they have no intentions of returning or practicing in South Africa.

CHAPTER 3

RESULTS

3.1 RESPONSE RATE

E-mails were sent to all ADSA members of whom the target audience included the 811 full-ADSA members. Initially there was a 19,2% response rate (n=156), where it was increased by 6,5% (n=53) after sending out a reminder. Of the total 209 responses, 13 questionnaires were excluded from the data set, as they were either community service dietitians (student RDs are included in the mailing for general ADSA messages), retired or had submitted incomplete questionnaires. Thus the e-mail survey provided a total number of 196 responses indicating an overall response rate of 24,3%.

From the 698 questionnaires that were physically posted to non-ADSA members, 15,8% (n=110) initially responded, to which the reminder increased the response rate by 6,1% (n=43). From the total of 153 questionnaires returned, 9 had to be eliminated due to incomplete data provided. Thus there were 144 respondents to the postal method indicating an overall response rate of 20,6% for the postal survey.

The final sample included 340 responses from a possible 1509 RDs registered with the HPCSA, indicating a response rate of 22,5%.

3.2 DEMOGRAPHICS

The sample of 340 RDs was predominantly female (97,5%), married (59,1%), without children (53%) with a mean age of 33,3 years (SD 8,3). Exactly half of the respondents speak Afrikaans as their first language (50%), with the majority living and working in South Africa (92,6%). It was found that 49,7% of the respondents have a postgraduate qualification of either a postgraduate diploma or honours degree, with only 9% having a masters degree and 3,5% a doctorate. The data shows that the majority of respondents (72,6%) are in full-time employment, working in urban/suburban areas (83,5%), with 40% working for the Department of Health (DOH) and 37,1% in the private sector. Those who responded have predominantly been practicing dietetics for 0-5 years (45,7%) and have hence been in their current job for only 0-5 years (66,2%). The average salary level was calculated to be between R 92 000 – 141 000 per annum, with only 4,1% earning >R 393

000 per year. Only 51,7% claimed to have a fixed contract for their current position (Table 3.1).

Table 3.1: Demographic characteristics of the sample of South African RDs (n=340)

	Frequency % (n)		Frequency % (n)
Age		Level of Qualification	
20-29	39,4 (134)	Bachelor	37,7(128)
30-39	42,4 (144)	Postgraduate Diploma	25,6(87)
40-49	10,6 (36)	Honours	24,1(82)
50-59	7,1 (24)	Masters	9,1(32)
60-69	0,5 (2)	Doctorate	3,5(12)
Gender		Area of Expertise	Yes
Male	2,1 (7)	Allergies	49,1(167)
Female	97,5 (333)	Diabetes	3,8(13)
Marital Status		Cardiovascular	16,8(57)
Unmarried	40,9 (139)	Eating Disorders	9,1(31)
Married	59,1 (201)	Intensive Care Unit	5,0(17)
Children		Gastro-intestinal Tract	7,9(27)
0	53,5 (182)	Mental Health	8,5(29)
1	17,4 (59)	Oncology	2,1(7)
2	19,4 (66)	Paediatrics	3,2(11)
>3	9,7 (33)	Renal	11,5(39)
Language		Sports	5,9(20)
Afrikaans	50,3 (171)	Other	5,6(19)
English	37,9 (129)		17,4(46)
Indigenous	11,8 (40)	Years of Practice	
Residence		0-5	45,3(154)
South Africa	93,2 (317)	6-10	25,9(88)
UK	6,8 (23)	11-20	18,8(64)
Location of Work		21-30	7,3(25)
Urban/suburban	83,5(284)	31-40	2,7(9)
Rural/semi-rural	16,5(56)	Work sector	
Salary		Department of Health	40 (136)
< R44 999	6,7 (23)	Private	37,1 (126)
R 45 000 – R 62 999	4,4 (15)	Education	6,8 (23)
R 63 000 – R 91 999	14,4 (49)	Research	3,5 (12)
R 92 000 – R 141 999	31,5 (107)	Industry	7,1 (24)
		Food Service	5,5 (19)

R 142 000 – R 211 999	21,5 (73)	Hours of Work	Full Time	72,6 (247)
R 212 000 – R 391 999	17,4 (59)		Part Time	17,1 (58)
>R 392 000	4,1 (14)		Unemployed	3,8 (13)
			Not working as RD	6,5 (22)
Time in current job		Contract	Yes	51,7(176)
0-5	66,2(225)		No	21,8(74)
5-10	16,0(54)		Not Applicable	26,5(90)
11-20	16,0(54)			
21-30	1,8(6)			

In comparing the e-mail versus the postal respondents, the 2 groups were not significantly different apart from 2 aspects. Those without e-mail access were found to be working more in the rural areas (Pearson's chi-square test $p=0,0001$) and were more likely to speak an indigenous language as their first language (Pearson's chi-square test $p= 0,00002$).

3.3 JOB SATISFACTION

3.3.1 Job satisfaction in relation to themes

The overall job satisfaction score was found to be 65,7%, indicating that South African RDs have a slight satisfaction with their employment. When analysing the 9 themes of job satisfaction from the AJSS, the overall results showed that RDs are only slightly satisfied with opportunities for promotion (52,5%) and the environment within which they work (61,3%) whereas moderate satisfaction was found in relation to knowledge and skills (68,7%), rewards of the work (68,3%), colleagues (both dietetic (70,4%) and non-dietetic (71,2%)), communication (72,2%) and the nature of the work (79,3%). The lowest level of satisfaction overall was for salary, which was found to have a slightly low level of satisfaction (49,2%) (Figure 3.1).

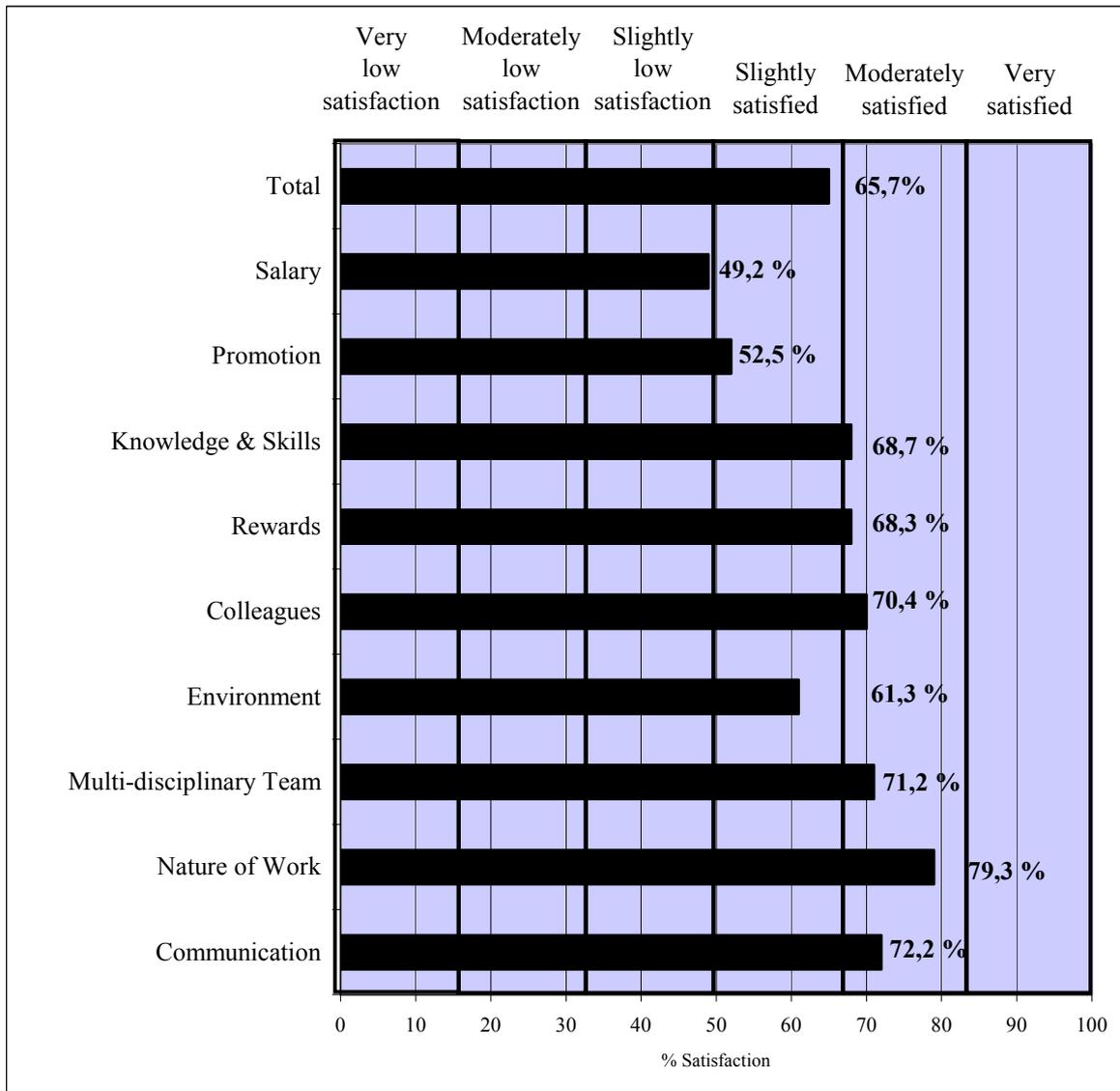


Figure 3.1: Job satisfaction scores per theme and overall for South African RDs (n=340)

Although the overall results demonstrated a moderate level of satisfaction for communication and interaction of the MDT towards the RD, many of the open-ended comments in relation to what the respondents hated most about their current position, were negatively directed towards this theme. Many of the RDs raised their concern for a general feeling of disrespect particularly from nurses, doctors and consultants, yet no comments were made with regard to other AHPs. Their comments included:

Nutritional policy implementation depends on nurses, but they are too busy and don't regard nutrition as a priority, this makes our work very hard and frustrating.

and

Doctors don't consult us for our dietetic opinion on specific patient cases.

and

I have to continuously fight doctors and consultants for nutritional interventions to be set up.

and

Doctors don't respect your opinion and don't want to keep up to date with current trends.

Linking into this theme of respect for the dietetic profession were comments of:

Personal trainers and non-dietitians give their clients ridiculous diet plans and discourage the use of dietitians.

and

There are so many so-called "professionals" who give patients nutritional advice without the appropriate qualification and they can still charge higher fees.

and

People still don't want to pay for a professional service, they would rather pay non-professionals, like Sure Slim, for a crash diet.

In contrast however, the theme pertaining to the nature of work, scored the highest level of satisfaction, reinforcing that the fact that RDs are happy with their career choice. This was further supported by the open-ended questions in relation what the respondents liked most about their current position. These comments included:

I really love what I do

and

It is rewarding to help those who really need help

and

The appreciation from patients and seeing them achieve results.

These comments in reference to the nature of the work are the essence of the job matching up with the career choice. If the level of satisfaction were low in this regard there would be a far higher level of RDs unemployed or leaving the profession. Thus, this shows that

dietetic positions are allowing RDs, to some degree, to do what they know and were trained to do.

3.3.2 Job satisfaction in relation to overseas based RDs

When comparing the level of satisfaction of those working in South Africa versus the UK (all of whom were based in the UK), the overall level of satisfaction was slightly higher in the UK, although this difference was not significant (Mann-Whitney U $p=0,291$). Despite this slight difference through the classification system, the South African-based RDs are classified as slightly satisfied (65,7%) and the UK-based RDs classified as moderately satisfied (68,4%) (Figure 3.2).

When breaking down job satisfaction into the 9 different themes, the only aspect of significant difference between the 2 groups was found, was based on salary (Mann-Whitney U $p=0,01$). The UK-based RDs were classified as moderately satisfied (60,8%), whereas the South Africa-based RDs were classified as having a slightly low level of satisfaction (48,7%) with their salary (Figure 3.2).

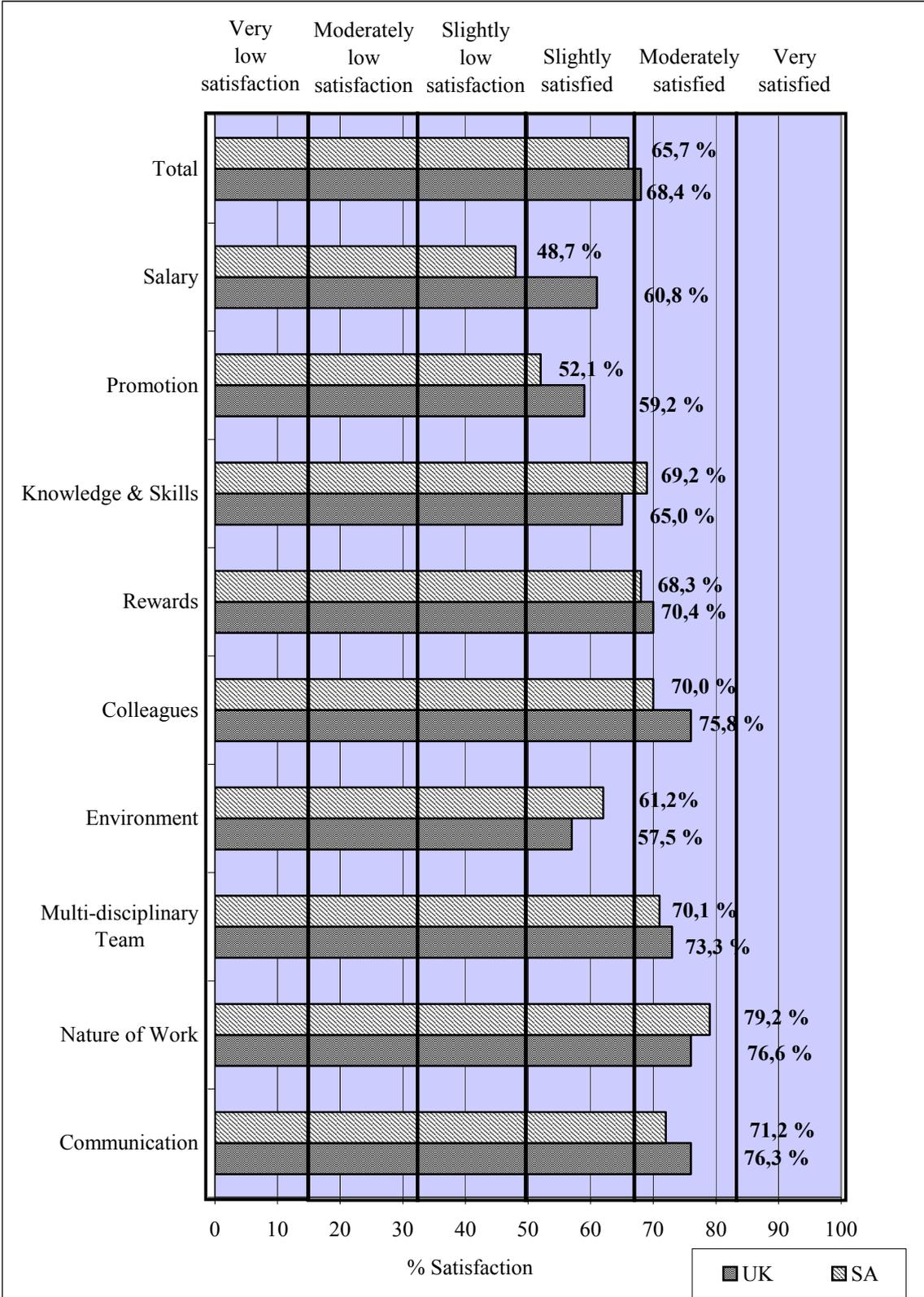


Figure 3.2: Job satisfaction scores per theme and overall for South Africa-based RDs (n=317) and UK-based RDs (n=23).

To further demonstrate this slightly low level of satisfaction with salary in the South African-based RDs, it was repeatedly quoted in response to the open-ended question of aspects that the RDs least liked about their current employment. One particular individual working in a DOH provincial hospital wrote:

In the DOH we have no recognition for further studies and are not promoted if we wish to remain in the clinical field. Despite having a Masters degree cum laude and 12 years service, I am still on the same salary level as an entry-level dietitian.

Another dietitian employed by the DOH wrote:

The salary doesn't reflect your level of education and expertise, personnel assistants in the hospital where I work, with only a matric (secondary school level of education graduation) earn at the same level as I do.

and

I am not getting the monetary recognition for what I do – especially as I am doing the job of 2-3 separate jobs.

However, this low level of satisfaction with the level of salary was a common trend irrespective of the sector of work within which RDs were based. A RD working in private practice wrote:

The medical aid schemes push the limits on one's earning potential, due to this I am not able to charge for what I believe my skills deserve.

and another from a private hospital wrote:

Our salaries are simply not up to standard – it can be really depressing.

3.3.3 Job Satisfaction in relation to demographic variables

When analysing the demographic variables in relation to the level of job satisfaction, only age was shown to play a significant role (Spearman $p=0,036$) with a positive correlation (Table 3,2). Thus as age increased, so did the overall level of job satisfaction, where those in the age group of 40-49 demonstrated the highest level of job satisfaction. As the age increased beyond 50 years this level of satisfaction tapered downwards again. This older generation of >50 years, despite progressing towards retirement age, they expressed their frustrations in their inability to progress into higher positions than currently held, independent of the sector of work within which they were currently employed. In

comparison the younger generation of RDs, although they expressed a slightly higher level of job satisfaction than the oldest group, they expressed problems of being overworked, understaffed, lack of autonomy, monotony of work, poor use of clinical skills with an inability to gain an expertise in an area of interest.

The remaining demographic variables of gender, marital status, number of children, language and country of residence did not significantly impact on the overall job satisfaction in these RDs.

Table 3.2: Demographic characteristics of respondents related to overall job satisfaction (n=340)

	Total Level of Satisfaction <i>% mean (SD)</i>	p value of satisfaction
Age		0,036 ^{a,b}
20-29	64,4 (11,1)	
30-39	65,7 (11,5)	
40-49	70,8 (14,1)	
50-59	67,8 (13,1)	
60-69	63,0 (4,2)	
Gender		0,531 ^c
Male	63,1 (8,7)	
Female	65,7 (11,8)	
Marital Status		0,593 ^c
Unmarried	68,8 (13,2)	
Married	66,1 (11,3)	
Children		0,657 ^d
0	64,8 (11,5)	
1	67,1 (11,1)	
2	67,1 (12,0)	
>3	64,3 (12,9)	
Language		0,080 ^d
Afrikaans	66,2 (11,1)	
English	66,3 (12,0)	
Indigenous	60,4 (11,1)	
Residence		0,300 ^c
South Africa	65,2 (11,7)	
UK	68,4 (12,7)	

^a significance, where $p < 0,05$

^b Spearman's rank correlation

^c Mann-Whitney U test

^d Kruskal Wallis test

3.3.4 Job Satisfaction in relation to dietetic qualifications and expertise

Significant differences were found in those RDs who claimed to have an area of clinical expertise (Mann-Whitney U $p=0,001$) as opposed to those who were working in general clinical practice. Specifically, those working in the fields of eating disorders (Mann-Whitney U $p=0,013$), gastro-intestinal diseases (Mann-Whitney U $p=0,001$) and sports (Mann-Whitney U $p=0,044$) were significantly more satisfied than those working in other areas of expertise or without an area of expertise. Significance was also found in those RDs who had been in practice for longer (Mann-Whitney U $p=0,035$), in comparison to those with fewer years of practice, following the same continuum that job satisfaction increases with age (Table 3.3).

Although the level of education does not play a significant role on job satisfaction, it is important to note a marked increase in job satisfaction from masters to doctorate level. However, this difference is probably based on doctorate graduates being older and having a greater level of expertise, where both age and expertise have independently been demonstrated, in this study, to positively influence job satisfaction.

Table 3.3: Dietetic qualifications and expertise related to overall job satisfaction (n=340)

	Level of satisfaction % mean (SD)	p value of satisfaction
Level of Qualification		0,12 ^d
Bachelor	65,2 (11,5)	
Postgraduate Diploma	65,3 (12,5)	
Honours	66,2 (11,6)	
Masters	63,8 (11,1)	
Doctorate	74,5 (10,2)	
Area of Expertise		0,001 ^{a,c}
Yes	68,1(11,6)	
No	63,7(11,7)	
Area of Expertise Type		
Allergies	69,2(8,7)	0,238 ^c
Diabetes	65,4(11,7)	0,064 ^c
Cardiovascular	69,5(13,4)	0,193 ^c
Eating Disorders	71,9(10,8)	0,013 ^{a,c}
Intensive Care Unit	69,6(6,1)	0,070 ^c
Gastro-intestinal Tract	73,9(8,8)	0,001 ^{a,c}
Mental Health	66,1(5,8)	0,970 ^c
Oncology	67,7(14,4)	0,602 ^c
Paediatrics	65,9(12,0)	0,989 ^c
Renal	69,4(10,6)	0,164 ^c
Sports	74,7(11,1)	0,044 ^{a,c}
Other	68,9(16,2)	0,101 ^c
Years of Practice		0,035 ^{a,c}
0-5	65,0 (11,6)	
6-10	65,8 (11,7)	
11-20	66,9 (12,1)	
21-30	69,4 (14,4)	
31-40	64,2 (10,1)	

^a significance, where $p < 0,05$

^b Spearman's rank correlation

^c Mann-Whitney U test

^d Kruskal Wallis test

3.3.5 Job Satisfaction in relation to current employment

In relation to current employment of the participants, significance in job satisfaction was found to be in relation to the hours of work (Kruskal-Wallis $p=0,021$), location of work (i.e. rural vs. urban) (Mann-Whitney U $p=0,00001$) and level of salary (Spearman's $p=0,00001$) (Table 3.4). This shows that the RD's who are employed full-time are more satisfied, versus those who work part-time or are unemployed. In most cases of those who were unemployed, unemployment was due to fact that they had resigned their jobs due to unsatisfactory aspects of their previous employment. This followed the same trend in those who were employed but no longer practicing in the field of dietetics, who quoted the main reasons for leaving the profession, was primarily due to poor salaries, inability to progress in their career and restrictions in practice. However this group of unemployed RDs and those not currently working as RDs only made up 10,3% of the respondents (Table 3.4). The majority of the respondents (72,6%) are in full-time employment and are satisfied with their current position.

In relation to the location of work, job satisfaction was found to be significantly greater in those working in urban areas as opposed to those working in rural areas. This same trend has been demonstrated in previous studies also showing low levels of job satisfaction of other rural-based health care professionals.^{50,54,75} Comments by rurally-based RDs demonstrate the aspects that contribute to low levels of satisfaction:

I am one of 2 dietitians in our department, we have a high patient load, out patient clinics, minimal support from management, repetitive clinical patients, no time for CPD and doctors do not consult our dietetic opinion in patient treatment.

and

The workload is too much, I am currently the only dietitian in the area, servicing the hospital and 9 clinics - the salary does not equate to the workload.

and

I am bored and lonely in my work. Things don't happen very fast out here.

The level of salary had a significant positive correlation on job satisfaction this demonstrated that as the level of salary increases so does the level of job satisfaction (Table 3.4).

The sector within which RDs work as well as having a contract did seem to secure a level of job satisfaction for RDs, although those who were working in industry and research did show higher levels of job satisfaction than those working in other sectors.

Table 3.4: Current employment of RDs related to overall job satisfaction (n=340)

	Level of satisfaction % mean (SD)	p value of satisfaction
Time in Current Job		0,12 ^{a,b}
0-5	65,3 (11,8)	
5-10	67,3 (12,9)	
11-20	63,4 (11,1)	
21-30	77,8 (3,4)	
Hours of Work		0,021 ^{a,d}
Full Time	66,6 (11,6)	
Part Time	65,0 (12,2)	
Unemployed	59,7 (11,8)	
Not working as dietitian	63,7 (13,4)	
Contract		0,42 ^d
Yes	64,4 (11,0)	
No	66,9 (13,0)	
Not Applicable	63,7 (13,4)	
Location of Work		0,00001 ^{a,c}
Urban/ suburban	67,1 (11,4)	
Rural/semi-rural	59,6 (12,0)	
Work sector		0,93 ^d
Department of Health (DOH)	61,3 (11,0)	
Private	69,2 (11,1)	
Education	65,9 (11,8)	
Research	71,0 (11,0)	
Industry	74,3 (10,3)	
Food Service	62,1 (11,1)	
Salary		0,00001 ^{a,b}
< R44 999	64,1 (10,3)	
R 45 000 – R 62 999	64,6 (12,0)	
R 63 000 – R 91 999	60,6 (11,2)	
R 92 000 – R 141 999	63,5 (11,0)	
R 142 000 – R 211 999	65,5 (11,9)	
R 212 000 – R 391 999	73,9 (9,9)	
>R 392 000	73,6 (12,4)	

^a significance, where $p < 0,05$

^b Spearman's rank correlation

^c Mann-Whitney U test

^d Kruskal Wallis test

3.4 FORECAST OF DIETITIAN MOVEMENT IN JOB SECTORS IN 2012

To obtain a further indication of the level of job satisfaction, the dietitians were asked where they would see themselves in 5 years time in terms of their current employment position. The most movement of dietitians is predicted to occur in the DOH and in food service management sectors, where over 50% currently employed in these 2 sectors claim they will be looking for different jobs as a RD within the next 5 years (Figure 3.3). Those areas of more stable work force are seen in research, industry and private sectors, where over 50% state that they will remain in their current job. In total one third of RDs will stay in their current job, with two thirds leaving, showing a high employee turnover.

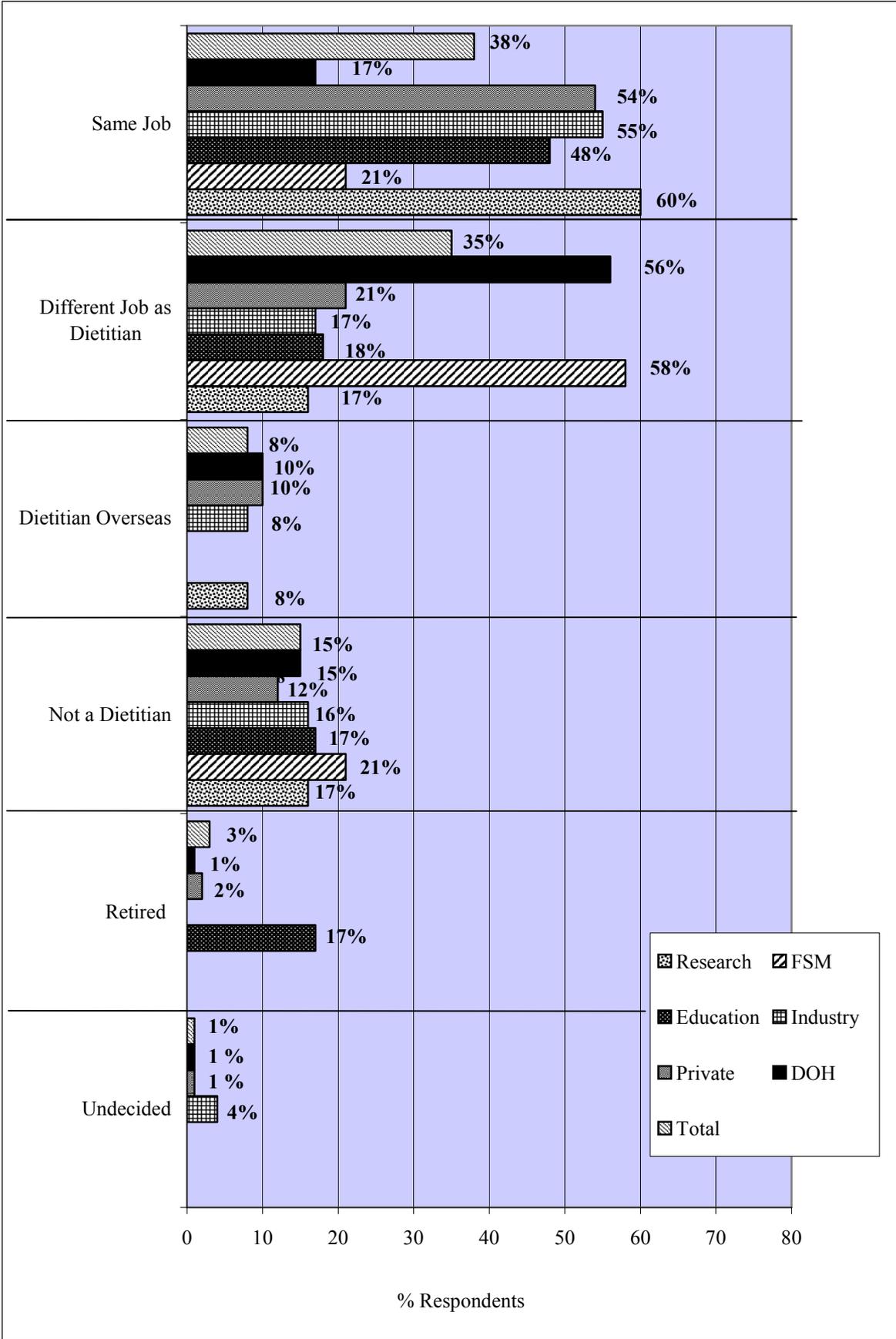


Figure 3.3: Forecast of RD movement in the different job sectors by 2012.

Of those leaving their current position, half will be searching for different dietetic posts while the remaining 50% will be going overseas, retiring or leaving the profession altogether. An encouraging aspect of this data is that only 8% of RDs see themselves as leaving the country in search of dietetic based positions overseas and 15% see themselves as leaving the profession altogether, showing that there will be a loss of 20% from the current dietetic workforce. In comparing this expected decline to the HPCSA statistics for dietetic registration over the last 10 years, dietetic registrations have steadily increased at an average of 5,8% per annum, demonstrating that universities are currently able to replace these losses to the dietetic workforce.²⁷

The high level of staff turnover should be a concern for employers, especially in the DOH, in that approximately 83% (n=113) of the current DOH dietetic workforce will be searching for alternative employment over the next 5 years (Figure 3.3). The main reasons for this relate to salary level and opportunities for promotion. However, understaffing already appears to be problematic for dietetic departments, which are straining current staff and further lowering job satisfaction levels. The open comments made by the respondents working in the DOH on this topic included:

I am doing the work of 5 dietitians, we have a serious understaffing at our hospital.

and another wrote:

There are not enough dietitians to get the work done, we are spread thinly doing too much work and achieving nothing as we can't do our work properly.

CHAPTER 4

DISCUSSION

Although both methods of questionnaire distribution produced almost exactly the same response rate, the response rate in general was still low in comparison to other questionnaire-based studies.^{11-13,16-21,24,46,51,53,55-58,68,69,71,81,116-118} Probable aspects that contributed to this low response could have been due to data collection taking place over the main summer, school and religious holiday for the year (December – January) for a large proportion of the South African population and that productivity (in distribution and completion of the questionnaire via e-mail) was probably hampered due to the power shedding South Africa was subjected to. To put the response rate into perspective ADSA provided a statistical report of their monthly e-mail distributions. This report showed that on average only 21% of the members actually open their ADSA e-mails, with a resounding 31,1% having the ADSA e-mail spam trapped. The remainder (47,9%) did not open the ADSA e-mails. Although previous studies showed e-mail as an effective, fast and cheap method for surveys, they did predict that this method would become less popular in time, even proposing the possibility of it becoming obsolete.¹³⁷ Many use e-mail today as the preferable method of communication, however with such a large volume of information being sent using this method it makes the option to disregard/delete non-essential mail items reality. Considering many of the RDs stated they were overworked and understaffed it probably contributed to the high non-response.

The findings of this study show that the dietitians registered with the HPCSA are slightly satisfied (67,5%) with their current job, which is lower in comparison to previous studies done on job satisfaction in RDs.^{3,99} The trend within previous studies where both a value and definition for job satisfaction were given, were both found to be moderate satisfaction. These studies were both based in the USA, with the first by Rehn (1989)(n=161)³ showing satisfaction at 79,6% and the second by Mortenson *et al* (2002)(n=1321)⁹⁹ showing a satisfaction of 76,4%.

This study however, still confirms that the RDs genuinely love the nature of their work and what they do, tending towards confirmation of career satisfaction. However despite the differences, there are definite themes demonstrating differing levels of satisfaction which

can be summarised into 6 areas of the dietetic profession that need more attention amongst South African RDs:

4.1 Expertise and experience

As discussed in the literature review there are many variables that can act either independently or in combination on the level of job satisfaction. In this study it was found that those demographic variables to significantly impact on job satisfaction in the HPCSA RDs were: age, years of professional experience, and having an area of expertise. These three variables are interrelated, where, with age, professional experience increases, and together on this timeline, so does the likelihood of developing an area of professional expertise.

Despite having had a year of compulsory community service in the DOH (as part of their training program), the younger dietitians either have high expectations once training is complete or have not been sufficiently trained in practical skills outside the scope of dietetics. It is assumed that although RDs graduate with excellent clinical knowledge and skills, they may lack the skills to achieve effective practice in areas of business skills, administration, entrepreneurship and having the ability to be assertive in promoting what they do, irrespective of the sector within which they are employed. Following along similar lines of learning skills outside of the scope of dietetics, is the ability of RDs to recognise or challenge employers to allow the opportunity for developing an area of expertise rather than remaining generalist in practice. It appears that this factor may play an important role in staff retention (further discussed in 4.4).

4.2 Salary

It was very clear that the salary levels are a major source of low job satisfaction amongst RDs working and living in South Africa, with a strong trend of those with higher levels of education (with exception of those with a PhD), having a lower level of job satisfaction. This trend is also very strong in other studies done on RDs^{4,7,99,134} and other health professionals (OTs,^{5,6,72} nurses,^{17,20,21,46,48,62,68,69} doctors,^{18,50,54}).

Considering the average salary level, the undercurrent feeling here is that the RDs, and especially those working in South Africa, do not feel they are being fairly paid considering

the time they have invested into their tertiary education to gain the clinical knowledge and skills they need to do their job. A large proportion of those who had left the dietetic profession stated the low salary level with poor earning potential as their main motivator for leaving the profession. However this group only represented 6,4% of the respondents and naturally proved to be a limitation of the study, as those who have left the profession have a high probability of no longer maintaining their registration status with the HPCSA and thus could not be included in data collection.

4.3 Promotion

Opportunities for promotion, although classified as slightly satisfied, the level of satisfaction was only ranked at 52,5%. In comparison to other themes, this lower level of satisfaction was reinforced by the many comments relating to the lack of opportunity to be promoted or move forward in their career. Similar to the salary, lack of opportunity for promotion was a strong reason for leaving the profession.

As demonstrated in Maslow's Hierarchy of Needs Theory, promotion is a means of recognition, where recognition is placed at level four in the five hierarchal steps.³³ If one cannot be promoted or progress in their work, it stifles achievement, dampening job satisfaction. This confers with a previous quote, where the individual described that promotion will only come if they move out of the clinical work and into a managerial position. This demonstrates that clinical posts do not span many promotional levels, inhibiting ones ability to progress professionally in the clinical field, but rather forcing dietitians into managerial positions for which they are not trained to take on, nor have the desire to work within. This lack of opportunity for promotion was also found in a study of Australian OTs (n=113)⁶ and American OTs (n=694),⁷² and it was the main influencing factor in both of these studies for OTs to leave their profession in both countries.

4.4 Staff turnover

Although the DOH shows to be the most unstable sector for dietetic staff retention, this trend is not unique to the DOH alone. All sectors within which RDs are employed will experience a high level of staff turnover, especially in positions in the education and food service management sectors. Industry, research and private sectors are only marginally more stable. Overall a total of 62% are planning to leave their current position within the

next 5 years, this is not only devastating in terms of a loss in expertise and experience for employers, in addition to the costs of replacing staff, but for colleagues it is the pressure of vacant positions, if they are not filled and in the case of patient care, it is the loss in continuity of therapy.

A strategy to improve staff retention employed in China for nursing staff was for the employer to invest in their staff by partly sponsoring and providing time for their staff to achieve higher levels of education in their career.⁴⁴ Based on the findings in this study, an increase in education level does not appear to be a practical solution in increasing job satisfaction levels as employers do not acknowledge an improved education by increasing salary levels or promotional opportunities, making further studies for the individual only a personal achievement, without any external rewards. Of the few respondents from the UK working in the National Health Service (NHS), this does not appear to be a trend unique to South Africa as they too report no recognition for further studies when working in the NHS. Thus, the work by Goodin (2003)⁴⁴ in China is not a practical solution for RDs, unless tertiary institutions, the dietetic association or even RDs themselves challenge employers to develop a system for academic recognition and achievements of RDs in the workplace.

To further support this Greger (2006)⁹⁸ found that no matter how highly qualified a RD was in the USA, it did not change their salary level.

It is important to note that the retention of dietitians within the profession on a national level, should not pose as a problem in the short term, as only 15% of the respondents saw themselves as leaving the profession and a further 8% saw themselves as living and working overseas within the next 5 years. In theory, this loss of 23% of the dietetic workforce does not signify a drop in the dietetic workforce for South Africa, as the HPCSA figures show a steady 5,1% annual increase in dietetic membership.²⁷ Thus, should dietetic graduates drop below 17,9% per annum, the workforce will start to deplete. In comparison to OTs surveyed in Australia by Meade *et al* (2005),⁶ they found that 60% of the sample group (n=195) indicated that they would leave the profession within 10 years, where the lack of promotion was cited as a primary reason for leaving. This low retention of OTs in the professions is also proving to be a problem in Canada, where they are actively seeking and welcoming internationally educated OTs to the country.¹³⁸

4.5 Professional status/image

It was clear in the comments that the RDs felt disrespect from nurses, doctors and consultants. This attitude could be based on one of 3 possibilities, where there could be a genuine disrespect or disregard for the profession by other professionals, or dietitians are not assertive enough in their work, or alternatively, the professionals don't properly understand the benefit of nutritional intervention in patient health. From this, it seems that the status of RDs needs to be boosted amongst other health professionals, namely doctors and nurses, starting at undergraduate level and moving to those already economically active. On a small scale this promotion can take place within institutions through joint study days or on a wider scale through the RDs speaking or interacting at conferences, demonstrating the value of the RD in specific scenarios. Professional status should not be misunderstood or misperceived as RDs wanting to boost personal or professional pride, but rather boosting the MDT relationship in an effort to enhance dietetic activity and interaction for the benefit obtaining maximal dietetic input for whatever the case requires.

Linking into professional status and respect of the dietetic profession, low levels of job satisfaction were due to non-dietetic individuals claiming to play a nutritional role in industry and general well-being. These sources included personal trainers, media articles, pharmaceutical representatives and the activity of commercial weight loss enterprises. The RDs felt these non-dietetic variables were providing poor dietary advice to the public and undercutting dietetic services. A problem contributing to this is that RDs are governed by a strict statutory code of practice,¹⁰⁹ to which RDs want to uphold and respect, yet these non-dietetically regulated bodies are not governed by the same code, yet appear to have the ability to practice as they please. RDs do fear that this loose practice could be to the detriment of patient/client well-being, something over which the RDs have no control to prevent. Although the name and use of the title of RD is regulated and protected, members of the public appear to be unaware of its significance. This reinforced the fact that although the dietetic community is currently only 1509 strong in South Africa, the body needs a 'voice' or a strategy to boost the value of the dietitian, protecting their work and reducing the power that other non-governed enterprises or individuals have over dietetic practice.

4.6 Location of work

It was found that those working in rural areas had significantly lower levels of job satisfaction than those working in urban areas. This comes as no surprise as the literature demonstrated this on a global scale amongst other health professionals.^{50,54,75} The reasons for low job satisfaction were also very similar to those found in previous studies, where the dietitians found it increasingly difficult to do their work effectively due to lack of resources, serious understaffing, professional isolation, limited budgets and a restriction to develop an expertise due to the posts forcing generalist practice.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

It can therefore be concluded that South African RDs experience a lower level of job satisfaction than their American colleagues. The reasons for this are primarily found to be due to poor salaries, lack of promotional opportunities, lack of opportunity to develop an area of expertise and a perception of low professional image. In developing a forecast of the dietetic workforce for the next 5 years, it shows that areas of poor staff retention will occur in dietetic posts that are based in the public, educational and food service management sectors. Posts based in the private, industrial and research sectors are only marginally more stable.

Recommendations for improving the level of job satisfaction can be targeted at various levels:

5.1. Salary

There needs to be a body of support in the re-evaluation of salary levels for RDs in South Africa, so that salaries are more comparable with similar professions with regard to the level of education and responsibilities of the job. This also follows with medical aid schemes, to be challenged in re-evaluating the value of a RD in patient care, recognising that prevention (through establishing a healthy lifestyle) is better than cure. The best 'voice' for the RDs is probably ADSA, which needs to put together a strategy task force to challenge medical aid schemes in promoting the value of the RD as a means of greater cost effective management for their client profiles, in addition to challenging the HPCSA, as it standardises rates/fees of the dietetic professional body. This re-evaluation of salary levels needs to take into consideration, the level of education achieved, level of responsibility and level of experience.

5.2. Promotion

Similarly, strategies for dietitian-orientated career-pathing need to be developed, including a promotional or career ladder in graduated levels along which progression should offer increasing levels of responsibility through increasing autonomy, reducing monotony, allowing RDs to openly and consistently re-evaluate services provided and provide practical solutions, in addition to allowing individual RDs to take the lead in more

specialist services. In the same way these strategies can be applied to private practice, encouraging individuals to become innovative and opportunistic in their work.

5.3. Professional image

As a means of boosting professional image, media-based strategies are one such method of increasing awareness, such as advertising campaigns, regular nutrition orientated television programmes, media articles written by RDs and even a monthly nutrition-based publication available at all newsagents. It is also proposed to promote the professional image amongst fellow health care professionals, by starting at undergraduate level through demonstrating the value of the RD in the MDT in both academic and practical modules. This needs to be continuously re-enforced by integrating the work and research done by RDs into study days and conferences that are hosted for these fellow health care professional groups. RDs however, do need to realise that they need to work hard to achieve the recognition they deserve.

5.4. Educational institutions

Education institutions that train RDs in an undergraduate program, apart from developing excellence in clinical practice, need to have a part of the training dedicated to developing non-dietetic skills required in practice to further support their clinical skills in nutrition and dietetics. These skills are recommended to be more business orientated such as entrepreneurship and business skills.

5.5. Future studies

Based on these findings, more needs to be done in assessing job satisfaction in South African RDs and RDs on a global scale. Starting on a small scale, future studies within South Africa should be based on more qualitative research, by conducting open interviews with RDs or focus groups to obtain more information regarding poor levels of job satisfaction. This can be further extrapolated into focus groups with other professionals to determine their attitude towards RDs and the dietetic role in the care of patients. Within both of these methods, the recommendations from this study should be discussed to determine if they are in agreement or have alternative recommendations. Following on from this these recommendations should be trialed to determine their efficacy and value in increasing overall dietetic job satisfaction.

On a broader scale, and moving laterally, comparing the level of job satisfaction or even attitude towards level of salary and opportunities for promotion in other allied health professionals registered in South Africa, such as physiotherapists, occupational therapists, speech and language therapists, audiologists and psychologists can be assessed. This will help determine if similar trends occur in AHPs, and if so the work of this larger body of professionals can work together challenging industry and governing bodies to improve job satisfaction level. Should similar trends not occur, it is a matter of observing those areas where high levels of job satisfaction are achieved in these professions and apply them to the dietetic profession, if practical.

On a global scale, the methodology of this study can be extrapolated to determine the level of satisfaction in other countries, such as the USA, UK, Ireland, Australia, Singapore and New Zealand (due to predominance of communication in English), to determine any similarities or differences with the South African context. This task should identify areas of high satisfaction and hence further probe them to extrapolate their application into the South African context. In the case of South Africa, strategies based on increasing satisfaction with pay and promotional opportunities would be a priority.

One aspect or variable not discussed throughout this study is the impact of job satisfaction on those in clinical practice on the health outcome, nutritional status or even satisfaction of dietetic service of patients under dietetic supervision. This would be valid to assess in order to determine to what extent job satisfaction influences and impacts on the RD productivity. As one of the main reasons for assessing job satisfaction in the health care profession is not only to maintain professionals, but also to maintain excellent clinical service to patients/clients.

REFERENCES

1. Organ D. 1988. *Organisational Citizenship Behaviour: The Good Soldier Syndrome*. Lexington Books, Lexington, Massachusetts, USA.
2. Herzberg F. 1966. *Work and the Nature of Man*. World Publishing. New York, NY.
3. Rehn B, Stallings S, Wolman P, Cullen R. Job satisfaction of South Carolina Dietitians. *Journal of the American Dietetic Association*. 1989;89: 979-981.
4. Dalton S, Gilbride JA, Russo L, Vergis L. Job satisfaction of clinical community and long-term care dietitians in New York City. *Journal of the American Dietetic Association*. 1993;93(2): 184-188.
5. Moore K, Cruikshank M, Haas M. Job satisfaction in occupational therapy: a qualitative investigation in urban Australia. *Australian Association of Occupational Therapists*. 2005;53: 18-26.
6. Meade I, Brown G, Trevan-Hawke J. Female and male Occupational Therapists: A comparison of job satisfaction. *Australian Occupational Therapy Journal*. 2005;52: 136-148.
7. Sullivan C, Leon J, Sehgal A. Job satisfaction among renal dietitians. *Journal of Renal Nutrition*. 2006;16(4): 337-340.
8. Broski DC, Cook S. The job satisfaction of allied health professionals. *Journal of Allied Health*. 1978; Fall 7(4): 281-7.
9. Agriesti-Johnston C, Broski D. Job satisfaction of Dietitians in the United States. *Journal of the American Dietetic Association*. 1982;81: 555-559.
10. Tovey EJ, Adams AE. The changing nature of nurse's job satisfaction: an exploration of sources of satisfaction in the 1990's. *Journal of Advanced Nursing* 1999;30(1): 150-158.
11. Yamashita M. Job satisfaction in Japanese nurses. *Journal of Advanced Nursing*. 1995;22: 158-164.
12. Westaway MS, Wessie GM, Viljoen E, Booyesen U, Wolmarans. Job satisfaction and self-esteem of South African nurses. *Curationis*. 1996;19(3): 17-20.
13. Prosser D, Johnson S, Kuipers E, Dunn G, Szmukler G, Reid et al. Mental health, 'burnout' and job satisfaction in a longitudinal study of mental health staff. *Social Psychiatry and Psychiatric Epidemiology*. 1999;34(6): 295.

14. Lu H, While AE, Barriball KL. Job satisfaction among nurses: a literature review. *International Journal of Nursing Studies*. 2005;42: 211-227.
15. Andrews DR, Dziegielewski. The nurse manager, job satisfaction, the nursing shortage and retention. *Journal of Nursing Management*. 2005;13(4): 286-295
16. Kudo Y, Satoh T, Hosoi K, Miki T, Watanabe M, Kido S, Aizawa Y. Association between intention to stay on the job and job satisfaction among Japanese nurses in small and medium-sized private hospitals. *Journal of Occupational Health*. 2006;48: 504-513.
17. Best MF, Thurston NE. Canadian public health nurses' job satisfaction. *Public Health Nursing*. 2006;23(3): 250-255.
18. Krogstad U, Hofoss D, Veenstra M, Hjortdahl P. Predictors of job satisfaction among doctors, nurses and auxiliaries in Norwegian hospitals: relevance for micro unit culture. *Human Resources for Health*. 2006;4:3.
19. Sveinsdottir H, Biering P, Ramel A. Occupational stress, job satisfaction and working environment among Icelandic nurses: a cross-sectional questionnaire survey. *International Journal of Nursing Studies*. 2006;43(7):875-890.
20. Lu H, While AE, Barriball L. Job satisfaction and its related factors: A questionnaire survey of hospital nurses in Mainland China. *International Journal of Nursing Studies*. 2007;44: 574-588.
21. Bjork, IT, Samdal GB, Torstad S, Hamilton GA. Job satisfaction in a Norwegian population of nurses: a questionnaire study. *International Journal of Nursing Studies*. 2007;44(5): 747-757.
22. Mrayyan MT. Jordanian nurses' job satisfaction, patients' satisfaction and quality of nursing care. *International Nursing Review*. 2006; 53(3): 224-230.
23. Zangaroo GA, Soeken KL. A meta-analysis of nurses' job satisfaction. *Research in Nursing Health*. 2007;30(4): 445-458.
24. Li J, Lambert VA. Job satisfaction among intensive care nurses from the Peoples Republic of China. *International Nursing Review*. 2008;55(1): 34-39.
25. Perry B. Shine On: Achieving career satisfaction as a registered nurse. *The Journal of Continuing Education in Nursing*. 2008;39(1): 17-25.
26. Pender F. 2008. *Clinical Cases in Dietetics*. Blackwell Publishing, Oxford, UK
27. Dafue Y. IT Stats HPCSA. e-mail:yvetted@hpcsa.co.za. Personal communication – November 2007.

28. Fisher CD. On the dubious wisdom of expecting job satisfaction to correlate with performance. *Academy of Management Review*. 1980; 5(4): 607-612.
29. Hellman CM. Job satisfaction and intent to leave. *Journal of Social Psychology*. 1997; 137(6): 677.
30. Spector PE. Measurement of Human Service Staff Satisfaction: Development of the Job Satisfaction Survey. *American Journal of Community Psychology* 1985;13 (6):691-713.
31. Taylor FW. 1911. *The Principles of Scientific Management*. Harper & Row Publishers, New York, NY, USA.
32. Handel MJ. 2003. *The sociology of organisations. Classic, contemporary and critical readings*. SAGE Publications Inc., California, USA.
33. Maslow AH. 1954. *Motivation and Personality*. Harper & Row Publishers, New York, NY, USA.
34. Benson SG, Dundis PD. Understanding and motivating health care employees: integrating Maslow's hierarchy of needs, training and technology. *Journal of Nursing Management*. 2003,11(5): 315–320.
35. Locke EA. What is job satisfaction? *Organizational Behaviour & Human Performance*. 1969;4(4): 309-339.
36. James LR, Jones AP. Perceived job characteristics and job satisfaction: An examination of reciprocal causation. *Personnel Psychology*. 1980;33(1): 97-135.
37. Taber TD, Alliger GM. A task-level of job satisfaction. *Journal of Organizational Behaviour*. 1995;16(2): 101-121.
38. Judge TA, Larson RJ. Dispositional affect and job satisfaction: A review and theoretical extension. *Organizational Behaviour and Human Decision Processes*. 2001;86(1): 67-98.
39. Souza-Poza A and Souza-Poza AA. Well-being at work: a cross-national analysis of the levels and determinants of job satisfaction. *Journal of Socio-economics*. 2000; 29(6): 517 – 538.
40. Collins K, Jones ML, McDonnell A, Read S, Jones R, Cameron A. Do new roles contribute to job satisfaction and retention of staff in nursing and professions allied to health. *Journal of Nursing Management*. 2000;8(1):3-12.

41. Kavanaugh J, Duffy JA, Lilly J. The relationship between job satisfaction and demographic variables for healthcare professionals. *Management Research News*. 2006;29(6): 304-325.
42. Kwon J. Clinical dietetics changes due to cost-reduction activities in healthcare systems. *Journal of the American Dietetic Association*. 2001;101(11):1347 – 1350.
43. Finlayson B, Dixon J, Meadows S, Blair G. Mind the Gap: The extent of the NHS nursing shortage. *British Medical Journal*. 2002;325: 538-541.
44. Goodin HJ. The nursing shortage in the United States of America: An integrative review of the literature. *Journal of Advanced Nursing*. 2003;43(4): 335-350.
45. King LA, McInerney PA. Hospital workplace experiences of registered nurses that have contributed to their resignation in the Durban metropolitan area. *Curationis*. 2006;29(4): 70-81.
46. Koorts AS, Marais AJ. A study of nurses of the RSA. *Curationis*. 1990;13(1-2):29-32.
47. McMurray JE, Williams E, Schwartz MD, Douglas J, Van Kirk J, Konrad R, *et al*. Physician job satisfaction. *Journal of General Internal Medicine*. 1997;12(11): 711-714.
48. Fung-Kam L. Job satisfaction and autonomy of Hong Kong registered Nurses. *Journal of Advanced Nursing*. 1998; 27(2):355-363.
49. Simoens S, Scott A, Sibbald B. Job satisfaction, work-related stress and intentions to quit of Scottish GP's. *Scottish Medical Journal*. 2002;47(4): 80-86.
50. Matsumoto M, Okayama M, Kajii E. Rural Doctors satisfaction in Japan: A nationwide study. *Australian Journal of Rural Health*. 2004;2(2): 40-48.
51. Chen H, Beck S, Amos L. Leadership styles and nursing faculty job satisfaction in Taiwan. *Journal of Nursing Scholarship* 2005;37(4): 374-380.
52. Pratt P, Kwon J, Rew M. Perceived job importance and job performance satisfaction of selected clinical nutrition management responsibilities. *Journal of the American Dietetic Association*. 2005;105(7): 1128-1132.
53. Kacel B, Miller B, Norris, D. Measurement of nurse practitioner job satisfaction in a Midwestern State. *Journal of the American Academy of Nurse Practitioners*. 2005;17(1): 27-32.

54. Koetsee T, Couper, ID. What interventions do South African doctors think will retain them in rural hospitals of the Limpopo province of South Africa? *Rural and Remote Health*. 2006; 6: 581-586.
55. Willem A, Buelens M, De Jonghe I. Impact of organisational structure on nurses' job satisfaction: A questionnaire survey. *International Journal of Nursing Studies*. 2007;44(6): 1011-1020
56. Piko BF. Burnout, role conflict, job satisfaction and psychological health among Hungarian health care staff: a questionnaire survey. *International Journal of Nursing Studies*. 2006;43(3): 311-318.
57. Thomas L, Valli A. Levels of occupation stress in doctors working in a South African public-sector hospital. *South African Medical Journal*. 2006; 96(11): 1162-1168.
58. Curtis EA. Job satisfaction: A survey of nurses in the Republic of Ireland. *International Nursing Review*. 2007;54(1): 92-99.
59. Ward M, Cowman S. Job satisfaction in psychiatric nursing. *Journal of Psychiatric and Mental Health Nursing*. 2007;14(5): 454-461.
60. Emerson E, Quinn-Griffin M, L'Eplattenier N, Fitzpatrick JJ. Job Satisfaction and acculturation among Filipino registered nurses. *Journal of Nursing Scholarship* 2008;40(1): 46-51.
61. Cortese C. Job satisfaction of Italian nurses: an exploratory study. *Journal of Nursing Management*. 2007;15(3): 303-312.
62. Brondt A, Vedsted P, Olesen F. General Practitioners' job satisfaction. *Ugeskr Laeger*. 2007;169(26): 2521-2525. (*Abstract in English, Article in Danish*).
63. Kumar S, Fischer J, Robinson E, Hatcher S, Bhagat RN. Burnout and job satisfaction in New Zealand psychiatrists: a national study. *International Journal of Social Psychiatry*. 2007;53(4): 306-316.
64. Miller PE. The relationship between job satisfaction and intention to leave of hospice nurses in a for-profit corporation. *Journal of Hospice and Palliative Nursing*. 2008;10(1): 56-64.
65. Demerouti E, Bakker AB, Nachreiner F, Schaufeli WB. A model of burnout and life satisfaction amongst nurses. *Journal of Advanced Nursing*. 2000;32(2): 454.
66. Adams A, Bond S. Hospital Nurses' job satisfaction, individual and organisational characteristics. *Journal of Advanced Nursing*. 2000;32(3): 536-543.

67. Kankaanranta T, Nummi T, Vainiomaki J, Halila H, Hyppola H, Isokoski M *et al.* The role of job satisfaction, job dissatisfaction and demographic factors on physician's intentions to switch work sector from public to private. *Health Policy.* 2006;83(2007): 50-64.
68. Baird L, Barnard C, Bester L, Spamer A, Stofberg L, Van der Merwe N *et al.* Die werksatisfaksie van verpleegpersoneel in langtermyn psigiatryse hospitale in die Kaapse Metropol. *Unpublished BCur study.* Bellville: University of Stellenbosch. August 2006.
69. De Cocq E, Greyling A, Henrico N, Kabab B, Kloppers A, Kotze C, *et al.* Factors influencing job satisfaction among registered nurses working in intensive care units. *Unpublished BCur study.* Bellville - University of Stellenbosch. August 2006.
70. Cowin L, Jacobsson D. The effects of nurses job satisfaction on retention: an Australian perspective. *Collegian.* 2003;10(3): 31-35.
71. Kekana HP, du Rand EA, van Wyk NC. Job satisfaction of registered nurses in a community hospital in the Limpopo Province in South Africa. *Curationis.* 2007;30(2): 24-35.
72. Bailey DM. Ways to retain or reactivate occupational therapists. *American Journal of Occupational therapy.* 1990; 44(1): 31-37.
73. Jenkins M. The problems of recruitment: a local study. *British Journal of Occupational Therapy.* 1991;54(12): 449-452.
74. Painter J, Akroyd D, Wilson S. The predictive value of selected job rewards on selected job rewards on occupational therapists job satisfaction in ambulatory care settings. *Occupational Therapy in Health Care.* 1995;9(4): 21-37
75. Denham LA, Shaddock AJ. Recruitment and retention of rural allied health professionals in developmental disability services in New South Wales. *Australian Journal of Rural Health.* 2004;1: 28-29.
76. Davis GL, Bordieri JE. Perceived autonomy and job satisfaction in occupational therapists. *American Journal of Occupational Therapy.* 1988;42(9):591-595.
77. Akroyd D, Wilson S, Painter J, Figuers C. Intrinsic and extrinsic predictors of work satisfaction in ambulatory care and hospital settings. *Journal of Allied Health.* 1994;23(3):155-164.
78. Devine C, Jastran M, Bisogni C. On the Front Line: Practice satisfactions and challenges experienced by dietetics and nutrition professionals working in community

- settings in New York State. *Journal of the American Dietetic Association*. 2004;104: 787-792.
79. Eick A.V. Role and job satisfaction among registered dietitians employed in rural and urban Minnesota. *Unpublished Doctoral Thesis*. Columbus: Ohio State University. 1981.
 80. Hall EJ. Nursing attrition and the work environment in South Africa health facilities. *Curationis*. 2004; 27(4): 28-36.
 81. Grunfield E, Whelan, TJ, Zitelsberger L, Willan AR, Montesanto B, Evans WK. Cancer Workers in Ontario: prevalence of burnout, job stress and job satisfaction. *Canadian Medical Association Journal*. 2000;163(2): 166-169.
 82. Crow, SM, Hartman SJ, Henson SW. Satisfaction of health care employees: a quest for the Holy Grail. *Health Care Management*. 2006;25(2):142-154
 83. Reddout M. Perceptions of clinical dietetic practice: continuing education and standards. *Journal of the American Dietetic Association*. 1991;91(8): 926-930.
 84. Moeller NL, Fitzgerald MP. A meta-analysis of the relation to job characteristics to job satisfaction. *Journal of Applied Psychology*. 1985;70(2):280-289.
 85. Syptak JM, Marsland DW, Ulmer D. Job satisfaction: Putting theory into practice. *Family Practice Management*. 1999;6(9):26-30.
 86. Jansen P, Martin JK. Job satisfaction and Age: A test of two views. *Social Forces*. 1982: 60: 1089-1102.
 87. Bernal D, Snyder D, McDaniel M. The age and job satisfaction relationship: does its shape and strength still evade us? *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*. 1998;53(5): 287-293.
 88. Hochwarter WA, Ferris GR, Perrewe PL, Witt LA, Kiewitz C. A note on the non-linearity of the age-job satisfaction relationship. *Journal of Applied Psychology*. 2001;31(6): 1223-1237.
 89. Bender K, Donohue S, Heywood J. Job satisfaction and gender segregation. *Oxford Economic Papers*. 2005;57:3: 479-496.
 90. Long A. Happily Ever After A study of job satisfaction in Australia. *The Economic Record*. 2005;81(255): 303.
 91. Voydanoff P. Perceived job characteristics and job satisfaction among men and women. *Psychology of Women Quarterly*. 1980;5(2): 177.

92. Mason ES. Gender differences in job satisfaction. *The Journal of Social Psychology*. 1995;135(2):143-151.
93. European Federation for the Improvement of Living and Working Conditions. *Measuring job satisfaction in surveys – Comparative analytical report*. Ireland, 2007. Accessed from www.eurofound.europa.eu (20 January 2008)
94. Clark, A. Job satisfaction and gender: Why are women so happy at work? *Labour Economics*. 1997;4(4): 341-372.
95. Evans S. Evolution, evidence and enterprise: women in leadership in the Australian healthcare industry. *The Journal of the Dietitians Association of Australia*. 1 December 2003. http://goliath.ecnext.com/coms2/gi_0199-669645/Evolution-evidence-and-enterprise-women.html (Accessed 28 June 2008).
96. Paull G. Children and women's hours of work. *The Economic Journal* 2008;118(526): F8-F27.
97. Booth AL, Van Ours JC. Job satisfaction and family happiness: The part time work puzzle. *The Economic Journal* 2008;118(526): F77-F99.
98. Greger JL. Are additional degrees needed to support advanced medical dietetic therapy. *Nutrition Today*. 2007;42(4): 194-197.
99. Mortensen JK, Nyland NK, Fullmer S, Eggett DL. Professional involvement is associated with increased job satisfaction among dietitians. *Journal of the American Dietetic Association*. 2002;102(10): 1452-1454.
100. Goodell TT, Van Ess H. Outcomes of nurses job satisfaction. *Journal of Nursing Administration*. 1994;24(11):36-41.
101. Stagnitti K, Schoo A, Dunbar J, Reid C. An exploration of issues of management and intention to stay: Allied health professionals in South West Victoria, Australia. *Journal of Allied Health*. 2006;35(4):226-231.
102. Get Access Now Website: Western Australia Dietitians Pay scales: <http://www.getaccess.wa.gov.au/careers/profiles/data/OCC97.asp> (Accessed 20 January 2008).
103. McDonald DJ, Makin PJ. The psychological contract, organisational commitment and job satisfaction of temporary staff. *Leadership and Organisational development Journal*. 2000;21(2): 84-91.

104. Decker FH. Occupational and non-occupational factors in job satisfaction and psychological distress among nurses. *Research Nursing Health*. 1997;20(5): 453-464.
105. Rossberg JL, Eiring O, Friss S. Work environment and job satisfaction. A psychometric evaluation of the working environment Scale-10. *Social Psychiatric Epidemiology*. 2004;39: 576-580.
106. Arvey RD, Bouchard TJ, Abraham LM. Job satisfaction: Environmental and genetic components. *Journal of Applied Psychology*. 1989;74(2):187-192.
107. Courtney M, Yacopetti J, James C, Walsh A. Queensland public sector nurse executives and career opportunities. *Australian Health Review*. 2001;24(2):83-95.
108. Ofili AN, Asuzu MC, Isah EC, Ogbeide O. Job satisfaction and psychological health of doctors at the University of Benin Teaching Hospital. *Occupational Medicine*. 2004;54(6):400-403.
109. HPCSA Professional Guidelines. Available:
<http://www.hpcsa.co.za/hpcsa/UserFiles/File/ProfessionalGuidelines.doc>. Accessed: 4 June 2008.
110. Stagnitti K, Schoo A, Reid C, Dunbar J. Access and attitude of rural allied health professionals to CPD and training. *International Journal of Therapy and Rehabilitation*. 2005;12(8):355-362.
111. Boythari ME, Cardinal BJ. The role of clinical dietitians as perceived by dietitians and physicians. *Journal of the American Dietetic Association*. 1997;97: 851-855.
112. Shai I, Shahar D, Fraser D. Attitudes of physicians and medical students toward nutrition's place in patient care and education at Ben-Gurion University. *Education for Health*. 2001;14(3):405-415.
113. Van Saane N, Sluiter JK, Verbeek JHAM, Frings-Dresen MHW. Reliability and validity of instruments measuring job satisfaction – systematic review. *Occupational Medicine* 2003;53: 191-200.
114. Connolly JL, Viswesvaran C. The role of affectivity in job satisfaction: a meta-analysis. *Personality and Individual Differences*. 2000;29(2):265-281.
115. Buchbinder SB, Wilson M, Melick CF, Powe NR. Primary care physician and job satisfaction and turnover. *American Journal of Managed Care*. 2001;7(7):701-7-13.
116. Castle NG. An instrument to measure job satisfaction of nursing home administrators. *BMC Medical Research Methodology*. 2006;6(47)

117. Hegney D, Plank A, Parker V. Extrinsic and intrinsic work values: Their impact on job satisfaction in nursing. *Journal of Nursing Management*. 2006;14(4): 271-281.
118. Milisen K, Abraham I, Siebens K, Darras E, Dierckx de Casterle B. Work environment and workforce problems: A cross-sectional questionnaire survey of hospital nurses in Belgium. *International Journal of Nursing Studies*. 2006;43(6):745-754.
119. Ironson GH, Smith PC, Brannick MT, Gibson WM, Paul KB. Construction of a Job in General Scale: a comparison of global, composite and specific measures. *Journal of Applied Psychology* 1989;74: 193-200.
120. Smith P, Kendall L, Hulin C. 1969. *Measurement of satisfaction in work and retirement. A strategy for the study of attitudes*. Rand McNally, Chicago, Illinois, USA.
121. Weiss DJ. 1967. *Manual for the Minnesota satisfaction questionnaire*. Work adjustment project, Industrial relations centre, University of Minnesota. USA.
122. Ng SH. A job satisfaction scale for nurses. *New Zealand Journal of Psychology* 1993;22: 46-53.
123. Shugars DA, Hays RD, DiMatteo MR, Cretin S. Development of an instrument to measure job satisfaction among dentists. *Medical Care* 1991;29: 728- 744.
124. Pelsma DM, Richard GV, Harrington RG, Burry JM. The quality of teacher work life survey: a measure of teacher stress and job satisfaction. *Measurement, Evaluation and Counselling Development*. 1989;21: 165-176.
125. Visser J, Marais M, du Plessis J, Steenkamp I, Troskie I. Experiences and attitudes of dietitians during the first compulsory community service year (2003). *South African Journal of Clinical Nutrition*. 2006;19(1):10-17.
126. Franz M. The dietitian: A key member of the diabetes team. *Journal of the American Dietetic Association*. 1981;79(3):302-305.
127. Nestle M. Leadership in clinical dietetics: meeting the challenge to roles in nutritional support. *Journal of American Dietetics Association*. 1984;84(11):1349-1353.
128. Agriesti-Johnson C, Dwyer K, Steinbaugh M. Nutrition support practice: a study of factors inherent in the delivery of nutrition support services. *Journal of Parenteral and Enteral Nutrition*. 1988;12(2):140-134.

129. Kennedy JF, Nightingale JMD. Cost savings of an adult hospital nutrition support team. *Journal of Nutrition*. 2005;21: 1127-1133.
130. Allred CG. Malnutrition and Clinical Outcomes: The case for Medical Nutrition Therapy. *Journal of the American Dietetic Association*. 1996;96(4):361-369.
131. Allison S. 2001. *Undernutrition in intestinal failure*. Greenwich Medical Media Limited, London, UK.
132. Mc Whirter J, Pennington CR. Incidence of malnutrition in hospital. *British Medical Journal*. 1994;308: 945-948.
133. Nightingale JMD, Walsh, N, Bullock MA, Wicks AC. Three simple methods of detecting malnutrition on medical wards. *Journal of the American Medical Association*. 1976;235: 1567-1570.
134. Whaley GA, Wright K. Male dietitians in 5 southern states: Some perspectives on the profession. *Journal of the American Dietetic Association*. 2000;100(12):1535-1537.
135. Desrochers, N. Legume promotion in counselling: An e-mail survey of Dietitians. *Canadian Journal of Dietetic Practice and Research*. 2006;62:193-198.
136. Peake, H, Stockely, M, Frost, G. What nutrition support literature do hospital nursing staff require? *Journal of Human Nutrition and Dietetics* 2001;3(14): 225-230.
137. Sheehan K. Survey response rates: A Review. *Journal of Computer Mediated Communication*. 2001;6(2):<http://jcmc.indiana.edu/vol6/issue2/sheehan.html>. (Accessed 12 November 2007).
138. Von Zweck C. The occupational therapy workforce in Canada. *Occupational Therapy Now*. 2006; 8(1): 17-20.

APPENDIX 1
DEMOGRAPHIC QUESTIONNAIRE

PLEASE READ THE INSTRUCTIONS BEFORE ANSWERING QUESTIONS.

1. All information on this questionnaire will be kept **CONFIDENTIAL** and **ANONYMOUS**.
2. **DO NOT** put your name or address on it to maintain confidentiality.
3. By completing this questionnaire you are giving consent to your participation.
4. Mark all relevant boxes with an **X**.
5. Please use a black or blue pen, and write clearly in those boxes that require more information if applicable.
6. For all those boxes chosen as “Other”, **PLEASE SPECIFY**
7. Please answer the questions in the **SEQUENCE** of the questionnaire.

PERSONAL INFORMATION			
1. Age	<input type="text"/>	years	
2. Gender	<input type="checkbox"/> Male	<input type="checkbox"/> Female	
3. Marital Status	<input type="checkbox"/> Single	<input type="checkbox"/> Married	<input type="checkbox"/> Divorced
	<input type="checkbox"/> Living with Partner	<input type="checkbox"/> Widowed	
4. Number of Children	<input type="checkbox"/> No children	<input type="checkbox"/> 1 child	<input type="checkbox"/> 2 children
	<input type="checkbox"/> >3 children		
5. First Language	<input type="checkbox"/> English	<input type="checkbox"/> Afrikaans	<input type="checkbox"/> Zulu
	<input type="checkbox"/> Xhosa	<input type="checkbox"/> Other	Specify <input style="width: 100px;" type="text"/>
6. Country of Residence	<input type="checkbox"/> South Africa	<input type="checkbox"/> UK	<input type="checkbox"/> Australia
	<input type="checkbox"/> USA	<input type="checkbox"/> Other	Specify <input style="width: 100px;" type="text"/>

GENERAL INFORMATION AS A DIETITIAN

7. How many years did you study to become a dietitian? years

8. Which institution did you graduate from as a dietitian?

- | | | |
|---|---|---|
| <input type="checkbox"/> Medunsa University | <input type="checkbox"/> North-West University | <input type="checkbox"/> Stellenbosch University |
| <input type="checkbox"/> University of Cape Town | <input type="checkbox"/> University of the Free State | <input type="checkbox"/> University of K.Zulu-Natal |
| <input type="checkbox"/> University of Limpopo | <input type="checkbox"/> University of Pretoria | <input type="checkbox"/> University of Venda |
| <input type="checkbox"/> University of Western Cape | <input type="checkbox"/> Other | Specify <input type="text"/> |

9. What year did you graduate as a Dietitian?

10. How many years have you practiced as a Dietitian? years

11. What is your highest level of qualification?

- | | | |
|---|----------------------------------|------------------------------------|
| <input type="checkbox"/> Bachelor (BSc) | <input type="checkbox"/> Honours | <input type="checkbox"/> Doctorate |
| <input type="checkbox"/> Postgrad Diploma | <input type="checkbox"/> Masters | |

12. Do you have an area of expertise in your dietetics practice?

- Yes – Go to question 13
- No – Go to question 14

13. What field of dietetics is your area of expertise in? (Mark more than 1 if required)

- | | | |
|---|---|-------------------------------------|
| <input type="checkbox"/> Allergies | <input type="checkbox"/> Intensive Care | <input type="checkbox"/> Pediatrics |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> GIT | <input type="checkbox"/> Renal |
| <input type="checkbox"/> Cardiovascular | <input type="checkbox"/> Mental Health | <input type="checkbox"/> Sports |
| <input type="checkbox"/> Eating Disorders | <input type="checkbox"/> Oncology | <input type="checkbox"/> Other |

Please Specify

19. What is your current annual salary, before taxes? (Please quote as South African Rands (SAR))

<R 44 999

R92 000 – R141 999

>R392 000

R45 000 – R62 999

R142 000 – R211 999

Earn a different currency

R63 000 – R91 999

R212 000 – R391 999

20. Reason for being in current job? (Mark more than 1 if required)

It is my passion

Good salary

Close to home

Only job available

Good perks

Convenience

Other

Specify

21. State what you like most about your current job.

21. State what you like most about your current job.

22. As a professional, where do you see yourself in 5 years time?

In the same job

A different job, not working as a dietitian

In a different job as a dietitian

Working overseas, but not as a dietitian

Working overseas as a dietitian

Retired

Other
Specify

APPENDIX 2
JOB SATISFACTION QUESTIONNAIRE

JOB SATISFACTION		
IN ANSWERING THIS SECTION, PLEASE CIRCLE THE NUMBER THAT MOST DESCRIBES OR CLOSELY REFLECTS YOUR OPINION.		Disagree very much Disagree moderately Disagree slightly Agree slightly Agree moderately
1	I feel I get paid a fair salary for the work I do.	1 2 3 4 5 6
2	There is little chance for promotion in my job.	1 2 3 4 5 6
3	I have enough time each month to complete or attend CPD activities.	1 2 3 4 5 6
4	I feel threatened by fellow dietitians.	1 2 3 4 5 6
5	I receive satisfactory recognition for doing good work from patients /clients	1 2 3 4 5 6
6	I work in a comfortable environment	1 2 3 4 5 6
7	I like the non-dietetic colleagues/ members of the MDT I work with.	1 2 3 4 5 6
8	I sometimes feel my job is meaningless.	1 2 3 4 5 6
9	Communications are good with other professionals (dietetic and non-dietetic).	1 2 3 4 5 6
10	Raises are few and far between.	1 2 3 4 5 6
11	I feel if I do well in my job I will get promoted.	1 2 3 4 5 6
12	I feel my knowledge and skills have declined since being in my current job.	1 2 3 4 5 6
13	I feel that fellow dietitians are competitive	1 2 3 4 5 6
14	I do not feel that the work I do is appreciated.	1 2 3 4 5 6
15	I feel restricted in my work due to professional guidelines.	1 2 3 4 5 6
16	I find I have to work harder at my job because of the incompetence of non-dietetic colleagues/ other health care professionals I work or liase with.	1 2 3 4 5 6
17	I like what I do in my job.	1 2 3 4 5 6
18	I have a good interaction network with fellow colleagues.	1 2 3 4 5 6
19	I feel unappreciated by what I am paid.	1 2 3 4 5 6
20	I feel if I were in a different dietetic job I have a better chance of being promoted.	1 2 3 4 5 6
21	My job experience is meeting my expectations in knowledge and skills development.	1 2 3 4 5 6
22	I have a good and rewarding relationship with fellow dietitians.	1 2 3 4 5 6
23	My current job is not rewarding enough.	1 2 3 4 5 6
24	I have too much to do at work.	1 2 3 4 5 6
25	I enjoy my non-dietetic colleagues/ other health professional co-workers.	1 2 3 4 5 6
26	I often feel isolated in my work.	1 2 3 4 5 6
27	I feel a sense of pride in doing my job.	1 2 3 4 5 6

28	I feel satisfied with my chances for salary increases.	1 2 3 4 5 6
29	Fellow dietitians show little interest or support in my work.	1 2 3 4 5 6
30	My job gives me enough exposure to CPD activities.	1 2 3 4 5 6
31	I have too much paperwork.	1 2 3 4 5 6
32	I dread going to work each day.	1 2 3 4 5 6
33	I am satisfied with my chances for promotion.	1 2 3 4 5 6
34	I receive recognition I feel I deserve from my non-dietetic colleagues/ other health professionals I work with.	1 2 3 4 5 6
35	My job is enjoyable.	1 2 3 4 5 6
36	I am always well informed on what is going on with a particular project or patient/client through good communications with fellow colleagues.	1 2 3 4 5 6

APPENDIX 3
ELECTRONIC FORMAT COVER LETTER



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvenoot • your knowledge partner

Dear Colleague

I hereby request your participation in a research project that is currently underway at the University of Stellenbosch and part of a Master of Nutrition thesis. The topic of research is: *Job satisfaction of Dietitians in South Africa*, which has received ethics approval from the Committee for Human Research, Faculty of Health Sciences, Stellenbosch University (Project number: N07/09/212).

Currently there is very little information regarding dietitians and job satisfaction not only at a national, but also on a global scale.

I appreciate and respect that time is something that we often lack in our profession, but I would appreciate 20 minutes of your time in completing the attached questionnaire. Please note, if you are working overseas, unemployed, retired or not working as a dietitian, it will only take approximately 3 minutes.

Participation in the survey is entirely voluntary, but I do urge you that your participation is essential in gathering valuable information, of which results will be disseminated to the Professional Board for Dietetics and ADSA. By



Fakulteit Gesondheidswetenskappe • Faculty of Health Sciences



Verbind tot Optimale Gesondheid • Committed to Optimal Health

Department of Human Nutrition • Departement Menslike Voeding
Posbus/PO Box 19063 • Tygerberg 7505 • Suid-Afrika/South Africa

Tel.: +27 21 938 9259 • Faks/Fax: +27 21 933 2991

Webblad / Web page: www.sun.ac.za/nutrition; www.sun.ac.za/nicus



completing the questionnaire, it is understood that you are consenting to partaking in the study. We sincerely hope that the results and specifically the recommendations may have an impact on the job satisfaction of all dietitians in the country.

Please answer the questionnaire in the order in which it is presented, where the first section is to collect information about you and the second section relates to the satisfaction of your current employment as a dietitian. It is important to note that your name and address are not requested, and although you have received this by e-mail, your e-mail address will be de-linked from your response to ensure that your information will be treated as anonymous and strictly confidential.

HOW TO REPLY:

- Return your questionnaires to jsresponse@btinternet.com - copy this address using your “copy” tool.
- Press the reply box at the top of this e-mail.
- In the address part, delete the ADSA address and paste the copied address above.
- Fill out the questionnaire as it appears in the e-mail.
- Click on the box that you want select and mark it by pressing the “x” on your keyboard.
- When finished, simply press the send box.

It would be most appreciated if you could complete and return this within a month of receiving it. I thank you in advance for your participation, where your support is greatly appreciated.

A Mackenzie

APPENDIX 4
POSTAL COVER LETTER



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvenoot • your knowledge partner

Dear Colleague

I hereby request your participation in a research project that is currently underway at the University of Stellenbosch and part of a Master of Nutrition thesis. The topic of research is: *Job satisfaction of Dietitians in South Africa*, which has received ethics approval from the Committee for Human Research, Faculty of Health Sciences, Stellenbosch University (Project number: N07/09/212). Currently there is very little information regarding dietitians and job satisfaction not only at a national, but also on a global scale.

I appreciate and respect that time is something that we often lack in our profession, but I would appreciate 20 minutes of your time in completing the attached questionnaires. Please note, if you are working overseas, unemployed, retired or not working as a dietitian, it will only take approximately 3 minutes.

Participation in the survey is entirely voluntary, but I do urge you that your participation is essential in gathering valuable information, of which results will be disseminated to the Professional Board for Dietetics and ADSA. By completing the questionnaire, it is understood that you are consenting to partaking



Fakulteit Gesondheidswetenskappe • Faculty of Health Sciences



Verbind tot Optimale Gesondheid • Committed to Optimal Health

Department of Human Nutrition • Departement Menslike Voeding
Posbus/PO Box 19063 • Tygerberg 7505 • Suid-Afrika/South Africa
Tel.: +27 21 938 9259 • Faks/Fax: +27 21 933 2991

Webblad / Web page: www.sun.ac.za/nutrition; www.sun.ac.za/nicus



in the study. We sincerely hope that the results and specifically the recommendations may have an impact on the job satisfaction of all dietitians in the country.

Please answer the questionnaire in the order in which it is presented, where the first section is to collect information about you and the second section relates to the satisfaction of your current employment as a dietitian. Although there is a tracking number on the questionnaire, please do not write your name and address on the questionnaire, as we intend to treat all information as anonymous and strictly confidential.

Upon completion please, return it using the provided self-addressed envelope for which postage has been pre-paid. It would be most appreciated if it could be returned within a month of receiving this letter.

I thank you in advance for your participation, where your support is greatly appreciated.

A Mackenzie

APPENDIX 5
LETTER TO ADSA REQUESTING ASSISTANCE



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvenoot • your knowledge partner

ADSA President (2006-2008)
Attention: Rene Smalberger
PO Box 868
Ferndale
2160
Tel: +27 11 7876621
e-mail: kien@mweb.co.za

RE. Request for assistance from ADSA with Research

I am a Masters student with the University of Stellenbosch, currently researching:

Job satisfaction of Registered Dietitians in South Africa.

This project has received ethics approval from the Committee of Human Research, Faculty of Health Sciences, Stellenbosch University (Project number: N07/09/212).

I am writing to respectfully request the assistance of ADSA in 3 regards. The first regard being in the e-mail distribution of survey material. Although I am requesting a full census of registered dietitians from the HPCSA, their registrant data does not hold e-mail addresses, only postal. I am of understanding that ADSA holds an e-mail database of ADSA members, of which I appreciate you



Fakulteit Gesondheidswetenskappe • Faculty of Health Sciences



Verbind tot Optimale Gesondheid • Committed to Optimal Health

Department of Human Nutrition • Departement Menslike Voeding

Posbus/PO Box 19063 • Tygerberg 7505 • Suid-Afrika/South Africa

Tel.: +27 21 938 9259 • Faks/Fax: +27 21 933 2991

Webblad / Web page: www.sun.ac.za/nutrition; www.sun.ac.za/nicus



cannot disclose the addresses to me, but can assist in the distribution of the material. Thus in the interests of reducing wastage of paper, postage and time, e-mail for this study has deemed preferable.

The survey material will consist of a cover letter, demographic data and job satisfaction questionnaire (4 pages in total). It is proposed that the dietitians complete the questionnaires in the reply format of the e-mail and return them to the researcher and not ADSA. All information received is guaranteed to be treated with the utmost confidentiality and anonymity. It will be clearly indicated that participation is voluntary and that by completing the questionnaires, the participant consents to partaking in the study.

The second request is to follow up this same process via e-mail, 3 weeks later to act as a reminder to the non- responders.

Lastly for those whom you do not have an e-mail address nor for whom are a member of ADSA, will be posted a hardcopy of the cover letter and questionnaires, which will naturally be my responsibility. However to make this possible I would need a census of those on your e-mail database.

Your assistance in this matter will be most greatly appreciated. Should further information be required with regard to this study, please do not hesitate to contact my study leaders or myself for further information.

Yours sincerely

A Mackenzie (Student Researcher) – annabel.mackenzie@btopenworld.com

D Marais (Study Leader) – dm@sun.ac.za (Tel: 021 93 9473)

J Visser (Co-study Leader) – jconrad@sun.ac.za (Tel: 021 938 8137)

APPENDIX 6
LETTER OF ETHICS APPROVAL FOR RESEARCH FROM THE COMMITTEE
FOR HUMAN RESEARCH



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvennoot • your knowledge partner

11 October 2007

Mrs AJ Mackenzie
Division of Human Nutrition
Dept of Interdisciplinary Health Sciences

Dear Mrs Mackenzie

RESEARCH PROJECT : "JOB SATISFACTION OF SOUTH AFRICAN REGISTERED DIETITIANS"
PROJECT NUMBER : N07/09/212

It is my pleasure to inform you that the abovementioned project has been provisionally approved on 9 October 2007 for a period of one year from this date. You may start with the project, but this approval will however be submitted at the next meeting of the Committee for Human Research for ratification, after which we will contact you again.

Notwithstanding this approval, the Committee can request that work on this project be halted temporarily in anticipation of more information that they might deem necessary to make their final decision.

Please note that a progress report (obtainable on the website of our Division) should be submitted to the Committee before the year has expired. The Committee will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly and subjected to an external audit.

In future correspondence, kindly refer to the above project number.

I wish to remind you that patients participating in a research project at Tygerberg Hospital will not receive their treatment free, as the PGWC does not support research financially.

The nursing staff of Tygerberg Hospital can also not provide extensive nursing aid for research projects, due to the heavy workload that is already being placed upon them. In such instances a researcher might be expected to make use of private nurses instead.

Yours faithfully

CJ VAN TONDER
RESEARCH DEVELOPMENT AND SUPPORT (TYGERBERG)
Tel: +27 21 938 9207 / E-mail: cjvt@sun.ac.za

CJVT/pm



DOCUMENTS AND LETTERS OF INFORMATION DOCUMENT NUMBER PROJECT 11007/09/212-001.DOC

Fakulteit Gesondheidswetenskappe • Faculty of Health Sciences



Verbind tot Optimale Gesondheid • Committed to Optimal Health
Afdeling Navorsingsontwikkeling en -steun • Research Development and Support Division
Posbus/PO Box 19063 • Tygerberg 7505 • Suid-Afrika/South Africa
Tel. +27 21 938 9677 • Faks/Fax: +27 21 931 3352
E-pos/E-mail: rdsdinfo@sun.ac.za