

**AN EXPLORATORY INVESTIGATION OF THE FACTORS THAT INFLUENCE
THE RETENTION OF KNOWLEDGE WORKERS AT THE NATIONAL
ENERGY REGULATOR OF SOUTH AFRICA**

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By

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ABSTRACT

Knowledge workers are the nucleus of the modern economy. Increasingly organisations are relying on this category of worker for their competitiveness and survival. To ensure that organisations succeed, they need to retain knowledge workers in a competitive labour market characterised by low supply of specialists and high demand for their skills. In the war for talent, firms are always faced with the challenge to retain top performing employees. Employees always have a choice to leave the employer whenever any form of unresolved dissatisfaction sets in. The National Energy Regulator of South Africa (NERSA) is facing a similar challenge. A high number of employees are resigning at an alarming rate. The success of NERSA is dependent on its ability to attract, develop and retain specialist in disciplines such as engineering, economics, law, customer services, accounting, information technology and other support professions.

This study used a quantitative survey method to measure and analyse the responses to the questionnaire that aimed to identify and understand factors that cause labour turnover among knowledge workers and, secondly, to gain insight into the major factors that may influence the retention of knowledge workers at NERSA. The research was designed from a post-positivist paradigm. Data was gathered through the administration of a close-ended questionnaire to NERSA's 59 knowledge workers, 34 of whom responded by completing and returning the questionnaire – a 58% response rate. The study is not an attempt to make generalisations about knowledge workers in the modern economy, but to seek to understand factors that are peculiar to NERSA in terms of their influence in retaining knowledge workers in this specific environment.

The study found that, at NERSA, the broader needs of knowledge workers relate to development, career progression, sense of achievement, freedom to plan, goal orientation, quality of leadership, recognition for contribution and adequate reward packages, control over work assignments and job enrichment. Differences among the various categories of employees underscore the need to treat knowledge workers as individuals. The study concludes that knowledge workers need discretionary space to apply their individual talents to their work and to be recognised and rewarded adequately. Various possible strategies can help retain knowledge workers such coaching and mentoring staff, focusing on the individual and understanding expectations.

Declaration

I, Thami Ignatius Nompula, hereby declare that this dissertation is my own original work, that all reference sources have been accurately reported and acknowledged, and that this dissertation has not previously, in its entirety or in part, been submitted to any University for assessment purposes.

Thami Ignatius Nompula

Date

In Memoriam

At the time of completing my studies, I pause to remember the people who were instrumental in me becoming the person I am and who are not here to witness how they impacted on my life:

My late father; a truly exceptional man. He named me Thamsanqa to proclaim to the world how fortunate he was to have me as an offspring, but I am more fortunate to have known him as a father and as a man. He was a provider, an inspiration and an anchor on whom all could rely. He was very remarkable, even to his last day. To my late brother; spirited, intense and brilliant – a towering frame that I will always miss. Finally to my late sister, ever cheerful, a unifier, clever and mature beyond her age – she taught us a lot about humanity. They all left a wonderful legacy.

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TABLE OF CONTENTS

ABSTRACT	ii
Declaration	iii
In Memoriam	iv
Acknowledgements	v
LIST OF TABLES	xii
LIST OF FIGURES	xiv
LIST OF APPENDICES	xv
LIST OF ACRONYMS	xvi
CHAPTER 1: INTRODUCTION	1
1.1 Introduction	1
1.2 The Importance of Regulation in the Modern Economy.....	2
1.3 The National Energy Regulator.....	3
1.4 Context: The Functions of NERSA.....	3
1.5 The Importance of Knowledge Workers in Regulatory Institutions	5
1.6 Labour Turnover among Knowledge Workers in Regulatory Institutions	7
1.6.1 The costs of labour turnover in the organisation.....	8
1.6.2 Cost of turnover and opportunity costs in regulatory institutions.....	9
1.6.3 Mitigating strategies to overcome the causes and impact of staff turnover	9
1.6.4 Local experience: staff turnover at the Competition Commission and ICASA	10
1.6.5 Staff Turnover at the National Energy Regulator	11
1.7 The Research Problem	12
1.8 Structure of the Report	12
CHAPTER 2: LITERATURE REVIEW	13
2.1 Introduction	13
2.2 Intellectual Capital and the Knowledge Worker	13
2.2.1 The knowledge worker concept	13
2.2.2 Emergence of intellectual capital and the knowledge worker.....	14
2.2.3 Definition of Intellectual Capital.....	15

2.2.4	Definition of knowledge work	16
2.2.5	Definition of a knowledge worker	17
2.2.6	Characteristics of the Knowledge Worker	17
2.2.7	The importance of building intellectual capital in the modern organisation.....	20
2.2.8	Managing knowledge workers successfully in order to retain them.....	20
2.2.9	Key aspects in retaining intellectual property: creating structural capital	22
2.3	Labour Turnover	23
2.3.1	General Overview	23
2.3.2	Factors that cause labour turnover among knowledge workers	24
2.3.3	Push factors that cause labour turnover among knowledge workers	25
2.3.4	Pull factors that cause labour turnover among knowledge workers.....	30
2.3.5	Factors that cause labour turnover in South African knowledge-driven organisations.....	31
2.4	Retention Strategies used to Attract, Develop and Retain Knowledge Workers	32
2.4.1	Development of the learning organisation	32
2.4.2	Application of the Precepts of the Learning Organisation by Regulatory Agencies	34
2.4.3	Matching organisational and individual needs.....	34
2.5	The Work Dimension	35
2.5.1	Employees' perception of work	35
2.5.2	Sense of Achievement.....	35
2.5.3	Challenging work	36
2.5.4	Multidisciplinary teams.....	36
2.5.5	Balanced Workload	37
2.6	The Reward Dimension.....	37
2.6.1	Risk Sharing	38

2.6.2	Adequate Reward Systems.....	38
2.6.3	Premium pay for specialist skills	39
2.6.4	Recognition	39
2.6.5	Performance improvement and feedback	40
2.7	The Leadership and Management Dimension.....	40
2.7.1	Quality of leadership	41
2.7.2	Socially-supportive environment	41
2.7.3	Freedom and autonomy	42
2.7.4	Supportive management: appreciation of individual contributions	42
2.8	The Training and Development Dimension	43
2.8.1	Future Growth and Opportunity	43
2.8.2	Partnerships with training institutions.....	44
2.8.3	Capacity Building.....	45
2.8.4	Exchange Programmes with other Regulators	45
2.8.5	Public exposure of employees.....	45
2.9	Values and Organisational Culture Dimension.....	46
2.9.1	Reputation of the organisation	46
2.9.2	Organisational culture and behaviour	47
2.9.3	Communication	47
2.10	Conclusion.....	48
CHAPTER 3: RESEARCH METHODOLOGY.....		49
3.1	Introduction	49
3.2	Research question, aim and goals	49
3.3	Delimitations and limitations of the study	50
3.4	Ethical considerations	50
3.5	Research Paradigm.....	51
3.6	Research Design.....	51
3.6.1	Characteristics of the Survey Research Method	52

3.6.2	Factors that influenced the choice of methodology	52
3.7	Data Gathering Methodology	54
3.7.1	The Pilot Survey	55
3.7.2	The questionnaire	56
3.7.3	Construction of the questionnaire	56
3.7.4	Assumptions made in the construction of the questionnaire	58
3.7.5	Content Validity and Reliability	58
3.8	The population and sample selected for the study	59
3.8.1	Biographical information of respondents	60
3.8.2	Race	60
3.8.3	Gender distribution	60
3.8.4	Age	61
3.8.5	Job Grade	62
3.8.5	Tenure at NERSA	63
3.8.6	Number of employers before joining NERSA	64
3.8.7	Number of previous years work experience before joining NERSA	65
3.8.8	Qualifications	65
3.8.9	Divisional distribution	67
3.9	Data Analysis	68
3.10	Conclusion	69
	CHAPTER 4: ANALYSIS AND DISCUSSION OF THE RESULTS	70
4.1	Introduction	70
4.2	Research results on the indicators of labour turnover	71
4.2.1	Quality of leadership and relationship with manager	72
4.2.2	Opportunity to achieve personal and professional goals	73
4.2.3	Opportunity to innovate and improve systems	74
4.2.4	Recognition for special contributions	75

4.2.5	Opportunities for development and career progression	76
4.2.6	Freedom to plan and execute work independently	77
4.3	Research results on the indicators of retention.....	78
4.3.1	Job enrichment	79
4.3.2	Sense of achievement	79
4.3.3	Control over work assignments	81
4.3.4	Adequate remuneration, benefits and reward package.....	82
4.3.5	Challenging work	83
4.4	Results of variables that are of low importance to respondents	84
4.4.1	Opportunity to work in foreign country	84
4.4.2	Experimentation with a number of career options	85
4.4.3	Exchange programmes with other regulators	86
4.4.4	Socially-supportive environment	87
4.4.5	Partnerships with training institutions.....	88
4.4.6	Public exposure of employees	89
4.5	Results of Chi Square Tests	90
4.5.1	Sense of achievement and number of years' experience before joining NERSA..	91
4.5.2	Opportunity to achieve personal and professional goals and employee grade or band	91
4.5.3	Opportunity for development and career progression and number of years' experience before joining NERSA	92
4.5.4	Opportunities for development and career progression and number of previous employers	93
4.5.5	Freedom to plan and execute work independently and number of years experience before joining NERSA	94
4.5.6	Freedom to plan and execute work independently and divisions at NERSA.....	95
4.6	Conclusion.....	96

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS	98
5.1 Introduction	98
5.2 Summary of the main findings	98
5.3 Recommendations to Management and the Human Resources Department	99
5.3.1 Retaining knowledge in the organisation	100
5.3.2 Coaching and mentoring for rising stars	100
5.3.3 Focus on the individual and groups of employees	101
5.3.4 Learning about what employees want for themselves and the organisation	101
5.3.5 Adequate and competitive remuneration package	102
5.4 Review of the limitations of the study and recommendations for future research.....	102
5.4.1 Factors Analysis: factors that influence labour turnover and retention	103
5.4.2 Understanding low importance scores in well-established retention factors	103
5.4.3 Conducting longitudinal studies.....	103
5.4.4 Comparative studies among regulatory agencies in South Africa	104
5.4.5 Understand the expectations of management against those of knowledge workers	104
5.5 Conclusion.....	104
REFERENCE LIST.....	106
APPENDIX A: THE QUESTIONNAIRE	117
APPENDIX B: SOURCES OF RETENTION VARIABLES IN THE QUESTIONNAIRE	121
APPENDIX C: LIST OF TABLES WITH RESULTS OF THE MAIN QUESTIONNAIRE	124

LIST OF TABLES

Table 2.1	Summary of push factors that cause labour turnover gleaned in the literature	25
Table 3.1	Racial and gender distribution of respondents expressed in percentages	61
Table 3.2	Tenure at NERSA	64
Table 3.3	Total number of employers previously worked for	64
Table 3.4	Number of previous years' work experience	65
Table 3.5	Percentage of gender distribution of qualifications	66
Table 3.6	Years' experience before joining NERSA according to qualifications	66
Table 3.7	Years working before joining NERSA per division	67
Table 3.8	Tenure at NERSA per division	68
Table 4.1	Summary of research results on the indicators of labour turnover	71
Table 4.2	Quality of leadership and relationship with manger	72
Table 4.3	Opportunity to achieve goals	73
Table 4.4	Opportunity to innovate and improve systems	74
Table 4.5	Recognition of special contribution	75
Table 4.6	Opportunities for development and career progression	76
Table 4.7	Freedom to plan and execute work independently	77
Table 4.8	Summary of research results on the indicators of retention	78
Table 4.9	Job enrichment	79
Table 4.10	Sense of achievement	80
Table 4.11	Control over work assignment	81
Table 4.12	Adequate remuneration, benefit and reward package	82
Table 4.13	Challenging work	83
Table 4.14	Summary of research results on low importance scores	84
Table 4.15	Opportunity to work in a foreign country	85
Table 4.16	Experimentation with a number of career options	86
Table 4.17	Exchange programmes with other regulators	87
Table 4.18	Socially- Supportive environment	88
Table 4.19	Partnerships with training institutions	88
Table 4.20	Public exposure of employees	89

Table 4.21	Sense of achievement analysed by number of years experience before joining NERSA	99
Table 4.22	Opportunity to achieve personal and professional goals analysed by grade	92
Table 4.23	Opportunity for development and career progression analysed by number of years experience before joining NERSA	93
Table 4.24	Opportunity for development and career progression analysed by number of previous employers	94
Table 4.25	Freedom to plan and execute work independently analysed by number of years experience before joining NERSA	95
Table 4.26	Freedom to plan and execute work independently analysed by division	96

LIST OF FIGURES

Figure 3.1:	Racial breakdown of respondents	60
Figure 3.2:	Gender distribution	61
Figure 3.3:	Age distribution	62
Figure 3.4:	Job Grades	63

LIST OF APPENDICES

Appendix A:	The Questionnaire	117
Appendix B:	Sources of labour turnover and retention in the questionnaire	121
Appendix C:	List of Tables of Results from the Main Questionnaire	124

LIST OF ACRONYMS

AFUR	African Forum for Utility Regulators
BMR	Bureau of Market Research
CEO	Chief Executive Officer
CRE	Commission for Electricity Regulator
ESC	Electricity Supply Commission
GDP	Gross Domestic Product
HR	Human Resources
IDMS	Integrated Document Management System
ICASA	Independent Commission Authority of South Africa
MBA	Master of Business Administration
MRTT	Market Regulation Technology Team
NER	National Electricity Regulator
NERSA	National Energy Regulator of South Africa
NHS	National Health System
NVE	Norwegian Water and Electricity Regulator
NNR	National Nuclear Regulator
OECD	Organisation for Economic Cooperation and Development
OFGEM	Office for Gas and Electricity Markets
RERA	Regional Electricity Regulators Association
RSA	Republic of South Africa
SANS	South African National Standards
SRC	Securities Regulation Commission
RED	Regional Electricity Distributor
TDLR	Texas Department of Licensing and Regulator
UK	United Kingdom
US	United States
WHO	World Health Organisation

CHAPTER 1: INTRODUCTION

1.1 Introduction

Drucker (1994) describes the new economic and social order of the Twenty First Century as one in which knowledge is the key resource above capital and equipment. Drucker (1994) contends that firms who succeed in the knowledge age will be those who employ knowledge workers as a competitive advantage. The rise of the knowledge worker has transformed the relationship between employer and employee in the new millennium, in much the same way that collective labour transformed these relationships in the industrial era (Malone, 2004). Power dynamics in South African organisations have been characterised by collective forces of labour and management (van der Merwe, 1990). However, as South Africa becomes a player in the competitive global environment, South African organisations need to pay attention to the powerful role of knowledge workers in the knowledge economy. It is expected that they will eventually exceed the power of collective labour.

Furthermore, the old social contract of employee loyalty towards an employer began its decline with the shift from employment for life, brought about by the need for companies to downsize and restructure in the light of increasing competitiveness in a global market place (Drucker, 1994). As companies emphasise that employability, rather than job security, is the only guarantee they can give employees, employees are becoming more assertive in making demands on employers or looking elsewhere (Liebowitz, 1999; Malone, 2004; Stewart, 1997). Knowledge workers are in a relatively more powerful position in the employer/employee relationship than the traditional employee since they rely on their knowledge to produce goods or services for profit (Stewart, 1997). The retention of these employees is therefore becoming an increasingly important challenge faced by organisations globally (Downes and Husbands, 2003; Drucker, 1994; Malone, 2004; Makaya, 2001; World Bank, 2004). It is estimated that replacement costs of these employees can be as much as 150% of the departing person's salary (Deloitte and Touché, 2003; Martin, 2000) and this does not take into account the lost client relations, potential innovations and tacit knowledge which leaves with the employee. This research aims to understand the factors that influence the retention of knowledge workers.

1.2 The Importance of Regulation in the Modern Economy

Regulation means government's direct or indirect control of an enterprise's activities in a particular sector of the economy (World Bank, 2001). Regulation can be *economic*, *technical* and *social* (World Bank, 2001). Economic regulation is primarily concerned with the price of monopoly elements of energy, the financial conditions of the utilities, their operating and investment decisions and the necessary conditions for competition (Baldwin and Cave, 1999; World Bank, 2001). Technical regulation focuses on the operational and engineering aspects of an enterprise or grid operation such as safety, reliability and quality of supply and customer service. Social regulation is concerned with the health and environmental standards that minimise degradation of the planet (World Bank, 2001). Regulation is therefore necessary to provide protection and support to a diverse range of stakeholders in a given sector. This will enable tariffs to be aligned closer to the cost of supply, create and maintain a climate conducive for investment. These, in turn, promote transparency in the regulatory processes to minimise regulatory risks, protect customers and ensure efficiency in utility operations and industry sustainability.

According to Baldwin and Cave (1999) there are six major reasons why regulators are appointed in a given sector of the economy. First, to prevent market failure that ensures that the industry is sustainable. For example, in 2002 the Banks Regulator decided to liquidate Saambou Bank but rescued BOE Bank to ensure confidence in the banking sector. Such interventions help provide investors with a predictable business environment. Secondly, to protect consumers from anti-competitive practices by powerful operators which lead to monopolistic dominance and price distortions (Baldwin and Cave, 1999; World Bank, 2001). Thirdly, regulators overcome information asymmetry problems by, for instance, instructing food manufacturers to provide nutritional information on food products. Fourthly, they sustain and ensure public confidence about service providers such as the role played by the South African National Standards (SANS) in certifying that certain products meet stringent quality standards or the nuclear safety assurance role of the National Nuclear Regulator (NNR). Fifthly, to meet the socio-economic objectives of government such as making telephony and energy accessible and affordable to all citizens. Finally, to promote equal opportunity by regulating the barriers to entry and to exit in certain markets in order to stimulate competition and choice.

1.3 The National Energy Regulator

The National Energy Regulator of South Africa (NERSA) is a regulatory authority established in terms of the National Energy Regulator Act, 2004 (Act No. 40 of 2004) to regulate the electricity, petroleum pipelines and the piped-gas industries (Republic of South Africa, 2004). NERSA is primarily an economic regulator. The functions of the Regulator are to oversee the activities of:

- The Gas Regulator as set out in section 4 of the Gas Act, 2001 (Act 60 of 2001);
- The Petroleum Pipelines Regulator as set out in section 4 of the Petroleum Pipelines Regulator Act, 2003 (Act 58 of 2002); and,
- The National Electricity Regulator as set out in section 4 of the Electricity Act, 1987 (Act 41 of 2001).

NERSA is led by a Board that comprises of nine members. The Chairperson of the Board, the Deputy Chairperson and two others are Part-time Members while the Chief Executive Officer (CEO) and three other Members serve on a full-time basis (Republic of South Africa, 2004). NERSA is supported by a secretariat made up of managers, specialists in the areas of economics, financial analysis, engineering, communications, information management, legal advisory services and support staff. In accordance with these Acts, NERSA is mandated to undertake functions such as the issuing of licences, granting of concessions, administration of the rules, settlement of disputes between stakeholders (especially licensees and customers), monitoring of compliance with regulatory norms, prosecution for non-compliance, including the imposition of penalties, promoting investment and encouraging competition in regulated industries, including reforming and liberalising markets (Republic of South Africa, 2004; World Bank, 2000).

1.4 Context: The Functions of NERSA

The generation, production and distribution of energy accounts for approximately R100 billion of South Africa's Gross Domestic Product (GDP) (National Electricity Regulator, 2005). NERSA is responsible for regulating the electricity supply industry (including Eskom), the vertically integrated electricity utility owned by the National Government and over 200 municipalities that are licensed to distribute electricity (National Energy Regulator, 2006). The electricity industry is

undergoing a restructuring process that will result in the assets of Eskom and municipal distributors being housed into six financially independent Regional Electricity Distributors (REDs). NERSA is expected to play a leading role in supporting the restructuring process. NERSA is also expected to implement a regulatory regime compatible with attracting new investment in generation capacity; promoting competition in the generation and supply of electricity; achieving cost savings, economies of scale and improved levels of service in the new REDs; introducing cost reflective end user tariffs; and protecting the financial sustainability of the industry and the interests of over 8 million consumers (National Energy Regulator, 2006).

There are relatively few players in the hydrocarbons industry (National Energy Regulator, 2006). The industries in question are piped-gas and petroleum pipelines. The gas industry consists almost entirely of Sasol Gas and the petroleum pipelines industry is dominated by Petronet (National Energy Regulator, 2006). In the case of the gas industry, the extent of regulatory intervention will be limited for up to 10 years by the Regulatory Agreement between Sasol and the Government. A number of private sector facilities include the offshore loading facility in Durban that are owned and operated jointly by BP, Shell, Engen and SASOL Oil. There are storage facilities in the Durban Harbour and the Saldanha Bay to Milnerton pipeline as well as pipelines along the Port of Cape Town (National Energy Regulator, 2006). The Gas Act and the Petroleum Pipelines Act provide the mandate to regulate and promote the orderly development of hydrocarbons industries.

The nature of regulatory work is unique in that it is regarded as an extension of government work and therefore permeates all sectors of society. It is important to have employees with the requisite competences to deliver on the mandate that these agencies are given by the citizenry, especially in a competitive labour market where specialists and professionals from regulatory agencies are poached by utilities. To the extent that regulatory agencies rely on the expertise of these categories of employees, it is important that regulators such as NERSA are able to retain them in order to effectively contribute towards meeting the socio-economic objectives of government and the public in its entirety. For example, in the Caribbean, the poaching of knowledge workers by utilities and other private sector companies is high due to regulatory agencies' limited resources (Downes and Husbands, 2003). In the TLDR's experience, finding and keeping quality employees has been a challenge where most talented professionals are often courted by other regulators and utilities, thus contributing to relatively high staff turnover (TDLR, 2006).

1.5 The Importance of Knowledge Workers in Regulatory Institutions

Changes in the international economic environment have resulted in utility or market liberalisation that in turn has seen markets becoming more competitive (Downes and Husbands, 2003). One outcome of utility liberalisation is the emergence of independent regulatory bodies, heavily used to oversee the delivery of energy, telecommunications, and financial services. Hundreds of these institutions have been set up in developed and developing countries in the past decade, mainly to protect investors from arbitrary political intervention; enforce competition rules in an objective manner; and to improve credibility, transparency, stability, and expertise (World Bank, 2004). To deal with this surge in economic activity and market liberalisation, governments have established regulatory agencies to ensure that the competitive process is fair and that consumer interests are protected (Downes and Husbands, 2003). Technological developments contributed to changes in this environment and it resulted in the unbundling of the production functions of utilities which led to an increase in the number of participants in the utilities market and greater competitiveness in various sub-markets.

A number of regulatory institutions have been formed to enforce these regulations. In Britain, for example, the Office of the Gas and Electricity Markets (OFGEM) was formed in the 1980s and the rest of Western Europe followed suit through the establishment of similar bodies, such as the Commission for Electricity Regulation (CRE) in France and the Norwegian Water and Electricity Regulator (NVE), (World Bank, 2001). Similarly South America and South Africa in the 1990s started establishing a number of regulators in the utility markets (Downes and Husbands, 2003; World Bank, 2000; 2004). The new regulatory environment requires institutions to possess the ability to adequately and effectively discharge the tasks which they were mandated to carry out (Downes and Husbands, 2003). To be able to do this successfully, attracting, motivating and retaining the right quantity and quality of human resources is important.

According to Domah, Pollit and Stern (2002) and Stern (2000), the effectiveness of modern regulatory agencies requires a substantial number of professionals with particular scarce specialist skills that are not readily available in the market, especially in developing countries. Regulatory agencies are usually staffed by economists, lawyers, accountants, financial analysts and engineers who not only require basic technical skills and knowledge but also special

investigative skills in regulation (Downes and Husbands, 2003; Makaya, 2001; Stern, 2000). The research and investigative functions of a regulatory institution require a number of supporting staff who are specialists or knowledge workers in their own right. These are librarians, information specialists, customer service or complaints officials, communication specialists, project managers, policy analysts and statisticians (Downes and Husbands, 2003). Given the general scarcity of skilled professionals in developing countries such as South Africa, the recruitment, development and retention of this type of human resource base is a pressing issue for regulatory effectiveness, and by extension, economic development.

Studies of regulatory agencies generally conclude that in order to be successful, there needs to be an analytical infrastructure capable of in-depth investigation and reporting on all the variables that must be taken into account to arrive at fair and balanced decisions (Downes and Husbands, 2003; Domah et al, 2002; Makaya, 2001; Stern, 2000; World Bank, 2004). Knowledge workers want an environment in which they can perform their own independent research and not be merely project managers for other knowledge workers. The pool of expertise required to support regulators to carry out their mandate needs to demonstrate superior capabilities in the respective technical fields of the regulatory agency (Downes and Husbands, 2003)

In a market where the skills necessary to ensure effective regulation leading to investor confidence and market competition, it is important for regulators to allocate the requisite resources to attract, develop and retain professionals. The availability of adequate resources and expertise to carry out the regulatory mandate of the agency would afford it the capacity to design tariffs, assess and monitor the performance of utilities. Furthermore, it would enforce all other regulations effectively and affordably to meet the socio-economic objectives of government, provide returns for investors and protect consumers (Downes and Husbands, 2003; Makaya, 2001; World Bank, 2004). The recruitment and retention of expertise must therefore be seen as central to the development of the required regulatory capability.

Regulators that are understaffed with respect to professionals threaten the broader socio-economic and financial interests of government, investors and consumers (Downes and Husbands, 2003). Having a sufficient pool of professionally qualified specialists will provide institutional continuity of regulation. Retaining knowledge workers lies at the heart of this

continuous success. South Africa, as a developing country, is in a similar position that is compounded by a shortage of skilled professionals. For example, the Bureau of Market Research estimates the shortage of engineers at 56% and of financial specialists at 48% (BMR, 2006). Assessing regulatory effectiveness is contingent upon the quality of the staff providing the technical and professional inputs since the decisions of the regulator must be based on competent research and expert technical advice (Downes and Husbands, 2003; Makaya, 2001; World Bank, 2004). The ability to attract and retain a pool of knowledge workers is essential for effective regulation in developing countries. Effective regulation comes down to the quality of employees in the regulatory institution.

1.6 Labour Turnover among Knowledge Workers in Regulatory Institutions

A review of Annual Reports of five regulatory agencies in Australia, the UK, Norway and the United States as well a study by Downes and Husbands (2003) in the Caribbean and the World Bank (2004) in developing countries indicate that generally regulatory institutions experience staff turnover challenges from time to time. The Annual Reports were for the period 2003 to 2005 while the Caribbean study (Downes and Husbands, 2003) was more longitudinal as it looked at developments since 1993, while the World Bank (2004) was a five-year review of developments in the regulatory space in developing countries. The major themes that came from the review are: cost of turnover, opportunity costs, poaching of staff as well as mitigation strategies (Downs and Husbands, 2003; ESC, 2005; OFGEM, 2006; SRC, 2005; TDLR, 2006). If regulatory institutions are unable to retain knowledge workers in their respective agencies they run the risk of failing to meet the mandate citizens have given to their political principals. It is especially important in South Africa as a developing country to have efficient and effective regulation in order to improve access and affordability to resources for the majority who were previously excluded as well as assure quality of supply and foster investment in the economy.

1.6.1 The costs of labour turnover in the organisation

Turnover is costly to firms as it results in the loss of specific skills, disruption to the work flows and an increase in the cost of recruiting and training replacements, including making them fully productive (Martin, 2003). Knowledge is important for the modern enterprise and it is threatened when employees leave. Economically, labour turnover can mean the difference between competitive advantage leading to success, and organisational weakness which leads to the premature demise of the firm (Michelman, 2003). Labour turnover can seriously threaten the cash flow position of an organisation due to outflows resulting from the loss of high performers. For example, recruitment and training, especially if a replacement is going to be headhunted, can be expensive items when they have not been budgeted for. This is compounded by loss of business and revenue streams when a former employee causes customers to defect too. While a new recruit is being trained and guided in their new position they are not productive. In fact they are restricting the productivity of the employee training them. In contrast, (Wagner, 2002) found that firms with a high retention rate tend to have a high return on investment as measured by profit which leads to higher valuation of the share price by the market. Such an outcome is pleasing to shareholders and ensures future success.

Michelman (2003) identified three categories of costs associated with labour turnover, namely, direct costs, indirect costs and opportunity costs. Direct costs include expense items such as placing advertisements for recruitment, the selection process, temporary employees, orientation and training and replacement salaries, especially where the new recruit is remunerated more. Indirect costs include the effects of change in workload, disruptions to the workflow, low employee morale and potential customer dissatisfaction due to disruption to service due to new employees not performing to the standards customers are accustomed to. Opportunity costs include loss of tacit knowledge that departing employees leave with and lost productivity due to management and others refocusing on filling vacancies, training new people and plugging any gaps that may occur. The costs of high turnover are more acute where skills are relatively scarce, where recruitment is costly or where it takes longer to fill a vacancy (Cowie, 2004). The situation is compounded when a firm loses employees to direct competitors, as is the case in many professional service organisations (Cowie, 2004).

1.6.2 Cost of turnover and opportunity costs in regulatory institutions

The Australian Electricity Supply Commission (ESC) reported in its 2005 Annual Report that it was experiencing high levels of staff turnover, including the loss of many experienced staff with the consequent loss of institutional memory, that is, accumulated knowledge and wisdom that is not recorded. It was also reported that costs associated with staff turnover are more difficult to quantify. They have also observed that the Commission has suffered opportunity costs arising from disruption to normal work flows and negative impacts on the policy-making capacity of affected organisations. Social and psychological costs, including the stresses and strains caused by extra work pressures, job insecurity, the loss of staff morale stemming from long periods of uncertainty over future employment, redundancy, and lengthy delays in the appointment staff, adversely affect the development and implementation of strategic plans (ESC, 2005).

In a similar vein, the Securities Regulation Commission (SRC) in the United States reported in its 2005 Annual Report that one of its divisions, the Market Regulation, experienced significant staff turnover in the previous two years. It further reported that new employees' unfamiliarity with the operations of the utilities adversely affected its effectiveness as the SRC was uncomfortable to send inexperienced staff into the field unless accompanied by more experienced staff. However, the SRC has spent time educating new staff which impacted negatively on the effectiveness of experienced staff. The Texas Department of Licensing and Regulation (TDLR) reported on the challenges it faces building and retaining dependable and motivated staff (TDLR, 2006). TDLR is also plagued by a constant influx of new employees who, in many cases, do not stay with the agency long enough to learn their role or become fully functional members of the team, resulting in an adverse impact on the agencies ability to regulate entities under its ambit.

1.6.3 Mitigating strategies to overcome the causes and impact of staff turnover

The Commission has also proposed awarding retention bonuses to selected staff. These bonuses could help reduce turnover on the Technology Team (SRC, 2005). The Office for Gas and Electricity Markets (OFGEM) in the UK also reported on its continued emphasis on retaining, recruiting and developing staff to ensure that it maintains its capacity to deliver on policy

priorities set by the regulator (OFGEM, 2006). It also reported that although staff numbers in the year under review were lower than the previous year, its staff turnover rate has improved in the past five years, from 28% in 2001 to 14% in 2005 (OFGEM Annual Report, 2006). The organisation is implementing programmes, such as a new competency framework that defines what is expected of staff and a talent development scheme that will make it an employer of choice. TDLR is forecasting a lower staff turnover rate for the following financial year. They hope this will be lower than the industry average, because it has made recruitment and retention its priority as well as focusing on creating a satisfying work environment characterised by opportunities for growth, career development, performance awards and recruitment and retention bonuses (TDLR, 2006).

1.6.4 Local experience: staff turnover at the Competition Commission and ICASA

Locally the Competition Commission reported in its latest Annual Report (2006) that it is facing challenges with regard to retaining employees. For example at the close of the financial year the total staff complement was 91 positions, while the strength actually stood at 78 staff members. This represents a 16% turnover and strength of 84%. Vacancies were in specialist positions such as economists and lawyers. To address the problem, the Commission's approach is to provide a nurturing environment conducive to attracting and retaining high quality employees at all levels. Given the fact that our employees are specialists in a new profession, staff retention remains one of our greatest challenges (Competition Commission, 2006). Another regulator, the Independent Communications Authority of South Africa (ICASA), faces a high staff turnover and is unable to attract and retain skilled staff (Mochiko, 2006). More than 10 senior managers have left in the past six months and ICASA is yet to fill those positions. Part of the inability to attract and retain staff was because of the low salaries offered (Mochiko, 2006). In its Annual Report ICASA also reported an increase in staff turnover for the year under review compared to the previous corresponding period. The organisation continues to face a challenge of retaining skilled staff due to its low salary levels relative to the industry it regulates (ICASA, 2005). However, it has begun with vigorous efforts to retain and develop quality staff through appropriate rewards.

1.6.5 Staff Turnover at the National Energy Regulator

A brief analysis of the staff profile in NERSA reveals a structure containing relatively few staff with experience in regulation, a Regulation Division with vacancies running at 30% and a relatively high turnover rate, particularly at professional levels within the organisation (National Energy Regulator, 2005). Notwithstanding that, the team does contain a number of people with good professional experience and a layer of people in middle ranking positions who are building up valuable experience in regulation. Further to this, an analysis of the human resources report revealed that the average length of service is 2.7 years, which is relatively short and indicates the generally low levels of experience in regulation amongst the staff. This is a key matter of concern given the significant regulatory challenges facing NERSA; only 35% of the staff in technical or professional positions have worked for NERSA for over 5 years are expected to carry a high proportion of the burden of regulating the industry; 50% staff have worked for NERSA for more than 3 years, with only 60% of these having professional qualifications. This suggests a lack of depth of experience in the organisation in technical regulation. Lastly, the average age of staff members is 33 years. All these factors suggest that NERSA needs to recruit and retain staff with considerable professional experience in order to fulfil its mandate.

High turnover is a relatively common problem in regulatory bodies where staff often attains skills which are of interest to the private sector or utilities themselves (Downes and Husbands, 2003; ICASA, 2005; OFGEM, 2006; TDLR, 2006; World Bank, 2004). Currently NERSA has a 37% vacancy rate compared to the industry average of 11% (Deloitte and Touché, 2003). The majority of vacancies are in sections that require staff qualified in technical disciplines, such as engineers, economists and financial analysts. A further requirement is that such staff needs to have industry experience to operate optimally. In summary, it would seem that NERSA is experiencing acute staff turnover and needs to understand the reasons for it and then formulate strategies for talent development and staff retention to mitigate against these challenges.

1.7 The Research Problem

Labour turnover is by no means a new challenge for organisations, however high staff turnover can threaten the survival of organisations. The high labour turnover at the National Energy Regulator is also threatening the long-term survival and effectiveness of the organisation. To mitigate this challenge, it is important to find creative and sustainable ways of retaining employees for effective and efficient energy regulation to take place. The aim of this research is to identify and understand key retention drivers that can contribute positively to the success of building a sustainable regulatory environment and to identify and understand factors that cause labour turnover among knowledge workers at the Energy Regulator, in particular. To date, it would seem that no research of this nature has been undertaken in the regulation industry.

1.8 Structure of the Report

The report is divided into five chapters: Chapter 1 has been the introduction to the study, the background to the research problem and the importance of the study; Chapter 2 is the literature review which is dedicated to building a theoretical base that seeks to bring an understanding of the role knowledge workers play in driving modern organisations in the knowledge economy; Chapter 3 details the research methodology which describes the method used in conducting the research, namely the survey method; Chapter 4 provides an analysis of the results and findings from the responses from the questionnaire and Chapter 5 presents the conclusion and recommendations on effective and sustainable strategies for retaining knowledge workers.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The new economy is often referred to as the knowledge economy (Drucker, 1994). Emerging from the industrial age, this new economy distinguishes itself by a large amount of the value of the company residing in the head of employees rather than employees being the tangible assets of the company. In fact, Kaye and Jordan-Evans (2002) assert that never before have organisations relied so heavily on their human assets for their competitive advantage than they do on knowledge workers. This chapter is dedicated to building a theoretical base that seeks to bring an understanding of the role knowledge workers play in driving modern organisations in the knowledge economy. The chapter is divided into four sections: the first section introduces the concept of knowledge management by defining terminology such as ‘intellectual capital’, the ‘knowledge worker’ and ‘structural capital’. The second section explores the importance of knowledge workers in regulatory institutions; the third section explores the issue of labour turnover and its impact on the competitiveness and effectiveness of modern enterprises. The last section explores the concept of retention and examines a number of factors and strategies that could contribute to the retention of knowledge workers.

2.2 Intellectual Capital and the Knowledge Worker

2.2.1 The knowledge worker concept

In the modern economy, knowledge work applies not only to the domain of intellectual activity, but also to the pragmatic activity of devising new products, services, applications and processes. In this sense, organisations involved in any of these activities are increasingly moving towards being knowledge-based communities which embody the knowledge of its workers in its products and services (Drucker, 1994; Despres and Hiltrop, 1995). As knowledge work is distinctly different from functional roles which depend largely on the routine of jobs and the systems that support them, knowledge workers apply their theoretical and practical understanding of an area of knowledge to produce outcomes. They therefore rely on specialist education, usually gained

outside of the organisation (Malone, 2004; Stewart, 1997). The current organisational trend moves away from hierarchical functional roles towards flatter structures in which all employees can contribute through their specific areas of expertise. Knowledge workers bring knowledge advantage and must therefore be recognised for the unique contribution they make.

2.2.2 Emergence of intellectual capital and the knowledge worker

Research conducted by the United Nations reflect that since the 1970s countries such as the United States, Europe and Japan have accelerated the employment of knowledge workers and this has developed as a trend (Despres and Hiltrop, 1995). For example, the United States recorded the highest percentage of knowledge workers in its service and manufacturing sectors while Europe and Japan tended to have more knowledge workers employed in the manufacturing sectors than in the service sectors (Despres and Hiltrop, 1995:16). In South Africa, this trend began to show in the 1980s and started accelerating in the 1990s (Roux, 1995). Comparisons with other countries confirm this growth in the country, albeit lagging behind more developed economies (Despres and Hiltrop, 1995; Roux, 1995). For South Africa to obtain national and global competitiveness, it is crucial to both develop and retain knowledgeable human capital. According to the Bureau of Market Research (BMR) (2006), there is a shortage of and demand for professionals and specialists in the services sector.

The shortage of skilled workers relative to their demand is as a result of both the low number of qualified knowledge workers and high turnover due to emigration or taking up positions in foreign countries (BMR, 2006). This shortage means that South African organisations are unable to attract and obtain appropriately qualified and experienced employees representing specialist knowledge areas. It is unlikely that this problem will be resolved comprehensively sooner given the high mobility of these types of employees, employment equity considerations and their attractiveness in the market place (BMR, 2006). Put differently, the demand for this type of employee exceeds supply. For the South African economy to flourish, it is important for supply to meet demand, thus placing the right skills in the right positions so that organisations can perform well and trade competitively.

Knowledge-based organisations rely on retaining knowledge employees for success and survival (Beckemeyer and Kilkeary, 1997; Liebowitz, 1999). Retention is important in order for employees to contribute to and support the achievement of organisational goals. Given the precarious and expensive nature of attracting, recruiting and developing knowledge employees, retention becomes a *sine qua non* for organisational success. According to Kaye and Jordan-Evans (2002) one of the major ways in which this type of employee can be retained is to love them, that is, treating employees fairly and respectfully, showing gratitude, challenging and developing them and caring about them. An inability to retain these employees means that the organisation runs the risk of losing both its knowledge base and its competitive advantage. This could spell a premature decline and eventual obliteration of the organisation if it is left unchecked. The more vexing question specifically is: what management interventions will the knowledge worker respond to in order to improve their performance and contribution so that the organisation can transform the knowledge input into a valuable outcome that creates value?

With organisations increasingly realising that their competitive edge resides with their employees and management (Liebowitz, 1999), in order to remain competitive and survive, organisations need to leverage their knowledge internally and externally. Intellectual capital provides many firms with the ability to pursue excellence in the conceptualisation, production, marketing and distribution of their products or service offering (Liebowitz, 1999). Knowledge management deals with the conceptualisation, review, testing, securing, and leveraging of information (Liebowitz, 1999). Knowledge is information with a process applied to it that eventually becomes wisdom or expertise that firms use to meet their strategic goals and profit from by successfully selling it to customers.

2.2.3 Definition of Intellectual Capital

Intellectual capital is the knowledge that resides in the heads of employees relevant to the purpose of the organisation (Stewart, 1997). It is formed and deployed by employees who are knowledge workers (Stewart, 1997). Intellectual capital is formed through repeated use of the information in pursuit of the organisation's strategic goals (Liebowitz, 1999). It includes information, patents and experience used to achieve specific outcomes that lead to the

organisation's success and survival. When knowledge workers possess more information and use it to create value, then they are regarded as being valuable to the organisation. Brooking (1996) defines intellectual capital as knowledge that can be converted into profit. This definition includes characteristic features such as inventions, ideas, design approaches, computer programmes, processes, company brands, customer relationships and publications. According to Brooking (2006), these features do not appear on the balance sheet but are capable of increasing the value of the company and ensuring its long-term competitiveness and profitability.

2.2.4 Definition of knowledge work

Knowledge is organised information that is applicable to problem-solving and has been organised to make it understandable and applicable to problem solving or decision making (Liebowitz, 1999). Knowledge work therefore encapsulates methodologies, expertise, insights, thoughts, behaviours, experiences and procedures. These are in turn used to develop goods or services for the firm to remain profitable on a long-term and sustainable basis (Stewart, 1997; Liebowitz, 1999). Knowledge work is used to actively enable performance, problem solving, learning and teaching and decision-making that leads to the production of goods and services (Hope and Hope, 1997). The terms knowledge work and intellectual capital will be used interchangeably as they possess the same characteristics.

The management of knowledge has become a key issue in keeping track of the competition in business (Hope and Hope, 1997). The landscape of knowledge management is expansive, ranging from technological applications to management of knowledge assets and methodologies that create the milieu that enhances the knowledge creation (Binney, 2001). In this study, the focus is on this latter aspect of knowledge management. Knowledge management in this study is defined as the capacity or processes within an organisation to maintain or improve organisational performance based on experience and knowledge (Pan and Scarbrough, 1999). It involves the way organisations build, supplement and organise knowledge and routines around their activities as well as in their culture (Pan and Scarbrough, 1999).

2.2.5 Definition of a knowledge worker

The term “knowledge worker” originates from the work of Drucker in the late 1980s (Drucker, 1994). Drucker (1994) defines knowledge workers as learning people whose level of education helps organisations remain competitive. They are continuously enhancing their skills in order to add value to the firm’s value proposition. Therefore, knowledge workers combine the experience, knowledge, skills, education, and learning and apply it creatively in order for the organisation to remain competitive in its market niche. Drucker described the knowledge worker as a specialist who was likely to earn more than their boss, and who, notwithstanding the organisation’s hierarchy, is a superior employee in their field of knowledge and therefore carries a powerful and influential resource. This resource is not owned by the employer but is owned and carried by the employee. Zarrabian (2004) defines a knowledge worker as someone who uses experience, knowledge and skills to perform their job in order for the firm to operate smoothly and efficiently. Such experience is used to drive revenue or reduce costs and can also be considered a competitive advantage (Zarrabian, 2004).

Liebowitz (1999) defines knowledge workers as staff who perform knowledge work and who use their creativity in applying that knowledge to build customised solutions to client problems. Knowledge workers are people who use their heads more than their hands to produce value. They add value through their ideas, their analyses, their judgment, their syntheses, and their designs (Reed, 1996). A special feature of this knowledge is that, unlike ordinary products, it cannot be packaged and sold over the counter to mass markets, but remains in the possession of the employee throughout the employment relationship.

2.2.6 Characteristics of the Knowledge Worker

The key characteristics of the knowledge worker are their ability to share the knowledge so that its benefits can be transferred to the organisation. Despres and Hiltrop (1995), using Drucker’s work as a basis, identified six key characteristics that distinguish the knowledge worker from a regular worker in any organisation. Each of these characteristics also typifies the type of

knowledge worker found at the National Energy Regulator. The six differentiating characteristics are:

- Knowledge workers possess specialised skills and training, which they have acquired by investing significant resources (time and money) towards their education (Despres and Hiltrop, 1995). Knowledge workers are unlike any other worker as they are the only ones who possess the nature and degree of their knowledge. Their skills and knowledge is critical in ensuring prosperity for their employer. It is therefore important for their employer to retain them because it is not all types of workers who make such an investment in their professional development (Nor and Roslin, 2005).
- Knowledge workers have deep specialisation with diffuse peripheral focus as opposed to a narrow functional focus (Despres and Hiltrop, 1995). The nature of their skills touches all aspects of the organisation which increases the latter's dependency on them. This dependence makes it obligatory for the retention of knowledge workers lest firms lose their competitive edge. Retaining knowledge workers in this case becomes a matter of survival.
- Knowledge workers have loyalty to their professions and peers, as opposed to any organisation (Despres and Hiltrop, 1995). Knowledge workers prefer advancing their studies through external programmes rather than internal programmes. Armstrong and Sterling (2004) have also found that the new psychological contract of knowledge workers relies on external rather than internal training providers. For example, engineers and chartered accountants in South Africa place more value on training provided by their respective professional institutes, such as the South African Institute of Chartered Accountants and the South African Institute of Consulting Engineers, and University programmes than they do on programmes provided by their employers. Knowledge workers therefore actively seek to increase their knowledge base via further academic study and therefore employers have to make provision for this in the employment contract in order to retain them. An employer who is loyal and committed to knowledge workers in this manner has a greater chance of success in retaining them.

- Knowledge workers tend to work on projects and in teams as opposed to on their own (Despres and Hiltrop, 1995). Harrigan and Dalmia (1991) found that knowledge workers stay committed to particular firms as long as those firms provide them with paraphernalia for working on interesting projects. “If this isn’t forthcoming, knowledge workers will swiftly trade up to bigger sandboxes” (Harrigan and Dalmia, 1991:8). The Australian Electricity Supply Commission (ESC) has also adopted the principles of personal mastery and team development to encourage employees to broaden their scope of work and pursue challenging assignments after they realised that these incentive knowledge workers (ESC, 2005). Because knowledge workers are more attracted to interesting projects, they stay longer with the employer who provides them with such projects.
- Knowledge workers have more rapid skills obsolescence than traditional workers (Despres and Hiltrop, 1995). Continuous learning is critical in ensuring that knowledge workers remain up to date, relevant and critical for the firm’s continued success in the market place (Michelman, 2003). Armstrong and Murlis (2004) encountered a similar finding and came to the conclusion that career malaise is the biggest driver of employment migration and therefore employers must be encouraged to take an active interest in providing learning opportunities at all times.
- Knowledge workers are more critical to the long-term success of the organisation than the short-term efficiencies of the organisation (Despres and Hiltrop, 1995). Amar (2002); Nor and Roslin (2005) and Drucker (1994) have found that knowledge management is not only about the latest technology but also managing knowledge within the company and treating it as the most valued asset for the long-term success of the company. In this view, knowledge workers have been considered to be an important asset by virtue of their possession of their knowledge. Having knowledge workers as part of the asset base ensures long-term success.

2.2.7 The importance of building intellectual capital in the modern organisation

The late 1980s ushered in the beginning of the information age (Beckemeyer and Kilkeary, 1997; Kinnear, 1999; Liebowitz, 1999). Knowledge workers have the skills and the wisdom to develop new strands of knowledge that may bring about significant breakthroughs that may catapult the human experience into a significant level of invention, reasoning, innovation and problem-solving. With knowledgeable employees, organisations will tap into a wealth of ideas and input that seek to meet their expectations in an unprecedented manner (Beckemeyer and Kilkeary, 1997). By bringing into the production process flexible, intelligent and change-ready employees, organisations will lead the revolution of bringing responsive solutions to specific and general customer problems. This customer value will be achieved through the sharing of detailed business information between the employer and employees as well as among the employees (Beckemeyer and Kilkeary, 1997). Sharing information increases the knowledge worker's ability to develop innovative products and services that not only meet customer requirements but also improve the organisations competitiveness, which translates into sustainable profit. This approach gives meaning to the concept of employees as assets of the organisation.

2.2.8 Managing knowledge workers successfully in order to retain them

The essence of utilising intellectual property is sharing knowledge amongst employees by fostering teamwork practices, recognising the scarce nature of knowledge workers and their mobility. It is also important to appreciate that knowledge workers need to be managed differently from other category of workers in order to retain them (Stewart, 1997).

First, in managing knowledge workers, management needs to allow them autonomy (Beckemeyer and Kilkeary, 1997). These authors have found that self-managed employees express interest in self-growth and group cooperation that result in a heightened sense of self-esteem and productivity. Kaye and Jordan-Evans (2002) also found autonomy to be important for employees who stay longer with their employer. Because of the nature of their work, knowledge workers apply their experience and expertise to problem-solving areas that create value for the firm. They

resent unnecessary supervision; they rather prefer an environment where they can develop ideas and create knowledge that will achieve the firm's strategic goals (Beckemeyer and Kilkeary, 1997). Once they know what the organisation wants to achieve and what contribution they can make to the outcomes, they thrive on the freedom they are given in order to develop solutions that meet unique customer requirements. This encourages them to stay with the employer.

Secondly, knowledge workers need to realise their full potential and utilise their strengths (Kaye and Jordan-Evans, 2002). This means making fewer, if any, dictatorial and top-down rulings and moving toward collaborative decision-making (Beckemeyer and Kilkeary, 1997; Kaye and Jordan-Evans, 2002). Managers need to be more approachable, pliable and willing to embrace new ideas from an independent and spirited workforce that is looking more for coaches and mentors than managers (Liebowitz, 1999; Beckemeyer and Kilkeary, 1997). In this type of milieu, the employer does not make decisions without consulting employees. Employees' input must be sought on all aspects of the operations.

Thirdly, knowledge workers look for opportunities where they can be creative and take risks using organisational resources and expect the attendant rewards (Hammer, 2002; Liebowitz, 1999). Too often corporate incentive systems reward safe, bureaucratic behaviour rather than the risk-taking individualistic behaviour characteristic of knowledge workers (Coetsee, 2001). Knowledge workers respond to a mix of financial and non-financial incentives and most talented people need a concrete sense of adventure, appreciation for their hard work and recognition of achievements to remain highly motivated. High achievers want to be measured so that they can prove their accomplishments. Knowledge workers respond best to challenges, personal recognition, freedom of activity and financial rewards (Coetsee, 2001). Rewards are important to reinforce the correct behaviour so that it can be repeated or amplified for the employer's benefit.

Lastly, job enrichment, like autonomy, is important to drive the performance of knowledge workers (Mohr and Zoghi, 2006; Umstot and Rosenbach, 2002). The factors of job enrichment are similar to McGill and Slocum (1995) anchors of a high performance culture. This theory looks at factors that are an integral part of the job itself. An enriched job is one that is high in skill variety, task identity, task significance, autonomy, affords employees feedback from the job and goal clarity (Umstot and Rosenbach, 2002). Job enrichment includes a number of workplace

practices such as quality circles, self-directed teams, job rotation and information sharing (Mohr and Zoghi, 2006). Jobs that are high in these characteristics provide employees with a sense of meaning, responsibility for work outcomes and knowledge of results of their work activities. To the extent that knowledge workers enjoy the challenges and autonomy in their job, satisfaction will rise with resultant higher productivity, lower absenteeism and lower labour turnover.

2.2.9 Key aspects in retaining intellectual property: creating structural capital

Given that the bulk of intellectual capital resides in the brain of the knowledge worker, firms are constantly faced with the risk of losing this knowledge. Although institutional knowledge technically remains the firm's property while the employee is still in service, the firm needs to motivate the employee to stay. Should that fail, then the ownership of this property needs to be made permanent by capturing it in a central repository so that it can be readily available to train and retrain current and future employees (Zarrabian, 2004). When the firm captures and owns this knowledge, it becomes structural capital (Stewart, 1997). Structural capital is a combination of the technical and organisational infrastructure in documented form, including technology, inventions, publications, business processes and the organisational systems that drive employees. Structural capital also includes the corporate image that shapes public perception of the firm, its people and its ability to produce desirable solutions (Stewart, 1997). Once the firm has full ownership and control of structural capital it can reproduce and share it amongst employees.

Included in the structural capital repository are intangible tangibles (Stewart, 1997). This may sound paradoxical at a first glance, but is easily understood when viewed as documentation of processes or a database of knowledge. For example, Microsoft has a high volume of structural capital in the form of code libraries and marketing processes. Structural capital is the intellectual value that remains with the enterprise when people leave such as equipment, tools, documentation and methodologies. Structural capital serves two purposes: to create and maintain the enterprise knowledge asset, and to enable the enterprise to continue creating value for both its owners and customers (Stewart, 1997). Structural capital is most valuable when it adeptly and obtrusively supports enterprise activities. Real value is achieved when the organisation is able to capture and deploy intellectual capital for its success. Knowledge assets, such as capital and

equipment, exist and are worth cultivating only in the context of strategy. True value for the firm lies in its ability to utilise them in full. In order for the firm to have certainty in deriving maximum value, it needs to retain key employees on a long-term basis.

The preceding section provided an introduction to the concepts of intellectual capital, knowledge work, the knowledge worker, customer capital and structural capital. These concepts are important in understanding the modern employee who possesses specialist knowledge that the firm relies on for its success. The rise of the knowledge worker has enabled the modern organisation to bring flexibility, intelligence and cutting-edge technology to the production process that resulted in the creation of responsive solutions to specific customer and general customer problems. In managing knowledge workers teamwork practices, autonomy, appropriate rewards and recognition, a collaborative and supportive environment and job enrichment are some of the key retention influences. Over and above retaining knowledge workers, firms need to retain the knowledge that these employees bring by creating structural capital. Once the knowledge and intellectual capital are captured properly, they must be deployed for the benefit of stakeholders in order to make the organisation successful and sustainable.

2.3 Labour Turnover

The next section examines labour turnover, its causes and the impact it has on organisational success. Labour turnover is concerned with the movement of employees out of positions with a particular employer (Martin, 2003; Organisation for Economic Cooperation and Development (OECD), 1996). In addition to an overview of the concept, the section will also examine the push and pull factors that give rise to labour turnover, examples of labour turnover patterns in modern organisations and concludes by examining the factors that cause labour turnover in South African knowledge-intensive institutions.

2.3.1 General Overview

In the war for talent, firms are always faced with the challenge to retain top performing employees (Costello, 2001; Kaye and Jordan-Evans, 2002; Martin, 2003). Employees always have a choice to leave the employer whenever any form of unresolved dissatisfaction sets in.

Unfortunately, labour turnover has become a common phenomenon globally among knowledge workers (Costello, 2001; Martin 2003). Martin (2003) conducted a study on tenure and labour turnover of knowledge employees in Australia, Europe, Japan and the United States between 1980 and 2000 and found that employees in Japan are more likely to stay longer with one employer than is the case in Europe and Australia. Findings in Europe showed that labour turnover was low in France, Germany, the Netherlands and Norway while higher in the rest of the continent for all categories of employees. In the United States the average professional holds 18 different jobs before they retire. This suggests that professionals stay for less than three years in a job throughout their career.

Martin (2003) defines labour turnover as a flow concept measured over a period, usually a year. This definition includes all leavers during the period, irrespective of whether they left voluntarily or due to redundancy or dismissals or retirement. Morrell, Loan-Clarke and Wilkinson (2001:6) define labour turnover as a “voluntary cessation of membership of an organisation by an employee of that organisation”. It is important to understand labour turnover within the context of employees leaving voluntarily because they control the decision to leave, hence the high interest by organisations to understand and curtail this phenomenon. The term is commonly used to describe the number of employees leaving the organisation voluntarily. Generally, organisations need to pass the test of retaining the majority of employees that joined in permanent positions in a given year of reporting. In discussing labour turnover, this section will focus on the act of leaving and factors that influence employees’ decisions to leave the organisation voluntarily.

2.3.2 Factors that cause labour turnover among knowledge workers

Given that some employees will leave their employer at some point in their career, it usually takes a while between the time they decide to leave and the actual time of departure (Drury, 2003; Kinnear, 1999; Kaye and Jordan-Evans, 2002). In addition to the time lag, there are various reasons why employees decided to leave (Kaye and Jordan-Evans, 2002; Stewart, 1997). It is generally accepted that either ‘push’ or ‘pull’ factors induce employees to leave their employer (Branham, 2005; Kaye and Jordan-Evans, 2002). Push factors refer to those factors inherent in

the organisation that cause or are perceived to have caused employees to leave; while pull factors refer to those influences that are found outside the organisation, beyond the control of the current employer, that cause employees to be pulled away from their employer (Branham, 2005). Under each of these factors, there are several causes of labour turnover and this section examines each to describe the number of employees leaving the organisation voluntarily. Generally, organisations need to pass the test of retaining the majority of employees that joined in permanent positions in a given year of reporting. In discussing labour turnover, this section will focus on the act of leaving and factors that influence employees' decisions to leave the organisation of these factors in turn. The first subsection examines push factors and the subsequent one examines pull factors.

2.3.3 Push factors that cause labour turnover among knowledge workers

The literature features numerous push factors that cause labour turnover among knowledge workers (BMR, 2004; Drury, 2003; Kinnear, 1999; Romano, 2002; World Bank, 2004). Each of the major factors identified will be examined in detail. A summary of these factors are presented in Table 2.1 for ease of reference and the definitions and details are contained in the text that follows.

Table 2.1 Summary of push factors that cause labour turnover gleaned in the literature

Factor number	Factor description
1	disillusionment with the status quo;
2	dissonance between the employees' contribution to the firm's success and the financial rewards they receive;
3	professional dissatisfaction;
4	treated as labour instead of being regarded as capital;
5	lack of collegiality among co-workers;
6	poor relationship of knowledge workers with the organisation's leadership;
7	unavailability of the requisite technology, equipment, resources and tools to carry out work;
8	lack of provision of career growth, learning, development and mentoring opportunities, and
9	Lack of scope to achieve work-life balance.

First, disillusionment with the status quo has been identified as major cause for driving knowledge workers out of the firm where their needs are consistently not met (Kinnear, 1999). When disillusionment sets in, employees will look elsewhere for an employer that can help them meet their satisfaction needs (Kinnear, 1999). For knowledge workers, the ability to leave their employer is much easier due to the fact that their skills are in high demand while the supply is low (Kinnear, 1999). The ease with which this category of employees can move is a contributing factor to the growing turnover statistics of knowledge workers (BMR, 2004). Husbans and Downes (2003) found that specialists in regulatory authorities in the Caribbean are usually poached by the utilities they regulate after a few years on the job.

Secondly, a World Bank (2004) also found that the regulatory authorities could not match the remuneration packages offered by utilities. Harris (1994) arrived at a similar outcome where knowledge workers were discouraged by the dissonance between their contribution to the firm's success and financial rewards they received. When knowledge workers perceive their rewards to be below their expectations, the dissatisfaction that results from the dissonance drives them away towards an employer who will adequately recognise their contribution through a commensurate remuneration package. Milkovich and Boudreau (1997) have found perceptions of pay inequities, either internal or external, as significant antecedents of turnover.

Thirdly, although a bit paradoxical in comparison to the second point, knowledge workers are not motivated by money only (Branham, 2005). Essentially, knowledge workers are motivated by the achievement of goals that they have set for themselves: money is only good when it is seen as a measure of their achievement. For example, when employees set themselves the goal of improving a system, they pursue it until they are satisfied with the outcome and the results are acknowledged by their peers. Although low salaries with their current employer or better salary offers elsewhere are reasons given when resigning, the real reason may lie elsewhere (Michelman, 2003; Romano, 2002). Because they state money as the reason to leave, managers believe that money is the key motivator for knowledge workers to either stay or leave. These postulations are different from the first point above. Dobbs (2001), and Jordan-Evans (2002) and Romano (2002) found that some employees are reticent about the real reason for leaving.

Although knowledge workers may be aware of money for a while, if they are unhappy in their current job, a high salary will not keep them. Downes and Husbands (2003) found that although money gets employees in the door, it does not keep them. Money alone will not encourage employees' loyalty and tenure (Cowie, 2004). Money and perks make life more pleasant, but more substantive strategies are essential for sustainable retention (Dobbs, 2001). Knowledge workers prefer a challenging and interesting work environment over high salaries (Armstrong and Murlis (2004; Malone, 2004). For example, a survey conducted in the United States in 2001 found an annual turnover rate of 20% among doctors as a result of professional dissatisfaction (Romano, 2002). Employees who feel stagnated, ignored or bored, are likely to leave much sooner than employees who feel their career goals are met.

Fourthly, Drucker (1994) warns organisations against treating knowledge workers as labour; instead he encourages them to regard them as capital. This analogy has been inspired by Drucker's (1994) observation that leading companies usually demonstrate outstanding productivity by employing their capital creatively. Furthermore, he observed that the performance of capital is dependent on improved productivity and has to be rewarded accordingly. The compensation and reward system of a company influences its strategic direction by affecting its ability to attract the best and brightest employees (Dobbs, 2001). Drucker (1994) says this is best achieved when leaders in the knowledge economy spend time with professionals to get to know them, mentor them, listen to them, challenge them, encourage them, acknowledge them and reward them appropriately.

Fifthly, Gering and Conner (2002) found that where an employer is unable to provide the requisite technology, equipment, resources and tools knowledge workers tend to leave soon after joining. In a study among medical practitioners, Sturgess and Guest (2001) found that knowledge workers become despondent when the employer does not use the latest technology and thus leave and join employers with a reputation for being on the cutting-edge of technological development. Knowledge workers place a high value on technology, equipment and resources and will always be attracted to an employer who can provide for it and will shun the employer who does not.

Sixth, Michelman (2003) found that where knowledge workers perceive their working environment as lacking information sharing and ordinary human virtues such as courtesy, and

respect, then labour turnover will be high. Knowledge workers regard the workplaces as a social setting where friendly relations that will improve the work environment are created and maintained. Barney (2002) also found that collegiality among co-workers is a positive influence on employee retention. Conversely, its absence leads to labour turnover. This is especially more pronounced where organisational cultural fit is central to the recruitment and retention of employees. Fitting into an organisational culture becomes even more important when there are prospects of career progression (Gering and Conner, 2002). Culture and quality of relationships at work encourage loyalty to an organisation. For example, being able to develop relationships with senior management is important as it encourages mentorship, career development and evokes excitement in the respective roles they play. Employees that find the organisational culture alienating tend to leave the organisation much sooner.

Seven, the relationship of knowledge workers with the organisation's leadership is more important for retention than HR policies, procedures, processes and practices (Dobbs, 2001). This relationship determines how long an employee will stay with the organisation. Many talented professionals leave an organisation because senior management fails to understand the psychology of work satisfaction and assume that people who excel at work do so because they are happy (Dobbs, 2001). Generally top performers use their own initiative and resourceful nature to deliver and need supportive management to help maintain the correct level of performance and motivation. This requires managers to be constantly in touch with employees in order to gain their confidence, loyalty and productivity (Dobbs, 2001). Pine and Gilmore (1998) contend that subordinates' perceptions of their boss are the singular best predictor of individual turnover. In a worldwide study the Hay Group (2001) found that the second largest determinant of turnover was due to unhappiness with the direct manager.

Eight, in the knowledge society employees are required to acquire knowledge beyond formal education (Sturges and Guest, 2001). Once past the formal education process, knowledge workers are expected to undergo a continuous learning process. Sturges and Guest (2001) have found that the lack of provision of career growth, learning, development and mentoring are among the top reasons why knowledge workers leave an employer. Dobbs (2001) also found that knowledge workers respond negatively if an employer does not support a culture of development that is cultivated through training, mentoring and clear career paths, thus confirming Sturges and

Guest's (2001) findings. The Hay Group (2001) found that lack of development and talent management were the biggest causes of labour turnover. Armstrong and Murlis (2004) arrived at a conclusion, namely that career malaise is the biggest driver of career or employment migration. They also found that whilst promotion is important for knowledge workers, an opportunity to progress has broader meaning than hierarchical advancement. Progression is seen more broadly in terms of developing a career or moving closer to a particularly chosen future role.

Nine, another key issue that influences future decisions about remaining in a current job by a knowledge worker is the extent to which there are opportunities to achieve what can be considered the right balance between work and life (Sturges and Guest, 2001). Knowledge workers resist tying their self-identity with their work identity (Izzo and Whithers, 2002). Knowledge workers want to keep a balance between leisure, family and community time (Izzo and Whithers, 2002). For example, they prefer an option of extended leave as a key workplace benefit. This type of employee regards their life interests as long-held, emotionally driven passions that are intricately intertwined with personality (Sturges and Guest, 2001). For example, a survey conducted among medical practitioners in the United Kingdom (UK) in 1998 to evaluate their shortage in the National Health System (NHS) found that there was a shortfall of 35% of doctors due to annual turnover (Leese, Young and Sibbald, 2002). The survey ascribed the high turnover rate mainly to health authorities' inability to provide female doctors with special child-care facilities and family-friendly privileges. Skills can be stretched in many directions but if they are not going in a direction congruent with finding a work-life balance, employees are likely to be dissatisfied and uncommitted to the employer, and will opt to leave.

In summary, nine major causes of labour turnover discussed above illustrate the pervasive nature of push factors that influence knowledge workers to leave their employers. These are disillusionment with the status quo; dissonance between the employees' contribution to the firm's success and the financial rewards they receive; professional dissatisfaction; being treated as labour instead of being regarded as capital; lack of collegiality among co-workers; poor relationship of knowledge workers with the organisation's leadership; unavailability of the requisite technology, equipment, resources and tools to carry out work; lack of provision of

career growth, learning, development and mentoring opportunities, and lack of scope to achieve work-life balance.

2.3.4 Pull factors that cause labour turnover among knowledge workers

Another set of factors that cause labour turnover among knowledge workers are pull factors (Branham, 2005; Cappelli, 2000; Drury, 2003). There are three major categories of pull factors, namely globalisation, macro-economic factors and personal circumstances (Cappelli, 2000; Drucker, 1994; Drury, 2003; Martin, 2003). Each of these will be fully discussed below.

The first category of pull factors is mobility of labour (Drucker, 1994). According to Drucker (1994), the knowledge society is a society of mobility. Globalisation is promoting and facilitating the development of an increasingly flexible and mobile labour market among knowledge workers (Drucker, 1994). For example, due to the advent of migration since the industrial age, numerous pull factors have encouraged professionals to migrate to where they can apply their skills or to destinations they perceive as promising maximum job satisfaction (Loefer, 2001). Loefer (2001) provides an example of mobility of physicians in the medical profession where they migrate to various parts of the world in pursuit of more knowledge about areas of medicine that their countries of birth do not provide. Knowledge workers by nature have an insatiable desire to learn as part of craving professional satisfaction (Drury, 2003). Globalisation is providing them with an opportunity to satisfy that craving. For example, the World Health Organisation (WHO) found that pull factors such as the prospects of learning about diseases in the developing world led doctors in developed countries to leave their employers (Loefer, 2001).

The second category of pull factors that are a significant determinant of labour turnover are market (macro-economic) forces (Cappelli, 2000). Knowledge workers have talents that are portable. According to Cappelli (2000) it is the market that determines employee movement. The most that organisations can do is to formulate sustainable retention strategies with the intention to delay the onset of departure. However, it can prove an arduous task to try to counter the pull effects of the market (Cappelli, 2000). For example, there is a limit to what an organisation can do to shield its people from attractive opportunities in the market and the overtures of aggressive

recruiters. In the United States top companies poach knowledge workers and executives by holding job fairs as part of their recruitment drives (Cappelli, 2000). This concept is a powerful magnet for attracting professionals. Employers who are prepared to pay a premium for top talent tend to have the competitive edge over organisations that try to hold on to their employees without necessarily providing them with the incentives that will encourage them to stay.

The third category of pull factors among knowledge workers is personal circumstances (Martin, 2003). Personal circumstances include variables such as spouse's career, family considerations, age and tenure at the organisation (Domah, et al, 2002; Martin, 2003). For example, when the spouse of an employee is transferred to another geographic location, the employee can decide to join the spouse and look for another job in the new town. Younger employees tend to leave their employer much quicker than older employees as their job mobility is much higher given lack of family responsibilities, experimentation with jobs based on uncertainty about which career path to follow and impatience to get ahead (Domah, et al, 2002; Martin, 2003). Experimentation with jobs among young people is inevitable, especially in markets where demand for their skills is greater than the supply. Finally, employees who do not have long tenure with their employer are likely to leave as soon as they arrive since they do not regard themselves as having strong ties with the firm or its employees or to the culture or values of the firm (Martin, 2003). Thus, the longer the employee is with the employer, the higher the chances of them staying on, especially when a lot of personal and financial (pension, long-term bonuses or shares) investments are at stake. All these factors play a part in the employee deciding to leave their job.

2.3.5 Factors that cause labour turnover in South African knowledge-driven organisations

Deloitte and Touché (2003) conducted a survey among top South African organisations that employ knowledge workers to determine trends in labour turnover and retention. The results of the survey showed that specialists cited dissatisfaction with pay and lack of career advancements as the major reasons for leaving their employer. Other reasons cited were employment opportunities in foreign countries, crime, self-employment, lack of recognition, incompatibility with manager, dissatisfaction with working environment, incompatibility with colleagues, unsuitable geographic location and lack of cultural sensitivity (Deloitte, 2003). Kinnear (1999)

found that labour turnover is high amongst knowledge workers who perceive that they cannot influence their work environment and where they are not growing. The findings also pointed to the fact that knowledge workers are highly mobile due to the high demand of their skills. All these factors were cited in earlier sections of the chapter thus showing consistency between causes of labour turnover globally and trends in South Africa.

2.4 Retention Strategies used to Attract, Develop and Retain Knowledge Workers

Studies similar to those conducted by Hoosain (1999) and Kinnear (1999) on factors that influence retention were conducted amongst specialists in regulatory institutions in the Caribbean by Downes and Husbands (2003), regulatory agencies in developing countries (World Bank, 2004) and by Armstrong and Murlis (2004) among MBA graduates from leading United States (US) business schools. Organisations formulate and implement various strategies to influence knowledge workers to stay. The following subsection examines a number of these strategies.

2.4.1 Development of the learning organisation

The concept of a learning organisation was introduced by Senge in the 1990s to describe an organisation that was motivated by innovation and empowerment of employees in the new economy (Senge, 1990). The learning organisation has its origins in companies like Shell, where Arie de Geus described learning as the only sustainable competitive advantage (Senge, 1990). The Learning Organisation is seen as a response to an increasingly unpredictable and dynamic business environment. For Dixon (1994), the essence of organisational learning is the ability to use the amazing mental capacity of all its members to create the kind of processes that will improve its capacity to continually transform itself. Senge (1990:4) defined the learning organisation as an "organisation where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to learn together". Put succinctly, learning organizations have systems, mechanisms and processes in place that are used to continually enhance their capabilities and those who work with it or for it, to achieve

sustainable objectives both for themselves, their team members and the communities in which they participate. The important points to note about this definition are that learning organisations:

- are adaptive to their external environment;
- continually enhance their capability to adapt;
- develop collective as well as individual learning;
- use the results of learning to achieve better results.

In addition to these distinctive features, the learning organisation has five major characteristics that distinguishes it from ordinary organisations, namely the existence of a shared vision upon which everyone in the firm agrees and labour in its pursuit; discarding old ways of thinking and the standard routines used for solving problems; linking organisational processes, activities, functions, and interactions with the environment as part of a system of interrelationships, that is, encourages interaction across boundaries; open communication across vertical and horizontal boundaries without fear of criticism or punishment; and, setting aside fragmented departmental interests to work together to achieve the organisation's shared vision (Senge, 1990). Following these characteristics breeds success.

These points are important to capture and understand if an organisation intends to retain its key employees. Organisations that seek to continuously improve their employee value proposition stand a better chance of retaining key talent. By becoming a learning organisation, the firm will have the ability to provide flexibility to cope with dynamically changing situations and allow knowledge workers to respond with initiative based on customer needs and not be constrained by business processes established for different circumstances (Dixon, 1994). With the pace of change ever quickening, the need to develop mechanisms for continuous learning and innovation is greater than ever and the learning organisation is the perfect vehicle to attain that. Hamel and Prahalad (1994) cautioned organisations to grow a broader range of managerial beliefs and a greater repertoire of managerial actions in order to cope with a more complex and competitive environment. This will enable them to organise around knowledge workers, honouring their need to feel in control, to overcome challenges and to embrace lifelong learning. The result will be successfully retaining employees for longer.

2.4.2 Application of the Precepts of the Learning Organisation by Regulatory Agencies

Regulatory agencies in developing countries embrace this concept in order to promote the pursuit of knowledge at all levels of the organisation (Husbands and Downes, 2003; World Bank, 2004). The Texas Department of Licensing and Regulation (TDLR) reported on the challenges it faces building and retaining dependable and motivated staff and found that by promoting innovation and learning among knowledge workers, it was able to respond quickly to environmental changes despite the challenges of not operating at full strength at any given time (TDLR, 2006). At the Office for Gas and Electricity Markets (OFGEM) training and development forms the cornerstone of mastering effective regulation and employee retention (OFGEM, 2006). Highly technical and specialised work is the main focus on the projects carried out in all these regulatory agencies and to this end emphasis is placed on the acquisition and sharing of knowledge at both individual and organisational levels. This approach is used to attract highly motivated self-starters who are serious about their intellectual growth while making a significant contribution to their chosen profession and employer. The ESC adopted the principles of personal mastery and team development to encourage employees to broaden their scope of work and pursue challenging assignments (ESC, 2005).

2.4.3 Matching organisational and individual needs

The literature is abound with findings from surveys that indicate factors that influence knowledge workers to choose and stay with an employer (Armstrong and Murlis, 2004; Cappelli, 2003; Malone, 2004; Martin, 2003; Kinnear, 1999; World Bank, 2004). A common thread from these findings shows that there is a need for a good correlation between the needs of the knowledge worker and the response of the organisation to those needs. For the purposes of exploring these in great detail, the needs and responses are grouped in the following dimensions: Work; Reward; Management and Leadership; Training and Development, and Inspiration and Values.

2.5 The Work Dimension

According to Drucker (1994) when employees are fulfilled with their work they will not consider it work because a person who enjoys their work is likely to be happier than one who sees work as a necessary discomfort. This subsection explores the meaning knowledge workers derive from their work and how that influences them to stay longer with an employer.

2.5.1 Employees' perception of work

When employees believe that the work they do has meaning and is worthwhile, they will continue doing it until something physical prevents them (Armstrong and Murlis, 2004; Malone, 2004). Perception of meaning and worth in a job occurs irrespective of the occupation (Malone, 2004). For example, a fire-fighter takes their job as serious as a chartered accountant does. So, regardless of how the next person perceives the work, the incumbent will be drawn to it because of the meaning they attach. Whatever the work is perceived to be, an incumbent with a positive disposition will be motivated to do their best at all times. In this regard the work becomes rewarding in itself. This is further buttressed by the support an employee gets from their leader and colleagues because where morale is high productivity is equally high, too (Izzo and Withers (2002). Intrinsically, the value of work drives employees to continue doing what they do best.

2.5.2 Sense of Achievement

Armstrong and Murlis (2004) conducted a survey on recent graduates from prestigious business schools with the degree of Master of Business Administration (MBA). The graduates are specialists in various fields and represent the microcosm of knowledge workers in a labour market characterised by specialists and professionals in a variety of economic sectors. They regard the need to achieve as a significant part of their working life. This becomes accentuated in situations of professional competition among employees. Highly competitive employees tend to prize achievement and recognition highly (Izzo and Whithers, 2002; Malone, 2004). For example, university research staff that competes for resources and to be at the top of peer lists is driven by this sense of achievement. Universities that support such endeavours will be endowed

with the finest research knowledge and skill amongst its ranks. Publishing the best research provides a platform for recognition for both the researcher and the institution. Situations of high achievement result in positive behaviour such as taking initiative, focusing on outputs, seizing opportunities, enjoying challenges, swift reaction to change and maintaining strong professional liaisons (Armstrong and Murlis, 2004). Achievement seekers take control of their environment by no resting on their laurel and seeking more glory.

2.5.3 Challenging work

Armstrong and Murlis (2004), Kinnear (1999) and Hoosain (1999) found that challenging work influences knowledge workers to stay with an employer. They found that knowledge workers refrain from looking for jobs that are repetitive or boring or less challenging. In fact, such a condition leads to dissatisfaction, which may drive the employee out of the organisation (Kovach, 1987). Where a challenge is accompanied by potential career development, such an opportunity is suitable for the long-term competence development objectives of knowledge workers (Armstrong and Murlis, 2004). Employees want to do a good job and assume more responsibility, especially if the work is meaningful and challenging (Drury, 2003). Jobs that are designed to meet both the operational efficiency requirements of the enterprise and the stimulation, challenge and competence development of employees, provide optimum levels of intrinsic rewards and by extension long-term retention of the employee. Such roles challenge employees to stretch their capabilities and utilise their abilities to perform their roles effectively and in return they will stay.

2.5.4 Multidisciplinary teams

To keep employees continuously stimulated and challenged, knowledge organisations provide them with opportunities to work in multi-disciplinary teams (World Bank, 2004). This encourages job enrichment, attainment of stretch goals, sharing of knowledge and information, team building, the creation of a robust body of knowledge as well as achieving the purpose of the organisation. The future of work will be underpinned by a team culture as a collaborative environment has a greater chance of retaining employees (Cappelli, 2000). A collegial

environment is more conducive to high performance and must be encouraged in order to provide the necessary space for knowledge workers to excel and contribute. For example, Peters (1994) has found that in today's complex and dynamic knowledge economy power comes from constant cooperation and sharing as opposed to the old style of hoarding information. Similarly, Koopman (1991) has found that the greater the complexity of a task and the knowledge required for the task, the greater the need for cooperation and team participation. Developing a team approach is important to release knowledge workers' capabilities for both their professional development and meeting the firm's goals.

2.5.5 Balanced Workload

The working conditions of professionals are different from those of factory floor workers who do not have control over their work processes (Armstrong and Murlis, 2004). Professionals tend to have or demand greater control over their workload. Unfortunately, at times they work long hours due to the sheer load of work they are required to perform (Armstrong and Murlis, 2004). More often than not these long hours are neither recognised nor compensated, leading to displeasure and disillusionment. As pointed out elsewhere, management mistake high productivity for happiness. Where this disjuncture occurs, the likelihood of poor performance is high (Schultz and Schultz, 1994). It is important to balance the workload of the individual within a given space of time against the competence levels of the employee. Environments where employees rarely see the light of day due to workload demands are characterised by high levels of stress and rumblings that impede productivity (Armstrong and Murlis, 2004). It is important to reward and recognise employees sufficiently for added effort while care is taken to optimise the variables of time, competence and work allocation. Workload must be taken into account in the reward system and in communication between the manager and the employee. Employees could be stressed by non-performance of their managers and being confronted with demanding tasks at short notice.

2.6 The Reward Dimension

Once an organisation has clearly defined what it expects of individuals and teams, it must then respond with a robust reward system to encourage performance and retention. Having an

effective reward and remuneration strategy can ensure increased productivity and employee satisfaction. The reward system is important in ensuring equity of access to rewards and their fair distribution to all employees (Kaye and Jordan-Evans, 2002). Reward is a combination of both remuneration and intangible gains of value to the employee such as indirect benefits and incentives like development opportunities, study time and travel (Kaye and Jordan-Evans, 2002; Malone, 2004). In a market that competes for the same talent pool, it is also important to pay competitively and to constantly benchmark remuneration to remain current.

2.6.1 Risk Sharing

Any organisation that goes into business, whether for profit or non-profit purposes, assumes a certain element of risk (Drucker, 1994). Traditionally, the organisation assumed all the risk. However, with the advent of the knowledge worker the tendency has been to share the risk between employer and employee (Armstrong and Murlis 2004; Malone, 2004; Stewart, 1997). In dealing with this significant development, Malone (2004) found that by putting incentives in place, the risk can easily be shared. He provides an example of an environment where bonuses for everyone who deals with customers depends partly on customer satisfaction ratings and staff can go into the intranet and view the ratings. All parties to the risk use peer pressure to excel and remove any service-quality problems. In such a setting the management of risk becomes a joint responsibility. Knowledge workers are motivated by such approaches.

2.6.2 Adequate Reward Systems

While it remains a significant part of the remuneration and reward package, it is becoming increasingly clear that money occupies a lower level in the motivation stakes of knowledge workers (Kovach, 1987; Katzel and Thompson, 1990; Kinnear, 1999; Young, 2001; Malone 2004). Adequate reward is regarded as a package that will both reflect the worth of the individual to the organisation as well as allow the individual to lead a lifestyle that will provide them with the balance they require to lead a fulfilled life (Downes and Husbands, 2003; Kinnear, 1999). Where reward systems contain incentive-based pay, the tendency has been towards

improved productivity and a longer stay with the employer (World Bank, 2004). Unequal sharing of rewards based on favouritism or other non-work or performance-related dimensions leads to dissatisfaction amongst staff. Equity of remuneration is a more important factor than the level.

2.6.3 Premium pay for specialist skills

Given the small pool of graduates in the Caribbean, regulatory agencies compete with the private sector and the regulated entities for these skills and talent (Husbands and Downes, 2003; World Bank, 2004). In order to attract and retain these employees, regulatory specialists pay them above average salaries which recognize their value to the organisation. Allowing for greater flexibility in remuneration approaches such as paying a premium for scarce skills, whether the policy allows for it or not, helps to ameliorate the dangers that could result due to exceptional market conditions. For example, Deloitte (2003) found that some organisations pay junior staff car allowances in order to retain them, despite their personnel policies not making provision for it. It is important to hold on to the skilled person.

2.6.4 Recognition

Numerous studies have found that recognition is one of the most powerful methods of rewarding people (Katzel and Thompson, 1990; Kinnear, 1999; Stewart, 1997; Coetsee, 2001; Armstrong and Murlis, 2004; Malone 2004). Feedback is an important barometer for knowledge workers to measure their success. Feedback alone, however, is not sufficient. Employees need to know that their contribution is appreciated and acknowledged by both the employer and their peers (Coetsee, 2001; Malone 2004). This need has been expressed as important by both Herzberg and McClelland in motivating and driving employees to achieve outstanding performance (Kovach, 1987; Young 2001). In Armstrong and Murlis' study MBA graduates ranked recognition second while in the Downes and Husbands (2003) ranked it fourth. In Maslow parlance this need combines both a social and ego factors and it is important to satisfy in order to sufficiently reward the employee in exchange for continuous superior performance (Kovach, 1987).

2.6.5 Performance improvement and feedback

Effective performance management is a powerful means of providing total reward to employees (Armstrong and Murlis, 2004). It is important to clarify mutual expectations between the employer and employees so that employees can receive feedback on their performance in order to reinforce the correct behaviours. Constructive feedback is highly motivational and has led individuals to innovate some of the best, profitable and groundbreaking solutions (Armstrong and Murlis, 2004; Malone, 2004). Successful performance management is characterised by personal development as its cornerstone. This encourages self-managed learning where the manager supports the achievements of the employee's personal development plan (Armstrong and Murlis, 2004). Performance development plans need to be integrated into the corporate strategy in order to create a high performance culture (Sturges and Guest, 2001). This approach helps with the management of knowledge as it is underpinned by knowledge sharing. Poorly handled feedback and arbitrary performance management is demotivating (Malone, 2004). Organisations that integrate and share knowledge have a greater chance of retaining key skills while providing employees with an opportunity to focus on success.

2.7 The Leadership and Management Dimension

Every successful organisation requires leadership to make the most of the skills its staff possesses. This requires a distinct set of management skills to motivate and develop staff, to communicate well with them and to build an organisational strategy that allows each individual to perform to the best of their abilities (Malone, 2004). Leadership is a process by which a leader influences others to accomplish an objective and directs the organisation in a way that makes it more cohesive and coherent (Armstrong and Murlis, 2004; Malone, 2004). Leaders carry out this process by applying their leadership attributes, such as beliefs, values, ethics, character, knowledge, and skills (Drucker, 1994). The skills with which these are executed determine whether the leader or manager will be successful in not only bringing the best out of the staff, but retaining them as well. To this end, leaders and managers must inspire and support employees by creating the energy for employees to do their best and provide environments where employees feel safe to voice their concerns, clear barriers and encourage creativity.

2.7.1 Quality of leadership

Quality of leadership refers to the way in which employees perceive their employer as caring, inspirational and encouraging employees to overcome challenges (Armstrong and Murlis, 2004). Leadership is pivotal in ensuring that outcomes are achieved through people and deliver on the organisation's strategy while maintaining supportive and constructive relationships between themselves and employees. These characteristics are similar to those espoused by the World Bank (2004) when they highlight the role of supportive management that values professional and technical staff who are regarded as critical to organisational success. Kinnear (1999) has shown the role of leadership through the element of organisational identity where leaders provide the employees an environment where their values and capabilities can find expression. Feedback from leaders in the form of recognition, reward and scope to engage in meaningful assignments is an important motivator for employees.

2.7.2 Socially-supportive environment

Having established that professional employees spend most of their social hours at work, it follows that a lot of socialising is done whilst at work. Employees' social needs and pursuits outside of work should be recognised in order for them to lead a seamless existence (Armstrong and Murlis, 2004). This approach views the employee as a holistic person and can potentially help employees build on their strengths because a supportive environment is critical to help achieve the firm's and the employee's goals. For example, providing child-care facilities, family responsibility leave, counselling, recreational facilities and flexible working hours helps improve employees' concentration (Schultz and Schultz, 1994). Responding to workers' social values positively impacts on the firm's ability to increase productivity, competitiveness, revenue potential and employee retention. To ensure the firm's sustainability, management needs to recognise the need to provide this type of environment.

2.7.3 Freedom and autonomy

Traditionally, organisations used control-oriented authority structures that accorded too much power to one party, the employer, over the other, the employee (Armstrong and Murlis, 2004; Sturges and Guest, 2001). McGregor's Theory X is in fact based on a patriarchal belief that employees must be treated like children at the mercy of the employer as the parent (Drury, 2003). This theory postulates that in order to get work done from employees, management must use their authority to coerce, intimidate, manipulate and closely supervise employees. Although there are industries and organisations that are inclined towards this orientation, in the modern knowledge economy, this is becoming less and less apparent (Drury, 2003; Armstrong and Murlis, 2004). The move towards Theory Y has pervaded the modern firm, that is, an acknowledgement that employees want to assume more responsibility, especially if the work is meaningful and challenging (Drury, 2003). Knowledge workers expect to be treated with respect by being accorded a measure of autonomy and freedom that allows them to do their work as best as they can, applying all their faculties and taking pride in the outcome of their effort. Allowing employees freedom and autonomy respects their abilities and their natural tendencies to excel.

2.7.4 Supportive management: appreciation of individual contributions

By their nature, organisations require an able leadership that will set the tone of the direction in which the organisation needs to chart (Malone, 2004). Leaders, sometimes called management, (although they are not necessarily the same) are responsible for formulating the vision, purpose and architecture of the firm and staff it with the requisite human resources to achieve the vision and purpose of the organisation (Coetsee, 2001). It is important for management, as the custodians of the organisation and its culture to provide the necessary support to facilitate the success that employees seek for themselves and the organisation. Izzo and Withers (2002) found that management contributes significantly to the retention of employees. Employees respond positively when management values them as individuals and the contribution they make towards the firm's success. Conversely, they respond negatively when such appreciation is absent. This is supported by Kaye and Jordan-Evans (2002) and Malone (2004) where they observed that people join organisations but leave their bosses. According to Malone (2004) talented professionals

leave an organisation because senior management fails to understand their needs by assuming that employees who excel at their work are happy. Management has a duty to support employees.

2.8 The Training and Development Dimension

Knowledge in the new economy changes constantly as do challenges organisations face. In order to keep abreast of the dynamic nature of knowledge work, modern firms make training and development an integral part of the employment experience (Malone, 2004; Michelman, 2003). Training is linked to a development plan of the individual employee which in turn flows from the requirements of the skills mix needed to fulfil meet the strategic objectives of the organisation (Armstrong and Murlis, 2004). Training is critical to prepare employees for future roles.

2.8.1 Future Growth and Opportunity

Under the ambit of future growth and prosperity, Armstrong and Murlis (2004:17) identified four factors, namely learning and development; career advancement opportunities; performance improvement and feedback, and self-improvement. These factors are important in ensuring that employees undergo continuous learning. Elsewhere Sturges and Guest (2001) have found that career growth, learning, development and mentoring are among the main reasons employees stay with an employer. Armstrong and Murlis (2004) have confirmed these findings by observing that career malaise contributes towards labour turnover. These studies buttress the need for career progression beyond hierarchical advancement towards developing a career path that meets specific goals. It is common to find that the average person wants to get ahead in life.

Lifelong learning and continuous self-improvement are some of the strategies individuals follow to achieve a better life for themselves. Armstrong and Murlis (2004) found that the value of continuous, on-going training and development creates a virtuous spiral that is beneficial to both the employee and the employer. After conducting a series of interviews with recent MBA graduates they came to the conclusion that learning is an intrinsically satisfying and rewarding experience. For example, Sturges and Guest (2001) found that employers that provide generous

study leave tend to retain top talent than employers that do not. As pointed out elsewhere in this chapter, knowledge workers have a tendency to have more loyalty to themselves and their profession. It is therefore important for an employer to contribute positively towards that loyalty. In return for the loyalty and support shown by the employer, the employee will reciprocate by contributing their knowledge and skills towards the employer's success.

Armstrong and Murlis (2004:18) cite one of their respondents as having said that the “satisfaction of growth needs depends on a person finding the opportunity to be what he is most fully and become what he can”. In fulfilling this need employers can offer their employees this opportunity through the provision of a sequence of experiences that prepare employees for whatever level of responsibility they possess the acumen and ability to reach (Armstrong and Murlis, 2004). Where employees have an opportunity to progress in their chosen career with their chosen employer they tend to achieve successful careers that meet all their aspirations. In this situation, they are motivated to stay and prosper with the organisation as it prospers too. Organisations that use systems and practices for identifying talent, promotion and succession planning become the employer of choice for motivated professionals (Malone, 2004). Knowledge workers look beyond promotion that offers money and prestige by looking for opportunities for self-development and growth which results in sustainable competence (Izzo and Withers, 2002). Organisations that have competence frameworks as part of their career offering stand a greater chance of attracting, developing and retaining employees motivated by opportunities for career advancement.

2.8.2 Partnerships with training institutions

At an organisational level, regulators forge partnerships with training institutions such as universities and poly-technics in order to keep abreast of changes in the dynamic world of information generation (World Bank, 2004). Benefits to employees include opportunities for professional development and networking with other professionals and the faculty of the academic institution. This has helped increase the public profile of specialists and helps attract students to regulation as a career option. Universities also welcome this liaison as it keeps its research relevant.

2.8.3 Capacity Building

In an attempt to ensure that the institution has the requisite capacity to regulate effectively, a mixture of work assignments is combined with academic programmes to ensure that employees are gainfully occupied (TDLR, 2006; World Bank, 2004). This enables employees to design and continuously improve on regulation methodologies thereby keeping abreast with developments, processes and systems used by regulated entities. For example, employees can be seconded to other organisations where there are opportunities to obtain new skills that their employer does not provide but is critical for their success and development. This helps build employee confidence as they are able to perform work that is expected of them thus contributing to the building of their reputation and credentials (Malone, 2004).

2.8.4 Exchange Programmes with other Regulators

Regulators exist in industries where monopolies exist or where there is asymmetry in the market place (Baldwin and Cave, 1999; World Bank, 2000). With a surge in the number of regulatory bodies all over the world, it becomes possible for knowledge-sharing to occur given the specialist nature of the profession. For example, regulators in the Caribbean took full advantage of the expertise offered by their counterparts in other parts of the world by entering into exchange programmes where their employees could spend time learning about a new area of knowledge (World Bank, 2004). This helps boost the competence of employees and encourages them to stay.

2.8.5 Public exposure of employees

In some respects, the manufacturing of knowledge in regulatory agencies can be likened to that of universities. This similarity creates the need to have employees' knowledge to be reviewed by their peers in the form of presentation of papers at retreats, conferences and in publications (World Bank, 2004). This approach helps employees to contribute to the body of knowledge in their respective profession(s), raise standards and improve the quality of their outputs. Feedback from peers is especially motivating as it feeds into the competitive nature of the knowledge

worker as well as the need for affiliation to the profession. Kinnear (1999) found that knowledge workers have a stronger identity with their profession than their organisation. This approach helps to buttress their needs and consequently the organisation gains immensely from the knowledge sharing through such fora.

2.9 Values and Organisational Culture Dimension

One of the cornerstones of a successful organisation is the extent to which it both defines and demonstrates a coherent set of values that employees will ascribe to (Malone, 2004). Of equal importance is the esteem and regard the organisation is held by the external community as well as the extent to which the organisation encourages employees to take risks and the degree to which it takes collective responsibility for the consequences of risk taking by employees. To achieve all of this and more, the organisation needs to display effective and supportive leadership that delivers on the vision and values of the organisation through recognition, communication and consultation. The factors discussed under this dimension are reputation of the organisation, organisational values and behaviours and communication.

2.9.1 Reputation of the organisation

Armstrong and Murlis (2004) found that employees are attracted to high-reputation employers. In South Africa for example, there is annual survey conducted by Deloitte Consulting aptly called “the Best Company to Work for” (Deloitte and Touché, 2005). Organisations that make it to the top of these lists tend to build reputations as employers of choice as they display all the traits that attract them to high performers who have a lot to offer an employer who will reciprocate the same seriousness. This is also called the “employer brand or employer value proposition” as it has a pull factor and engenders a sense of pride for working for that employer (Armstrong and Murlis, 2004). For example, Deloitte and Touché (2005) found that when employees discover that promises made to them when they first joined are not kept, then they will leave. Husbands and Downes (2003:11) found that “pride in the organisation” ranked fourth as a motivating factor

for staff working for regulatory institutions in Barbados. In South Africa, organisations that develop a reputation as socially responsible are attractive brands that employees want to associate with (Deloitte and Touché, 2005).

2.9.2 Organisational culture and behaviour

An organisation that both espouses and practises a value system as the foundation for its leadership and management practice is tends to be regarded as an employer of choice by highly qualified and experienced employees (Kinnear, 1999; Armstrong and Murlis, 2004; The World Bank, 2004). To ensure a total embrace of the values, both management and employees' performance is partly measured on their ability to display these in their work method. For management especially, it is important for these to be reflected in the HR Policies and Procedures (Armstrong and Murlis, 2004; The World Bank, 2004). For example, the World Bank (2004) found that because regulatory institutions use civil service rules it is sometimes difficult to attract and retain competent specialists. To overcome this challenge, they aimed at adopting private sector benchmarks as it is these organisations that they compete with for the same labour pool. Kinnear (1999) also found that where the individual's value system matches strongly with that of the organisation, motivation and retention tend not to be turbulent issues for management to contend with. It is therefore important for an employer to have a persona that attracts the best and the brightest in order to retain specialist skills that will positively contribute to its success.

2.9.3 Communication

Communication ensures the effective flow of information in all directions so that all stakeholders are familiar with the vision, purpose, strategic goals and the direction the organisation will take as well as being kept abreast of developments. Traditionally, it was employers who communicated and employees listened (Armstrong and Murlis, 2004). This has since changed as employees, especially knowledge workers, are looking for a better value proposition from employers that keep them informed. Employees require to be informed timeously as much as they want their voice to be heard so that they can contribute to decision-making in the firm (Armstrong and Murlis, 2004; Malone, 2004). Malone (2004) provides an example of AES Corporation, a US

electric power supplier, where every employee is regarded as a mini-CEO because they are responsible for enquiring after and for informing on work in progress. Having a voice in the way the organisation is run is empowering as is having mutually respectful relations with leaders, as the case is at Medscheme (Hoosain, 1999). Barbados regulatory specialists ranked communication as importantly as pride in the organisation (Husbands and Downes, 2003). Effective communication is usually facilitated through sound relations between the leadership and employees, irrespective of which level they may be.

2.10 Conclusion

This chapter has focused on gaining an understanding of the concept of knowledge management by explaining terminology such as ‘intellectual capital’, ‘knowledge worker’, ‘structural capital’ and ‘customer capital’. The chapter also explored an understanding of the significant role of knowledge workers in regulatory institutions; issues of labour turnover among knowledge workers and its impact on the effectiveness of modern enterprises to achieve their goals and understanding the concept of retention, especially the dimensions and strategies that contribute to the retention of knowledge workers. Issues and challenges facing modern organisations, including regulatory agencies, in managing knowledge workers with regard to their attraction, development and retention were looked at. Possible courses of action and choices at the disposal of firms were provided in order to gain the most out of their intellectual capital with a view to achieve sustainable effectiveness in the market place while retaining these skills. For regulatory institutions with the challenges of having to recruit in competitive labour markets characterised by scarcity in the requisite skills critical to their mission, these strategies hold important lessons for the attraction, development and retention of skilled professionals and specialists.

The next chapter is a discussion of the research methodology used to gather empirical data to explore the applicability of the theory from the literature review to NERSA. It is intended that the outcome will assist NERSA to identify the causes of labour turnover among knowledge workers with a view to develop retention strategies to retain them in a highly competitive labour market.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this chapter is to describe the methodology that was used to carry out the research. In order to achieve the overarching aim of the research, namely to identify the characteristics of a successful retention strategy for a knowledge-intensive organisation such as NERSA, a quantitative research method was used. Using a survey method, data was collected by means of a structured questionnaire. Specifically, the survey aimed at identifying factors that contribute to staff turnover and retention and sustainable strategies that could be used for the retention of knowledge workers at NERSA. The research was carried out in two stages: the first stage was the literature review presented in Chapter 2, which identified the antecedent variables of staff turnover and the strategies for retaining knowledge workers in the modern economy. The second stage was the design and administration of a quantitative questionnaire that sought to validate the extent to which these variables occur at NERSA. Essentially the data collected and analysed is intended to address the research problem.

3.2 Research question, aim and goals

The research question that the study seeks to answer is: what are the key drivers that influence the retention of knowledge workers in a knowledge organisation? The aim of the study is to identify and understand the underlying retention factors that are important to knowledge workers at NERSA including an exploration of factors that could make knowledge workers consider leaving NERSA and to survey the biographical characteristics that influence knowledge workers in their decision to either leave or stay at NERSA with a view to formulate strategies that could help NERSA to retain key employees. In order to achieve this aim, there are five objectives to the study:

- The **first** objective is to identify and understand factors that cause labour turnover among knowledge workers.

- The **second** objective is gain insight into the major factors that may influence the retention of knowledge workers at NERSA with a view to formulate the correct type of retention strategies in a competitive labour market;
- The **third** objective is to determine if there are any factors that are not important to cause labour turnover among knowledge workers;
- The **fourth** objective is to determine if there are any retention factors that are not important and therefore may not influence knowledge workers to stay at NERSA;
- The **fifth** objective is to determine if there are certain **biographical characteristics** that influence the more important turnover and retention factors.

3.3 Delimitations and limitations of the study

The study focused on staff at the Energy Regulator. Because of the focus on knowledge workers, only employees in the regulatory divisions, such as engineers, economists and financial analysts and other support divisions that employ professionals such as lawyers, policy analysts, information management specialists, accountants and people management practitioners, who are knowledge workers in their own right, were targeted as respondents. The knowledge worker component comprises 59% of the total number of employees at the Regulator. As expected, the information from the responses provided significant data for analysis. However, because of the number of responses, the size of sample does not lend itself to factor analysis. The responses are not intended to be generalisable to the industry or all types of knowledge workers, but will provide insight into the challenges of retaining knowledge workers at NERSA.

3.4 Ethical considerations

Participants in the survey are known to the researcher as they work in the same environment with the researcher. The researcher has an interest in the study and its outcome, because, as part of management, he would like to see the organisation succeed both in terms of achieving its strategic objective and in retaining high calibre professionals who will contribute to that success. The researcher is aware that overzealousness or being sensitive to findings that highlight the

inefficiencies of management may lead to bias. The researcher did not influence the respondents' answers, thus allowing the process to take its natural trajectory. In this study, the researcher opted for the survey questionnaire in order not to interfere with the answers the respondents gave. To further enhance the reliability of the data gathered, the researcher allowed the respondents to withhold their identity. This ensured that respondents could answer without fear of being identified with the answers given. Furthermore, it was explained to the respondents that the research was for academic purposes although they will be presented to the management of NERSA as well as to the University and published on the University's website.

3.5 Research Paradigm

The research was conducted in the post-positivist paradigm (Guba and Lincoln, 1994). This paradigm acknowledges that the subjects being studied have their own reality that the researcher must depict as accurately as possible. Remenyi (1996:26) contends that "being a positivist implies that the researcher is working with observable social reality and that the end product of such research can be the derivation of laws or law-like generalisations similar to those produced by the physical and natural sciences". Leedy (1997) confirms this approach by asserting that the positivist research paradigm describes the world as being made up of observable, measurable facts that have an objective reality. This paradigm therefore expects the researcher to be objective in the analysis and interpretation of the reality that was observed and measured at NERSA. Although the researcher is also employed by NERSA, it was important to maintain a measure of distance between the two so that the researcher can be independent and interrogate the causes and effects of the subject being researched objectively, evaluate the evidence critically and make conclusions and recommendations that can then be used to address the problem. Administering the questionnaire by internal mail ensured that the distance was maintained.

3.6 Research Design

A pilot study was developed to test the feasibility of the questionnaire, its clarity and the likely responses it would elicit from respondents. To expedite data analysis, quantitative data was collected using a structured questionnaire. The structured questionnaires were used to collect

descriptive data using the normative survey method (Leedy, 1997). The questionnaire provided some measurements of influence of the factors that drive staff turnover and staff retention and added in-depth insights. A structured questionnaire, the primary instrument, consisted of a series of 45 statements using a four-point Likert scale and biographical information of the respondents.

3.6.1 Characteristics of the Survey Research Method

Leedy (1997) describes the survey method as a research paradigm that accurately records the observations of a population within the research parameters. Punch (2003) defines a survey as an ordered series of questions or statements assessing attitudes, behaviours or personal characteristics that is administered to individuals in a systematic manner. Surveys may be administered in a variety of mediums such as paper, oral or electronic format and using various delivery methods such as face-to-face interviews, telephonic interviews and mail distribution. For the purposes of this study, the paper-based distribution was used.

3.6.2 Factors that influenced the choice of methodology

The basic idea behind the survey methodology is to measure variables by asking respondents questions and then to examine relationships among the variables (Fowler, 1993). Surveys tend to be exploratory in nature (Cooper and Schindler, 1998). The nature of this study is also exploratory. There are two types of surveys: cross-sectional designs or longitudinal designs (Cooper and Schindler, 1998; Leedy, 1997). Cross-sectional surveys ask questions of people at one point in time while longitudinal studies do so over a period of time. The objective of cross sectional surveys is mainly to detect and describe correlations between variables. Surveys vary widely in sample size and sampling design. This study is a cross-sectional survey as it is concerned with employees' views at a certain point in time.

From an administration point of view, the survey methodology is a cost-effective method of gathering information compared to focus groups or personal interviews for example (Walonick,

2004). Furthermore, because the interviewer is not present, this removes the possibility of bias, which tends to be present when interviews or focus groups are conducted (Walonick, 2004). Added to this is the fact that surveys are known to most people and therefore when they are presented with one, they do not become apprehensive, but tend to be willing to cooperate. Compared to focus groups or interviews questionnaires are less intrusive and allow the respondent to complete it at their own pace and time (Walonick, 2004). Once completed, questionnaires are simpler to capture and analyse as there are various computer software packages available for data manipulation (Walonick, 2004).

Fowler (1993) says that a distinction can be made between large-scale, small-scale, and cross-cultural studies. Large-scale probability surveys are the ideal, and the target population is a whole country, for example. Typical large-scale surveys of a national population use a sample size of 1500-3000 respondents or larger (Fowler, 1993). Small-scale surveys sometimes involve non-probability sampling, and a typical sample size of 200-300 respondents, although students operating on tight budgets and under time constraints often use smaller samples. Comparative or cross-cultural surveys usually involve 3-6 nations, and sample sizes that involve 1000 people per nation (Fowler, 1993). The current study is a small scale non-probability sampling survey.

For the current study, the general population is the knowledge workers at NERSA. The total number of employees at NERSA is 100 while the number of knowledge workers is 59. All the knowledge workers were surveyed. A total of 34 responses were received and the responses constitute the sample. In the same way that Fowler (1993) found that constraints can limit the sampling methods of researchers, this researcher was also operating under time and budgetary constraints. Although Coopers and Schindler (1998) and Leedy (1997) assert that surveys can be a cost-effective type of research, they sometimes suffer from inherent weaknesses. These weaknesses are supported by Wilonick (2004). They have found that some of the greatest are:

- Reactivity, that is, respondents tend to give socially desirable responses that make them look good or seem to be what the researcher is looking for;
- Sampling Frame caused by the difficulty to access the proper number and type of people who are needed for a representative sample of the target population;

- Non-response Rate due to a lot of people not participating in surveys; and,
- Measurement Error where surveys are often full of systematic biases, and/or loaded questions.

This study experienced first hand the problems that result from non-response by the target sample. Walonick (2004) observed that low response rates to survey questionnaires can lower confidence in the results. This can be confounded by the researcher's inability to probe responses due to their structured nature, which is achievable with interviews. Although the response rate was not the ideal, returned questionnaires were enough to provide meaningful data for analysis.

3.7 Data Gathering Methodology

Questionnaires for both the pilot survey and the main survey were administered using the internal mail system. Questionnaires contained in envelopes were sent to respondents. For the pilot survey, initial contact was made through physical meetings to explain the purpose of the survey and the assistance required from respondents. Three respondents were surveyed for the pilot study. For the main survey, an email was sent to respondents outlining the background and aims of the study and solicited their participation by alerting them to retrieve sealed envelopes from their pigeon holes. Data was collected from all knowledge workers in the four divisions.

Fifty nine questionnaires were distributed to knowledge workers for the main survey and of these 34 responses were received. This represents a return rate of 58%, which is reasonable for a survey sent through the mail. Although this was an anonymous questionnaire, respondents were asked to sign a register to indicate that they had completed and returned the questionnaire. Leedy (1997) calls this a self-administered questionnaire because respondents are allowed to fill them out themselves in their own time without the researcher being present. All the researcher has to do is arrange delivery and collection. Questionnaires were deposited in sealed envelopes at employees' pigeon holes. All completed questionnaires were deposited in a sealed, marked box at reception for collection by the researcher. E-mail follow-ups with employees who had not signed resulted in the return of an additional one completed questionnaire after the closing date.

According to Walonick (2004), one of the most powerful tools for increasing the response rate is to use follow-ups or reminders. The responses provided quantitative data to reinforce or contradict and explain the information obtained from the literature review. The questionnaire was administered during working hours over a period of one week. Part of the reason why some questionnaires were not returned is that some employees are out of the office for extended periods of time consulting with stakeholders, while others were on official leave. Another reason is that where follow-up was done, some employees indicated that there was no point in participating in a survey when as they intended to leave imminently and were thus not interested in the survey or the results thereof.

3.7.1 The Pilot Survey

A pilot survey was administered on three employees at the Regulator who fall under the category of knowledge worker: one was an Internal Auditor; another was a Financial Analyst and the other a Human Resources Practitioner. The main aim of running the pilot survey was to detect any flaws in the phrasing of questions and to correct any shortcomings prior to administering the main survey, determine the time it takes to complete the survey and the clarity of the language (Burgess, 2003). The pilot sample was homogeneous by age, race and qualifications with differences in gender: two males and one female. All respondents answered the survey at the same time under similar conditions: were provided 24 hours to return the questionnaire and they answered questions at their own pace within their own schedule. Immediately following the completion of the survey, the researcher conducted a debriefing that determined that the respondents understood and were comfortable answering the questions. Few changes were deemed necessary, namely, clarification on the job grade category, refining the age categories, rephrasing some of the statements and removing questions on the organisation's responses. The removal was precipitated by the fact that not all respondents would have been at NERSA long enough to provide informed input, thus potentially adversely affecting the quality of data. Due to the fact that more than 30% of the targeted respondents were in a similar position, it was decided to remove the question as it would distort the results. Once the corrections were incorporated, the results of the pilot responses and the format became the basis for the questionnaire. The three respondents were part of the sample that participated in the main survey.

3.7.2 The questionnaire

Leedy (1997) describes the questionnaire as an instrument of observing data beyond the physical reach of the researcher. Since this study's goal is to glean the opinions of the respondents, the questionnaire was considered most appropriate. This appropriateness notwithstanding, Punch (2003) contends that there are some limitations to the questionnaire as its usefulness relies on the willingness of respondents to cooperate. This potential threat was mitigated by the careful targeting of respondents, especially in an environment where labour turnover was high and therefore employees wanted their views heard in order to address the challenges facing the organisation. An analysis of the pilot survey resulted in the simplification and clarity of the questionnaire and the researcher was confident that the questionnaire was detailed enough, its objectives well-articulated, the output explained and the finalisation resulting in feedback indicated. See Appendix A for the questionnaire.

A total of 45 close-ended questions were asked using a four-point Likert scale. The Likert scale provides a way by which researchers can measure the degree of agreement or disagreement of the respondents to a question (Dumas and Redish, 1999). The four-point Likert scale contained the following measurements of variables: 'no influence' (a value of 1), 'little influence' (a value of 2), 'significant influence' (a value of 3) and 'highly significant influence' (a value of 4). Variables that emerged from the literature review were used deductively to construct questions for the questionnaire. Target questions were used to examine the antecedents to turnover and retention that were identified in the literature review. The four-point Likert scale measured how important each item was in relation to the respondents' intention to leave or stay at NERSA. This approach is suitable for efficient capturing and processing of the data and is suitable for highly educated respondents (Creswell, 1994).

3.7.3 Construction of the questionnaire

The questionnaire was constructed using the layout of Kinnear's (1999) adaptation of the Schriesheim and Tsui's Job Satisfaction Index. It covered three pages: the first page provided introductory information on the aim of the study, assurance of confidentiality, which the questionnaire was aimed at and how the results will be used by the researcher. The second page

contained section one of the questionnaire which essentially solicited the biographical data of the respondents using nine questions. Making the first part general questions follows from Walonick's (2004) suggestion that it is necessary to present general questions before specific ones in order to avoid response contamination. Moreover, people are happy to respond to familiar questions that refer to them before they answer unfamiliar ones. However, this risks pertinent questions not being asked should the respondent lose interest (Creswell, 1994). The third page was the main survey and comprised 45 statements indicating factors that influence knowledge workers' decision to either leave or stay with NERSA. The variables were based on the literature review and the variables identified as either the causes of staff turnover or the factors that influence the retention of knowledge workers (See Appendix B). The retention variables are reciprocal to the causes of the staff turnover.

Care was taken to ensure that the questions are related to the theoretical constructs of the research question. Furthermore, it was important to ensure that questions cover every concept covered in the literature review and that there was not excessive coverage of any one concept. Thus, in structuring the questionnaire, all the concepts were covered to ensure that all the variables are measured. Walonick (2004) emphasises the importance of only asking questions that directly address the study goals and keeping questions as short as possible. The length of the questionnaire determines interest, which in turn influences the response rate. Response rate is an important indicator of how much confidence can be placed in the results (Walonick, 2004). Ensuring that the length and contents of the questionnaire are relevant to the study will increase the chances of a favourable response rate.

Only close-ended questions were used to obtain data from respondents. Close-ended questions provide a variety of possible responses for the respondent to choose from (Dumas and Redish, 1999). This choice was influenced by the ability of close-ended questions to provide a uniformity of responses, control over the process and to the ease of coding answers and produce forms of computer-statistical analysis on the results (Dumas and Redish, 1999; Wisniewski, 2002). Dumas and Redish (1999) identified three advantages of close-ended questions over open-ended questions. Firstly, much as open-ended questions are very useful to elicit free flowing responses from the respondents free of any restrictions; they create some problems precisely because of the freedom with which the respondents answer. Secondly, some of the respondents might answer

ambiguously while others might answer in a contradictory fashion with the first sentence contradicting the second one. Thirdly, respondents might misunderstand a question and give an answer that is totally unrelated or they might answer something that gets misunderstood by the researcher leading to the question being mistakenly coded. Care was taken to eliminate these shortcomings by opting for close-ended questions.

3.7.4 Assumptions made in the construction of the questionnaire

The assumption was made that the data recorded in the questionnaires adequately reflected the level of education of the respondents. As English is the official language of communication at NERSA, it was assumed that the respondents would be sufficiently functionally literate to complete the questionnaire in English as they understand both the variables raised and the manner in which they are presented. Leedy (1997) cautions against the use of jargon when respondents are less intelligent or sophisticated and advises a mix of jargon and operational definitions of the concepts being studied when respondents are intelligent or highly specialised. The educational levels of the target sample gave the researcher confidence that they will respond to the questionnaire because Walonick (2004) found that non-response to survey questionnaires is associated with low education. The design and development of the questionnaire proceeded with this advice in mind.

3.7.5 Content Validity and Reliability

Content validity was applied on the measuring instrument (questionnaire) during the pilot survey. Validity determines whether the research truly measures that which intended to measure (Cooper and Schindler (1998) or how credible the research results are (Golafshani, 2003). Validity was enhanced by linking questions to the literature (see Appendix B). From a positivist point of view, the researcher strived to collect data that are true measures of reality. The idea is that one-to-one mapping exists between the measures and the phenomena that are the focus of the research. To the extent that the mapping holds, the data collected by positivist researchers are deemed valid (Golafshani, 2003).

Wisniewski (2002) describes reliability as the extent to which results are consistent over time and are an accurate representation of the population under study (Golafshani, 2003). The pilot survey, administrative procedure, provision of clear instructions and use of closed questions linked to a predefined measurement scale were all used to enhance reliability.

3.8 The population and sample selected for the study

The population of the study is all knowledge workers working in NERSA. The exploratory nature of this study limits the focus to a sample of knowledge workers who are critical to the regulatory function of NERSA as well as the professionals who provide specialist support to this function and not the rest of the employees. The main questionnaire was administered using the non-probability sampling method (Creswell, 1994; Punch, 2003). Sampling is important as it narrows and delimits the population for the purposes of the study (Creswell, 1994). Creswell (1994) and Punch (2003) define non-probability sampling as a technique that uses deliberate methods to select respondents in a study where the selection is based on factors such as the personal convenience of the researcher, expert judgment or any conscious decision of the researcher. As this is an exploratory study, the non-probability choice for this sampling was based on the access the researcher has to the subjects and time constraints given potential barriers to access by approaching other regulatory agencies.

The population of 59 knowledge workers comprised of engineers, financial/economic analysts and customer services specialists, policy analysts, researchers, legal advisors and information resources management. These make up the regulatory support knowledge workers. Included in the population are organisational support professionals in the fields of accounting, internal audit, human resources management and communications. The organisational support professionals bring particular and in some cases specialist knowledge to the organisation and contribute to its successful management. However, they do not contribute directly to the body of regulatory knowledge. The study excluded managers and other semi-skilled and semi-professional staff. All this was facilitated by the purposive nature of non-random sampling.

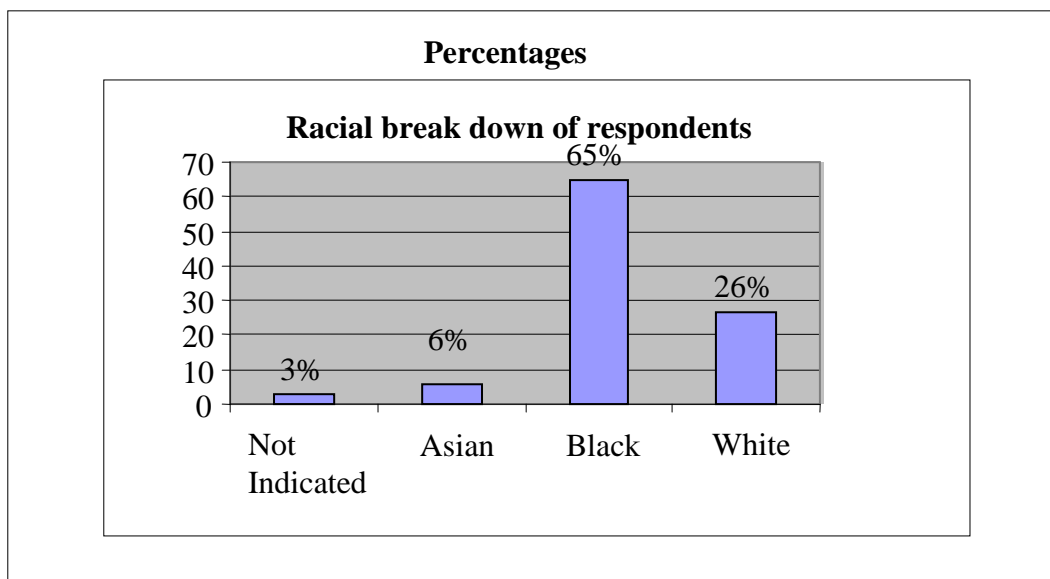
3.8.1 Biographical information of respondents

According to Leedy (1997) descriptive statistics describe patterns and general trends in a data set. The first part of the questionnaire asked respondents for their biographical information in order to carry out group analyses. Although part of the data is descriptive, such as information about the respondents' race, age, job grade, highest qualification obtained, gender and division where an employee is attached to, the other part was exploratory in nature, establishing tenure at NERSA, number of years working experience before NERSA and number of employers before NERSA.

3.8.2 Race

Of the 34 respondents, 65% were Black, 26% White, 6% Asian while 3% did not indicate their race as reflected in figure 3.1. This reflects the general racial distribution of the organisation where Black employees make up 80% of staff.

Figure 3.1: Racial breakdown of respondents



3.8.3 Gender distribution

Of the 34 respondents, there were more females (56%) than males (42%). This is the general gender distribution of the organisation where female employees make up 53% of staff. Furthermore, this distribution occurs despite South Africa coming from a history of women having entered the world of work much later than men and professional and other specialist jobs being the domain of men in the economy.

Figure 3.2: Gender distribution

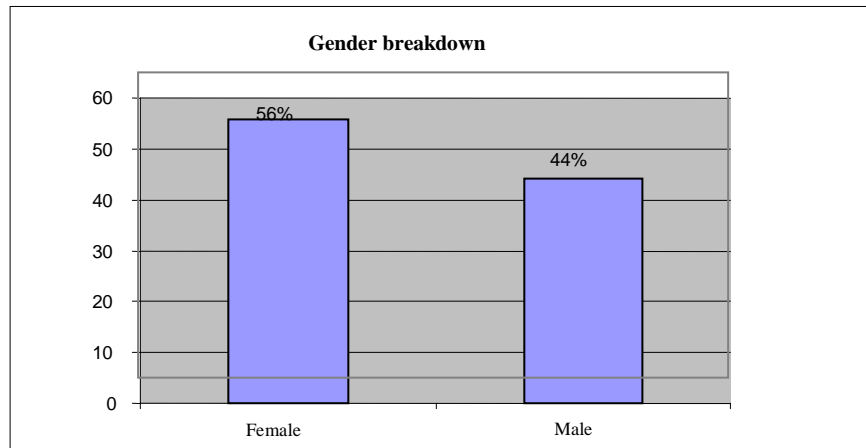


Table 3.1 presents the racial and gender distribution expressed as a percentage. The figures on top are the actual number of responses or frequencies and the second number the percentage. Of the females that responded 63% or 12 were Black, 26% or 5 White and 6% or 1 Asian. On the male side, 65% or 10 of the respondents were Black, 26% or 4 White and 6% or 1 Asian.

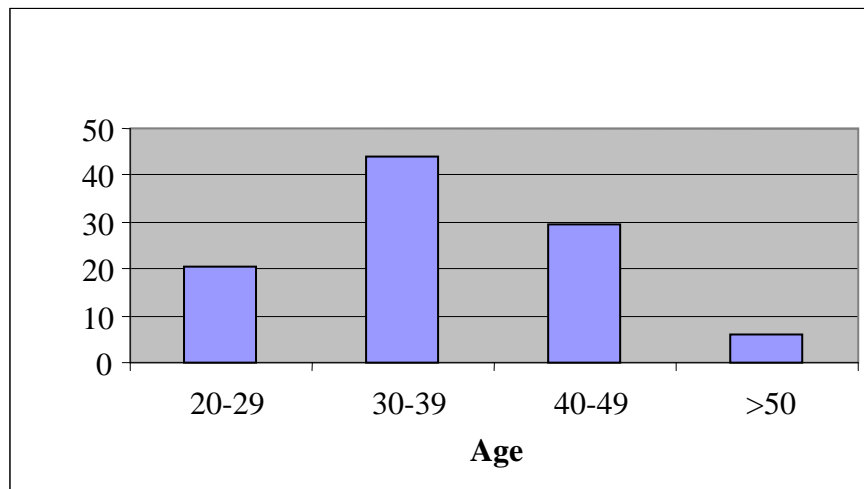
Table 3.1: Racial and gender distribution of respondents expressed in percentages

RACE	FEMALE	MALE	TOTAL
Unknown	1 5%	0 0%	1 3%
Asian	1 6%	1 7%	2 6%
Black	12 63%	10 65%	2 65%
White	5 26%	4 26%	9 26%
Total	19 100	15 100	34 100

3.8.4 Age

The majority of respondents, 44%, are between the ages of 30 to 39. Thirty percent of the respondents are between the ages 40 to 49 while 20% are between the ages 20 to 29 and 6% are 50 years old and over. These are depicted in figure 3.3. This shows that employees at NERSA are generally young, with the majority - 64% - being under the age of 40. This may pose serious challenges in that there may be not enough depth of experience in the organisation.

Figure 3.3: Age distribution

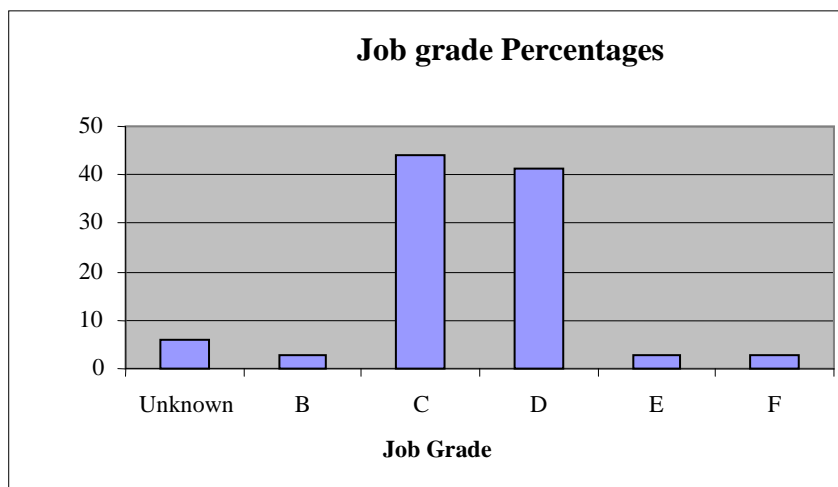


3.8.5 Job Grade

NERSA uses the Patterson Job Evaluation System. The basic premise of the Paterson System is that the value of a job to an organisation is based on its level of responsibility (Snelgar, 1983). Responsibility is reflected and measured by the decision-making requirements of the job. Because all jobs require incumbents to make decisions in order to perform their jobs, decision-making is a logical and equitable basis on which to compare jobs within an organisation. Job evaluation is a systematic process of determining the value of each job in relation to other jobs in the organisation, grading it in relation to others in a department or industry and determining the remuneration for that position (Snelgar, 1983). Each job is allocated a grade band. Paterson has six bands – A to F (Snelgar, 1983). The highest band is F. In the case of NERSA, the CEO and 3 Full-time Members of the Regulator’s positions are graded as F band jobs.

As indicated in Figure 3.4, of the 34 respondents, 44% were in the C-band, 41% in the D-band 3% each in the B-, E- and F-bands while 6% did not indicate a band in their response. Employees in the B- and F-bands were not targeted, 15% of the responses are null and void. It would appear that there is a minority of employees who do not know their respective job grades. Generally, the majority of employees at NERSA are located in the C- and D-bands and the responses confirm the distribution of employees. The majority of responses came from the targeted employees.

Figure 3.4: Job grades



3.8.5 Tenure at NERSA

Because the focus of the study is on retention, it was important to understand the length of stay employees had at NERSA. Eighteen percent or 6 of the respondents have less than 2 years tenure, 56% or 19 have been at NERSA for between two and five years, 9% or only 3 for six to ten years and 11% or just four with a tenure of more than ten years. The majority (56%) therefore do not have more than five years' tenure at NERSA. See Table 3.2.

Table 3.2: Tenure at NERSA

UNKNOWN	< 2 YEARS	2 – 5 YEARS	6 – 10 YEARS	>10 YEARS	TOTAL
2	6	19	3	4	34
6%	18%	56%	9%	11%	100

3.8.6 Number of employers before joining NERSA

As part of understanding the mobility of employees, information on how often they have moved between employers was used to measure their propensity to stay for a reasonably long period with a single employer, especially NERSA. The majority (32%) of respondents worked for three previous employers followed by 26% who worked for two employers while a further 24% worked for one employer. Eighteen percent of respondents worked for four or more previous employers. The number of employees who have worked for three or less previous employer is greater than that of employees who have been through more than three employers. On the face of it, this may suggest that generally employees here stay longer with one employer or that the majority are young people who are still starting out in their career. It would have been more illuminating if the average time they stay per employer could be established.

Table 3.3: Total number of employers previously worked for

NO OF EMPLOYERS	FREQUENCY	PERCENTAGE
1	8	24
2	9	26
3	11	32
4	3	9
5	3	9
Total	34	100

3.8.7 Number of previous years work experience before joining NERSA

Only 9% or 3 respondents have been working for three years since qualification, 26% or nine for less than five years while 24% or 8 have been working for six to ten years and 41% (14) have previous working experience of more than ten years. Combining the 8 respondents with more than 6 years but less than ten with the 14 with more than ten years translates into 65% of respondents have more than six years working experience. Generally, this is good as it means that more than half of the respondents have relatively long experience to be entrusted with important work to perform.

Table 3.4: Number of previous years work experience

< 2 YEARS	2 – 5 YEARS	6 – 10 YEARS	>10 YEARS	TOTAL
3	9	8	14	34
9%	26%	24%	41%	100

3.8.8 Qualifications

The nature of work at NERSA is highly specialised and technical and therefore requires people who are highly qualified to carry it out. The data for qualifications is presented in terms of gender. Forty-two of females hold bachelors degrees; 77% hold diplomas, 50% honours degrees while 21% are holders of master's degrees. On the male side 47% hold bachelors degrees; 13% hold diplomas, 20% honours degrees and a further 20% hold masters degrees. See Table 3.5 for the gender distribution of the respondents' qualifications.

Table 3.5: Percentage of gender distribution of qualifications

GENDER	Bachelors	Diploma	Honours	Masters	TOTAL
FEMALE	5 42%	7 78%	3 50%	4 57%	19 56%
MALE	7 58%	2 22%	3 50%	3 43%	15 44%
TOTAL	12	9	6	7	34
	100	100	100	100	100

A further categorisation was performed to determine the qualifications and number of years experience employees has prior to joining NERSA and it is presented in Table 3.6. Of the respondents with Bachelors degrees one has less than 2 years working experience, five or 42% have between 2 and 5 years working experience and the other 6 or 50% have more than 6 years, with three having more than 10 years. For respondents with Diplomas less than half (4) have less than 5 years experience while two have between 6 and 10 years experience and three have more than 10 years working experience outside NERSA. Most (five out of six) of the respondents with Honours degrees have six or more years working experience with one having between 2 and 5 years. For the respondents with Master's degrees, the most (14) have more than 10 years' working experience followed by eight or 23% with between 6 and 10 years. There are nine with 2 to 5 years experience and three with less than 2 years.

Table 3.6: Years' experience before NERSA according to qualifications

QUALIFICATION	< 2 YEARS	2 – 5 YEARS	6 – 10 YEARS	> 10 YEARS	TOTAL
BACHELORS	1 8%	5 42%	3 25%	3 25%	12 100
DIPLOMA	1 11%	3 33%	2 22%	3 33%	9 100
HONOURS	0 0%	1 17%	2 33%	3 50%	6 100
MASTERS	1 14%	0 0%	1 14%	5 71%	7 100
TOTAL	3 9%	9 26%	8 24%	14 41%	34 100

3.8.9 Divisional distribution

This section describes the sample in terms of number of years' working experience before joining NERSA and the results are presented in Table 3.7. Three of the respondents in Corporate Affairs have been working for more than 10 years prior to joining NERSA while another three have more than years and two have 2 to 5 years. In Regulation nine of the respondents have more than 10 years previous working experience; six have experience of between 2 to 10 years and two have less than two years tenure. In the Specialised Support Services units the respondents have experience greater than 6 years. Most of the respondents in Support Services have previous working experience of between 2 and 5 years while the rest have experience greater than 6 years.

It would seem that the Regulation division has greater experience than the other areas, followed by Corporate Affairs. This bodes well for the organisation in terms of keeping institutional memory by having people that new recruits can learn from. This is a challenge though as it seems that there is not sufficient depth in the Support areas. This could pose a threat as the regulatory divisions require experienced and sophisticated support for them to carry out their work.

Table 3.7: Years working before joining NERSA per division

DIVISION	< 2 YEARS	2 – 5 YEARS	6 – 10 YEARS	> 10 YEARS	TOTAL
CORPORATE AFFAIRS	0 0%	2 25%	3 38%	3 38%	8 100
REGULATION	2 12%	3 18%	3 18%	9 53%	17 100
SPECIALISED SUPPORT UNITS	0 0%	0 0%	1 50%	1 50%	2 100
SUPPORT SERVICES	1 14%	4 57%	1 14%	1 14%	7 100
TOTAL	3 9%	9 26%	8 24%	14 41%	34 100

Table 3.8 describes the sample in terms of tenure at NERSA by division. Four of the respondents in the Corporate Affairs division have tenure of less than 5 years at NERSA followed by two who have more than 10 years. In the Regulation division more than two-thirds of the respondents have tenure of 5 years or less and only two have been working for 6 to 10 years and another two have

tenure of more than 10 years. Both the respondents in the Specialised Support units have been working at NERSA for less than five years. The majority of respondents in Support Services have been working at NERSA for less than 5 years while only one has tenure greater than 6 years.

Table 3.8: Tenure at NERSA per division

DIVISION	< 2 YEARS	2 – 5 YEARS	6 – 10 YEARS	> 10 YEARS	TOTAL
CORPORATE AFFAIRS	3 38%	1 13%	0 0%	2 25%	8* 100
REGULATION	2 12%	11 65%	2 12%	2 12%	17 100
SPECIALISED SUPPORT UNITS	1 50%	1 50%	0 0%	0 0%	2 100
SUPPORT SERVICES	0 0%	6 0%	1 14%	0 0%	7 100
TOTAL	6 18%	19 56%	3 9%	4 12%	34* 100

*Two respondents did not mark their scores and they have been excluded in the total.

3.9 Data Analysis

The data was captured using Microsoft Excel. After capturing the data, it was transferred to a statistical package called STATA. Once on STATA the data was cleaned to remove errors. The errors included extra strokes which caused distortion. All the transferred data was used for statistical analysis. Upon completion of data cleaning the data labels were attached to commence the analysis. The data was analysed on three levels: univariate, bivariate and multivariate levels. At the univariate level frequencies were ran on all the variables in the data to obtain a “feel” of the data. Thereafter bivariate statistical techniques such as cross tabs and chi-square were computed to investigate relationships between different variables in the data set. Descriptive and inferential statistical analyses were conducted for the study. Berenson and Levine (2000:5) define descriptive statistics as “methods involving the collection, presentation and characterisation of a set of data in order to describe features of the set of data”. Descriptive statistics were used to organise and summarise the numerical data that was collected and the results presented in tabular format. Inferential statistics were used to analyse the data, including multivariate analysis on the biographical data of the respondents.

The Chi test was used to test further the association between elements of the subgroups and variables being measured. The goal was to further analyse those factors in order to establish biographical differences among the respondents. Descriptive statistics reveal more on core factors affecting retention, but on their own are limited in providing explanation why individuals exit or remain in the company (Fowler, 1993). Cross tabs resulting from the Chi test are more likely to reveal views that dominate a factor. Differences resulting from the test were then used for further inferences about the factors that influence certain groups in relation to staff turnover or retention. Chi test is able to provide more certainty about the relationship between biographical information and the variables being tested, for example (Fowler, 1993). The outcome then helps explain how different groups react to the variables.

3.10 Conclusion

This study used a quantitative survey method to measure and analyse the responses to the questionnaire that aimed to identify and understand factors that cause labour turnover among knowledge workers and, secondly, to gain insight into the major factors that may influence the retention of knowledge workers at NERSA. The research was designed from a post-positivist paradigm. Data was gathered through the administration of a questionnaire to 59 knowledge workers, 34 of whom responded by completing and returning the questionnaire. Univariate analysis was used to describe the responses. Content validity was applied on the measuring instrument by linking questions to the literature as indicated in Appendix B. To minimise bias of the data gathered, the respondents were allowed to withhold their identity.

The following Chapter is a presentation and discussion of the results and it highlights variables that obtained the highest scores for indicators of staff turnover and retention indicators.

CHAPTER 4: ANALYSIS AND DISCUSSION OF THE RESULTS

4.1 Introduction

This chapter examines the results in terms of the factors that would influence knowledge workers to leave NERSA (labour turnover) and those that would influence them to stay (retention). The aim of the study is to identify and understand the underlying retention factors that are important to knowledge workers at NERSA with a view to formulating strategies that will help to retain key employees. To this end, five objectives were formulated to achieve the aims of the study, namely to identify and understand factors that cause labour turnover among knowledge workers; to gain insight into the major factors that may influence the retention of knowledge workers at NERSA; to determine if there are any factors that are not important to cause labour turnover among knowledge workers; to determine if there are any factors that are not important and therefore may not influence knowledge workers to stay at NERSA; and, to determine if there are certain biographical characteristics that influence the more important turnover and retention factors.

The chapter is divided into four sections: first section in this chapter highlights the results that respond to the first objective of the study; the second section highlights the results that respond to the second objective, third section presents the results that answer the third and fourth objectives of the study, and the fourth section addresses the fifth objective.

Although respondents responded to a four-point Likert-scale, the results are reported as a single score of importance. , that is “no influence” and “little influence” are combined and called “not important” while “significant influence” and “highly significant influence” are called “important”. For example, where the results show a variable as being regarded as having a “significant influence” with a score of 44% and one regarded as having “highly significant influence” with a score of 33% while the “no influence” variable scores 5% and the “little influence” variable scores 18%, this factor will be reported as having an importance of 77%. Forty five tables that reflect the results of the responses to the questions in the questionnaire were

generated and these are attached as Appendix C: the first 20 measured indicators of staff turnover while the subsequent 25 measured indicators of retention.

In preparing the results from the tables, the scores were ranked and the results that produced a score of importance that is equal to or greater than 70% are reported in this chapter. Thus not all 45 tables will be reported. This choice of reporting was influenced by restrictions on the length of the report of the study as well to highlight to management those areas respondents deem as important so that they can focus on them in the short to medium term in order to mitigate against staff turnover. The rest of the indicators can be addressed in the medium to long-term as they are not regarded as important and their influence may not have as much an impact as the former.

4.2 Research results on the indicators of labour turnover

Six indicators of labour turnover that obtained scores of importance equal to or greater than 70% and these are: quality of leadership and relationship with the manager; opportunity to achieve personal and professional goals; opportunity to innovate and improve systems; recognition for special contribution; opportunities for development and career progression; and, freedom to plan and execute work independently. This section is a response to the first research objective, namely, what are the factors that cause labour turnover amongst knowledge workers. These are ranked and summarised in Table 4.1 in order of importance.

Table 4.1: Summary of research results on the indicators of labour turnover

Rank order	Indicator description	Magnitude of importance
1	Quality of leadership and relationship with manager	76%
2	Opportunity to achieve personal and professional goals	76%
3	Opportunity to innovate and improve systems	76%
4	Recognition for special contribution	73%
5	Opportunities for development and career progression	70%
6	Freedom to plan and execute work independently	70%

4.2.1 Quality of leadership and relationship with manager

Seventy six percent of the respondents attach importance to the quality of leadership in the organisation as well as their relationship with their manager to the point of being prepared to leave if does not meet their expectations. This shows the pivotal role of leaders and managers in creating a favourable environment for performance. The results in Table 4.2 show that 76% of the respondents display a preference for quality leadership. NERSA, like any other organisation, is driven by a vision and mission that has been set by its leadership. It is therefore important for the leadership to keep employees enthused and committed to achieving the vision and mission in a way that ensures their participation and interest. The high rate of vacancies has increased the work load of managers with the unfortunate consequence of neglecting to keep employees energised and building professional relationships that are underpinned by a commitment to remove all barriers to excellence so that both parties can achieve their goals. Unless the leadership and management at NERSA are perceived as inspirational, supportive, caring and encouraging, employees will consider leaving.

Table 4.2: Quality of leadership and relationship with manager

	FREQUENCY	PERCENT
NO INFLUENCE	5	15
LITTLE INFLUENCE	3	9
<i>“NOT IMPORTANT” SCORE</i>		24
SIGNIFICANT INFLUENCE	7	21
HIGHLY SIGNIFICANT INFLUENCE	19	55
<i>“IMPORTANT” SCORE</i>		76
TOTAL	34	100

Knowledge workers have a high need to trust their leaders and have a healthy relationship with their manager (Armstrong and Murlis, 2004). Managers are the prime representative of the organisation to employees and thus good management is critical to retaining knowledge workers. Kaye and Jordan-Evans (1999) found that the length of stay of a knowledge worker in an organisation is contingent on the relationship with the manager. Many professionals leave organisations because leaders fail to understand their unique needs. Knowledge workers commit

to a leader who believes in their value as employees and who helps them to unlock their full potential. Managers need to be constantly in touch with employees in order to gain their confidence. Pine and Gilmore (1998) contend that a subordinate's perceptions of their boss is the singular best predictor of turnover while the Hay Group (2001) found the second largest determinant of turnover to be unhappiness with the direct manager.

4.2.2 Opportunity to achieve personal and professional goals

Seventy six percent of the respondents will consider leave if they do not get an opportunity to achieve their personal and professional goals as presented in Table 4.3. The study has already established that knowledge workers at NERSA take their personal and professional goals seriously and look to the organisation to provide the space and time to achieve that. Regulation as a discipline is relatively new in South Africa and thus for it to grow, participating professionals need to constantly create a body of knowledge that will improve the various regulated sectors of the economy. NERSA is facing the challenge of ensuring that it retains capable employees so that it contributes meaningfully to the socio-economic objectives of the Government.

Table 4.3: Opportunity to achieve goals

	FREQUENCY	PERCENT
NO INFLUENCE	3	9
LITTLE INFLUENCE	5	15
<i>“NOT IMPORTANT” SCORE</i>		24
SIGNIFICANT INFLUENCE	9	26
HIGHLY SIGNIFICANT INFLUENCE	17	50
<i>“ IMPORTANT” SCORE</i>		76
TOTAL	34	100

Essentially knowledge workers are motivated by the achievement of goals that they have set for themselves: money is only good when it is seen as a measure of their achievement (Branham, 2005). For example, when employees set themselves the goal of improving a system, they will pursue it until they are satisfied with the outcome and the results are acknowledged by their peers. An organisation that supports employees' quest for their personal and professional best is

best poised to enhance their ability to adapt, develop collective and individual skills and use the results of learning to achieve better results for the organisation. These qualities encourage the pursuit of achieving personal and professional goals as well as the organisation's shared vision.

4.2.3 Opportunity to innovate and improve systems

Seventy six percent of respondents regard the lack of an opportunity to innovate and improve systems as a reason to consider leaving. Knowledge workers bring special competences and are always looking for opportunities to utilise their expertise to benefit the firm (Drucker, 1994).

Employers who do not embrace the principles of the learning organisation such as continuously improving and innovating new systems to remain current or sometime staying ahead of competitors risk losing key talent to employers who are in search of excellence and show resilience and adaptability to the pace of change (Dixon, 1994; Senge, 1990). NERSA is currently undergoing fundamental and extensive change, and this presents the organisation with an opportunity to provide employees with the scope and space to innovate and improve systems in order to prepare the organisation for an exciting future. Failure to do so will result in lost opportunities to truly become a world-class energy regulator. These results indicate that there is a threat that if NERSA does not embrace the qualities of a learning organisation, such as encouraging employees to innovate, it will not be able to sustain its position as the leading thought provider on energy regulation in the continent for the foreseeable future.

Table 4.4: Opportunity to innovate and improve systems

	FREQUENCY	PERCENT
NO INFLUENCE	2	6
LITTLE INFLUENCE	6	18
<i>“NOT IMPORTANT” SCORE</i>		<i>24</i>
SIGNIFICANT INFLUENCE	13	38
HIGHLY SIGNIFICANT INFLUENCE	13	38
<i>“IMPORTANT” SCORE</i>		<i>76</i>
TOTAL	34	100

Senge (1990) introduced the concept of the learning organisation to describe firms that are motivated by innovation and empowerment of employees. The essence of the learning organisation is its ability to use the mental capacity of employees to create processes and systems that will improve its capabilities and continually transform it (Dixon, 1994). Where the characteristics of a learning organisation are not displayed and embraced, knowledge workers may not stay for long. This outcome confirms the need to ensure that knowledge workers are at all times at the cutting edge of bringing the necessary change so that their profession evolves.

4.2.4 Recognition for special contributions

Seventy three percent of respondents value the contribution they make to the organisation and would therefore like to be recognised for their effort. This shows that for the majority of employees being recognised for their contribution is very important.

Table 4.5: Recognition of special contribution

	FREQUENCY	PERCENT
NO INFLUENCE	2	6
LITTLE INFLUENCE	7	21
<i>“NOT IMPORTANT” SCORE</i>		<i>27</i>
SIGNIFICANT INFLUENCE	13	38
HIGHLY SIGNIFICANT INFLUENCE	12	35
<i>“IMPORTANT” SCORE</i>		<i>73</i>
TOTAL	34	100

Knowledge workers at NERSA would like to be recognised for the contributions they make to make the organisation a success. To this end, they would like the organisation to have the necessary recognition tools in place lest they feel unappreciated and consider leaving to join an organisation that will appreciate and recognise them for utilising their talents for the overall benefit of the organisation. To date, the organisation uses the annual “CEO’s Award” and the “Emerging Leader Award” to recognise employees who have done well in a calendar year.

Feedback is an important barometer for knowledge workers to measure their success given their competitive nature. Employees need to know that their contribution is appreciated and acknowledged by both the employer and their peers. This need has been expressed as important by both Herzberg and McClelland in motivating and driving employees to achieve outstanding performance (Kovach, 1987; Young 2001). Recognition fulfils the need for individuality especially if it comes in the form of financial reward, incentives and acknowledgement. This has a positive influence on the knowledge workers' decision to stay with an employer for longer.

4.2.5 Opportunities for development and career progression

Table 4.6 shows an importance score of 70% for the opportunities for development and career progression as an indicator of labour turnover. This could mean that more than two thirds of respondents would consider leaving if they were not afforded such opportunities. To prevent employees from leaving, it is important to provide them with opportunities for development. These need to be accompanied by a clear career path where each employee will be able to apply the knowledge they acquired to advance their career objectives. One of the misgivings employees express in exit interviews is that, as much as NERSA is committed to training them, attending courses is not enough. When employees indicate a desire to attend training courses or to study further, NERSA supports them. However, a problem becomes the lack of opportunity to implement what they have learnt in order for the careers to progress. The development of career paths for employees is still a challenge that NERSA is yet to overcome and any delays could result in more resignations, which threaten the efficacy of the organisation.

Table 4.6 Opportunities for development and career progression

	FREQUENCY	PERCENT
NO INFLUENCE	6	18
LITTLE INFLUENCE	4	12
<i>“NOT IMPORTANT” SCORE</i>		<i>30</i>
SIGNIFICANT INFLUENCE	14	41
HIGHLY SIGNIFICANT INFLUENCE	10	29
<i>“IMPORTANT” SCORE</i>		<i>70</i>
TOTAL	34	100

According to the literature once knowledge workers are past the formal education process, they express a desire to undergo continuous learning, acquire more knowledge and advance their careers (Sturgess and Guest, 2001). They respond negatively if an employer does not support a culture of development through training, mentoring and career paths (Dobbs, 2001). Although there is an inherent risk of increasing the market value of employees through development, the Hay Group (2001) found that lack of staff development precipitates labour turnover. Where an employer provides learning and development, whether from peers, mentors or through scheduled training, knowledge workers are less likely to leave. The results confirm the literature review that knowledge workers do not show loyalty to an employer who does not commit to them through development programmes and career paths that meet their career objectives.

4.2.6 Freedom to plan and execute work independently

Table 4.7 shows an importance score of 70% for the variable freedom to plan and execute work independently. It seems that knowledge workers at NERSA value their freedom to apply their expertise without unwarranted interference. Most of the respondents display a confidence to carry out their work unencumbered as long as the guidelines and framework within which they ought to work is provided and agreed upon early on in the employment relationship.

Table 4.7 Freedom to plan and execute work independently

	FREQUENCY	PERCENT
NO INFLUENCE	5	15
LITTLE INFLUENCE	5	15
<i>“NOT IMPORTANT” SCORE</i>		<i>30</i>
SIGNIFICANT INFLUENCE	16	47
HIGHLY SIGNIFICANT INFLUENCE	8	23
<i>“IMPORTANT” SCORE</i>		<i>70</i>
TOTAL	34	100

By not granting employees freedom NERSA stands a greater chance of losing them. This has implications for the management style employed at NERSA. The respondents' responses are consistent with Drucker (1994) asserting that the knowledge age is the era of individualism and therefore freedom to plan and act are at the centre of knowledge workers' job satisfaction. Having dictatorial and top-down rules will drive knowledge workers away (Drury, 2003). Knowledge workers expect to be accorded a measure of autonomy and freedom that allow them to work independently, applying all their faculties and taking pride in the outcome of their effort. The need for freedom indicates a high locus of internal control in knowledge workers. The results of the study confirm the literature review (Drucker, 1994; Malone, 2004) and caution against treating knowledge workers like other ordinary employees. Knowledge workers are talented and therefore a rule book will impede their creativity, innovation and their uniqueness.

4.3 Research results on the indicators of retention

This section answers the second research goal, namely, what are the most important variables and underlying factors that influence the retention of knowledge workers. Five indicators of retention that obtained scores equal to or greater than 70% and these are reported here, and these are: job enrichment; sense of achievement; control over work assignments; adequate remuneration, benefits and reward package; and, challenging work. These are ranked and summarised in Table 4.8 in order of importance.

Table 4.8: Summary of research results on the indicators of retention

Rank order	Indicator description	Magnitude of importance
1	Job enrichment	79%
2	Sense of achievement	76%
3	Control over work assignments	73%
4	Adequate remuneration, benefits and reward package	71%
5	Challenging work	70%

4.3.1 Job enrichment

Seventy six percent of respondents regard job enrichment to be of high importance and this may have a significant influence on their decision to stay at NERSA as presented in Table 4.9. Most of the employees at NERSA will consider staying if they have an enriched job experience.

Table 4.9: Job enrichment

	FREQUENCY	PERCENT
NO INFLUENCE	5	15
LITTLE INFLUENCE	3	9
<i>“NOT IMPORTANT” SCORE</i>		24
SIGNIFICANT INFLUENCE	13	38
HIGHLY SIGNIFICANT INFLUENCE	13	38
<i>“IMPORTANT” SCORE</i>		76
TOTAL	34	100

Employees that attach high importance to job enrichment are likely to stay longer than is the case when these qualities are lacking. It is therefore important for NERSA to ensure that this variable is addressed to the satisfaction of employees. Job enrichment is an important performance driver for knowledge workers (Mohr and Zoghi, 2006; Umstot and Rosenbach, 2002). Job enrichment purports that the work itself as an intrinsic motivator provided the organisational setting is suitable. This theory looks at factors that are an integral part of the job itself and identify skill variety, task identity, task significance, autonomy, employees’ feedback and goal clarity as important elements of an enriched job (Umstot and Rosenbach, 2002).

4.3.2 Sense of achievement

Table 4.10 shows an importance score of 79% for the variable “sense of achievement” as an indicator for retention. Respondents attach significant importance to this variable and NERSA may be able to retain them if the environment encourages opportunities for achievement.

The results indicate that NERSA may probably retain employees if it provides them with a sense of achievement from the work they do there. Armstrong and Murlis (2004) found that a sense of achievement is accentuated in situations of professional competition among employees. Achievement seekers take control of their environment, are not satisfied with past achievement and instead seek more glory and therefore the more NERSA provides them with new opportunities to achieve on a continuous basis, the greater the probability for retaining them. For example, milestones such as participating and implementing the first Multiple Year Price Determination methodology in Africa are significant avenues to achieve as the results put the regulator amongst the best in the world and a leader in the continent.

Table 4.10 Sense of achievement

	FREQUENCY	PERCENT
UNKNOWN	1	3
NO INFLUENCE	4	12
LITTLE INFLUENCE	2	6
<i>“NOT IMPORTANT” SCORE</i>		<i>18</i>
SIGNIFICANT INFLUENCE	16	47
HIGHLY SIGNIFICANT INFLUENCE	11	32
<i>“IMPORTANT” SCORE</i>		<i>79</i>
TOTAL	34	100

These findings confirm the observation by Izzo and Whithers (2002) and Malone (2004) that highly competitive employees tend to prize achievement and recognition highly. Situations of high achievement result in positive behaviour such as taking initiative, focus on outputs, seizing opportunities, enjoying challenges, swift reaction to change and building and maintaining strong professional liaisons (Armstrong and Murlis, 2004). From this it shows that NERSA can benefit greatly by proving employees with a sense of achievement.

4.3.3 Control over work assignments

The results that measured control over work assignments show an importance score of 73%. This means that employees seek greater control over their work. See Table 4.11.

Table 4.11: Control over work assignments

	FREQUENCY	PERCENT
NO INFLUENCE	4	12
LITTLE INFLUENCE	5	15
<i>“NOT IMPORTANT” SCORE</i>		<i>27</i>
SIGNIFICANT INFLUENCE	18	53
HIGHLY SIGNIFICANT INFLUENCE	7	20
<i>“IMPORTANT” SCORE</i>		<i>73</i>
TOTAL	34	100

The majority of employees at NERSA are professionals that have the training and discipline to deliver on their commitments. To demonstrate this they require the organisation to trust them to act in the best interests of the employer and giving them control over their work assignments is one of the ways to demonstrate that trust. With greater trust comes greater control which translates to higher retention opportunities (Senge, 1990). By transferring control to employees, NERSA may be able to retain knowledge workers better than if the employer retained control.

These finding are consistent with the literature as suggested by Senge (1990) that flattening hierarchies and removing bureaucracy that create obstacles to freedom will encourage knowledge workers to stay with such an employer. Modern employers acknowledge that employees want to assume more responsibility, especially if the work is meaningful and challenging (Drury, 2003). Knowledge workers expect to be treated with respect by being accorded a measure of autonomy and freedom that allows them to do their work to the best of their ability, applying all their faculties and taking pride in the outcome of their effort. By according knowledge workers a measure of autonomy and freedom over their work, they may decide to stay longer at NERSA.

4.3.4 Adequate remuneration, benefits and reward package

Adequate remuneration, benefits and reward package received the fifth-highest score and Table 4.12 shows an importance score of 71% for the variable “adequate remuneration, benefits and reward package”. The results show that NERSA professionals place high importance to the size of their remuneration package. Generally, the size and structure of a remuneration package forms part of the rewards that employees would consider when they join an employer. The adequacy of the package becomes more accentuated when employees consider having a long-term relationship with their employer. Surveys conducted in the past indicated that NERSA professionals are likely to stay if the organisation rewards them with market-related packages for their contribution.

Table 4.12: Adequate remuneration, benefits and reward package

	FREQUENCY	PERCENT
NO INFLUENCE	7	20
LITTLE INFLUENCE	3	9
<i>“NOT IMPORTANT” SCORE</i>		29
SIGNIFICANT INFLUENCE	3	18
HIGHLY SIGNIFICANT INFLUENCE	18	53
<i>“IMPORTANT” SCORE</i>		71
TOTAL	34	100

The literature indicated that knowledge workers are discouraged by the dissonance between their contribution to the firm’s success and financial rewards they received when they perceive the rewards to be below their expectations. When this happens they show withdrawal cognitions (Milkovich and Boudreau, 1997). Put differently, they will be encouraged to stay when pay is compatible with their contribution. NERSA knowledge workers would also be retained when this compatibility is prevalent. Money is a measure of the professional’s achievement. In determining knowledge workers’ remuneration the organisation needs to be conscious of the role base and variable pay play in reflecting what the individual is worth. Adequate reward will allow the individual to lead a lifestyle that will provide them with the work-life balance they require.

4.3.5 Challenging work

For 70% of the respondents having challenging work has high importance. The results in Table 4.13 show that the retention of knowledge workers could be influenced by the nature of the work itself. The worst threat to a trained mind is boredom and stagnation (Romano, 2004). NERSA employees are likely to thrive professionally by being constantly engaged and stimulated. Professionals in the Corporate Affairs Division such as legal advisors and customer service officers deal with non-routine work resolving utilities' and customers' complaints as they arise, especially those that arise as a result of violation of license conditions. These challenge professionals as they have to rely on more than recommended guidelines to resolve these matters, especially when situations are politically and emotionally explosive.

Table 4.13: Challenging work

	FREQUENCY	PERCENT
NO INFLUENCE	2	6
LITTLE INFLUENCE	8	24
<i>“NOT IMPORTANT” SCORE</i>		<i>30</i>
SIGNIFICANT INFLUENCE	16	47
HIGHLY SIGNIFICANT INFLUENCE	8	23
<i>“IMPORTANT” SCORE</i>		<i>70</i>
TOTAL	34	100

According to Malone (2004) knowledge workers prefer a challenging and interesting work environment while Romano (2004) contends that professional dissatisfaction results from feelings of stagnation and boredom as a result of the work not providing challenges which knowledge workers thrive on. Hoosain (1999) and Kinnear (1999) also argue that challenge influences knowledge workers to stay with an employer. Where challenge is accompanied by potential career development, knowledge workers will stretch their capabilities and utilise their abilities to perform their roles effectively. They reciprocate the employer's sagacity by staying.

4.4 Results of variables that are of low importance to respondents

The previous section reported the results of the variables that were deemed to be of high importance to employees at NERSA as indicators for labour turnover and retention. This section examines and reports the results of variables that they deemed to be of low importance and would therefore not influence labour turnover or retention. The low importance score are worth looking at as they indicate a departure from what the literature generally regards as important for knowledge workers and will also help NERSA prioritise what should be focused on as these indicate that they should not be prioritised as they are unlikely to influence employees to stay. Of the variables that employees regarded as unimportant, six scored values of 70% or greater. The indicators are presented in summary format in Table 4.14: the first two measure staff turnover indicators while the latter four measure retention indicators.

Table 4.14: Summary of research results on low importance scores

Rank order	Indicator description	Magnitude of importance
1	Opportunity to work in a foreign country	76%
	Exchange programmes with other regulators	76%
2	Experimentation with a number of career options	73%
	Socially-supportive environment	73%
3	Partnerships with training institutions	70%
4	Public exposure of employees	70%

4.4.1 Opportunity to work in foreign country

Seventy six percent of respondents attach low importance to opportunities to work in a foreign country as a variable that would make them consider leaving NERSA. A relatively high number of respondents indicated that an opportunity to work overseas will not influence them to leave NERSA as reported in Table 4.15. This is an interesting result as NERSA is involved in exchange and training programmes with the Energy Regulator of Norway, NVE, as well as being a founder member of the African Forum for Utility Regulators (AFUR) and the Regional Electricity Regulators Association (RERA) which is an association for countries in Southern Africa. AFUR

and RERA are continental initiatives where employees interact with their counterparts and travel to the continent. Added to this exposure employees attend courses in Europe and the United States (US) from time to time. With so much international exposure, it would be expected that employees at NERSA would consider working in a foreign country as an attractive option.

TABLE 4.15: Opportunity to work in a foreign country

	FREQUENCY	PERCENT
NO INFLUENCE	19	55
LITTLE INFLUENCE	7	21
<i>“NOT IMPORTANT” SCORE</i>		76
SIGNIFICANT INFLUENCE	3	9
HIGHLY SIGNIFICANT INFLUENCE	5	15
<i>“IMPORTANT” SCORE</i>		24
TOTAL	34	100

The results do not support the literature which describes the knowledge society as a society of mobility where globalisation promotes and facilitates an increasingly flexible and mobile labour market among knowledge workers (Drucker, 1994). Globalisation encourages professionals to migrate to where they can apply their skills or to destinations they perceive as promising maximum job satisfaction (Loefer, 2001). Notwithstanding the power and attractions that globalisation provides as described by Drucker (1994) and Loefer (2001), employees at NERSA seem to indicate low mobility and are likely to stay in South Africa for a while to come.

4.4.2 Experimentation with a number of career options

For 73% of the respondents experimentation with a number of career options has low importance as an indicator that would make employees consider leaving NERSA. This means that employees at NERSA would not consider leaving to try out various opportunities in the market, despite being in a labour market where demand for their skills is greater than the supply.

Table 4.16: Experimentation with a number of career options

	FREQUENCY	PERCENT
NO INFLUENCE	7	21
LITTLE INFLUENCE	18	52
<i>“NOT IMPORTANT” SCORE</i>		73
SIGNIFICANT INFLUENCE	5	15
HIGHLY SIGNIFICANT INFLUENCE	4	12
<i>“IMPORTANT” SCORE</i>		27
TOTAL	34	100

This finding in Table 4.16 contradicts the literature where younger employees are described as having a tendency to leave their employer much quicker than older employees (Domah, et al, 2002; Martin, 2003) Domah (2003) found that younger people have high job mobility due to a lack of family responsibilities, on uncertainty about which career path to follow and impatience to get ahead NERSA therefore faces the risk of employing young people who may in fact not be planning to stay for long as they are still trying out a career in regulation.

4.4.3 Exchange programmes with other regulators

Exchange programmes with other regulators have low importance among 76% of the respondents as indicated in Table 4.17. This could mean that employees would rather not work for NERSA if it means they have to spend time in other countries, or locally, as part of an exchange agreement with another regulatory agency. Similarly with overseas training, exchange programmes carry obligations that limit the mobility of employees for a period of two years for participation in an overseas exchange programme, or the employee risks paying financial penalties if they move prior to the expiry of the two years.

Table 4.17: Exchange programmes with other regulators

	FREQUENCY	PERCENT
NO INFLUENCE	15	44
LITTLE INFLUENCE	11	32
<i>“NOT IMPORTANT” SCORE</i>		76
SIGNIFICANT INFLUENCE	3	9
HIGHLY SIGNIFICANT INFLUENCE	5	15
<i>“IMPORTANT” SCORE</i>		24
TOTAL	34	100

Regulatory agencies in developing countries encourage employees to spend time in developed countries to learn more about regulation to boost their competence and encourage them to stay (Downes and Husbands, 2003; World Bank, 2004). It is unclear whether other countries make their employees enter into contracts that potentially increase their tenure at these institutions.

4.4.4 Socially-supportive environment

For 73% of the respondents, working in a socially-supportive environment has low importance and hardly influences employees’ decision to stay at NERSA. This is understandable considering the individualistic disposition of knowledge workers who do not rely on the social structures of their organisation. This is consistent with the characterisation of knowledge workers as individualistic by Coetsee (2001) and the knowledge era as one of individualism (Drucker, 1994).

The results in Table 4.18 are inconsistent with Shultz and Schultz (1994) when they say that firms need to respond to workers’ social needs as these positively impact on the firm’s ability to increase productivity, competitiveness, revenue potential and employee retention. Facilities such as providing child-care facilities, family responsibility leave, counselling, recreational facilities and flexible working hours have a tendency to help improve employees’ general well-being.

Table 4.18: Socially-supportive environment

	FREQUENCY	PERCENT
NO INFLUENCE	13	38
LITTLE INFLUENCE	12	35
<i>“NOT IMPORTANT” SCORE</i>		73
SIGNIFICANT INFLUENCE	7	21
HIGHLY SIGNIFICANT INFLUENCE	2	6
<i>“ IMPORTANT” SCORE</i>		27
TOTAL	34	100

4.4.5 Partnerships with training institutions

Table 4.19 shows that 70% of the respondents attach low importance to working for an organisation that has a partnership with training institutions. Earlier it was indicated that NERSA has a training programme with NVE in Norway in which employees travel to Oslo to be trained on the latest regulatory techniques and attending courses in the US and in Europe periodically.

Table 4.19: Partnerships with training institutions

	FREQUENCY	PERCENT
NO INFLUENCE	11	32
LITTLE INFLUENCE	13	38
<i>“NOT IMPORTANT” SCORE</i>		70
SIGNIFICANT INFLUENCE	5	15
HIGHLY SIGNIFICANT INFLUENCE	5	15
<i>“ IMPORTANT” SCORE</i>		30
TOTAL	34	100

Unlike development and career progression that were rated as important, partnership with training institutions scored low. As part of attending overseas training employees are obliged to

either work for two years for NERSA after completing such training or pay for the costs incurred by NERSA should they leave before two years expire. This type of obligation seems to discourage employees from participating in training programmes, which could be the reason for its low importance score. The results contradict Downes and Husbands (2003) postulation that partnership with training institutions benefits employees through opportunities for professional development and networking.

4.4.6 Public exposure of employees

Seventy one percent of the respondents attach low importance to public exposure through presentation of papers at retreats, conferences and in publications. Table 4.20 shows that more than two-thirds of respondents may not be encouraged to stay at NERSA through exposure they may receive by presenting papers to the public and publishing their work. This is a surprising result as NERSA is regarded as a knowledge-intensive organisation that deals with matters that are of public interest and that influence the economic and social development of the country.

TABLE 4.20: Public exposure of employees

	FREQUENCY	PERCENT
NO INFLUENCE	13	38
LITTLE INFLUENCE	11	32
<i>“NOT IMPORTANT” SCORE</i>		<i>70</i>
SIGNIFICANT INFLUENCE	5	15
HIGHLY SIGNIFICANT INFLUENCE	5	15
<i>“IMPORTANT” SCORE</i>		<i>30</i>
TOTAL	34	100

These results contradict the literature where Downes and Husbands (2003) found that public exposure of employees helps them to contribute to the body of knowledge in their respective profession(s), raise standards and improve the quality of their outputs. According to Umstot and Rosenbach (2002) feedback from peers enriches their work experience as it feeds into the competitive nature of the knowledge worker as well as the need for affiliation to the profession

and Kinnear (1999) found that knowledge workers have a stronger identity with their profession than their organisation and therefore public exposure encourages them to interact more with their peers and helps to satisfy their need for recognition by peers. It would seem that NERSA employees prefer an existence of anonymity while letting their leaders take the spotlight.

This subsection dealt with results that indicate that there are variables that are unimportant to influence employees to consider leaving NERSA. Opportunities that carry obligations for staying at NERSA for two years seem to have the opposite effect on employees. In contrast, a tendency such as experimentation with various job options may be more attractive to young employees in other industries. The individualistic nature of knowledge workers is underscored by the low importance attached to being in a socially-supportive environment. It would seem that employees would rather fend for themselves and focus on the work at hand and let their leaders get the exposure. These findings can be topics for further research to understand the cause of the apparent contradiction with the general findings of the literature.

4.5 Results of Chi Square Tests

Pearson's Chi Square is a measure of independence between two variables (Fowler, 1993). According to Babbie and Mouton (2006), this test assumes that there is no relationship between the two variables being tested. If the test produces a result that is equal to or less than a probability value of 0.05, then it means there is a relationship that is statistically significant. To answer the fifth objective of the study, namely to determine if there are certain biographical characteristics that influence turnover and retention, Chi Square tests were performed for eleven variables that were deemed important and were reported in the previous section using nine the biographical variables. Of the eleven tests that were performed, only six produced results with probability values (p-values) of less than 0.05 and will be reported. This means that the results that were eliminated are not statistically significant whereas the six that will be reported are statistically significant. The sample of the study is small and lends itself to sampling error, hence the high number of statistically insignificant outcomes.

4.5.1 Sense of achievement and number of years' experience before joining NERSA

Table 4.21 presents the results of the Chi test for the variable 'sense of achievement' and the number of years' experience respondents had before joining NERSA. The results provide insight into the impact length of experience have on employees' sense of achievement: respondents with more than five years experience attach greater importance to sense of achievement as a retention factor than those with less tenure. It would seem that the longer the numbers of years' people spend working the more importance they attach to achievement.

Table 4.21: Sense of achievement analysed by number of years' experience before joining NERSA

YEARS EXPERIENCE	<2 YEARS	2 – 5 YEARS	6 – 10 YEARS	>10 YEARS	TOTAL
NO INFLUENCE	1 25%	1 25%	2 50%	0 0%	4 100
LITTLE INFLUENCE	0 0%	0 0%	2 50%	0 0%	2 100
SIGNIFICANT INFLUENCE	1 6%	5 31%	3 19%	7 44%	16 100
HIGHLY SIGNIFICANT INFLUENCE	1 8%	3 25%	1 8%	7 58%	12 100
TOTAL	3 9	9 26	8 21	14 41	34 100

Chi Square value	Degree of freedom	p-value
24.5958	20	0.017

4.5.2 Opportunity to achieve personal and professional goals and employee grade or band

This test measured the importance respondents in the various bands place on being provided with an opportunity to achieve personal and professional goals in deciding to leave. As stated in Chapter 3, the focus on the job grades was on the C-Band, D-band and E-band. The only E-band response attached low importance to this variable. As for where most responses were, i.e. C- and

D-bands, the results show that respondents in the C-band attach slightly more importance to the opportunity to achieve personal and professional goals than respondents in the D-band.

Although the literature is silent on the various grades of knowledge workers, it does indicate that all types of knowledge workers, irrespective of discipline are looking for opportunities to achieve personal and professional goals (Armstrong and Murlis, 2004; Hay Group, 2001). In attaching slightly higher importance to this variable, lower grade employees are indicating that they are more likely to leave if it is not addressed. Some of the senior level employees seem to be content with their achievements; and this is where the real difference is between the groups.

Table 4.22: Opportunity to achieve personal and professional goals analysed by grade

	B-BAND	C-BAND	D-BAND	E-BAND	F-BAND	TOTAL
NO INFLUENCE	1 33%	0 0%	1 33%	0 0%	1 33%	3 9%
LITTLE INFLUENCE	0 0%	2 40%	2 40%	1 20%	0 0%	5 15%
SIGNIFICANT INFLUENCE	2 22%	4 44%	3 33%	0 0%	0 0%	9 26%
HIGHLY SIGNIFICANT INFLUENCE	0 0%	9 52%	8 48%	0 0%	0 0%	17 50%
TOTAL	3 9%	15 44%	14 41%	1 3%	1 3%	34 100

Chi Square value	Degree of freedom	p-value
43.8382	15	0.002

4.5.3 Opportunity for development and career progression and number of years' experience before joining NERSA

Table 4.23 highlights the results that indicate that opportunities for development and career progression are important for respondents with a high number of years' experience than those of respondents with a low number of years' experience. This is inconsistent with Drucker's (1994)

and Armstrong and Murlis' (2004) work where they found that younger professionals with few years industry experience are constantly in the look out for opportunities for development while much older professionals are happy to mentor and nurture young generations. Most of the employees at NERSA are young with low experience and it would be expected that they are seeking for opportunities for development and career progression.

Table 4.23 Opportunity for development and career progression by number of years experience before joining NERSA

	<2 YEARS	2 – 5 YEARS	6 – 10 YEARS	>10 YEARS	TOTAL
NO INFLUENCE	2 33%	1 17%	2 33%	1 17%	6 100
LITTLE INFLUENCE	0 0%	0 0%	1 25%	3 75%	4 100
SIGNIFICANT INFLUENCE	1 7%	2 14%	5 36%	6 43%	14 100
HIGHLY SIGNIFICANT INFLUENCE	0 0%	6 25%	0 0%	4 58%	10 100
TOTAL	3 9%	9 26%	8 24%	14 41%	34 100

Chi Square value	Degree of freedom	p-value
17.1589	9	0.046

4.5.4 Opportunities for development and career progression and number of previous employers

This variable, described in Table 4.24, has an importance score of 71% and describes the influence the number of previous employers an employee has worked for on their perception on the opportunities for development and career progression.

Employees who worked for three or less previous employers attach more importance to opportunities for development and career progression than those with more than three previous employers. It could be that employees with a low number of employees are still looking to a

bright future in their chosen career at NERSA than those who have been in the field much longer who may be looking for something different. From a NERSA perspective, it means more attention needs to be paid to employees who have limited exposure to previous employers and make their experience at NERSA more meaningful so that they are less likely to consider leaving.

Table 4.24: Opportunity for development and career progression analysed by number of previous employers

PREVIOUS EMPLOYERS	1	2	3	4	5	TOTAL
NO INFLUENCE	1 17%	4 67%	1 17%	0 0%	0 0%	6 100
LITTLE INFLUENCE	0 0%	1 25%	0 0%	3 75%	0 0%	4 100
SIGNIFICANT INFLUENCE	2 14%	2 14%	8 57%	0 0%	2 14%	14 100
HIGHLY SIGNIFICANT INFLUENCE	5 50%	2 20%	2 20%	0 0%	1 10%	10 100
TOTAL	8 24%	9 26%	11 32%	3 9%	3 9%	34 100

Chi Square value	Degree of freedom	p-value
37.9094	12	0.000

4.5.5 Freedom to plan and execute work independently and number of years experience before joining NERSA

Respondents with a high number of years' experience before joining NERSA attach more importance to freedom to plan and execute work independently than those with low experience. It could be with time and being exposed to more people and situations, employees with more experience have gained a lot of confidence in themselves and their abilities than employees with low experience who still require a degree of guidance.

Table 4.25 Freedom to plan and execute work independently analysed by number of years experience before joining NERSA

	<2 YEARS	2 – 5 YEARS	6 – 10 YEARS	>10 YEARS	TOTAL
NO INFLUENCE	1 17	2 33	3 50	0 0	6 100
LITTLE INFLUENCE	2 40	0 0	2 40	1 20	4 100
SIGNIFICANT INFLUENCE	0 0	4 21	3 16	12 63	19 100
HIGHLY SIGNIFICANT INFLUENCE	0 0	3 75	0 0	1 25	4 100
TOTAL	3 9	9 26	8 24	14 41	34 100

Chi Square value	Degree of freedom	p-value
22.4424	9	0.008

4.5.6 Freedom to plan and execute work independently and divisions at NERSA

The results in Table 4.26 explore the variable of freedom to plan and execute work independently further by measuring the biographical differences between employees in the various divisions at NERSA. Although the table is divided into the four divisions, the results will be reported in terms of two groups: the two divisions that largely deal with regulatory work, Corporate Affairs and Regulation will be combined into “regulatory divisions” while the Specialised Support units and Support Services will form another group, namely “support divisions”.

Table 4.26: Freedom to plan and execute work independently analysed by division

DIVISIONS	CORPORATE AFFAIRS	REGULATION	SPECIALISED SUPPORT UNITS	SUPPORT SERVICES	TOTAL
NO INFLUENCE	1 17	1 17	1 17	3 50	6 100
LITTLE INFLUENCE	1 20	2 40	0 0	2 40	5 100
SIGNIFICANT INFLUENCE	3 16	14 74	1 5	1 5	19 100
HIGHLY SIGNIFICANT INFLUENCE	3 75	0 0	0 0	1 25	4 100
TOTAL	8 23	17 50	2 6	7 21	34 100

Chi Square value	Degree of freedom	p-value
18.0683	9	0.034

Employees in the regulatory divisions attach more importance to freedom to plan and execute work independently than those in the support divisions. This finding is critical in guiding NERSA to allocate more time and resources to employees in the regulatory divisions as a matter of course so that they can perform their tasks unencumbered. However, employees in the support divisions need to be encouraged to look for freedom in their work as the organisation also requires their expertise in order to be able to focus on the core function of NERSA successfully.

4.6 Conclusion

The broader needs of knowledge workers which have been identified in the findings of the study relate to development, career progression, sense of achievement, freedom to plan and execute work independently, goal orientation, quality of leadership, recognition for contribution, control over work assignments, job enrichment, challenging work and adequate remuneration and reward packages. NERSA faces the challenge of ensuring that it addresses both the potential causes of labour turnover and those factors that will influence the retention of knowledge workers.

The next chapter explores in greater detail the recommendations that NERSA may consider implementing in order to increase their chances of successfully retaining knowledge workers. The chapter also reflects on the limitations of the study and makes recommendations for future research as well as concluding remarks.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This is the final chapter of the study and it is divided into four sections. The first section is a summary the main findings. The second section provides recommendations to the management of NERSA on strategies to increase the retention of knowledge workers. The third section highlights the challenges and the limitations of conducting the study and then makes recommendations for future research into this field of study by indicating the areas that require attention to advance the body of knowledge on staff retention. The final section will provide concluding remarks.

5.2 Summary of the main findings

This section contains a summary of the variables that were deemed important in influencing employee staff turnover and retention at NERSA as well as the differences in the biographical characteristics of employees with regard to these two indicators. The main purpose of the study was to identify and understand the underlying retention factors that are important to knowledge workers at NERSA including an exploration of factors that could make knowledge workers consider leaving NERSA and to survey the biographical characteristics that influence knowledge workers in their decision to either leave or stay at NERSA with a to formulate strategies that could help NERSA to retain key employees. The study was conducted through a survey method using a questionnaire to collect data from respondents, 58% of whom participated.

The study found that employees at NERSA attach high importance to opportunities for development and career progression. Although NERSA is committed to the training of its employees, it is still facing the challenge of making the training meaningful by incorporating it into employees' career development. As part of their development, employees showed a preference for freedom to plan and execute their work independently. This would require management to make a paradigm shift towards giving up power and control, including changing the performance management system to reflect this shift. In addition to sharing control, managers

need to create a favourable environment for performance. The study also revealed the individual nature of knowledge workers who have a need for recognition for the innovations and improvements they bring to NERSA's systems and processes, including being adequately rewarded. Recognition motivates and drives employees to achieve outstanding performance and choose to stay with the employer longer. As employees with a high sense of achievement and goal orientation, NERSA is faced with the challenge of providing knowledge workers with an environment where goal-setting, skill variety, task identity, task significance, autonomy and employee feedback become the nucleus of organising work. An organisation that supports employees 'to attain their personal and professional goals is able to enhance employees' ability to adapt and to and use their new skills to achieve better results for the organisation.

In terms of the differences in the biographical differences among employees, the study found that the longer the numbers of years' people spend working, they more confident they become and attach more importance to achievement and independence. There was a similar finding among employees in the regulatory divisions compared to support divisions. Employees in lower grades are more likely to leave if their concerns are not addressed. NERSA needs to encourage the career development of younger employees so that they can consider a long-term career at NERSA. With regard to factors deemed to be of low importance, opportunities to work overseas seem unable to influence employees to stay at NERSA despite exposure to international travel, training and interaction with other regulators. NERSA requires employees to either work for two years after completing overseas training or repay the cost of training if they leave before the two years expire. This requirement discourages employees from participating in foreign training or exchange programmes. Employees also attach low importance to experimentation with various career options, working in a socially-supportive environment, partnership with training institutions and public exposure. These occur despite these interventions' ability to increase opportunities for interaction with peers and help satisfy employees' need for recognition.

5.3 Recommendations to Management and the Human Resources Department

Having summarized the findings and gained a perspective on their implications for NERSA, this section provides recommendations to Management and the Human Resources Department:

5.3.1 Retaining knowledge in the organisation

It is important to develop high levels of competence in attracting and appointing competent knowledge workers. NERSA needs to also ensure continuous transfer and encoding of knowledge so when knowledge workers leave, it retains the knowledge. The concept of structural capital becomes important in this regard. Stewart (1997: 57) describes structural capital as “that which is left after employees have gone home for the night”. Bussin and Spavins (2004) intimate that organisations should not rest once they have appointed these workers. NERSA has to face up to the fact that an employee might leave one day and therefore it needs to immediately transfer that knowledge soon after the employee arrives. When star performers leave, they take their knowledge with them. This may be offset by systems of encoding knowledge so that the regulator retains it. NERSA uses the Integrated Document Management System (IDMS) to store information and documentation for institutional memory; however the system is under utilised. Used properly and fully, IDMS holds the key to reducing the impact of high staff turnover.

5.3.2 Coaching and mentoring for rising stars

Part of engaging knowledge workers means providing them with an environment where skills transfer and knowledge sharing is easily facilitated (Bussin and Spavins, 2004). There is a clear need for younger employees to gain from their older and more experienced colleagues. Coaching and mentoring are interventions that are suited to meet this type of need. Mentoring is a power free, two-way mutually beneficial relationship (Starcevich, 1999). Mentors are facilitators and teachers allowing the protégé to discover their own direction (Starcevich, 1999). Coaching is about helping people recognise how they might operate differently, utilise their strengths more or challenge their thinking in order to help them achieve higher levels of performance. The coach works alongside staff to help them learn, on a one-on-one basis, through self-exploration, building on existing talent and skills (Heathfield, 2007). It is suggested that NERSA managers should adopt a coaching rather than a telling style in supporting knowledge workers. Both the staff and their coaches and mentors can benefit immensely from this process.

5.3.3 Focus on the individual and groups of employees

Bussin and Spavins (2004) have found that the focus in retention strategies has shifted from a one-size-fits-all to customisation. They implore employers to recognise the shift towards motivational factors that are contingent on an employee's age, status, career goals and other specific demographics. To this end, NERSA's retention strategies must be targeted to individual employees or groups of employees. For example, the findings have indicated that younger employees at NERSA value quality leadership and a challenging environment and therefore the organisation's response needs to cater for those expressed needs. NERSA needs to be serious about retention in order to create a work environment that allows for flexibility, growth and development. The success for achieving this lies with individual managers and their ability to apply responsive people management and motivational skills. Leaders who can enable meaningful and fulfilling work experiences for individual employees are much more likely to win the battle of retaining top performers.

5.3.4 Learning about what employees want for themselves and the organisation

Forums such as one-on-one meetings and employees surveys are powerful tools that NERSA can use to learn about employees' aspirations. More importantly, the organisation needs to act on the results of such interaction. Michelman (2003) found that it is not the conducting of surveys that promote retention as much as it is what companies do in response to what they have learnt from such surveys. The benefit of acting on employee opinion and suggestions promotes retention because addressing issues employees raise helps move employees to a point at which they are engaged in what they are doing. Such focus discourages the inclination to look for work elsewhere or take calls from recruiters. Employees who witness positive organisational responses to the issues they raise feel more connected to the firm and its leaders. They also experience a general sense of well-being when they are recognised for their ideas and contributions (Michelman, 2003). Michelman (2003) also found that employees are more likely to stay with their employer in tough economic times when they feel that they are treated with integrity.

5.3.5 Adequate and competitive remuneration package

Knowledge workers are individualistic, goal-oriented and have a high sense of achievement. This orientation drives them to perform and pursue excellence. In return, they want to be recognised, remunerated and rewarded adequately. It is important to find creative and sustainable ways that ensure parity with the market while recognising the special contributions they make for the benefit of the organisation. The latter will ensure that knowledge workers exhibit behaviour and attitude that are aligned to the vision, mission and strategic objectives of NERSA. Where reward systems contain incentive-based pay the tendency has been towards improved productivity and retention (World Bank, 2004). Downes and Husbands (2003) advise regulatory agencies to pay specialists above average salaries in order to attract and retain them in recognition of the value they bring to the organisation. Allowing for greater flexibility in remuneration approaches, such as paying a premium for scarce skills and rewarding high performance directly, will help to ameliorate the challenges that could result due to unforeseen labour market conditions.

5.4 Review of the limitations of the study and recommendations for future research

The focus of the study was on the population of knowledge workers at NERSA. Although the sample was small, the proportion of responses to the population was high, the results cannot be used to generalise on retention of knowledge workers in the general labour market or in the regulation industry in particular. The small sample notwithstanding, the results enabled the researcher to gain insight into a number of variables that serve both as indicators of labour turnover and retention of knowledge workers at NERSA. In addressing the limitations of the study and thus discovering more knowledge that can advance the study of labour turnover and the retention of knowledge workers, especially in South Africa, the following recommendations are suggested for future research.

5.4.1 Factors Analysis: factors that influence labour turnover and retention

The size of the sample prevented the use of factor analysis. A larger sample would have allowed for the use of factor analysis to combine the identified turnover and retention variables, to determine if the factors produced created discrete labour turnover and retention factors, or combined these variables. It is suggested that a study with a much bigger sample be conducted among a number of regulatory agencies in South Africa in order to test whether there are empirical differences between these two concepts or if the differentiation could be artificial, that is, a single factor dealt with positively is a retainer of staff, while if it is neglected it could lead to increased staff turnover.

5.4.2 Understanding low importance scores in well-established retention factors

Employees at NERSA attached low importance to a number of variables that the literature regarded as important among knowledge workers. Research should be conducted on the relevance of these factors and explore if the attitude of NERSA employees is common among South African knowledge workers and why the different from other knowledge workers elsewhere in the world.

5.4.3 Conducting longitudinal studies

As this was a cross-sectional study, whose approach is to look at turnover and retention at a particular point in time and then attempted to make inferences. This type of approach has a major disadvantage in that it becomes difficult to predict labour turnover if it is not studied over a long period of time. The questionnaire did not ask if employees intended to leave in the foreseeable future so that their responses could be measured according to the behaviour later on. Longitudinal studies would help shed more light into certain biographical differences.

5.4.4 Comparative studies among regulatory agencies in South Africa

With the growth of regulation as a discipline in the country and with a number of predominantly monopolistic industries being regulated, this field may benefit immensely from a study that highlights human resource implications in general and retention implications in particular, for regulatory agencies that are expected to compete with relatively more resourced utilities for specialist employees in a hyper-competitive labour market. Similar to longitudinal studies, because comparative studies are large in nature, their sheer size could shed more light into certain biographical differences.

5.4.5 Understand the expectations of management against those of knowledge workers

At what point do we really say that retaining employees is critical? Research into the expectation gap between managers and knowledge workers will help to formulate sustainable retention strategies that are responsive to the needs of employers, on the one hand, and those of employees, on the other. Employers need to appreciate and come to terms with the fact that generally employees approach the labour market having already set their personal and professional goals which may be at variance with those of employers. It will therefore be necessary to conduct research into how organisations would actually benefit by reviewing success stories and understanding what managers expect from knowledge workers and vice-versa

5.5 Conclusion

Knowledge workers have a critical role to play in the modern economy (Drucker, 1994; Stewart, 1997). As more organisations define themselves as knowledge-based communities, organisations need to have carefully considered strategies to retain knowledge workers. If this is left unattended at NERSA, the turnover of knowledge workers can prove to be the greatest risk for ensuring effective and efficient regulation of the energy industry in South Africa. To overcome this potential risk, NERSA needs to focus on the individual knowledge worker as the results indicated a strong sense of individualism and independence from respondents. Knowledge

workers' need for individualism and independence may be met through a number of interventions such as providing them with the freedom to act independently, financial rewards and recognition and developmental opportunities. Knowledge workers require discretionary space to apply their individual talents to their work. Their need for financial incentives is based on the recognition of their individual performance as opposed to team-based recognition. Developmental opportunities also reflect the goal-orientated and achievement nature of the knowledge worker.

Various possible strategies can help retain knowledge workers such as providing quality leadership; coaching and mentoring of staff; focusing on the individual; learning more about what employees' desire and rewarding them adequately. NERSA is advised to strive to recognise and value the special contributions of employees. Freedom and autonomy rather than micromanagement and bureaucracy are important catalysts to make the work challenging. Managers need to learn to forego power and control and start sharing it with knowledge workers. As individualistic stakeholders, knowledge workers are constantly looking for opportunities to innovate and improve organisational systems in order to adapt to the quick pace of change. Treating knowledge workers as individuals will support their high sense of achievement and goal-orientation. Interventions such as coaching and mentoring are necessary to enable younger employees with limited work experience to discover their own direction and help them to recognise how they might operate differently. Utilising their strengths more and challenging the way they think will help them achieve higher levels of performance. By focusing strongly on interventions that will address both the causes of labour turnover and the drivers of retention NERSA begin to see the rewards of focusing on employees as individuals.

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APPENDIX A: THE QUESTIONNAIRE

November 2006

Dear Colleague

RESEARCH REPORT: FACTORS THAT INFLUENCE THE RETENTION OF STAFF AT THE NATIONAL ENERGY REGULATOR

Attached is a questionnaire which forms part of the research which I am currently conducting. The research has been designed to gain insight into what influences employees to stay working for the National Energy Regulator. It is aimed at employees in the regulatory divisions, legal advisory services, customer services, information services and professional support staff.

The aim of the research is to get your views on what would influence your decision to stay or leave the Regulator. It also aims to establish the practices the Regulator applies which may affect the retention of its employees. The results will be used for academic purposes only and the report will be available on the Rhodes University Intranet for your information.

This is an anonymous questionnaire and therefore you will not be identified in the results. The questionnaire is divided into 2 sections and filling it should take 20-30 minutes to complete. I would appreciate it if you would complete and return it to me by 30 November 2006.

Although this is an anonymous questionnaire, please complete the register to indicate that you have returned it.

Thank you for your participation.

Yours sincerely

Thami Nompula

Contact details:

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SECTION 1: BIOGRAPHICAL DETAILS OF RESPONDENT

- 1.1 Please complete Section 1 in full. Please note that the biographical information will be used to make group comparisons only and your questionnaire will not be analysed on an individual basis.

Please circle one number for questions 1 – 9

QUESTION		ANSWER				
1	Race: 1 = Black, 2 = White, 3 = Asian, 4 = Coloured	1	2	3	4	
2	Age: 1= 20-29, 2= 30-39, 3= 40-49, 4= ≥50	1	2	3	4	
3	Job Grade: 1 = F, 2 = E, 3 = D, 4 = C, 5 = B	1	2	3	4	5
4	Years of service at NERSA 1 = <2 years, 2 = 2 – 5 years, 3 = 6 – 10 years, 4 = >10 years	1	2	3	4	
5	Number of years' working experience before NERSA 1 = <2 years, 2 = 2 – 5 years, 3 = 6 – 10 years, 4 = >10 years	1	2	3	4	
6	Number of employers worked for before NERSA 1 = 1, 2 = 2, 3 = 3, 4 = 4, 5 = >5	1	2	3	4	5
7	Highest qualification obtained: 1 = Diploma, 2 = Bachelors Degree, 3 = Honours Degree, 4 = Masters Degree, 5 = PhD	1	2	3	4	5
8	Gender: 1 = male, 2 = female	1	2			
9	Division: 1= Regulation (electricity and hydrocarbons), 2= Corporate Affairs, 3= Support Services, 4= Specialised Support Units,	1	2	3	4	

SECTION 2: FACTORS THAT INFLUENCE YOUR DECISION TO STAY AT NERSA

Attached is a questionnaire for your attention. Please answer all the questions.

Please indicate to what extent you agree that the following statements would currently **influence your decision to remain employed** at NERSA by placing a cross (X) in **one** of the four columns.

- 1.2 If, for example, you rate a question as highly significant influence, it means that this factor would definitely influence your decision to stay at NERSA, whereas if you rate a question as no influence, it means it would not influence your decision to stay working for NERSA.
- 1.3 It is important that you show differentiation in your response since some factors will influence your decision more than others.

SECTION 2: FACTORS THAT INFLUENCE YOUR DECISION TO STAY AT NERSA

FACTORS		Degree of influence			
		NO INFLUENCE	LITTLE INFLUENCE	SIGNIFICANT INFLUENCE	HIGHLY SIGNIFICANT INFLUENCE
1.	Disillusionment with the status quo				
2.	Size and structure of remuneration package				
3.	Opportunity to achieve personal and professional goals				
4.	Opportunity to innovate and improve systems				
5.	Teamwork with opportunities for rotation of roles to gain new skills and knowledge				
6.	Recognition of special contribution				
7.	Technology, equipment, resources and tools to perform work				
8.	Challenging work assignments in your area of expertise				
9.	Information sharing on projects and work assignments				
10.	Treated with courtesy and respect by colleagues				
11.	Organisational culture				
12.	Quality of leadership and relationship with manager				
13.	Opportunities for development and career progression				
14.	Scope to balance work and life pursuits				
15.	Opportunity to work in a foreign country				
16.	Offer to work elsewhere for a higher remuneration package				
17.	Experimentation with a number of career options				
18.	Personal circumstances				
19.	Freedom to plan and execute work independently				
20.	Scope to create desirable results				
21.	Organisational climate that nurtures learning				
22.	Freedom from bureaucracy				
23.	Control over work assignments				
24.	Opportunities for training and development				
25.	Matching organisational and individual needs				
26.	Job enrichment				
27.	Sense of achievement				
28.	Challenging work				
29.	Work in multidisciplinary teams to enrich knowledge, attain stretch goals and share information and knowledge				
30.	Balanced workload that matches competence level and time				

	variables				
31	Adequate remuneration , benefits and reward package				
32	Premium for specialist skills and knowledge				
33	Recognition for contribution to organisational goals				
34	Effective performance management system				
35	Socially-supportive environment that recognises social needs				
36	Freedom and autonomy to assume more responsibility on work assignments				
37	Management that values individuals' contribution and fully utilises their skills				
38	Opportunities for feedback, self-improvement and career advancement				
39	Partnership with training institutions				
40	Opportunities for capacity building				
41	Exchange programmes with other regulators				
42	Public exposure through presentations at conferences and publications for the general public and specific audiences				
43	Reputation of the organisation				
44	Organisational culture				
45	Effective two-way communication (receiving and giving feedback regarding organisational developments)				

APPENDIX B: SOURCES OF RETENTION VARIABLES IN THE QUESTIONNAIRE

Variable		Author in literature review
1	Disillusionment with the status quo	Kinnear, 1999
2	Size and structure of remuneration package	World Bank, 2004
3	Opportunity to achieve personal and professional goals	Sturgess and Guest 2001 Armstrong and Murlis, 2004
4	Opportunity to innovate and improve systems	Armstrong and Murlis, 2004; Malone, 2004
5	Teamwork with opportunities for rotation of roles to gain new skills and knowledge	Stewart, 1997; Zarrabian, 2004
6	Recognition of special contribution	Coetsee, 2001; Armstrong and Murlis, 2004; Malone 2004
7	Technology, equipment, resources and tools to perform work	Drucker, 1994; Downes and Husbands, 2003
8	Challenging work assignments in your area of expertise	Kinnear, 1999' ESC, 2005; TDLR, 2006 World Bank, 2004
9	Information sharing on projects and work assignments	Cappelli, 2000; ESC, 2005; Koopman, 1991
10	Treated with courtesy and respect by colleagues	Barney, 2002
11	Organisational culture	Gering and Conner, 2002; Martin, 2003
12	Quality of leadership and relationship with manager	Armstrong and Murlis, 2004; Drucker, 1994; Downes and Husbands, 2003 Kinnear, 1999; Malone, 2004 World Bank, 2004
13	Opportunities for development and career progression	Armstrong and Murlis, 2004; Gering and Conner, 2002
14	Scope to balance work and life pursuits	Izzo and Whithers, 2002; Sturgess and Guest, 2001
15	Opportunity to work in a foreign country	BMR, 2006; Downes and Husbands, 2003
16	Offer to work elsewhere for a higher remuneration package	Deloitte and Touché, 2003; Kaye and Jordan-Evans, 2001; Harris, 1994; Michelman, 2003; Romano, 2002
17	Experimentation with a number of career options	Domah, et al, 2002; Harris, 1994; Martin, 2003
18	Personal circumstances	Cappelli, 2000; Drucker, 1994; Drury, 2003; Martin, 2003
19	Freedom to plan and execute work independently	Armstrong and Murlis, 2004;

		2Drury, 2003; Sturgess and Guest, 2001
20	Scope to create desirable results	Mohr and Zoghi, 2006; Umstot and Rosenbach, 2002
21	Organisational climate that nurtures learning	Dixon, 1994; Hamel and Prahalad, 1994; Senge, 1990
22	Freedom from bureaucracy	Beckenmeyer and Kilkeary, 1997; Kaye and Jordan-Evans, 2002
23	Control over work assignments and scope to respond to customer needs	Beckenmeyer and Kilkeary, 1997; Dixon, 1994; Kaye and Jordan-Evans, 2002
24	Opportunities for training and development	Armstrong and Murlis, 2004; Malone, 2004; Michelman, 2003
25	Matching organisational and individual needs	Armstrong and Murlis, 2004; Cappelli, 2003; Malone, 2004; Martin, 2003; Kinnear, 1999; World Bank, 2004
26	Job enrichment	Mohr and Zoghi, 2006; Umstot and Rosenbach, 2002
27	Sense of achievement	Kaye and Jordan-Evans (2002; Michelman, 2003; Romano, 2002
28	Challenging work	Armstrong and Murlis, 2004; Malone, 2004 Romano, 2002
29	Work in multidisciplinary teams to enrich knowledge, attain stretch goals and share information and knowledge	Stewart, 1997; Zarrabian, 2004; Cappelli, 2000 Peters, 1994; Koopman, 1991
30	Balanced workload that matches competence level and time variables	Armstrong and Murlis, 2004; Drury, 2003
31	Adequate remuneration , benefits and reward package	Armstrong and Murlis, 2004; Coetsee, 2001; Deloitte and Touché, 2003; Husbands and Downes, 2003; Katzel and Thompson, 1990; Kinnear, 1999; Malone 2004; Stewart, 1997
32	Premium for specialist skills and knowledge	Deloitte and Touché, 2003; Husbands and Downes, 2003; World Bank, 2004
33	Recognition for contribution to organisational goals	Deloitte and Touché, 2003; Izzo and Whithers, 2002; Kinnear, 1999; Malone, 2004
34	Effective performance management system	Armstrong and Murlis, 2004; Malone, 2004
35	Socially-supportive environment that recognises social needs	Armstrong and Murlis, 2004
36	Freedom and autonomy to assume more responsibility on work assignments	Armstrong and Murlis, 2004; Drury, 2003
37	Management that values individuals' contribution and fully utilises their skills	Armstrong and Murlis, 2004; Drucker, 1994; Martin, 2003;

		World Bank, 2004).
38	Opportunities for feedback, self-improvement and career advancement	Armstrong and Murlis, 2004; Sturgess and Guest, 2001
39	Partnership with training institutions	World Bank, 2004
40	Opportunities for capacity building	Malone, 2004; TDLR, 2006; World Bank, 2004
41	Exchange programmes with other regulators	Husbands and Downes, 2003; World Bank, 2000
42	Public exposure through presentations at conferences and publications for the general public and specific audiences	Kinnear, 1999; World Bank 2004
43	Reputation of the organisation	Armstrong and Murlis, 2004; Deloitte and Touché, 2005; Husbands and Downes (2003
44	Organisational culture	Deloitte and Touché, 2005; Downes and Husbands, 2003 Malone, 2004
45	Effective two-way communication (receiving and giving feedback regarding organisational developments)	Deloitte and Touché, 2003; Kaye and Jordan-Evans, 2001; Harris, 1994; Michelman, 2003; Romano, 2002

APPENDIX C: LIST OF TABLES WITH RESULTS OF THE MAIN QUESTIONNAIRE

Table 1: Disillusionment with the status quo

	FREQUENCY	PERCENT
UNKNOWN	3	9
NO INFLUENCE	7	21
LITTLE INFLUENCE	5	15
<i>“NOT IMPORTANT” SCORE</i>		36
SIGNIFICANT INFLUENCE	10	29
HIGHLY SIGNIFICANT INFLUENCE	9	26
<i>“IMPORTANT” SCORE</i>		55
TOTAL	34	100

Table 2: Size and structure of remuneration package

	FREQUENCY	PERCENT
UNKNOWN	2	6
NO INFLUENCE	4	12
LITTLE INFLUENCE	5	15
<i>“NOT IMPORTANT” SCORE</i>		27
SIGNIFICANT INFLUENCE	6	18
HIGHLY SIGNIFICANT INFLUENCE	17	50
<i>“IMPORTANT” SCORE</i>		68
TOTAL	34	100

Table 3: Opportunity to achieve personal and professional goals

	FREQUENCY	PERCENT
NO INFLUENCE	3	9
LITTLE INFLUENCE	5	15
<i>“NOT IMPORTANT” SCORE</i>		24
SIGNIFICANT INFLUENCE	9	26
HIGHLY SIGNIFICANT INFLUENCE	17	50
<i>“IMPORTANT” SCORE</i>		76
TOTAL	34	100

Table 4: Opportunity to innovate and improve systems

	FREQUENCY	PERCENT
NO INFLUENCE	2	6
LITTLE INFLUENCE	6	18
<i>“NOT IMPORTANT” SCORE</i>		24
SIGNIFICANT INFLUENCE	13	38
HIGHLY SIGNIFICANT INFLUENCE	13	38
<i>“IMPORTANT” SCORE</i>		76
TOTAL	34	100

Table 5: Teamwork with opportunities for rotation of roles

	FREQUENCY	PERCENT
UNKNOWN	1	3
NO INFLUENCE	7	21
LITTLE INFLUENCE	7	21
<i>“NOT IMPORTANT” SCORE</i>		42
SIGNIFICANT INFLUENCE	7	21
HIGHLY SIGNIFICANT INFLUENCE	12	34
<i>“IMPORTANT” SCORE</i>		55
TOTAL	34	100

Table 6: Recognition of special contribution

	FREQUENCY	PERCENT
NO INFLUENCE	2	6
LITTLE INFLUENCE	7	21
<i>“NOT IMPORTANT” SCORE</i>		27
SIGNIFICANT INFLUENCE	13	38
HIGHLY SIGNIFICANT INFLUENCE	12	35
<i>“IMPORTANT” SCORE</i>		73
TOTAL	34	100

Table 7: Resources and tools to perform work

	FREQUENCY	PERCENT
NO INFLUENCE	6	18
LITTLE INFLUENCE	10	29
<i>“NOT IMPORTANT” SCORE</i>		47
SIGNIFICANT INFLUENCE	12	35
HIGHLY SIGNIFICANT INFLUENCE	6	18
<i>“IMPORTANT” SCORE</i>		53
TOTAL	34	100

Table 8: Challenging work assignments in your area of expertise

	FREQUENCY	PERCENT
UNKNOWN	1	3
NO INFLUENCE	4	12
LITTLE INFLUENCE	5	15
<i>“NOT IMPORTANT” SCORE</i>		27
SIGNIFICANT INFLUENCE	16	47
HIGHLY SIGNIFICANT INFLUENCE	8	24
<i>“IMPORTANT” SCORE</i>		71
TOTAL	34	100

Table 9: Information sharing

	FREQUENCY	PERCENT
NO INFLUENCE	4	12
LITTLE INFLUENCE	13	38
<i>“NOT IMPORTANT” SCORE</i>		<i>50</i>
SIGNIFICANT INFLUENCE	10	29
HIGHLY SIGNIFICANT INFLUENCE	7	21
<i>“IMPORTANT” SCORE</i>		<i>50</i>
TOTAL	34	100

Table 10: Treated with courtesy and respect by colleagues

	FREQUENCY	PERCENT
UNKNOWN	1	3
NO INFLUENCE	6	18
LITTLE INFLUENCE	4	12
<i>“NOT IMPORTANT” SCORE</i>		<i>30</i>
SIGNIFICANT INFLUENCE	12	35
HIGHLY SIGNIFICANT INFLUENCE	11	32
<i>“IMPORTANT” SCORE</i>		<i>67</i>
TOTAL	34	100

Table 11: Organisational culture

	FREQUENCY	PERCENT
UNKNOWN	1	3
NO INFLUENCE	5	15
LITTLE INFLUENCE	5	15
<i>“NOT IMPORTANT” SCORE</i>		30
SIGNIFICANT INFLUENCE	10	29
HIGHLY SIGNIFICANT INFLUENCE	13	38
<i>“IMPORTANT” SCORE</i>		67
TOTAL	34	100

Table 12: Quality of leadership and relationship with manager

	FREQUENCY	PERCENT
NO INFLUENCE	5	15
LITTLE INFLUENCE	3	9
<i>“NOT IMPORTANT” SCORE</i>		24
SIGNIFICANT INFLUENCE	7	21
HIGHLY SIGNIFICANT INFLUENCE	19	55
<i>“IMPORTANT” SCORE</i>		76
TOTAL	34	100

Table 13: Opportunities for development and career progression

	FREQUENCY	PERCENT
NO INFLUENCE	6	18
LITTLE INFLUENCE	4	12
<i>“NOT IMPORTANT” SCORE</i>		30
SIGNIFICANT INFLUENCE	14	41
HIGHLY SIGNIFICANT INFLUENCE	10	29
<i>“IMPORTANT” SCORE</i>		70
TOTAL	34	100

Table 14: Scope to balance work and life pursuits

	FREQUENCY	PERCENT
NO INFLUENCE	6	18
LITTLE INFLUENCE	11	32
<i>“NOT IMPORTANT” SCORE</i>		<i>50</i>
SIGNIFICANT INFLUENCE	11	32
HIGHLY SIGNIFICANT INFLUENCE	6	18
<i>“IMPORTANT” SCORE</i>		<i>50</i>
TOTAL	34	100

Table 15: Opportunity to work in a foreign country

	FREQUENCY	PERCENT
NO INFLUENCE	19	55
LITTLE INFLUENCE	7	21
<i>“NOT IMPORTANT” SCORE</i>		<i>76</i>
SIGNIFICANT INFLUENCE	3	9
HIGHLY SIGNIFICANT INFLUENCE	5	15
<i>“IMPORTANT” SCORE</i>		<i>24</i>
TOTAL	34	100

Table 16: Offer to work elsewhere for higher remuneration

	FREQUENCY	PERCENT
NO INFLUENCE	3	9
LITTLE INFLUENCE	11	32
<i>“NOT IMPORTANT” SCORE</i>		<i>41</i>
SIGNIFICANT INFLUENCE	6	18
HIGHLY SIGNIFICANT INFLUENCE	14	21
<i>“IMPORTANT” SCORE</i>		<i>49</i>
TOTAL	34	100

Table 17: Experimentation with a number of career options

	FREQUENCY	PERCENT
NO INFLUENCE	7	21
LITTLE INFLUENCE	18	52
<i>“NOT IMPORTANT” SCORE</i>		73
SIGNIFICANT INFLUENCE	5	15
HIGHLY SIGNIFICANT INFLUENCE	4	12
<i>“IMPORTANT” SCORE</i>		27
TOTAL	34	100

Table 18: Personal circumstances

	FREQUENCY	PERCENT
NO INFLUENCE	12	35
LITTLE INFLUENCE	8	24
<i>“NOT IMPORTANT” SCORE</i>		59
SIGNIFICANT INFLUENCE	9	26
HIGHLY SIGNIFICANT INFLUENCE	5	15
<i>“IMPORTANT” SCORE</i>		41
TOTAL	34	100

Table 19: Freedom to plan and execute work independently

	FREQUENCY	PERCENT
NO INFLUENCE	5	15
LITTLE INFLUENCE	5	15
<i>“NOT IMPORTANT” SCORE</i>		30
SIGNIFICANT INFLUENCE	16	47
HIGHLY SIGNIFICANT INFLUENCE	8	23
<i>“IMPORTANT” SCORE</i>		70
TOTAL	34	100

Table 20: Scope to create desirable results

	FREQUENCY	PERCENT
NO INFLUENCE	2	6
LITTLE INFLUENCE	13	38
<i>“NOT IMPORTANT” SCORE</i>		<i>44</i>
SIGNIFICANT INFLUENCE	12	35
HIGHLY SIGNIFICANT INFLUENCE	7	21
<i>“IMPORTANT” SCORE</i>		<i>56</i>
TOTAL	34	100

Table 21: Organisational climate that nurtures learning

	FREQUENCY	PERCENT
NO INFLUENCE	6	18
LITTLE INFLUENCE	6	18
<i>“NOT IMPORTANT” SCORE</i>		<i>36</i>
SIGNIFICANT INFLUENCE	16	46
HIGHLY SIGNIFICANT INFLUENCE	6	18
<i>“ IMPORTANT” SCORE</i>		<i>64</i>
TOTAL	34	100

Table 22: Freedom from bureaucracy

	FREQUENCY	PERCENT
NO INFLUENCE	5	15
LITTLE INFLUENCE	6	18
<i>“ NOT IMPORTANT” SCORE</i>		<i>33</i>
SIGNIFICANT INFLUENCE	9	26
HIGHLY SIGNIFICANT INFLUENCE	14	41
<i>“ IMPORTANT” SCORE</i>		<i>67</i>
TOTAL	34	100

Table 23: Control over work assignments

	FREQUENCY	PERCENT
NO INFLUENCE	4	12
LITTLE INFLUENCE	5	15
<i>“NOT IMPORTANT” SCORE</i>		27
SIGNIFICANT INFLUENCE	18	53
HIGHLY SIGNIFICANT INFLUENCE	7	20
<i>“IMPORTANT” SCORE</i>		73
TOTAL	34	100

Table 24: Opportunities for training and development

	FREQUENCY	PERCENT
NO INFLUENCE	4	15
LITTLE INFLUENCE	14	41
<i>“ NOT IMPORTANT” SCORE</i>		56
SIGNIFICANT INFLUENCE	6	18
HIGHLY SIGNIFICANT INFLUENCE	9	26
<i>“ IMPORTANT” SCORE</i>		44
TOTAL	34	100

Table 25: Matching organisational and individual needs

	FREQUENCY	PERCENT
NO INFLUENCE	7	21
LITTLE INFLUENCE	4	11
<i>“ NOT IMPORTANT” SCORE</i>		32
SIGNIFICANT INFLUENCE	6	18
HIGHLY SIGNIFICANT INFLUENCE	17	50
<i>“ IMPORTANT” SCORE</i>		68
TOTAL	34	100

Table 26: Job enrichment

	FREQUENCY	PERCENT
NO INFLUENCE	5	15
LITTLE INFLUENCE	3	9
<i>“NOT IMPORTANT” SCORE</i>		<i>24</i>
SIGNIFICANT INFLUENCE	13	38
HIGHLY SIGNIFICANT INFLUENCE	13	38
<i>“IMPORTANT” SCORE</i>		<i>76</i>
TOTAL	34	100

Table 27: Sense of achievement

	FREQUENCY	PERCENT
UNKNOWN	1	3
NO INFLUENCE	4	12
LITTLE INFLUENCE	2	6
<i>“NOT IMPORTANT” SCORE</i>		<i>18</i>
SIGNIFICANT INFLUENCE	16	47
HIGHLY SIGNIFICANT INFLUENCE	11	32
<i>“IMPORTANT” SCORE</i>		<i>79</i>
TOTAL	34	100

Table 28: Challenging work

	FREQUENCY	PERCENT
NO INFLUENCE	2	6
LITTLE INFLUENCE	8	24
<i>“NOT IMPORTANT” SCORE</i>		<i>30</i>
SIGNIFICANT INFLUENCE	16	47
HIGHLY SIGNIFICANT INFLUENCE	8	23
<i>“IMPORTANT” SCORE</i>		<i>70</i>
TOTAL	34	100

Table 29: Working in multi-disciplinary teams

	FREQUENCY	PERCENT
NO INFLUENCE	5	15
LITTLE INFLUENCE	14	41
<i>“ NOT IMPORTANT” SCORE</i>		<i>56</i>
SIGNIFICANT INFLUENCE	6	18
HIGHLY SIGNIFICANT INFLUENCE	9	26
<i>“ IMPORTANT” SCORE</i>		<i>44</i>
TOTAL	34	100

Table 30: Balanced workload that matches competence and time variables

	FREQUENCY	PERCENT
NO INFLUENCE	6	18
LITTLE INFLUENCE	8	23
<i>“NOT IMPORTANT” SCORE</i>		<i>41</i>
SIGNIFICANT INFLUENCE	12	36
HIGHLY SIGNIFICANT INFLUENCE	8	23
<i>“ IMPORTANT” SCORE</i>		<i>59</i>
TOTAL	34	100

Table 31: Adequate remuneration, benefits and reward package

	FREQUENCY	PERCENT
NO INFLUENCE	7	20
LITTLE INFLUENCE	3	9
<i>“NOT IMPORTANT” SCORE</i>		29
SIGNIFICANT INFLUENCE	3	18
HIGHLY SIGNIFICANT INFLUENCE	18	53
<i>“IMPORTANT” SCORE</i>		71
TOTAL	34	100

Table 32: Premium for specialist skills and knowledge

	FREQUENCY	PERCENT
NO INFLUENCE	8	24
LITTLE INFLUENCE	7	21
<i>“ NOT IMPORTANT” SCORE</i>		45
SIGNIFICANT INFLUENCE	9	26
HIGHLY SIGNIFICANT INFLUENCE	10	29
<i>“ IMPORTANT” SCORE</i>		55
TOTAL	34	100

Table 33: Recognition for contributing to organisational goals

	FREQUENCY	PERCENT
NO INFLUENCE	8	23
LITTLE INFLUENCE	6	18
<i>“NOT IMPORTANT” SCORE</i>		41
SIGNIFICANT INFLUENCE	9	26
HIGHLY SIGNIFICANT INFLUENCE	11	33
<i>“ IMPORTANT” SCORE</i>		59
TOTAL	34	100

Table 34: Effective performance management system

	FREQUENCY	PERCENT
NO INFLUENCE	7	21
LITTLE INFLUENCE	5	15
<i>“NOT IMPORTANT” SCORE</i>		36
SIGNIFICANT INFLUENCE	10	29
HIGHLY SIGNIFICANT INFLUENCE	12	35
<i>“IMPORTANT” SCORE</i>		64
TOTAL	34	100

Table 35: Socially-supportive environment that recognises social needs

	FREQUENCY	PERCENT
NO INFLUENCE	13	38
LITTLE INFLUENCE	12	35
<i>“NOT IMPORTANT” SCORE</i>		73
SIGNIFICANT INFLUENCE	7	21
HIGHLY SIGNIFICANT INFLUENCE	2	6
<i>“IMPORTANT” SCORE</i>		27
TOTAL	34	100

Table 36: Freedom and autonomy to assume more responsibility on work

	FREQUENCY	PERCENT
NO INFLUENCE	5	15
LITTLE INFLUENCE	13	38
<i>“NOT IMPORTANT” SCORE</i>		53
SIGNIFICANT INFLUENCE	12	35
HIGHLY SIGNIFICANT INFLUENCE	5	12
<i>“IMPORTANT” SCORE</i>		47
TOTAL	34	100

Table 37: Management that values individuals' contributions

	FREQUENCY	PERCENT
NO INFLUENCE	9	27
LITTLE INFLUENCE	3	9
<i>“NOT IMPORTANT” SCORE</i>		36
SIGNIFICANT INFLUENCE	8	23
HIGHLY SIGNIFICANT INFLUENCE	14	41
<i>“IMPORTANT” SCORE</i>		54
TOTAL	34	100

Table 38: Opportunities for feedback, self-improvement and career advancement

	FREQUENCY	PERCENT
NO INFLUENCE	9	27
LITTLE INFLUENCE	7	21
<i>“NOT IMPORTANT” SCORE</i>		48
SIGNIFICANT INFLUENCE	10	29
HIGHLY SIGNIFICANT INFLUENCE	8	23
<i>“IMPORTANT” SCORE</i>		52
TOTAL	34	100

Table 39: Partnerships with training institutions

	FREQUENCY	PERCENT
NO INFLUENCE	11	32
LITTLE INFLUENCE	13	38
<i>“NOT IMPORTANT” SCORE</i>		70
SIGNIFICANT INFLUENCE	5	15
HIGHLY SIGNIFICANT INFLUENCE	5	15
<i>“IMPORTANT” SCORE</i>		30
TOTAL	34	100

Table 40: Opportunities for capacity building

	FREQUENCY	PERCENT
NO INFLUENCE	11	32
LITTLE INFLUENCE	11	32
<i>“NOT IMPORTANT” SCORE</i>		<i>64</i>
SIGNIFICANT INFLUENCE	9	27
HIGHLY SIGNIFICANT INFLUENCE	3	9
<i>“IMPORTANT” SCORE</i>		<i>36</i>
TOTAL	34	100

Table 41: Exchange programme with other regulators

	FREQUENCY	PERCENT
NO INFLUENCE	15	44
LITTLE INFLUENCE	11	32
<i>“NOT IMPORTANT” SCORE</i>		<i>76</i>
SIGNIFICANT INFLUENCE	3	9
HIGHLY SIGNIFICANT INFLUENCE	5	15
<i>“IMPORTANT” SCORE</i>		<i>24</i>
TOTAL	34	100

Table 42: Public exposure of employees

	FREQUENCY	PERCENT
NO INFLUENCE	13	38
LITTLE INFLUENCE	11	32
<i>“NOT IMPORTANT” SCORE</i>		<i>70</i>
SIGNIFICANT INFLUENCE	5	15
HIGHLY SIGNIFICANT INFLUENCE	5	15
<i>“IMPORTANT” SCORE</i>		<i>30</i>
TOTAL	34	100

Table 43: Reputation of the organisations

	FREQUENCY	PERCENT
NO INFLUENCE	7	20
LITTLE INFLUENCE	7	20
<i>“NOT IMPORTANT” SCORE</i>		<i>40</i>
SIGNIFICANT INFLUENCE	11	33
HIGHLY SIGNIFICANT INFLUENCE	9	27
<i>“ IMPORTANT” SCORE</i>		<i>60</i>
TOTAL	34	100

Table 44: Organisational culture

	FREQUENCY	PERCENT
NO INFLUENCE	9	27
LITTLE INFLUENCE	4	12
<i>“NOT IMPORTANT” SCORE</i>		<i>39</i>
SIGNIFICANT INFLUENCE	11	32
HIGHLY SIGNIFICANT INFLUENCE	10	29
<i>“ IMPORTANT” SCORE</i>		<i>61</i>
TOTAL	34	100

Table 45: Effective two-way communication

	FREQUENCY	PERCENT
NO INFLUENCE	6	18
LITTLE INFLUENCE	9	26
<i>“NOT IMPORTANT” SCORE</i>		<i>44</i>
SIGNIFICANT INFLUENCE	10	29
HIGHLY SIGNIFICANT INFLUENCE	9	27
<i>“ IMPORTANT” SCORE</i>		<i>56</i>
TOTAL	34	100