

UNIVERSITY OF KWAZULU-NATAL

**AN EVALUATION OF RECRUITMENT AND RETENTION
PRACTICES FOR SCARCE AND CRITICAL TECHNICAL SKILLS IN
THE KWAZULU-NATAL DEPARTMENT OF TRANSPORT**

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degree of Master of Commerce (Human Resource Management)**

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DECLARATION

I, Miranda Cindy Zwane, declare that

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ACRONYMS

BCEA	Basic Conditions of Employment Act
CPD	Continuing Professional Development
DOT	Department of Transport
DPSA	Department of Public Service and Administration
ECSA	Engineering Council of South Africa
EEA	Employment Equity Act
EPMDS	Employee Performance Management and Development System
HBU's	Historically Black Universities
HR	Human Resource
KZN	KwaZulu-Natal
LGSETA	Local Government Sector Education and Training Authority
MEC	Member of the Executive Council
NQF	National Qualifications Authority
OECD	Organisation for Economic Co-operation and Development
OSD	Occupation Specific Dispensation
PSC	Public Service Commission
PSETA	Public Service Education and Training Authority
SA	South Africa
SAQA	South African Qualifications Authority
SETA	Sector Education and Training Authority
TVET	Technical and Vocational Education and Training

ABSTRACT

The aim of this study was to evaluate the recruitment and retention practices for managing critical skills in the KwaZulu-Natal Department of Transport. The study was motivated by a continuous staff turnover especially regarding scarce and critical technical skills where newly appointed employees only remain in the Department of Transport for periods not exceeding five years and then resign or move to the private sector, municipalities or non-governmental organisations. Amongst other things the study sought to determine what methods could be used to recruit and retain technically skilled employees in the KwaZulu-Natal Department of Transport, determine shortcomings related to the Occupation Specific Dispensation for employees with technical skills, determine factors that contribute to the attraction and retention of technically skilled employees, and determine whether or not measures to ensure appropriate recruitment and retention of staff, especially scarce skills, are in place. The study employed a qualitative research approach and used focus groups and interviews as data collection methods. The study revealed that the main reason for exits of technical scarce skilled employees in the Department of Transport is linked to remuneration where the Department of Transport is unable to offer competitive salaries provided by the private sector and municipalities. In addition, frustration around plateauing was highlighted. The study also revealed that the Department has struggled to recruit and retain skilled technical employees for many years due to recruitment and retention strategies that are not competitive. Furthermore, the study revealed that the Occupation Specific Dispensation (OSD) determination has had a negative impact on the salary, benefits and career progression of employees where retention mechanisms were noted as not flexible within the OSD.

The study recommended that the Department of Public Service and Administration (DPSA) should open discussions on the review of the Occupation Specific Dispensation determination. The study recommended that the recruitment strategy should be flexible regarding remuneration for people with critical skills. In addition, it is recommended that the current recruitment policy needs to be reviewed so that it can accommodate some outstanding issues. In conclusion, the study recommended that future studies be conducted on how the government working conditions for line managers and employees with scarce and critical technical skills should be structured and comparing the government departments' policy on recruitment and retention with municipalities considering they form one sphere of government.

LIST OF TABLES

TABLE 2.1: KZN DOT RECRUITMNT AND SELECTION STEPS.....	14
TABLE 3.1: SENIOR MANAGERS INTERVIEWS SAMPLE.....	40
TABLE 3.2: FOCUS GROUP DISCUSSION SAMPLE.....	41
TABLE 4.1: DEPICTING SAMPLE OF THE STUDY.....	48

LIST OF FIGURES

FIGURE: 2.2 MASLOW'S HIERARCHY OF NEEDS.....	31
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LIST OF ANNEXURES

ANNEXURE A: RESEARCH INSTRUMENT.....	85
ANNEXURE B: INFORMATION CONSENT FORM.....	88
ANNEXURE C: FOCUS GROUP DISCUSSION QUESTIONS.....	91
ANNEXURE D: SENIOR MANAGEMENT INTERVIEW SCHEDULE.....	93
ANNEXURE E: GATEKEEPERS LETTER.....	97
ANNEXURE F: ETHICAL CLEARANCE.....	100
ANNEXURE G: EDITORS'S REPORT.....	102
ANNEXURE H: TURN IT IN REPORT.....	104

TABLE OF CONTENTS

DECLARATION	i
ACKNOWLEDGEMENTS	ii
ACRONYMS	iii
ABSTRACT	iv
LIST OF TABLES	v
LIST OF FIGURES	vi
LIST OF ANNEXURES	vii
CHAPTER 1	1
INTRODUCTION AND BACKGROUND OF THE STUDY	1
1.1 INTRODUCTION.....	1
1.2 BACKGROUND OF THE STUDY	2
1.3 THE STATEMENT OF THE RESEARCH PROBLEM.....	3
1.4 THE AIM AND OBJECTIVES OF THE STUDY	4
1.5 SUB-RESEARCH OBJECTIVES	4
1.6 RESEARCH QUESTIONS.....	4
1.7 SIGNIFICANCE OF THE STUDY	5
1.8 SYNOPSIS OF THE LITERATURE REVIEW	5
1.9 RESEARCH DESIGN AND METHODOLOGY OF THE STUDY	6
1.10 LIMITATIONS OF THE STUDY	7
1.11 THE STRUCTURE OF THE DISSERTATION	8
1.12 CONCLUSION	9
CHAPTER 2	10
LITERATURE REVIEW RELATING TO SKILLS SHORTAGES	10
2.1 INTRODUCTION.....	10
2.2 THE CONCEPT OF RECRUITMENT	10
2.2.1 The Overview of Recruitment	11
2.2.2 Processes of Recruitment.....	12
2.2.3 Methods of Recruitment	12
2.2.4 Steps for Recruitment	13
2.2.5 Challenges with the Recruitment Process	15
2.2.6 Recruitment Process Challenges in the KZN DOT	15
2.2.7 Strategies of Recruitment	15

2.3 CONCEPT OF RETENTION	16
2.3.1 The Overview of Retention	16
2.3.2 Challenges of Retention.....	17
2.3.3 Retention of Employees with Scarce Skills.....	18
2.3.4 Factors Affecting an Employee’s Retention.....	18
2.3.4.1 Job Satisfaction.....	19
2.3.4.2 Job Security	19
2.3.4.3 Organisational Culture.....	19
2.3.4.4 Compensation	20
2.3.4.5 Effective Leadership.....	20
2.3.4.6 Training and Development	21
2.3.4.7 Work-Life Balance	21
2.4 THE CONCEPT OF TURNOVER AND ATTRITION	22
2.5 SOUTH AFRICAN LEGISLATIVE FRAMEWORK FOR THE STUDY	23
2.6 DIFFERENT ASPECTS OF SKILLS SHORTAGES FROM A GLOBAL AND SOUTH AFRICAN PERSPECTIVES	25
2.7 MANAGING SKILLS SHORTAGES IN THE CHANGING BUSINESS ENVIRONMENT.....	29
2.8 FRAMEWORK UNDERPINNING THE STUDY	29
2.8.1 Theoretical Framework for the study	30
2.8.2 Maslow’s Hierarchy of Needs	30
2.8.3 Fredrick Herzberg’s Two - Factor Theory	32
2.9 CONCLUSION	34
CHAPTER 3	35
RESEARCH METHODOLOGY	35
3.1 INTRODUCTION.....	35
3.2 RESEARCH DESIGN AND METHODOLOGY.....	35
3.2.1 Exploratory Research Design	35
3.2.2 The Research Methodology for the Study	35
3.3 POPULATION OF THE STUDY	37
3.3.1 Sampling Techniques	38
3.3.1.1 Probability sampling.....	38
3.3.1.2 Non-Probability sampling.....	38
3.3.2 Purposive Sampling	39
3.3.2.1 Sample of the Study.....	39

3.4 DATA COLLECTION METHODS	42
3.4.1 Data Collection Technique Employed.....	42
3.4.1.1 Types of Interviews Considered for this Study	42
3.4.1.2 Focus Group Discussions (FGDs)	42
3.4.1.3 Reasons for the selected data collection methods	43
3.4.1.4 Construction and Administration of the Research Instrument	44
3.5 THE MEASUREMENT OF RELIABILITY AND VALIDITY OF THE STUDY...44	
3.6 PILOT STUDY	44
3.7 DATA ANALYSIS	45
3.8 ETHICAL CONSIDERATION	46
3.9 CONCLUSION	46
CHAPTER 4.....47	
DATA PRESENTATION AND ANALYSIS.....47	
4.1 INTRODUCTION.....	47
4.2 PRESENTATION OF FINDINGS	47
4.2.1 Response Rate.....	49
4.3 PRESENTATION AND ANALYSIS OF DATA BASED ON INTERVIEWS	49
4.4 PRESENTATION OF DATA	49
4.4.1 Shortcomings of the Occupation Specific Dispensation	49
4.4.1.1 Remuneration.....	50
4.4.1.2 Job satisfaction	50
4.4.2 Factors affecting the recruitment and retention of scarce and technical skills.....	51
4.4.2.1 Motivation for employees.....	51
4.4.2.2 Amendment of the OSD	52
4.4.3 Effective methods of recruiting and retaining scarce and technical skills	53
4.4.3.1 Succession Plan and Head Hunting	53
4.4.3.2 Mentorship.....	54
4.4.4 Measures for effective recruitment and retention processes	56
4.4.4.1 Flexibility on Recruitment and Selection Policy	56
4.5 CONCLUSION	57
CHAPTER 5.....58	
DISCUSSION OF THE RESEARCH FINDINGS	58
5.1 INTRODUCTION.....	58
5.2 DISCUSSION OF THE RESEARCH FINDINGS	58
5.2.1 Remuneration.....	58

5.2.2 Job satisfaction	60
5.2.3 Motivation for employees.....	61
5.2.4 Amendment of the OSD	62
5.2.5 Succession Plan and Head Hunting	62
5.2.6 Mentorship.....	63
5.2.7 Flexibility on Recruitment and Selection Policy	65
5.3 CONCLUSION	66
CHAPTER 6.....	67
RECOMMENDATIONS AND CONCLUSION.....	67
6.1 INTRODUCTION.....	67
6.2 ANSWERS TO RESEARCH QUESTIONS	67
6.3 RECOMMENDATIONS FOR POLICY MAKERS	70
6.3.1 Policy Level.....	70
6.3.1.1 The Occupation Specific Dispensation (OSD).....	70
6.3.1.2 Recruitment and Retention Policies and Strategies	71
6.3.1.3 Public Service Regulations, 2016.....	72
6.3.2 Practical and Managerial Level	72
6.3.2.1 Training and Development Programmes	72
6.4 RECOMMENDATIONS FOR FUTURE STUDIES	73
6.5 CONCLUSION	73
REFERENCES.....	75
ANNEXURE A: RESEARCH INSTRUMENT	85
ANNEXURE B: INFORMATION CONSENT FORM.....	88
ANNEXURE C: FOCUS GROUP DISCUSSION QUESTIONS.....	91
ANNEXURE D: SENIOR MANAGEMENT INTERVIEW SCHEDULE	93
ANNEXURE E: GATEKEEPERS LETTER.....	97
ANNEXURE F: ETHICAL CLEARANCE	100
ANNEXURE G: EDITORS’S REPORT	102
ANNEXURE H: TURN IT IN REPORT.....	104

CHAPTER 1

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 INTRODUCTION

The importance of human resources has been widely acknowledged amongst other factors of production. Organisations are increasingly placing more value on human resource capacity development. The competitive business environment has seen many organisations continuously developing strategies to bridge war on talent. Irrespective of these, skills shortages remain one of the challenges facing most developing countries such as South Africa (SA). Skills shortages in South Africa have been witnessed for many years. Such shortages include the non-unavailability of qualified technicians in various fields such as civil engineering aviation, construction and water within the government where qualified technicians tend to move from government to private sector. This is mainly because of workers refusing to work under current market conditions and dominant wages in particular (Windapo, 2016).

In addition, there has been a deficiency of engineering (skills) and related professionals, in SA. This leads to delays in the implementation of projects. Most experienced engineers are working outside the government which is struggling to recruit engineers (Construction Education and Training Authority Sector Skills Plan: 2017-2022). The reasons for the movement of people from the public to the private sector have been witnessed for so many years due to recruitment and various other government policies which tend not to be favourable to many people. The KZN DOT has also faced the same challenge of continuous staff turnover especially in technical skills areas. The South African Institute of Civil Engineers (SAICE) stated that 1.73 percent of its members has been lost through expatriation in the past three years. Government needs to make advances in order to entice engineers back to South Africa (Business Report, 2019).

Within the KZN DOT it has been noted that there has been a continuous staff turnover especially with regard to scarce and critical technical skills where newly appointed employees stay within the Department of Transport for no longer than five years and then resign or move to the private sector, municipalities or non-governmental organisations. KZN DOT creates posts and recruits staff members and also loses staff members frequently. This has, however, prompted the need to understand why there has been a higher outflow of staff than inflow, even if the public service has put (in place) policies, for staff retention (Bernocchi, 2018). It is within this context that this research seeks to evaluate the recruitment and retention practices of scarce and critical technical skills in the KZN DOT.

1.2 BACKGROUND OF THE STUDY

South Africa has been facing the challenge of scarce skills shortages leading to the slow rate of meeting the developmental vision of poverty alleviation, unemployment, inequality and lacklustre growth in the economy. In addition, the scarce skills challenge has also led to an increase in unemployment by 0.5% to 27.2% in quarter two of 2018 (Stats SA, 2018).

This clearly shows that the available jobs require people with critical skills which seem to be a challenge where recruitment and retention of staff is concerned. Before its independence, South Africa suffered from racial discrimination where black people were prevented from having access to high quality, high paying jobs. This situation, however, changed when South Africa obtained its independence in 1994 and the new government set new employment standards. These new employment standards were meant to address equal access to job opportunities for vulnerable communities (Employment Equity Act 55 of 1998, as amended). South Africa has, however, continuously faced technical skills shortages where white workers dominate black workers who then perform semi-skilled work. This clearly illustrates that there has been a technical skills challenge in South Africa particularly in transport and related industries. The absence of engineers in several departments is frequently a significant gauge of the encounters administrations are faced with in terms of the provision of capacity to formulate and manage infrastructure projects both nationwide and provincially (Windapo, 2016).

Given the huge responsibilities and the need to justify the budget allocation in providing the expected service delivery, the job requirements draw more on the technical skills such as civil and mechanical engineers, quantity surveyors and other technical related jobs. The DOT has in existence strategies such as the Occupation Specific Dispensation (OSD) aimed at ensuring the effective recruitment and retention of the technically skilled employees. More so because recent studies by the Public Service Commission (PSC) 2018 and Public Sector Education Training Authority (PSETA) 2017 have indicated that current remuneration frameworks have negatively impacted on various organisation's ability to retain and attract reasonable numbers of employees in possession of the right competencies to deliver. Irrespective of these existing strategies, the transportation sector, just like other public sectors and in particular, the KZN DOT, battles with recruiting and retaining technically-skilled employees. As a result, the Department is facing challenges of high labour turnover and delays in project implementation and completion evidenced in the maintenance, repair, refurbishment, rehabilitation and completion of roads, transportation services and traffic. It is against this background that this study examines the recruitment and retention strategies used in managing scarce and critical technical skills in KZN DOT.

KZN DOT is an integral part of the Public Service as it contributes substantially to the economy of South Africa through transportation systems. It is the third largest department in the Province in terms

of size and budget which has been allocated. The huge responsibilities in ensuring efficient transportation of goods and services within and beyond the Province attracted a large financial budget allocation for infrastructure projects for the year 2018/19 of R22.1 billion over the Medium-Term Expenditure Framework (MTEF) (KZN Budget Speech 2018/19, p.12). KZN DOT was allocated 8.2 % of the budget in 2018/19 and 8.5% of the 2017/18 budget for the Province. The budget allocation was R11.1 billion over the 2018/19 MTEF. The DOT mainstream Expanded Public Works Programme (EPWP) targets 58 260 work opportunities and R200 million labour intensive construction projects and is expected to be implemented in the year 2018/19 (KZN Budget Speech: 2018).

Even though the Department has made a contribution to generating revenue, it faces challenges in obtaining critical skilled employees in the technical and engineering fields in particular. In addition, the Department continues to face challenges despite efforts made in addressing these challenges and the introduction of the OSD for engineers and related professionals. The situation, however, is worsened by the favourable offers from other institutions which are not controlled by government. Such offers have led many people leaving government and work for consultancy companies and municipalities. In an attempt to address these challenges, the Department offers bursaries to students studying for qualifications in technical and engineering fields and need to serve contractual obligations upon completion of their studies (KZN DOT Strategic Plan 2015/16-2019/20).

There are also non-human resource challenges being faced by the KZN DOT which include road network integrated planning improvement and coordination with the railway, aviation and shipping modes. The other challenges involve defining a network which is appropriately classified, combined and realistic, creating an environment which is conducive to road traffic operations improvements and assets maintenance, consistent and adequate funding allocation for road maintenance and rehabilitation, lack of enough funding for capacity enhancement or extension of the infrastructure and deterioration of the road's conditions. In addition to that, meeting socio-economic objectives, law enforcement regarding vehicles which are overloaded causing road infrastructure to fail and premature damages contributes to challenges faced by the department. (South Africa Road Infrastructure Strategic Framework).

1.3 THE STATEMENT OF THE RESEARCH PROBLEM

The researcher, being an employee in the Human Resource (HR) Directorate of the KZN DOT, perceives that the high turnover of technically skilled employee is a result of ineffective recruitment and retention strategies adopted by the Department. In addition, the OSD tends to present shortcomings, which lead to technically skilled employees in the KZN DOT leaving their jobs for the private sector.

Such a dispensation seems to present a challenge where employees within the Department become dissatisfied and opt to leave their jobs thereby creating a high turnover for critical skills.

1.4 THE AIM AND OBJECTIVES OF THE STUDY

The main aim of the study was to evaluate the recruitment and retention strategies for scarce and critical technically skilled employees within the KZN DOT. It was hoped that the findings of the study would help to create, translate and integrate human resource practices which may be articulated and have the potential to educate not only HR practitioners but all employees within the KZN DOT. In addition, the findings of the study will offer a platform for introducing broader sustainability initiatives in the recruitment and retention of scarce and critical technical skills.

The objective of the study was to assist to assist in meeting the aim of the research through determining effective ways and strategies for recruiting and retaining technically skilled employees in the KZN DOT. Furthermore, this study intended to address the following sub-objectives which include: -

1.5 SUB-RESEARCH OBJECTIVES

- To explore effective methods to recruit and retain technically skilled employees in the KwaZulu-Natal Department of Transport.
- To establish the shortcomings related to the Occupation Specific Dispensation for technically skilled employees in the KwaZulu-Natal Department of Transport.
- To determine factors affecting the recruitment and retention of scarce and critical technical skills in the KwaZulu-Natal Department of Transport.
- To establish measures for effective recruitment and retention processes.

1.6 RESEARCH QUESTIONS

The main research question for the study was to understand what strategies the KwaZulu-Natal Department of Transport could utilise to recruit and retain technically skilled employees. The research also had sub-research questions which were:

- What effective methods could be used to recruit and retain technically skilled employees in the KwaZulu-Natal Department of Transport?
- What are the shortcomings related to the Occupation Specific Dispensation for employees with technical skills in the KwaZulu-Natal Department of Transport?
- What factors contribute to the attraction and retention of technically skilled employees in the KwaZulu-Natal Department of Transport?

- What measures are in place to ensure effective recruitment and retention processes and procedures?

1.7 SIGNIFICANCE OF THE STUDY

The significance of the study shows how the research would go about refining and revising the existing knowledge in the area under investigation. This dissertation however sought to evaluate the recruitment and retention strategies used for technically skilled employees at the KZN DOT. So far, no work has been undertaken to identify and discuss the strategies used in managing scarce and critical technically skilled employees in the context of KZN DOT. Given the importance of the role of the Department of Transport in the effective delivery of public services and the labour turnover facing the Department in the retention of technically skilled employees, it was presumed that a study of this nature would be recommended to address challenges for the nation's development agenda. From an academic point of view, it is hoped that the study will contribute to further research in the context of service delivery. The study provided insightful information on the effective implementation of human resource practices in the KZN DOT and improved public service delivery. In addition, the research recommended measures for effective recruitment and retention processes.

1.8 SYNOPSIS OF THE LITERATURE REVIEW

Economic Surveys South Africa (2017, p.11) argued that "skills shortages in South Africa have been widely seen as a major hurdle to the achievement of targeted economic growth rates". It is pertinent to note that such a major hurdle has also created several challenges within South Africa particularly the KZN DOT in relation to employment and retaining of scarce and critical technically skilled employees. Recruitment, is, however, understood as a procedure where an organisation attracts and employs the right candidates to help the organisation to achieve its goals (Oaya, Ogbu and Remilekun, 2017). Several definitions of recruitment have been crafted and (Metha, Kurbetti, and Dhankhar, 2014, p.16) argued that "recruitment is a procedure which focuses on attracting suitable and competent persons for a particular position". When one speaks of recruitment, it is obvious that another key term which is linked to recruitment is selection which is also a process involving the appropriate application of techniques and methods with the intention of appointing a competent person or persons (Lin, 2017). It is pertinent to note that, there are procedures which are followed leading to employing the right person for the job. When people are employed the next important and crucial part is retaining those people especially those with scarce and critical technical skills. Retention has also been defined by many scholars paying attention to a process where employees are kept within the working environment

(Mabuza and Proches, 2014, p. 411) argued that “retention seeks to minimise risks of losing qualified employees for the job”.

This study adopted Maslow’s hierarchy of needs and Herzberg’s two factor theory of motivation as its framework. It is noteworthy that the framework guiding employee recruitment and selection is generally built around the concept of motivation. Motivation is defined as the measurement of the level to which people pledge themselves to accomplishing goals (Shadding, Whittington, Wallace, Wandu and Wilson 2016). It may also be defined as intrinsic and extrinsic elements that inspire persons to be constantly interested and dedicated to a career or subject in an effort to accomplish a goal (Rees and Smith, 2014). Maslow’s hierarchy of needs focuses on physiological needs, safety needs, the need to belong to and love needs, esteem needs and self-actualisation needs. Shahwan-Akl and Maude (2017, p.14) stated that employee job satisfaction is mostly increased by motivational factors which play a crucial role and this results in improved organisational performance. Such a theory will assist in promoting an understanding of issues central to this research. The Frederick Herzberg two factor theory, postulates that employees are confronted by two factors, hygiene and motivating factors, which mimic extrinsic and intrinsic motivation respectively (Umeozor, 2018) and will also compliment Maslow’ theory of the hierarchy of needs in this research. These two theories will help to unearth critical issues around the human resources practices on scarce and critical technical skills in KZN DOT.

1.9 RESEARCH DESIGN AND METHODOLOGY OF THE STUDY

The design of this study is of an exploratory nature and uses a qualitative research approach. The population under study was made up of all the technically skilled employees of the KZN DOT totalling 40. The researcher adopted a non-probability sample which indicates that the sample was not selected using a random selection method. The researcher used a purposive sampling method. Purposive sampling was used specifically for its advantages which includes inter alia the return of pertinent information and avoids wasting time taking samples that have nothing to do with the research topic, saving money and effort, and that which allows the researcher to reach a targeted sample quickly. 10 employees were interviewed while 30 participated in the focus group. Ten employees were interviewed included senior managers who are involved in the decision-making process of determining scarce and critical technical skills while the 3 FGDs consists of managers, engineers, control and production engineering technicians and surveyors. Content analysis was used to analyse the data. A cross sectional research design, which is a dimension that uses a once off time dimension, was used in this study.

1.10 LIMITATIONS OF THE STUDY

The researcher was aware of the limitations of the FGDs particularly that the researcher may lose control of the proceedings, that data in FGDs is difficult to analyse, organise and difficult to transcribe when participants speak at the same time.

The main limitation of this research was that available documents do not give much on the retention of scarce and critical technical skills. In addition, a lack of previous studies in the research area in the Department is a limitation. Another limitation noted was that, government employees are very much aware of the political tensions that exist in the KwaZulu-Natal Province. As a result, they are sceptical of participating in research of this nature. This, to a certain extent, limited the number of participants. There has not been much written in relation to the high staff turnover within the South African government. More so, very few authors talk of factors affecting the recruitment and retention of technically skilled employees within the transport sector. However, an innovative reading of texts, policies and many interviews assisted the researcher to extract very valuable information.

The other limitations included unavailability of transport to accomplish travelling arrangements, lack of accurate data and lack of obligation from the informants. Regardless of these obstacles, meaningful and successful research was possible because of the researcher's zeal to maintain academic excellence and involvement in the recruitment process within the Department in the KZN Province. More so the researcher established a passion for understanding and initiating measures for the Department to adhere to the appropriate recruitment and retention processes.

As argued by Bryman (2016), qualitative methodology is too subjective and too impressionistic. In this study as well, such subjectivity might be considered as a limitation. Furthermore, the views of the researcher may have been unsystematic and the association between the participants and the researcher may have impacted on the participant's responses. As an attempt to avert such subjectivity the researcher asked a few Human Resources practitioners working for other Government Departments to suggest questions that could be relevant in relation to scarce and technical skills.

The suggested questions and /or rewording were taken into account in the formulation of the final interview schedule. On the issue of generalisation, the researcher cross checked the answers provided by each interviewee with the responses provided by the other interviewees. This assisted in getting a general view on the pertinent aspects of the study. Another limitation of this study is the fact that it is difficult to replicate findings within qualitative methodology since interpretation is influenced by the subjective learning of the researcher.

1.11 THE STRUCTURE OF THE DISSERTATION

This dissertation comprises 5 chapters as presented below.

Chapter 1 provides literature on the introduction and background information of the research focus area. This also includes the statement of the research problem from the background information, the research questions and objectives, the importance of the study, research methodology, and limitations of the study.

Chapter 2 responds to the research questions on the effective methods and strategies used by the KZN DOT to recruit and retain technically skilled employees, shortcomings related to the OSD, factors contributing to recruitment, retention of scarce skills and measures put in place to ensure that the DOT adheres to appropriate recruitment and selection processes and procedures. All these questions will be answered in a literature review form.

Chapter 3 discusses the research methodology where the research design, sample, data collection and analysis methods will be analysed.

Chapter 4 presents and analyses data gathered using the methodology in chapter 3. This was completed in line with the answers provided to the four research questions of the study. Issues discussed involved reasons for exit of employees with scarce and critical technical skills, how to improve recruitment and retention, why it is challenging to recruit and retain this group and how to improve on recruiting and retaining staff with scarce and critical technical skills. The chapter presented results on suggestions and trainings needed for recruitment and retention of the group under study, succession policy and suggestions around it, how to improve the OSD and strategies on how to recruit and retain staff with scarce and critical skills. Seven themes were identified and these include remuneration, inflexible recruitment process, training and awareness on recruitment and retention policies, the OSD, job satisfaction and security, organisational culture and skills development.

Chapter 5 presents the discussion of the research findings with themes arranged in line with the four objectives of the study.

Chapter 6 which is the last chapter provides answers to the research questions. Furthermore, this chapter provides recommendations which related to the implementation of the policies of the KZN DOT relating to recruitment and retention of scarce and critical skills. The recommendations for further studies are also provided.

1.12 CONCLUSION

This chapter summarises what this research is all about focusing on the background and the rationale of challenges on retention of scarce and critical technical skills within the KZN DOT. The chapter discussed the purpose and objectives of the research addressing the research questions, significance of the research, literature review, methodology, data presentation and analysis, limitations of the study and the outline of the research. The following chapter concentrates on the concepts of recruitment, selection and retention of employees. Human Resource (HR) practices play a pivotal role for an improved business approach and organisation sustainability. The study sought to investigate how recruitment and retention, if done properly, will be able to contribute to the nation's economy by increasing the numbers of employees recruited and retained by the organisation.

CHAPTER 2

LITERATURE REVIEW RELATING TO SKILLS SHORTAGES

2.1 INTRODUCTION

The changes in the global environment are positioning the knowledge economy as a source of capital for driving economic growth. Technological innovations are driving many processes requiring nations to keep pace with the developments. Thus, complementing human capital development remains crucial to harness the advantages of the knowledge economy and technology. Therefore, the importance of human capital in any production process cannot be overlooked. Increasingly, international competition has resulted in making countries, especially the developing nations facing skills shortages address the demand and supply of goods and services. The problems associated with skills shortages often make media headlines and remain a challenge for employers, union bodies and governments in addressing service delivery issues. South Africa is no exception to the menace of skills shortages. A recent survey by XPATWEB Work Permit and Expertise Solution (2018) shows that 75% (of the companies surveyed) seek international talent to fill the required skills needs especially in technical fields. According to the Organisation for Economic Co-operation and Development (OECD 2017, p.11) “Skills shortages in South Africa have been widely seen as a major barrier to the achievement of targeted economic growth rates. An attempt to redress the effect of the skills shortages in South Africa has led to the government publication of such skills to encourage skills development in the identified areas”.

Given the foregoing, the chapter reviewed current literature from, inter alia, books, journal articles government gazettes, company reports and publications from professional bodies. This chapter provides a global and South African perspective on skills shortages. In addition, the underpinning theories and legislation governing recruitment and selection were presented. Further literature was presented on the recruitment and retention process, steps, methods as well as possible challenges facing recruitment and selection.

2.2 THE CONCEPT OF RECRUITMENT

This section covers the concept of recruitment and retention providing definitions, methods, challenges and strategies for managing recruitment and selection in the KZN DOT.

2.2.1 The Overview of Recruitment

According to Oaya, *et al.* (2017, p.36). “Recruitment is about ensuring that people who are qualified are available when needed and a large enough pool of applicants is generated to meet government job needs by filling vacant positions”. While attracting top talent, scarce skills is a demanding task, retaining these high demand employees is even more challenging (Mabuza and Proches, 2014). With this in mind, recruitment tends to be one way of attracting suitable candidates to an organisation. The basic aim of recruitment is to create a collection of talented candidates to enhance the organisation, however, Lin (2017, p.12) argued that “recruitment and retention should not be treated as two separate issues. He further stated that without a sound strategy for improving retention, the recruitment process and efforts may be ineffective”.

Metha, *et al.* (2014, p.16) argued that “recruitment is the first process where an employee engages with the organisation and thus the ability to recruit the right individual initially, greatly impacts on the ability to retain them”. Understanding this, global organisations have stressed the importance of efficient recruitment and selection strategies, which ensure the right talent is sourced thus decreasing dysfunctional turnover and improving company performance. Russo, Rietveld, Kalina and Rogan (2016, p.4) defined recruitment as “the purchase of one of the production factors of skills that employees possess to do their work”.

It is pertinent to note that other scholars argued that recruitment involves organisational involvement in attracting competent persons, elimination of unsuitable candidates, and successful candidate’s conversion to be effective in order to add value to the organisational mandate (Anyim, *et al.* 2012, p.72).

The (KZN DOT Recruitment and Selection Policy 2011, p.3) defined recruitment as a “process that employers use to attract applicants for jobs to determine their suitability for such jobs. In addition to that, it is a process where employment equity is achieved within the workforce through the elimination of unfair discriminatory practices”.

It can also be argued that recruitment is an enabling process where organisations draw a variety of competent individuals to fill in available positions. (Bogatova, 2017), sentiments are also shared by Rees and Smith (2014, p.20), who argued that “recruitment is a process involving mainly actions and activities intended to attract appropriately qualified candidates into institutions”. Since recruitment attracts the right candidates to fill certain posts, it supposes that selected candidates should have the capacity to assist organisations to realise their strategic objectives. Considering that there are many definitions of recruitment, it can be argued that the definition of recruitment can be summarised as a matching process where potential candidates are measured against the requirements of the available posts, this process can expedite the agencies recruitment function and make possible easy labour

mobility (Chala, 2017). In a way, this builds a partnership between employees and employers as expressed by Rath and Lee (2015). Such a definition which helps institutions to meet strategic objectives has been adopted in this research.

2.2.2 Processes of Recruitment

The only Toolkit on Recruitment and Selection produced by the Public Service Commission-South Africa (PSC) in 2002 stated that the recruitment and selection process is reliant on all key personnel having role-players having an all-inclusive view of effective and efficient management of recruitment. This process, however, can be divided into six distinct phases starting from job evaluation to final selection of the most successful candidates (Public Service Commission, 2002). The first stage of job evaluation involves a job description, applying for the filling of a post and obtaining approval and duty sheets. Line management assisted by the Human Resource component is then responsible for this first stage right up to the final stage. The second stage, however, involves advertising for a job where drafting an advert, placing an advert and receiving applications happens, followed by a third phase which involves registering applications. The fourth stage involves screening or selection of applicants who meet the minimum standards which lead to selection of successful candidates. Through the obtaining of approval for the outcome of the screening process and commencement with short-listing, letters of regret are then sent while unsuccessful applications are placed on record in the fifth stage. In this stage, selection of successful candidates is done leading to final selection which leads to informing successful candidates and letters of regret being sent to unsuccessful candidates (KZN DOT Recruitment and Selection Policy, 2011).

2.2.3 Methods of Recruitment

There are two types of recruitment, namely active and passive recruitment methods. Passive recruitment method involves organisations watching and waiting to fill vacant posts. In this method, employees are more active than employers where institutions wait until a prospective employee gets in touch with an institution through sending an application without an advertisement (Rath and Lee 2015). An active recruitment method involves employers taking a major role than employees where companies use other means of selecting competent personnel. Recruitment can also be enhanced by the use of technology. There is a need for companies to compete for talent the way they compete for customers. Social media recruiting is cost-effective when compared to the recruitment methods which are traditional (Emanuela, 2018).

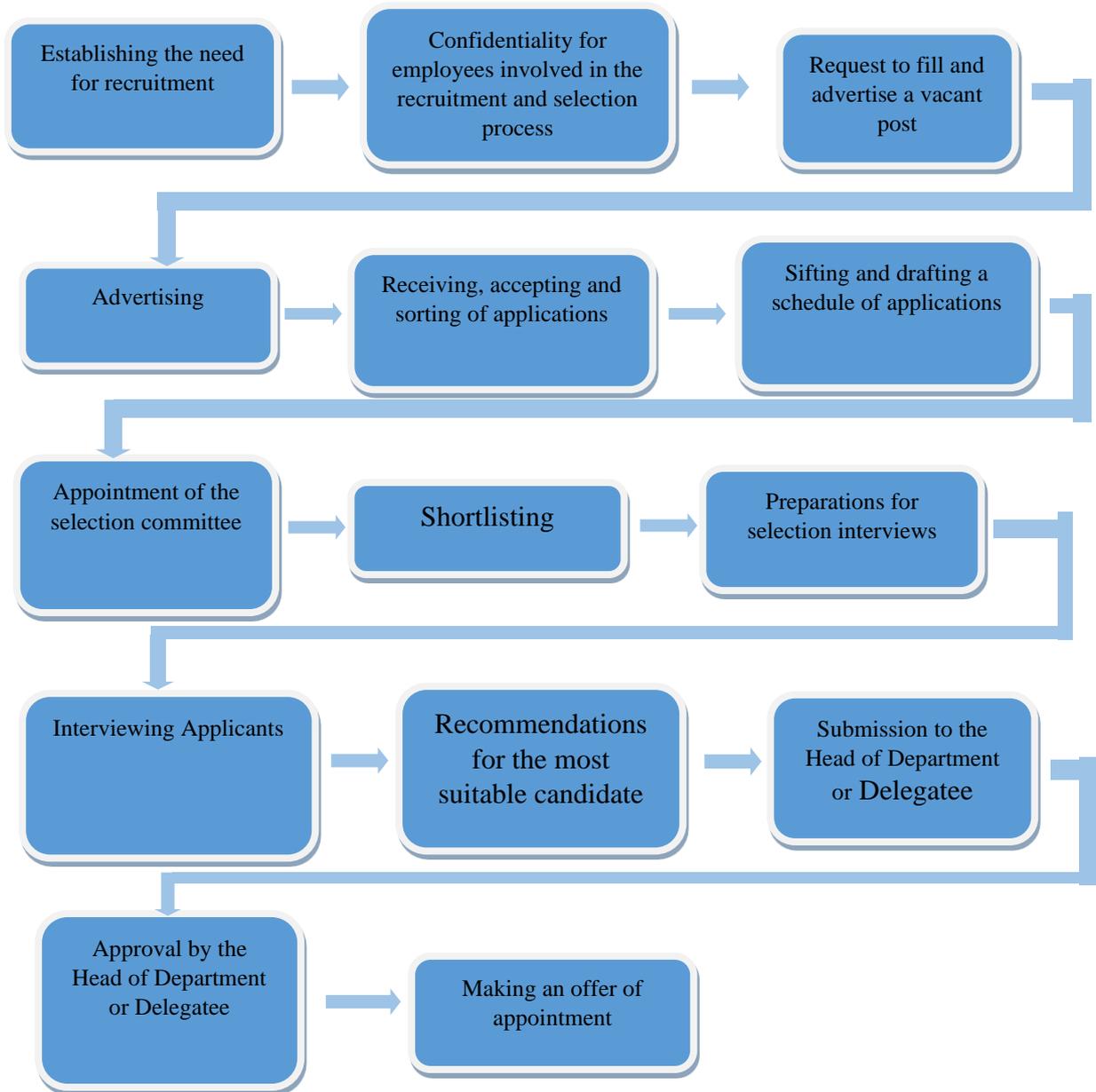
Recruitment methods are classified into formal and informal recruitment methods. A formal recruitment method involves drafting deliverables and advertises a post within a newspaper where transparency is exercised with the view that every person would have an opportunity to have access to the advert (Otoo, Assuming and Agyei, 2018). An informal recruitment method is considered where an advert is circulated amongst few organisations and selection is done efficiently based on those within a closed group or fewer institutions Coetzee and Stoltz (2015). According to Oaya, *et al.* (2017, p.19) “there are high chances of job fulfilment for those selected under informal sources than formal sources”. The researcher supposes that this is so because the informal source is well connected and those who get the job get it based on competence and the social network from which they belong.

2.2.4 Steps for Recruitment

Before any recruitment occurs, a need to recruit is first and foremost identified where supervisors advise HR about the necessity to fill a post. This is then checked as to whether there is a need for the existence of the post in a department the salary level and budget. Amos, Pearse, Ristow and Ristow, (2016, p. 16), pointed out that the “advertisement of the post could arise from the formation of a new job or from a vacancy created by someone who could have resigned or been promoted”. Updating a job description is the second step which helps to acquire the right candidate for the job. Koch, Gerber and De Klerk, 2018. p.94) pointed out that “job descriptions are useful in the process of recruiting new staff in clarifying the nature and scope of responsibilities attached to the specific job”. This same process, however, can be used for appraisal of staff and training and development of staff. Job evaluation as a third step focuses on evaluating the vacant post before advertisement and then the development of the recruitment advertisement as the fourth step where qualifications and competencies are considered leading to the closing date for applications. Advertisements are, however, expected to contain all the required information which would enable organisations to recruit a person with required specific skills (Amos *et al.* 2016).

The KZN DOT has a longer procedure or more steps for recruitment with 14 steps (KZN DOT Recruitment and Selection Policy, 2011, p.12-17).

Table 2.1: KZN DOT Recruitment and Selection steps



2.2.5 Challenges with the Recruitment Process

Each time a post becomes available, it can be argued that organisations face the challenge on the demands of the required skill and the competent person who would fill the post (Chandrasekara and Perera, 2016). Various institutions, however, also face challenges with the recruitment and selection of employees. These challenges include a lack of linking recruitment and selection policies to the human resource strategy with organisational goals and mandate, inappropriate human resource planning, absence of qualified candidates in the market and unavailability of HR experts (Eva, 2018). Another challenge is on failure to carry out reference checks of candidates throughout the shortlisting process, where some companies end up employing people with criminal records. Departure of South African skilled persons to other nations poses a challenge to the job market, especially when persons with critical skills or technical skills leave the country. Another challenge is, however, that of HIV/AIDS which poses the challenge of absenteeism in the workplace, staff turnover, loss of skills, morale decline and loss of tacit knowledge as noted by the United Nations (2000).

2.2.6 Recruitment Process Challenges in the KZN DOT

In the KZN DOT, it has been noted that delays in the advertising of posts are due to cost cutting measures in the Province. The authority to advertise posts which, is obtained from the Premier of KZN, has led to challenges in the recruitment process. In addition, thereto this process can take several months. Moreover, some Selection Committees do not adhere to the Recruitment and Selection Policy causing delays because the interview minutes have to be corrected or the entire process may at some point could be requested to be re-done. There are delays in obtaining security screening results because this process sometimes takes up to two months as well as obtaining Employment Reference checks from employers for lower level posts. Lower level posts sometimes attract a large number of applications (± 5000 applications for a single post) and there is a limited capacity to deal with these applications. Salaries offered by the public service are not competitive with the private sector, hence some of the engineer posts have been advertised more than once, but do not attract any candidates.

2.2.7 Strategies of Recruitment

Strategies in recruitment should seek to address the challenges noted with recruitment. Such strategies include integrating employees into the organisation's principles so that they can easily fit into the organisation and stay. A working environment conducive to newly appointed staff should be made available where coaching skills are offered (Vasquez, 2014). The second strategy involves good communication as a way of retaining staff where poor communication induces employees to leave the

organisation. Employers should be in a position to communicate how employees are expected to add value to the vision and mission of their organisations. Institutions should also build a channel of communication which builds trust and commitment leading to mutual interest between the employee and employer (Amos *et al.* 2016). The third strategy is staff development through training as noted in the South African National Development Plan 2030 that companies should advance the technical skills of their employees where programmes which are developmental are put in place working closely with organisations which focus on staff training and development. The fourth strategy is on developing and preparing job descriptions in advance before employees are appointed. If a job description is not put in place before a new employee joins, the new employee is likely to leave because that person would likely not meet the expectations which were not clarified at the inception of the job. There is also a need to come up with a programme which caters for employees with HIV/AIDS related diseases.

2.3 CONCEPT OF RETENTION

This section covers the concept of retention where overview of retention, methods of retention, challenges on retention and factors affecting retention process in the KZN DOT will be considered.

2.3.1 The Overview of Retention

According to the Wisconsin State Government's Workforce Planning (2015, p.2) "retention of employees is a systematic attempt to generate and promote an atmosphere that persuades employees to remain in the working environment by putting policies and practices which address their different needs". KZN DOT Retention Policy (2012, p.5) defined "retention as the retaining of staff who hold the vital skills, knowledge and skills which are relevant for the realisation of the department's goals and objectives through suitable attraction, employment, training and development methods". Retention of employees is also defined as the organisation's ability to sustain its valuable employees (Al-Emadi, Schwabenland and Wei, 2015). Similarly, it is defined as a controllable component, in which the right people are aligned to the right jobs in an organisation. Koch, *et al.* (2018, p. 13) are of the opinion that "employee retention lies in having the right culture and understanding of what motivates staff". Organisations need to come up with strategies that create commitment among employees who then see the need to stay with their organisation (Kalina and Rogan, 2016).

The KZN DOT Retention Policy (2012, p. 6) points out that "skills that the Department target by way of staff retention methods are those skills needed to realise and meet the needs of the Department's strategic objectives and service delivery needs". Employee retention is one of the key parameters used to measure any organisation's health (Ghosh, Satyawadi, Joshi and Shadman. 2013). As a method

adopted by companies to uphold active personnel and simultaneously meet working requirements. Retention is a practice in which the workers are stimulated to stay with the business for a long duration of time until project completion Metha, *et al.* (2014). Similarly, employers must generate and nurture an atmosphere that inspires employees to remain active by putting policies and practices in place that respond to their desires which are diverse (Mabuza and Proches, 2014).

It is evident from the definitions above, that underlying themes, such as motivation and turnover exist in employee retention. In order to establish the basis of attraction and retention of employees within organisations, it is important to establish what motivates employees to make the choices that they do.

One of the fundamental goals of an organisation is the ability to obtain, cultivate and in addition, sustain resources. Human resources are classified as one of the most significant resources that are among the best and most vital skills to an organisation. Strategic and imminent use of these resources is thus essential for organisational success (Ahmed, *et al.* 2013). Unstable economic conditions, globalisation, technological advances and the new generation Y employees (also known as millennials), force organisations to acclimatise. Successful acclimatisation is achieved through a committed and competent workforce. Organisations that practise and understand the importance of retention are brought closer to achieving competitive advantage through their most valuable resource, their human capital. (Kalina and Rogan, 2016) stated that few years ago, retention of scarce and critical technical skills employees received an overwhelming consideration to the fact that many people with such expertise left their organisations for other opportunities. It is within this context where competition became a global phenomenon which affected various companies who needed to develop and retain a loyal, committed and able workforce that retention got enormous attention Larsen (2017).

2.3.2 Challenges of Retention

It is pertinent to note that employee retention is always a challenge as employees leave their employment for various reasons. Staff turnover is unsettling, and has a negative effect on institutions in different means where productivity and service delivery then suffer. Letsbokgohla (2015) pointed out that employees with scarce skills are in high demand within the South African government and technical staff have been difficult to replace or source and retain. The Department also faces the same challenge of staff retention due to staff turnover which is also caused by many factors. Such factors include lack of capacity building opportunities for staff where there is limited access to staff growth and proper training opportunities (Lin, 2017). Another challenge involves a lack of a competitive compensation system. Employees are usually productive when they see that their compensation

is on par with their output and if it is not, some will start to look for a job elsewhere or become demotivated.

Lack of resources and tools to perform duties is another problem that leads to challenges on staff retention and staff turnover. The Department of Public Service and Administration (DPSA, 2006) emphasised that institutions need to put in place resources that meet the demands of the job so that employees are retained. Job stress is another challenge making retention difficult. If employees' stress levels are high, the chances are high that employees are then unproductive and sad (Mabuza and Proches, 2014). Poor communication has an influence on staff turnover at various institutions. If the work is not interesting or the environment is not conducive for staff to work, employees become demotivated and likely to leave. In addition, employees leave institutions if they do not gain experience, hence job descriptions need to be constantly reviewed and ensure that staff members are happy and motivated.

2.3.3 Retention of Employees with Scarce Skills

According to Nel. (2017), Drake International provided the following scarce skills guidelines for employee retention:

- Top performers must be profiled.
- Goals for a clear retention strategy must be set.
- The retention challenge should be acknowledged.
- Turnover cost and the rehiring of people need to be calculated.
- New employee's on boarding programmes must be well-planned.
- The value of human resources should be recognised, taken care of and treasured.

2.3.4 Factors Affecting an Employee's Retention

It is evident that a contributing factor to motivation and hence retention lies in finding the right balance between intrinsic and extrinsic motivational factors. Identifying and understanding these factors provides valuable insight into enhancing employee retention. Each of these factors will be examined in the subsequent sections.

2.3.4.1 Job Satisfaction

Job satisfaction is defined as the complete approach towards a person's current job which incorporates the opinions, feelings and thoughts about the job. A right attitude to the job shows fulfilment in the job (Kaplan, 2015).

A study by Meyers and Woerkom (2014) revealed a positive correlation between job satisfaction and the intention to stay in an organisation. Fisher (2016) supported the above and was of the opinion that a satisfied employee will remain longer within the organisation. Building from the motivation theories, work content is considered an intrinsic motivating factor and thus job satisfaction plays a critical role in sustaining motivational levels of employees (Hoffman and Tadelis, 2018). This is similar to a study conducted by Kalina and Rogan, (2016) that demonstrated a positive association between intrinsic motivation and job satisfaction. Contributing factors include the employee-employer relationship, job security, culture, work conditions, compensation, and training and development. Incorporating these factors into strategies will increase satisfaction, motivation, company performance and hence retention (Metha, *et al.* 2014).

2.3.4.2 Job Security

Job security is defined as the probability or the assurance that an employee has in keeping their current job (Metha, *et al.* 2014). Rathi and Lee (2015) investigated employee retention as a challenge in the leather manufacturing and resolved in their outcomes that a progressive relationship happens between retention and job security. In these dynamic economic times, job security is becoming an important factor for employees to remain within their current organisations. Nel (2017) further supports the above, the study finding that job security is a lasting objective for employees. The study further highlighted that although monetary components initially attract employees in the short-term, they require long-term approaches to fully withstand them. These long-term approaches can be realised when businesses simultaneously invest in themselves and their employees (Schein, 2010).

2.3.4.3 Organisational Culture

An organisation's culture is defined as a set of beliefs, expectations, values, norms and work routines that is shared by organisation members and influences how they relate to one another and work together to accomplish organisational goals (Schein, 2010). In essence, it is an organisation's differentiating factor. Alvesson (2014) stated that culture is the most critical component in retaining staff since it provides the necessary connection between the employee and the organisation. The depth of that

connection in turn affects motivation and performance. The study by Goksoy (2016) is consistent with this view as it cited culture as a reason for employee retention. Alvesson (2014) further demonstrated a statistically significant relationship between organisational climate, financial performance and staff satisfaction. When organisations have a culture that filters support, growth and development, it enriches employee commitment, performance and retention (Schein, 2010).

2.3.4.4 Compensation

Compensation, in financial terms, refers to the pay package, wages and salaries employees are reimbursed with for the work that they do (Grobler, 2011). Compensation forms a predominant part of literature that applies to employee retention. The study by Hoffman and Tadelis (2018) revealed a positive relation between compensation and company performance. Mabuza and Proches (2014) further indicated that compensation is a substantial factor for job satisfaction, motivation and hence retention. Compensation is still valued as an element of retention. In contrast, it is argued that although financial compensation is essential in attracting and recruiting it is not the primary motivator for employees (Meyers and van Woerkom, 2014). It is also aligned with Herzberg's theory that stated that compensation is not a sustainable motivator. For organisations to truly utilise compensation as a sustainable retention factor, they need to incorporate both financial and non-financial components of compensation (Metha *et al.* 2014).

2.3.4.5 Effective Leadership

Leadership is defined as the conduct of a person guiding the undertakings of a group towards a mutual goal (Northouse, 2018). Effective leadership is the ability to gain respect from both internal and external stakeholders whilst employees are inspired and motivated to stay within the organisation (Mencl *et al.* 2016). The study is consistent with the above as it ranked leadership skills and supervisors' management as imperative factors for motivation. Contributing to this, Metha, *et al.* (2014) illustrated a positive relationship between effective leadership and the intention to stay in an organisation. Vasquez (2014) further indicated that the management–employee relationship contributes to effective employee satisfaction and hence company performance. Northouse's (2018) research demonstrated an important association between employee empowerment and employee retention. When employees feel that their contribution is meaningful, valued and supported by their leaders, they are fulfilled and empowered which leads to motivation and hence retention (Elegbe, 2016).

2.3.4.6 Training and Development

Training is defined as the intended effort to expedite the learning of skills and knowledge that are related to the job whilst development is the acquisition of new skills that simultaneously benefit the employee and the organisation (Getha-Taylor, *et al.* 2015). Commitment and motivational levels decrease when organisations fail to provide meaningful work. An organisation that fosters training and development encapsulates the essence of recognising and valuing its employees and demonstrates management commitment (Larsen, 2017). Coetzee and Stoltz's (2015) study is consistent with this, demonstrating the critical role training and development opportunities have in retaining staff. In contrast, the study by Larsen. (2017) demonstrated no positive correlation between training and development for experts and retention. Despite the contrasting view, there is much literature that favours training and development in retention. Meyers and van Woerkom (2014) in their study found a meaningfully positive affiliation between training and employee retention. This is further reinforced by Fisher's (2016) study which illustrated a positive relationship between company performance and effective training and development. Training and development thus aid in realising competitive advantage as they simultaneously increase commitment, retention and organisational success (Larsen, 2017).

2.3.4.7 Work-Life Balance

Work-life balance is defined as the contented state of equilibrium accomplished between an employee's private lifestyle and the primary priorities of their employment position (Hoffman and Tadelis, 2018). Metha, *et al.* (2014) stated that "an employee's intention to stay in an organisation is directly linked to the ability to achieve work-life balance". Organisations that understand the priority of work-life balance and assist in achieving it, will aid in retaining employees (Vasquez, 2014). Deery and Jago (2015) further support this and are of the opinion that a flexible work schedule could assist in achieving this balance. Consistent with this view, Hlengwa's (2015) study demonstrated that the amount of flexibility is positively associated with employee retention.

The study by Rathi and Lee (2015) contradicts this view as results found no affirmative association between work-life balance and retention; the rationale could be attributed to a younger participant group. The dynamics of the new generation workforce have changed with more female candidates entering the workforce and obtaining high-level positions. One of the greatest contributors to female retention is the ability to balance family commitments. Organisations that recognise this, and change and implement strategies for it, can tremendously increase commitment and motivation and hence employee retention (Brixiová *et al.* 2015). When factors such as job satisfaction, job security, culture, compensation, training and development and work-life balance are indoctrinated into organisational

strategy, it will optimise employee retention. Ghosh *et al.* (2013) argued that the traditional factors of retention such as compensation, training and employee development are ‘futile’. The pattern in literature discussed above contradicts this statement as it demonstrates the positive correlation between these traditional factors and motivation, hence retention.

2.4 THE CONCEPT OF TURNOVER AND ATTRITION

This section covers the concept of turnover and attrition wherein definitions look at the rate at which employees exit an organisation and situations where one retires will be considered respectively.

Turnover is defined as the speed at which the workforce exits an organisation and is substituted by new personnel (Swanepoel, Erasmus, Schenk and Tshilongamulenzhe .2014). Hollenbeck, Noe and Gerhart (2018) similarly defined turnover “as the termination of association in the organisation by individuals who expected monetary benefits from the organisation”. Voluntary turnover happens when an employee elects to leave an organisation whilst involuntary turnover occurs when an employee is requested to leave. Turnover accounts for one of the greatest costs in an organisation; hence, it is the greatest motivator for retention. Some of these costs include training, recruitment and selection (Vasquez, 2014). When an effective employee leaves it is referred to as dysfunctional turnover because it negatively impacts on productivity, employee morale, quality of production and financial performance (Rathi and Lee, 2015).

The high turnover rate, especially amongst employees skilled in engineering, makes the attraction, recruitment and retention of these employees important not only to address the historical inequities in the local industry, but also to ensure much needed diversity that organisations need to tap into a larger market and gain competitive advantage (Deery and Jago, 2015).

Attrition in Human Resource terminology states to the phenomenon of the employees exiting an organisation (Hollenbeck, *et al.* 2018). Unlike turnover mentioned above, which stipulates that there needs to be replacement when an employee leaves the organisation, attrition happens when an employee retires, or vacates the position (Deery and Jago, 2015). Attrition in a company is usually measured with a metric called attrition rate, which simply measures the number of employees leaving the company, be it via voluntary resignation or being laid off by the company (Hoffman and Tadelis, 2018).

It is therefore a steady decrease of employees in an organisation through retirement, resignation or death. Ahmed, *et al.* (2013) agreed that in other words attrition involves departure of employees from an organisation voluntarily or involuntarily which impact on the organisational bottom line. When an

employee resigns or voluntarily leaves the organisation, a need to replace that person arises where costs are incurred when finding a replacement (Shadding, *et al.* 2016).

2.5 SOUTH AFRICAN LEGISLATIVE FRAMEWORK FOR THE STUDY

Building on the concept of retention presented in section 2.4., the researcher draws on the legislation that addresses skills development from the concept of recruitment and retention process. The South African Department of Labour offers all the significant policies addressing the notion of skills development. The aim is to build the capacity of South African workforce. The legislation within the limit of this study addressing skills development is the Skills Development Act 97 of 1998 as amended and the Skills Development Levies Amendment Act 24 of 2010.

The purpose of the Skills Development Act 97 of 1999 is “to provide an institutional framework to devise and implement national, sector and workplace strategies to develop and improve the skills of the South African workforce; to integrate those strategies within the National Qualifications Framework (NQF) contemplated in the South African Qualifications Authority Act 58 of 1995; to provide for learnerships that lead to recognition of occupational qualifications; to provide for the financing of skills development by means of a levy-financing scheme and a National Skills Fund; to provide for and regulate employment services; and to provide for matters connected therewith” (Skills Development Act 97 of 1998 as amended).

Other legislations include the Basic Conditions of Employment Act 75 of 1997 as amended, which seeks to establish and make provision for the regulation of basic conditions of employment; and thereby to comply with the obligations of the Republic as a member state of the International Labour Organisation, and provide for matters connected therewith. Skills Development Act 97 of 1998 as amended also seeks to provide an institutional framework to devise and implement national, sector and workplace strategies to develop and improve the skills of the South African workforce. This policy also seeks to integrate those strategies within the NQF contemplated in the South African Qualifications Authority Act 58 of 1995 (SAQA); to provide for learnerships that lead to recognised occupational qualifications and provide for the financing of skills development by means of a levy-grant scheme and a National Skills Fund. Skills Development Act also seeks to provide for and regulate employment services and to provide for matters connected therewith.

Similarly, the Skills Development Levies Amendment Act 24 of 2010 serves to fund the skills development initiative in the country. The intention is to inspire a strategic and organised method to learning, and to intensify employment prospects for job seekers. The Act mandates employers to register and contribute 1% of the employer’s wage bill for skills development initiatives in anticipation of a

better skilled and more productive workforce (Skills Development Levies Amendment Act 24 of 2010). In addition to the skills Acts, is also the legislation addressing the recruitment and retention processes in South Africa. Within the limits of this study, this legislation includes the Public Service Act 1994 (Proclamation 103 of 1994), as amended, the Labour Relations Act 66 of 1995, as amended, the Employment Equity Act 55 of 1998, as amended, the Basic Conditions of Employment Act 75 of 1997, as amended, the Occupation Specific Dispensation, the White Paper on Human Resource Management and the Public Service Recruitment Toolkit.

Given that the study is focused on a South African public sector organisation, another piece of legislation peculiar to the public service is the Occupation-Specific Dispensation (OSD). The objective of the OSD is to advance government's capability to attract and retain “skilled” employees, through improved remuneration. It is presumed that the implementation of the OSD will put in place a proper career-pathing model for all occupational groups addressing salary, performance, qualification, scope of work and experience (Occupation Specific Dispensation for Engineers and Related Professionals, 2009).

Formal and informal recruitment methods are used by the South African Public Service to fill vacant posts where vacancies are advertised internally and externally in the media in order to attract a pool of candidates and for transparency purposes. Section 65 (40) of the Public Service Regulations, 2016 clearly stated that, the Executive Authority shall ensure that posts which are vacant in the public service are advertised, locally, nationwide and when advertising outside the Department the DPSA’s vacancy circular shall be used. This creates an opportunity for existing employees to apply for the advertised jobs. Informal recruitment methods however can be used to fill posts for instance when there is a difficulty in attracting scarce skilled employees through advertising. Section 67 (5) (b) of the Public Service Regulations, 2016 allows the public service to fill vacant posts with employees who have been declared excess employees as long as the salary level is linked to the particular grade of the post. This normally follows a restructuring process within a Department. The KZN DOT, however, has specific methods of recruitment which do not discriminate against applicants. Such methods include a skills search or head hunting until the most suitable candidate is found, development and use of a skills database to facilitate the identification of potential candidates, employee referrals and the use of a disability database where non-discrimination is practised (KZN DOT Recruitment and Selection Policy 2011, p.12).

It is pertinent to note that SA’s legislation on recruitment and retention processes is influenced by various pieces of legislation such as the amended 1996 Constitution which clearly shows that any law or conduct against the Constitution is regarded as invalid. Another piece of legislation on the

recruitment and retention process is the OSD. Its focus is to provide norms and standards to the public service with the purpose of improving government's capability to attract and retain skilled employees.

The Labour Relations Act 66 of 1995 sets out the laws that govern labour relations in SA. It is guided by Section 27 of the Constitution, which entrenches the workers' rights and companies to form organisations to bargain collectively. There is also the Employment Equity Act 55 of 1998 as amended which emphasise elimination of discrimination, favouritism and creating equal opportunities for everyone.

2.6 DIFFERENT ASPECTS OF SKILLS SHORTAGES FROM A GLOBAL AND SOUTH AFRICAN PERSPECTIVES

The concept of skill means an aptitude and capacity learnt through thoughtful, organised, and constant effort to smoothly and adaptively carryout multifaceted activities or job functions containing ideas, things (technical skills), and/or people (interpersonal skills) (Kruger, 2016). A skill is the ability of an individual to carry out a task with determined results often within a given amount of time, energy, or both. As such skills can be divided into two domains namely: general and specific skills. The general skills include, but are not limited to, time management, teamwork and leadership and self-motivation whereas specific skills are meant for certain jobs (Letshokgohla, 2015).

The OECD Economic Surveys South Africa (2017, p.31) noted that "digitalisation, globalisation, demographic shifts and other changes in work organisation are constantly reshaping skill needs". This can to some extent result to skills shortages which are persistent and mismatches which are costly for individuals, organisations and society in terms of lost earnings and lower production and growth. In addition, rapid technological developments in the workplace are pushing for the need to match the workers existing skill sets with the job requirements (The Hays Global Skills Index 2017). The measure of the skills to that of job requirements varies across nations and regions.

With the advent of the Fourth Industrial Revolution, or fast-paced digital progress, technology is transforming the manner people work and employees' skills need to keep pace with these developments. As technology gets smarter and more capable of performing functions previously performed by humans, workers need to advance skills that give them the advantage over machines, such as critical thinking and creativity. A Forum report, The Future of Jobs, reveals that by 2020 more than one-third of skills that are considered critical in today's workforce will have changed. The issue of skills shortages in South Africa prominently features as a national development discourse where over the past two decades, the country has faced skills shortages. The Department of Higher Education and Training (DHET) and the Sector Education and Training Authorities (SETA) have for the past five years created numerous

documents which classify scarce skills or occupations in high demand (Balwanz and Ngcwangu 2016). This led to the development of legislation by government such as the Skills Development Act, 1998, National Skills Development Strategy and other initiatives. In November 2014, DHET gazetted a high demand occupations list which specified that “identifying current and future skills demand as accurately as possible is extremely important, if the goals of the NDP are to be met” (DHET, 2014).

According to Bernochi (2018, p.19), “skills shortages are a stumbling block that hinders South Africa from meeting the targeted growth rate of 6% per annum”. The scarcity of skilful professionals, artisans, and engineers has its roots in the apartheid years and efforts are being made to remedy the situation. The South African government is afflicted by a scarcity of skills that impacts negatively on the productivity of the economy as well as on meeting developmental needs. The prevalence of scarce skills can be found at all spheres of government in that positions remain vacant for prolonged periods of time, chiefly because there is a deficit of qualified and experienced talent, either because such individuals are unavailable or do not meet the stipulated employment criteria (Bernochi, 2018).

Brixiová, Ncube, and Bicaba (2015) have identified some trends that can be used as a reference point with regards to skills shortages. The authors identified apartheid education as a contributory factor to skills shortages that SA is experiencing now. Furthermore, the authors also indicated that the current education that SA is providing is not good enough to address the extent of damage caused by the apartheid system of education. The type of education provided to the youth in most instances does not equip them to access fields such as engineering, metallurgy, and other related fields. Lin (2017) argue that another problem facing SA is that the youth are reluctant to choose subjects such as mathematics and physical science which in most cases are pre-requisites in scarce and technical professions.

Coetzee, Mitonga-Monga and Swart (2014) argue that another problem that indirectly impact on skills shortages is the inability of tertiary institutions to meet targets for programmes aimed at different races as a means to close the skills gaps among the races in SA. This includes failure to meet targets aimed to replace the old apprenticeships with the new learnership and internship programs. The introduction of Technical and Vocational Education and Training (TVET) institutions have, however, been able to provide invaluable interventions in addressing skills shortages. Another factor that exacerbates the skills shortage problem is that most black graduates have qualifications obtained from universities which were previously black and therefore are perceived to be inferior Hlengwa (2015) state that most of the qualifications obtained from such universities are in the field of humanities.

Mncayi (2016, p. 68-69) stated that “what is more distressing in the South African labour market is that these skills shortages exist against a backdrop of graduates who are unemployed. There is a pool of graduates which organisations cannot utilise because they do not have the necessary skills and

knowledge. Many positions remain vacant because there is a shortage of people with critical skills. Employers are not able to capitalise on these unemployed graduates because they do not have time to train new entrants”. Another condition for learners to graduate from universities of technologies is that they must undertake experiential learning (Hlengwa, 2015). Placing such learners in the workplace is still a challenge, making it hard for learners to graduate. Some of the youth without jobs have graduated, but companies ignore them as the youth readiness for employment is questioned. There is no collaboration between tertiary institutions and the workplace. Some organisations even question the quality of programmes obtained from some institutions when some graduates have been employed.

The following discussion addresses recruitment and retention through themes such as human resources, attrition, turnover and retention. It unbundles retention strategies globally and in turn focuses on the best practices. Furthermore, it looks at recruitment and retention with specific emphasis on engineers and technicians by highlighting concepts such as turnover rate concerning engineering skills in South Africa.

A workforce that is skilled and capable is crucial in the development of every organisation as well as the nation. The importance of a skilled workforce, more especially for the public sector, is based on the need to deliver services to the citizens. South Africa, just like other nations on the continent, has been facing a challenge of a skills scarcity. The Local Government Sector Education and Training Authority (2016, p.8-18), defined skills as “the necessary competencies that can be expertly applied in a particular context for a defined necessary purpose which can either be linked to an occupation (skills shortage) or a gap in the skills profile within an occupation that is a “top-up” skills requirement. Similarly, critical skills refer to specific key or generic and “top up” skills within an occupation”.

In view of this, Gerstein and Friedman, (2016), opined that critical skills address specific capabilities needed within occupations such as general management skills, communication and customer care handling skills, teamwork skills, cognitive skills, communication in language and literacy skills and technology skills. Thus, the concept of scarce skills refers to “those occupations in which there is a scarcity of qualified and experienced people, currently or anticipated in the future” Local Government Sector Education Training Authority (LGSETA, 2016, p.7). For Balwanz and Ngcwangu (2016), scarce skills within the South African perspective mean that there are too few available people with a qualification to do the job within certain occupations. Given these definitions, the condition is grouped under relative and absolute scarcity.

In relative scarcity, the suitably skilled human resources are not available due to an emerging occupation with little or the unavailability of skills requirements (LGSETA, 2016). In the same vein, relative

scarcity shows that available human resources do not meet the job criteria because of geography, equity and the unavailability of competent people needed at the shortest time (LGSETA, 2016). From the geographical perspective, people with the required skills may not be willing to relocate, and from the equity perspective, candidates with the requisite skill may not belong to the specific affirmative action group required. Sometimes, the people with the requisite skills may be completing a qualification and are therefore not available within a short period of time the skill is needed. This may also reflect in the organisations' willingness to recruit but the applicant's unavailability due to awaiting qualifications such as professional qualifications under which the applicant may not perform any duty.

South Africa's greatest fight has been the development and production of professionals that have technical skills which are defined as the required capabilities to complete specific roles. These skills require a hands-on knowledge often mechanical, information technology, mathematical, or scientific tasks (Balwanz and Ngcwangu 2016). Some examples include information of software design languages, mechanical equipment, or tools. While technical skills are often most important for jobs related to Information Technology (IT) and other fields in the sciences, many other industries also require employees with at least some technical skills. The Department is in possession of records of applicants who have taken longer than 10 months to receive their registration from ECSA and there is no transparency from the statutory body. There is also an over reliance on external consultants which denies employees the opportunity to utilise their skills which they offer willingly (KwaZulu Natal Young Professionals under the Council for the Built Environment Challenges: KZN DOT and Public Works Report).

DHET published a list of occupations in high demand in South Africa. On the list appeared amongst others Civil Engineer, Mechanical Engineer, Quantity Surveyor, Mechanical Engineering Technician, Civil Engineering Technician (DHET, 2018). The Department of Home Affairs provided a list of critical skills relating to an application for critical skills Visa or permit for permanent residence the following from the built environment were identified, Quantity Surveyor, Civil Engineer, Mechanical Engineer, Surveying Technician, Civil Engineering Technician, Mechanical Engineering Technician (Department of Home Affairs, 2014).

Technical skills remain an institutional challenge for infrastructure organisations. A study conducted by Letshokgohla (2015) discovered that engineers are in high demand which contribute to their scarcity from a South African perspective.

2.7 MANAGING SKILLS SHORTAGES IN THE CHANGING BUSINESS ENVIRONMENT

There are various strategies used for managing skills shortages in various organisations. The concept of talent management can be regarded as one of the strategies for managing skills shortages. This strategy refers to the expectation of essential human capital for an organisation and the preparation to meet those needs (Kougija, 2014). The talent management strategy increased in popularity after McKinsey's 1997 research and his 2001 publication on *The War for Talent*. Talent management is regarded as the science of using strategic human resource planning to improve business value and to make it possible for companies and organisations to reach their goals.

Elements of strategic workforce planning and talent management include recruiting, retaining, developing and rewarding of employees which then include them to perform at acceptable levels. A talent-management strategy should link to a business strategy to function more appropriately. It is pertinent to note that other strategies that retain technical staff include looking for talent in-house and adjusting hiring criteria through use of interim professionals. In addition, there could be a need to hire interim or contract staff to cover skills shortages caused by a lack of available permanent candidates. Transfer of employees either (inter)nationally or from another part of the company also helps in managing skills shortages (Northouse 2018). Northouse (2018, p.54) also summarises this by arguing that “institutions need to reinvent, realign, re-evaluate, recruit and collaborate as ways of addressing skills shortages”.

2.8 FRAMEWORK UNDERPINNING THE STUDY

The frameworks adopted for this study are Maslow's hierarchy of needs and Herzberg's two factor theory of motivation. These theories are supported by the South African legal frameworks for recruitment and retention of employees.

The framework guiding employee recruitment and selection is generally built around the concept of motivation. Motivation is defined as “the measurement of the extent to which people commit themselves to achieving goals” (Shadding *et al.* 2016). Motivation is also defined as “intrinsic and extrinsic elements that inspire people to be continuously interested and devoted to a job or subject in an effort to accomplish a goal (Rees and Smith, 2014, p.237). For some other scholars, motivation refers to a force that invigorates and provides direction to performance as well as what underlies the tendency to persist, even in the face of one or more obstacles (Shadding *et al.* 2016). Given the background on motivation, the study is underpinned by the above mentioned two theories of motivation. The study is

also supported by legislative frameworks supporting recruitment and legislation in the South African Public Service.

2.8.1 Theoretical Framework for the study

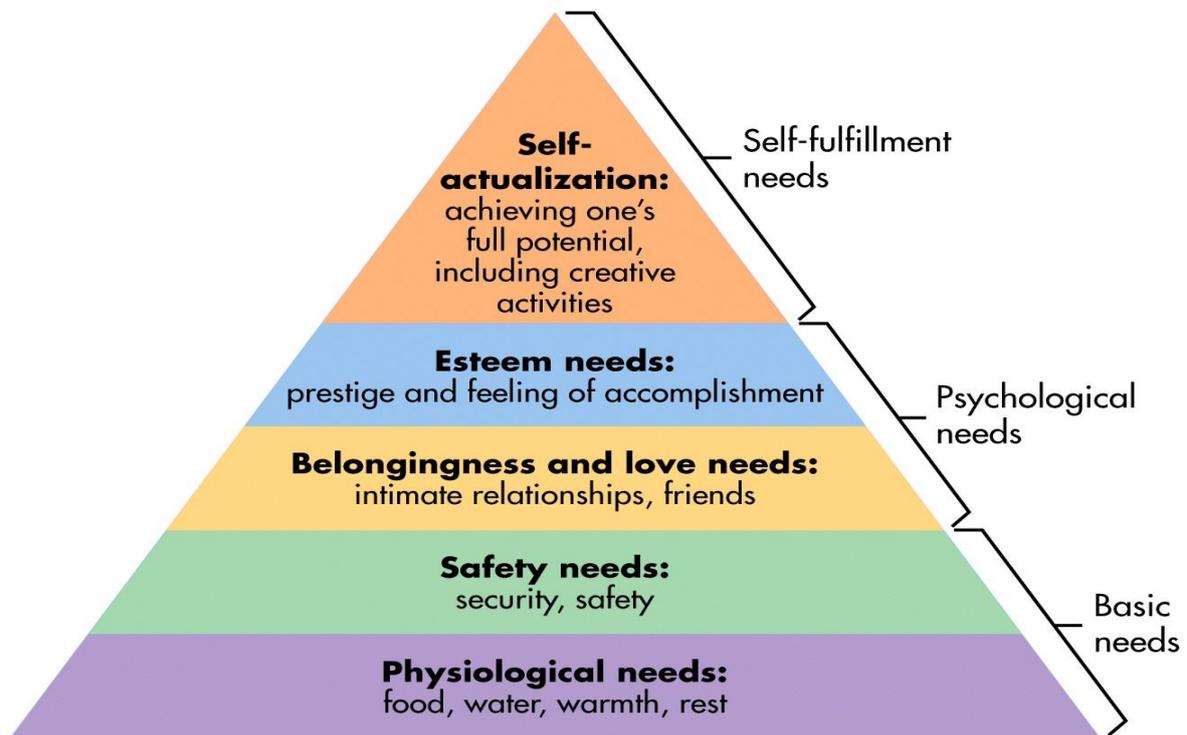
A theoretical framework entails concepts and definitions relevant to scholarly literature and prevailing theory that is used for a definite study. It must show an understanding of theories and concepts that are appropriate to the topic of a research paper and that relate to the bigger parts of information being deliberated (Kumar, 2005). The theoretical framework reinforces the study in such a way that it permits the reader to evaluate issues involved in the study. It also connects the researcher to the current knowledge helping the researcher to ask questions such as why and how. Having a theory helps one to identify the parameters to those generalisations (Ravitch, Sharon and Riggan, 2017). A theoretical framework stipulates which key variables influence a phenomenon of interest and emphasises the need to examine how those key variables might differ and under what circumstances. According to Meyer (2017), the theoretical framework is very important because it provides the reader with the key variables that will be important in understanding the phenomenon being investigated. Furthermore, Meyer (2017) indicated that may provide an insight into the nature and meaning of the phenomenon under investigation. To fully understand the concept of motivation, a look into the early motivation theories is essential. The underlying rationale for these theories is that motivation originates with an unfilled need (Adzei and Atinga, 2012). The two theories of relevance are Maslow's hierarchy of needs and Herzberg's Two Factor Theory of Motivation. The discussion on motivational theories developed below clarifies behaviours on an organisational and employee level.

2.8.2 Maslow's Hierarchy of Needs

There has been broad research conducted in the part of work motivation and job satisfaction trying to explain individual's interests and values. One of those theories explored in this dissertation is Maslow's hierarchy of needs. Maslow's hierarchy of needs was developed in the early 1950s by Abraham Maslow who proposed that contained in every being is a 'hierarchy of needs' and within this hierarchy the succeeding need will only prevail once the preceding one has been satisfied (Pichère and Cadiat, 2015). The researcher chose this theory for the study because it relates to talent retention. The theory highlights the importance of ensuring sound recruitment and talent retention policies within an organisation. The theory provides insight which is very useful for organisations and management. Policies and practices can also be formulated with the aim of satisfying employee needs.

Abraham Maslow suggested a theory which defined five basic needs in the form of a hierarchy. Fisher (2016) argued that motivation theories can either be process or content theories. In Maslow's Hierarchy of Needs there is an assumption that there are five different needs for humans as indicated in Figure 2.2

Figure: 2.2 Maslow's Hierarchy of Needs



Source: Maslow *et al.* (1998)

Maslow *et al.* (1998) in Figure 2.1 specified that individuals are motivated to attain certain needs and those needs take preference over others. Following from basic needs are, physiological, safety, social, esteem and self-actualisation. According to Kumar, (2005) physiological needs are biological and signify basic needs like water and food and they are very strong. This is considered the greatest basic need for physical survival of human beings and it motivates behaviour. According to Maslow companies should offer employees' salaries that enable them to afford sufficient living conditions. Once this level has been fulfilled the following level up is what inspires humans, and the list goes on. In human survival these needs always come first if deprived of in the quest for satisfaction. The safety need addresses issues of security, protection, order, stability, and anxiety. Furthermore, the social need considers the need for love, affection, belongingness through participation in personal relationships as well as through religious, social and public groups.

The esteem need becomes powerful when the first three classes of needs are fulfilled. The esteem needs include self-esteem and the esteem the individual gets from others, for example an individual's self-respect and the need to be respected by others. Satisfaction of this level of need provides an individual with feelings of confidence and some aspects of value. Otherwise, the individual feels frustrated, weak, abandoned and useless. The last need on the hierarchy is the need for self-actualisation. Within self-actualisation, self-fulfilment is addressed. At the achievement of the first four needs in the hierarchy, the self-actualisation need is satisfied. This is considered the highest need which provides the employees with what they want and need in order to be motivated. The rationale is that self-actualised human capital signifies assets which are valuable to the human resources of the organisation. Many researchers and practitioners consider motivation the most significant factor which influences the success of both the individual and organisation (Mabuza and Proches, 2014).

Alvesson, (2014, p. 23) stated that "employee job satisfaction is mostly increased by motivational factors which play a crucial role and this results in improved organisational performance". Motivation works if the right individual with appropriate skills is responsible for the job or else it will be a waste of resources and time and will result to job dissatisfaction (Rathi and Lee, 2015). Self-actualised employees are able to work at their full potential and be loyal to the organisation instead of seeking greener pastures elsewhere in order to fulfil their needs. In essence, Maslow's theory aligns motivation to the ability to fully understand and satisfy individual needs in relation to the level of hierarchy that individuals fall within (Wärnich, 2015). Despite the controversy regarding the validation of this theory, Self-Actualisation Esteem, Social, Safety and Physiological needs form an important aspect for research illustrating the link between motivation and need (Hollenbeck, Noe and Gerhart 2018).

2.8.3 Fredrick Herzberg's Two - Factor Theory

Building on Maslow's theory but focusing explicitly on motivation in relation to workplace and job design, is Herzberg's two factor theory of motivation. In literature, the theory can also be referred to as Motivation-Hygiene Theory or the Dual-Factor theory. The theory was penned by Frederick Herzberg in 1959 in the quest to understand the relationship between people motivation and job satisfaction. Herzberg developed the theory that people's job satisfaction depends on two kinds of factors, that is, factors for satisfaction (also referred to as motivators/satisfiers) and factors for dissatisfaction (also referred to as hygiene factors/dissatisfiers). The concepts of satisfaction and dissatisfaction are mimicked in extrinsic and intrinsic motivation respectively (Umeozor, 2018).

Intrinsic motivation is the ability to motivate oneself through inner satisfaction and the actual work context; extrinsic motivation in contrast requires external sources to motivate. This is inclusive of rewards either verbal or tangible (Bassett Jones and Lloyd, 2015). The dynamics of Herzberg's theory are illustrated by Abdulrahman and Hui, (2018) who summarised factors affecting job attitudes where the author looked at issues leading to dissatisfaction and satisfaction. "On issues leading to dissatisfaction the author argued that company policy, supervision, relationships with senior or executive directors, working conditions, poor remuneration and relationships between work peers are the issues or factors which affect job attitude in a negative way. Factors leading to satisfaction include achievement, recognition, good working environment, responsibility given to staff, advancement and growth offered to staff".

Alshmemri, Shahwan-Akl and Maude, (2017, p. 13-14) also pointed out that "factors leading to satisfaction are related to the job context, environment of the job and are extrinsic by nature. There is another factor, which if present stimulates the individual to perform better. There are also motivational and hygiene needs that Herzberg proposes following a theoretical relationship between the two. Employees will be satisfied when the needs which motivate them are met and when the needs cannot be met, employees will be dissatisfied. It is therefore critical that these theories are utilised to complement theoretical frameworks which will be useful in getting a better understanding of the study.

- Hygiene factors include good working conditions, better supervision, salary, work based relationships amongst peers and other employees, job security, consistent management policies. These factors replicate the 'context of the job'.
- Motivator factors include aspects relating to the job itself, such as responsibility, recognition, growth, promotion and career advancement. In essence, these factors replicate the 'content of the job'.
- The concepts of dissatisfaction and satisfaction are not simply counterparts. Herzberg postulated that whilst certain factors result in dissatisfaction, the opposite of these factors do not necessarily result in satisfaction or motivation.
- Hygiene factors unlike motivator factors will not motivate or sustain long-term motivation but are essential to prevent dissatisfaction and they prevent the employee from focusing on higher level needs.

Despite the controversy associated with the two-factor theory of motivation, the theory does provide some essential aspects to the study focus area. Research adds diverse viewpoints which can be incorporated to advance motivation and hence retention. One of the key findings is that salary alone will not sustain an employee's motivation, and thus organisations willing to retain their employees must incorporate factors that sustain motivation and hence retention".

2.9 CONCLUSION

The global and local economic landscapes make it a necessity for organisations to constantly become accustomed to new conditions in the environments in which they operate. This chapter has discussed the concept of scarce and critical skills as well as defining skills shortages in South Africa and strategies for recruitment retention and selection. Issues were looked at from global perspective to provincial and regional perspective. The following chapter 3 discusses the qualitative methodology used to gather data using various research instruments such as interviews and Focus Group Discussion.

While the chapter is well written, it is lengthy and often contains too much information that provides a summary of concepts. There is little evidence of critique in the chapter. Furthermore, references provided are often dated and few are from the last three to five years.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Chapter three provides a brief description of the different types of research designs. Furthermore, it provides different types of methodologies and point out which one was used in this study. The chapter goes on to describe what sampling is, and then provides different types of sampling procedures. To that extent it was important for the researcher to indicate the population of the study as well as the sample of the study. The chapter also addresses issues of reliability and validity as well as indicate how the research instrument was constructed and piloted. In conclusion the chapter provides ethical considerations that were observed.

3.2 RESEARCH DESIGN AND METHODOLOGY

Research design is the plan that is followed when conducting a research project. Research design and the methodology are considered to be the backbone of any research. There are different types of research designs. Authors such as Saunders, Lewis, and Thornhill (2012), Singh (2007), and Brown (2006) indicate that research designs generally fall under four categories namely, exploratory, descriptive, causal, and experimental designs. In other words, as argued by Tripathi and Shukla (2005, p.98) research design “is the overall plan programme of research”. In this study the researcher used exploratory design and this design is briefly discussed in the next section.

3.2.1 Exploratory Research Design

As argued by Saunders *et al* (2012) exploratory design is useful when there is not much and definite information about the phenomena being study. Similarly, this study specifically focused on scarce and critical skills within the KZN DOT has never been conducted.

3.2.2 The Research Methodology for the Study

In research there are generally three types of research approaches or methodologies, namely quantitative, qualitative and mixed research methodologies. Quantitative methodology is one wherein the responses are quantified and then a determination is made as to whether or not the majority support the view or question being posed. Generally quantitative methodology involves a relatively large

number of participants than qualitative methodology. Qualitative research is broadly discussed in this section since it is the one that is pertinent to this study. Mixed research methodology simply combines qualitative and quantitative approaches.

According to Taquette and Minayo (2015, p. 358), qualitative research is “assumed as research that is concerned with the subjective and relational level of communal reality and that deals with history, the universe of meanings, motives, beliefs, values and the attitudes of social actors”. It must be added that the subjectivity that the authors are referring to is that of the participants not the researcher’s subjective reality. According to Creswell (2014); Sekaran and Bougie (2016), and other authors qualitative research methodology is often used where the sample of the study is small.

Qualitative methodology is considered to be objective and not interested in numbers as it involves data collection, analysis and writing (Silverman 2013). In qualitative methodology the participant’s subjective views play a major role in answering that which is being studied. As implied above when a description of quantitative research, qualitative research involves a smaller number of participants. In addition to that, unlike quantitative methodology it saves time and uses written materials which is not often subject to misrepresentation, observations and interviews as primary sources. More so, “it sees through the eyes of the people being studied through face to face interaction and taking responsibility or role of another person in order to acquire knowledge” (Bryman 2016, p.366). Qualitative methodology helps to see through the eyes of the people being studied giving room to probe beneath surface appearances.

Qualitative methodology is flexible and contains a limited imposition of predetermined formats on the social world. It is pertinent to note that, the researcher sees things in the eyes of the people being studied thereby creating a limitation in the degree to which one can genuinely adopt the worldview of the people being studied. In addition, qualitative methodology prefers less structured approach to interviewing. Prospects of flexibility is however not doubted where changing in direction in the course of an investigation can be done much easily.

Qualitative methodology may also be difficult to replicate since the imagination of the researcher tends to be paramount. The methodology relies too much on the researcher’s views about what is significant and also relies on the researcher’s relationship with the participants (Bryman, 2016). It is also difficult to replicate considering that it is unstructured in nature and there are no set standards that could be followed for replicating qualitative studies. The researcher controls or decides on what strikes him or her as significant while other researchers are likely to empathise with other issues. It is difficult to replicate findings within qualitative methodology since interpretation is influenced by the subjective learning of the researcher. There is also a problem of generalisation and lack of transparency.

In qualitative methodology representatives of most cases if not all cases are drawn from small data sets and people who usually are interviewed are not representatives of the entire population. In relation to data analysis, qualitative methodology is not clear on how data analysis is conducted and what the researcher did or does with the data and how did the researcher reach to a conclusion on data analysis. The mere fact that this was an exploratory study was enough to provide an insight on the recruitment and retention practices for scarce and critical skills in the KwaZulu-Natal department of Transport with a hope that further studies will be based on quantitative data that will allow representivity and easy generalisation. While in qualitative studies it is not clear on how data analysis is conducted, there are methods that are often used which include identification of themes as was done in this study.

3.3 POPULATION OF THE STUDY

According to Sekaran and Bougie (2013, p. 240), a population of a study can be defined as “the entire group of people, events or things of interest that the researcher wishes to investigate”. This means that the population of the study is the sum total of all the elements that the study is all about. It includes those who actually participated in the study and those who did not but are affected because the results obtained are to be generalized to them as well.

The total number of employees in the KZN DOT is 3484 (Persal Technical Report 2019, p. 4). The researcher as a senior employee of the KwaZulu-Natal Department of Transport and having been granted permit to access the list of all the employees of the Department, was able to identify 150 employees that are deemed as falling under scarce and critical skills. It was these 150 employees who formed the population of this study.

In some cases, a researcher is not able to make use of all members of the population, even if it was possible it may prove costly to do so. In that case it is advisable for a researcher to use a sample. According to Sekaran and Bougie (2013, p. 241) a sample can be defined as “a subset of the population”. When selecting a sample, the researcher has to conduct a selection process in a systematic manner using some techniques, and these techniques are discussed below.

3.3.1 Sampling Techniques

Authors of research methodology books such as Sekaran and Bougie (2016), Creswell (2014) all agree that there are generally two types of sampling techniques namely probability and non-probability sampling and these are briefly discussed below.

3.3.1.1 Probability sampling

Probability sampling is associated with randomness in selecting participants. In probability sampling every member of the population has a known or estimated chance of being selected to be part of the study. In assigning probabilities to the units of the population ideally objectivity should be used. Furthermore, in probability sampling it is important that the precise population size is known. In other words, probability sampling is not appropriate in cases where the population is too general.

The main advantage of probability sampling is that it removes the researcher's possible influence which is often the case with systematic sampling in which the researcher uses his or her subjective view as to which unit of analysis must be part of the study. In other words, probability sampling reduces the chances of bias on the part of the researcher. In probability sampling the researcher is able to generalize the findings confidently than is the case with non-probability sampling. The disadvantage of probability sampling that is advanced by research authors is that it may prove to be time consuming and costly. There are three main types of sampling techniques that are used in probability sampling namely systematic sampling, simple random sampling, stratified random sampling and cluster sampling.

3.3.1.2 Non-Probability sampling

Non-Probability sampling is often referred to as judgement sampling since it is non-random. Non-randomness implies that there is no guarantee that each member of the population will be considered for inclusion in the sample of the study. The researcher uses subjective criteria to select the sample. This, as explained above, may introduce bias which may interfere with the selection of the sample. Unlike probability sampling procedures non-probability sampling needs relatively less time to process and therefore not costly since time is money. The main disadvantage with non-probability sampling is that the selection of the sample depends largely on the researcher's ability and skill in selecting research samples.

In terms of non-probability sampling procedures self-sampling, convenient sample, quota sampling snowball sampling and purposive sampling are usually used. This research used non-probability

purposive sampling which focuses on the researcher having a specific purpose in mind and then used that purpose as a criterion of selecting the sample.

3.3.2 Purposive Sampling

This study employed purposive sampling. According to Bryman (2008, p.45), purposive sampling is defined as “when researcher is studying a specific characteristic, feature or function”. Purposive sampling was used simple because it increases representivity, saves time, and saves money and effort. Furthermore, it enables the researcher to reach the targeted participant quicker. In addition to that, participants with specific characteristics are easily identified when using purposive sampling, however it may have a disadvantage in a form of bias on the part of the researcher. The researcher was cognisant of this weakness throughout the research. As an attempt to avoid bias, the researcher allowed all those who were willing to take part in the study to do so irrespective of their colour, race, colour, creed, or position at the KZN DOT as long as they were part of the targeted category.

3.3.2.1 Sample of the Study

As indicated above purposive sampling was used in this study. The purposive sample that was used in this study involved 10 senior managers and 30 technical skilled employees who included engineers, production engineering technicians and surveyors. Senior managers were identified because of their knowledge and experience with recruitment and retention phenomenon and furthermore they were willing to participate and communicate their experiences and opinions. The researcher preferred the above methods so as to focus on the population’s particular characteristics which were of interest and also inclusiveness of diversity in terms of background, cultural differences and different age groups respectively. The 10 managers participated in the structured interviews while the 30 employees participated in the FGD’s.

Table 3.1: Senior Managers Interviews Sample

Participant	Salary Level	Job Description
Director: New Construction	13	Provision of strategic inputs in new construction projects taking into account political, social, and engineering demands.
Director: Technology Transfer Centre	13	Provision of strategic focus within the technology Centre with particular focus on research and training on infrastructure management systems.
Chief Director: Regional Services (X2)	14	Provision of strategic focus in KZN DOT's road infrastructure projects.
Director: Organisational Development Services	13	Provision of Organisational Development Services.
Director: Policy and Planning	13	Formulation and reviewal of Departmental policies and oversee the planning activities in line with applicable legislation.

Table 3.2: Focus Group Discussion Sample

Occupation Specific Dispensation (OSD) – Engineers and Related Professionals: (2009)

Participant	Grade	Job Description
Candidate Engineering Technician	Entry Level	Provision of technical services and support in engineering research, design, manufacturing, operations and maintenance under supervision
Control Engineering Technician	Grade A	Performance and management of technical services and support in engineering research, design, manufacturing, operations and maintenance.
Chief Engineer	Grade A	To perform and manage all aspects of varied innovative and complex engineering activities that result in progress technology and engineering applications.
Cost Centre Manager	Level 12	To render and manage technical services in the implementation of projects, support engineering research, design, manufacturing, operations and maintenance of the provincial road network.
Candidate Engineer	Entry Level	Performance of different aspects of engineering activities to improve technology and engineering applications under supervision as prescribed by ECSA
Control GISc Technician	Grade A	Management and supervision of operational GISc activities and performance of advanced technical GISc activities.
Survey Technician	Grade A	Performance of surveys and processing of all survey related data in relation to set standards and provision of processed survey/cartography data, plans and provision of technical support
Control Surveyor	Grade A	Performance and management of all aspects of varied innovative and complex survey/cartography activities to improve survey/cartography applications.
GISc Technician	Grade A	To perform all relevant technical GISc activities that results in the capturing, collection and maintenance of geographic data in the public service

3.4 DATA COLLECTION METHODS

There are a number of data collection methods such as Focus Groups, Interviews, and Surveys to name but a few. A method that the researcher chooses must take into account the objectives that need to be achieved. Furthermore, it is wise for the researcher to use a cost-effective method that is able to locate and access the participants easily. In this study the data collection methods that were used were the interviews and focus groups, and these are briefly discussed below.

3.4.1 Data Collection Technique Employed

There are different ways in which interviews can be conducted such as teleconferencing, personal interviews and telephonic. Some interviews are in depth and some may be an overview of the subject matter. In this study in depth interviews were used for the reasons briefly discussed below.

Focus Groups are characterised by facilitation by the researcher and normally comprise of relatively small number of participants. They too will be briefly discussed below.

3.4.1.1 Types of Interviews Considered for this Study

All the types of interviews mentioned above were considered and the researcher felt that personal interviews were the most appropriate. Personal interviews involve face to face encounter between the interviewer and the interviewee. Furthermore, personal interviews may take different forms such as in-depth interviews and key informant interviews. In depth interviews are those that are conducted with interviewees who may not necessarily have a broad understanding of the subject being investigated. In the case of the key informant interviews, interviewees are deemed to have a deep understanding of the subject being investigated. In this study the researcher used key informant interviews because it was important to obtain information from participants who have the broad understanding of scarce and critical technical skills.

3.4.1.2 Focus Group Discussions (FGDs)

Bryman (2008) described FGD as an interview that comprises of few people of between 1- 10 people. In addition, it focuses on specific theme or topic that is explored in depth. Three Focus Group Discussions each comprising of 8-12 participants were carried out. These were a group of senior managers and technical skilled employees responding to effective methods and strategies used by the KZN DOT to recruit and retain technical skilled employees, shortcomings related to OSD. As opposed to Bryman (2016) who argued that FGD involves four people or more, Bickman and Rog (2016) argued

that FGD may comprise of more than eight but less than twelve people. All these scholars Bryman 2016 and Bickman and Rog (2016) agree that FGD last from one and half hours to two and half hours. The purpose of FGDs is to stimulate an in-depth exploration of the topic which is little known.

FGDs formed the bigger part of the research in terms of number of people interviewed where at least thirty people were engaged. This was prioritised because of the advantages of FGDs.

The general advantage of FGDs is that, participants' responses are questioned and analysed and challenged by the group. This helped the researcher to end up having the most accurate information of what people think and put in a position to revise their views. In addition, meaning was collectively constructed. All in all, participants for FGDs were 30 and 10 for interviews. Information gathered through interviews were verified and compared with FGDs and written material. Information during interviews and FGDs was gathered through audio recording to avoid missing what participants had replied to the question. Audio recording helped to write down participants' answers without error or distorting meaning.

One of the reasons why a focus group was chosen for this study was an appreciation that this study was still an exploratory study. The researcher hoped to obtain a range of opinion about scarce skills within the KwaZulu-Natal Department of Transport. As suggested by Sekaran and Bougie (2016), and Schutt (2012) focus groups are very useful in that regard. As argued by Sekaran and Bougie (2016), focus groups are also important for their emphasis on discovering new unanticipated findings and hidden opinions about the subject matter.

3.4.1.3 Reasons for the selected data collection methods

The focus group method was chosen because as suggested by authors such as Sekaran and Bougie (2016), Creswell (2014), it is flexible and captures real-life data in a social environment. Furthermore, it was chosen because it is high on face validity and provides speedy results especially in cases when the researcher is faced with time constraints as was the case in this study. Focus groups were also chosen for their relative low cost than other methods such as questionnaires. The interviews were chosen because they provide the researcher the opportunity to ask follow up questions when a need arises, they also afford the participant to ask questions in cases where clarity is needed. Furthermore, interviews allow the researcher to observe non-verbal communication. Thus, increasing the level of correctness in the responses provided as the researcher may probe more if non-verbal communication suggests a need to do so.

3.4.1.4 Construction and Administration of the Research Instrument

As indicated earlier this research employed a qualitative approach and as is often the case with such approaches, the interview and focus groups were used to collect the data. The interview schedule comprised of 8 broad questions and the researcher administered it. As indicated earlier there were 10 senior managers tasked with the recruitment and retention of scarce and critical skilled employees in the KZN DOT. Responses from the participants were recorded. Of the 10 managers that were targeted 6 participated in the interviews of the study as stated in Table 3.1.

3.5 THE MEASUREMENT OF RELIABILITY AND VALIDITY OF THE STUDY

Maxwell (2013, p. 122), argued that the “concept of validity has been controversial in qualitative research”. The author went further to suggest that this controversy made other qualitative researchers to even abandon it as it was seen to be more aligned to quantitative approaches. In this study the term validity was used to mean the same thing as Maxwell (2013, p. 122) views it which is to mean “the correctness or credibility of a description, conclusion, explanation, interpretation, or other sort of account”. The researcher ensured validity by addressing validity threats during the data collection process itself, a strategy recommended by Maxwell (2013) and other authors. For example, if there were opposing views on a question or theme the focus group members would deliberate on it in more detail until a clear direction or meaning is determined. The same would be done with interviews, the researcher would indicate the alternative view to the interviewee and ask him/her to elaborate why his/her views were not the same. Furthermore, the researcher consistently asked for feedback from the participants, both in focus group discussions and interviews, on conclusions she had reached. Rich data obtained from the interviews was also used in the facilitation of focus group discussions. While reliability is more of a quantitative data phenomenon the author viewed the data provided as reliable since the participants of the study were people who knew the subject matter and the fact that their skills are scarce.

3.6 PILOT STUDY

According to Gumbo (2014) a pilot study is mini study or investigation which seeks to test whether or not the research instrument is able to obtain or retrieve the information it was designed to obtain or retrieve. In other words, it pre-tests, the research instrument and determines the extent to which it is able to obtain or retrieve reliable and valid information. “The term ‘pilot studies’ discusses full-scale study mini versions also called ‘feasibility’ studies, as well as the exact pre-testing of a particular research instrument such as a questionnaire or interview schedule”, (Gumbo, 2014; p. 387).

For the purpose of this study, structured interview questions were pretested on five employees of another component who are defined as critical and scarce but not categorised as technical skilled employees. This was done in order to ascertain if the interview questions were not ambiguous, too long and defamatory amongst other things. Their suggestions were also taken into consideration. The pilot study confirmed that the interview schedule did not comprised of any unclear items and the participants found the completion easy and quick.

The researcher was mindful that superiors and their subordinate were not in the same focus group discussion because that could have been a validity threat. The use of one moderator was another way of ensuring that some level of consistency in the questioning technique, timing of responses, and emphasis was maintained. The researcher also supported the expression of varying opinions as a critical element of focus group protocol.

3.7 DATA ANALYSIS

In most cases qualitative data is analysed using NVivo tools, content analysis, MSWord and other methods. Content analysis was used to analyse data in this study. Authors of research books such as Sekaran and Bougie (2016) and Creswell (2014) all agree that content analysis is essentially a coding operation and that it is nothing else but the standardization of collected data into some conceptual framework. The importance of coding arises from the fact that data comes in different forms and must therefore be standardized into categories or forms.

First, the participants were coded as male and female. This was done to determine the gender representation in scarce and technical skills and to indicate how each gender answered to questions posed. This was particularly important because different genders may view the same phenomenon or act differently. Secondly, all key findings from interview notes and answered from focus groups were transcribed, copied and pasted into the template under relevant codes. For example, answers relating to job satisfaction were coded into either job satisfaction or job dissatisfaction. If the participant answered in a certain way the answer would be classified as meaning either job satisfaction or job dissatisfaction. At the end of the analysis of this coded variable a theme would emerge whether more participants were satisfied with their jobs or dissatisfied. Answers relating to questions about the conditions of employment at the KZN DOT were coded as meaning either favourable or unfavourable working conditions. The same coding process was done with regards to other answers to the questions asked by the researcher. The different codes were then combined to fall under four broad themes namely factors affecting recruitment and retention of scarce and critical technically skilled employees, how recruitment and retention of scarce and critical technically skilled employees could be improved, difficulties in

improvement of recruitment and retention of scarce and critical technically skilled employees, and succession policy and training interventions on scarce technically skilled employees. These themes are linked to the objectives of the study.

3.8 ETHICAL CONSIDERATION

UKZN has an Ethics Research Policy that all students should comply with. Having obtained authorization to conduct the study within the KZN DOT, the researcher applied and was granted ethical clearance by the UKZN Research Committee. The researcher ensured that each participant of the study received the letter of informed consent. In that letter the researcher informed the participants what the study was all about. The researcher also informed the participants that confidentiality and anonymity was to be maintained at all times and that the participant may withdraw their participation at any stage of the study should they wish so without giving any explanation to the researcher and without any negative implications to them.

3.9 CONCLUSION

The chapter was able to indicate how the researcher project was designed and which methodology was employed. Furthermore, the chapter indicated which methodology was deemed appropriate by the researcher and how the sample of the sample was obtained. The chapter further indicated the different types of data collection methods and indicated which one was used in this study. In conclusion the chapter indicate d ethical considerations that were observed in the design and collection of the data. The next chapter presents and analyses the data that was collected.

CHAPTER 4

DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION

This chapter focuses on the presentation of data which concentrated on eight main interview questions. These eight questions targeted reasons for exit, how to improve on the recruitment and retention of staff with scarce and critical technical skills, how to improve policies, suggestions and training needed, succession policy, the OSD and strategies to recruit and retain staff. The three focus group discussions focused on recruitment and retention of employees with scarce and critical technical skills. Themes identified will provide guidance on discussion for the next chapter.

4.2 PRESENTATION OF FINDINGS

The method of data collection and analysis within this research involved six interview schedules and three FGDs of ten people per group. Qualitative data was analysed using MS Word data analysis templates from which all study themes were derived. All key findings from interview notes and transcripts were copied and pasted into the template under the relevant themes. Findings are presented in themes answering the four objectives which seek to respond to an evaluation of the recruitment and retention practices for scarce and critical technical skills in the KZN DOT.

The data that is presented in this chapter is based on the research objectives and questions asked both in the interviews and focus group discussions as presented in table 4.1 below.

Table 4.1 depicting sample of the study

OBJECTIVES	INTERVIEW QUESTIONS
<p>1. To establish the shortcomings related to the Occupation Specific Dispensation for technically skilled employees in the KZN DOT.</p>	<p>What are the main reasons for the exit of the employees with scarce and critical and technical skills in our department?</p>
<p>2. To determine factors affecting the recruitment and retention of scarce and critical technical skills in the KZN DOT.</p>	<p>Why is the department experiencing difficulty in attracting the required technical skills?</p> <p>How do you think OSD could be improved?</p>
<p>3. To explore effective methods to recruit and retain technically skilled employees in the KZN DOT.</p>	<p>How can the department improve the implementation of the recruitment and retention policies in order to recruit and retain more scarce and critical technical skilled employees?</p> <p>During the process of conducting exit interviews, what important issues do you come across with, that will improve the retention and recruitment of people with scarce and critical and technical skills?</p>
<p>4. To establish measures for effective recruitment and retention processes.</p>	<p>What can you suggest for the department to have a succession policy? What training interventions are needed for the succession planning programme and the duration of the programme?</p> <p>What suggestions do you have to improve the recruitment policy to be aligned with the retention policy?</p>

4.2.1 Response Rate

Ten senior managers were targeted and only six managers participated, and it therefore meant there was a 60% response rate. FGD's of 30 employees was targeted and 30 employees participated implying there was a 100% response rate. Three FGDs were created for the 30 participants where each group comprised 10 participants. All three groups dealt with the recruitment methods and the retention policy. These two main issues covered all four research objectives. The overall response rate was therefore 80% contributing to the validity and reliability of the study.

4.3 PRESENTATION AND ANALYSIS OF DATA BASED ON INTERVIEWS

The researcher utilised Content Analysis to categorise verbal or behavioural data. All key findings from interview notes and transcripts were copied and pasted into the template under the relevant themes. Coding of data entailed two main stages which involved grouping data into different categories and assign numbers to categories that would have been created. All these data analysis methods were used to validate the information collected from the field. Participants' responses were used by the researcher to evaluate the effectiveness of the application of the KZN DOT's recruitment and retention policies. The analysis was also based on the descriptive analysis of information extracted from the Annual Performance Plan of the KZN DOT. This plan refers to targets and the allocated budget for transport infrastructure.

4.4 PRESENTATION OF DATA

4.4.1 Shortcomings of the Occupation Specific Dispensation

The objective one focused on establishing the shortcomings related to the Occupation Specific Dispensation for technically skilled employees in KZN DOT. Remuneration and job satisfaction were the two themes which emerged responding to the research questions which also answered to an evaluation of the recruitment and retention practices for scarce and critical technical skills in the KZN DOT.

4.4.1.1 Remuneration

The researcher found out that most participants pointed out that the main reason for exits is linked to remuneration where the KZN DOT is unable to offer competitive salaries as provided by the private sector and municipalities. Employees in the private sector and municipality tend to earn more than those in the provincial government. One of the participants argued:

“The government has failed to compete with the private sector and municipalities who offer better and more lucrative salaries.”

The above statement highlights that the government is not able to provide salaries which are competitive to private sectors and various municipalities. In addition to that the government tend to ignore that by nature of their work, employees with scarce and critical technical skills need to be utilised within their functional areas where proper remuneration is considered. It is evident that people with critical skills do not have the patience with handling of projects and remuneration which makes them leave the government for better opportunities within the private sector. This was witnessed in most of the respondents’ answers in relation to the shortcomings of OSD. An example of this statement is in relation to one respondent who said that:

“People with critical skills do not have the patience and if they discover that there are unnecessary delays in handling projects, they become demoralised in a way and begin to think that the public service is not the right place for their critical skills.”

However, as far as the working environment is concerned, a lot of people are very happy and if the department was to counter offer them a better package they would stay. This implies that remuneration has been the main reason for exit of employees with scarce and critical technical skills. More money is also in many contracts which are given to the private sector or consultants.

4.4.1.2 Job satisfaction

In as much as remuneration affects recruitment and retention of scarce and critical technically skilled employees within the DOT, it was also noted that job satisfaction plays a role in recruiting and retaining staff. The level of growth that people with scarce and critical technical skills get in the private sector seems better and favourable than working within the DOT. Job satisfaction which involves the ability to perform certain functions in a good environment was found to be unavailable. In addition, thereto, job titles and the level of responsibility led to the exit of many employees. Job satisfaction is one of the reasons for the exit of staff with scarce and critical technical skills as some staff are not satisfied with

the exposure and experience, they get in a limited environment. For example, one of the participants argued:

“You will find that people need satisfaction to work in their work environment. In addition to that job satisfaction comes in different forms and such forms include satisfied with financial gains on the job, flexible working hours, the ability to perform certain functions or certain activities and being able to supervise projects and making the job more exciting.”

The above caption highlighted that employees need to be satisfied of their job where exposure creates more experience. Another example of job satisfaction is by one of the respondents who said:

“Employees lack exposure to the technical aspects of the job because there are many and the work which needs their technical expertise is limited due to the fact that most of government work is done by consultants rather than department officials. Hence many government employees would prefer to go to the private sector to get that experience. There is a lack of external motivation for those employees compared to those who graduate from the technical colleges. When they are working with consultants, they get more experience than working in the department.”

The above statement also means that due to poor job satisfaction, government employees tend to prefer moving to the private sector and municipalities where they would get experience than working in the government. This may also mean that exit of employees with scarce and critical technical skills is exacerbated by lack of or no career path for officials.

4.4.2 Factors affecting the recruitment and retention of scarce and technical skills

The second objective focused on determining factors affecting the recruitment and retention of scarce and critical technical skills and on how the OSD could be improved in the KZN DOT. Motivation for employees and amendment of the OSD were the themes noted responding to the evaluation of the recruitment and retention practices for scarce and critical technical skills in the KZN DOT.

4.4.2.1 Motivation for employees

Most of the respondents indicated that there is over-reliance on consultants implying that the private sector made it difficult for the government to recruit and retain staff with relevant skills. The respondents indicated that there has been no motivation for employees to join or stay in the department because of poor remuneration, administrative work and the over reliance on consultants as indicated

earlier. This made it difficult for government employees to gain more experience and exposure as a lot of work was given to the consultants leading to demotivation of government employees who ended up not gaining experience on their jobs. To illustrate this point one of the respondents went on to say:

“The difficulties of government’s rigidity regarding administrative work and too great a reliance on consultants and the private sector has affected us and the other difficulty lies in government’s failure to pay employees better in spite of being able to pay more to consultants leading to no motivation to join the department.”

All participants cited the government’s entry level salary which is very low, making it difficult to attract the required technical skills. For example, one of the participants said:

“The Department is not able to pay its employees more but is willing to pay more to consultants thereby creating a difficulty within the department in terms of remuneration. This implies that there is nothing much that motivates people to join the department. Employees would rather join consultants who pay better, promote opportunities and career pathing. Salaries in the department are very low and unattractive to the extent that very few people are willing to join the department. If we advertise our posts in comparison to the municipality and the private sector, our salaries are low.”

This seems to suggest that as long as poor remuneration and over reliance on consultants, government employees would remain demotivated as these two aspects play a key role in DOT.

4.4.2.2 Amendment of the OSD

The researcher found out that OSD can be improved through negotiating with unions, training and investing in talent management in order to retain employees and increase salaries when employees move to the next levels. It was also noted that the review of the OSD would address discrepancies which in turn will attract technical staff. A need to amend the OSD was highlighted by all respondents where it will be applied based on departmental circumstances without having a link between the OSD and those individuals who are professionally registered. It was argued that:

“There is a need for consideration of the time the technical person spends in training for that to be recognised within the OSD. In addition, if the department invests in its employees and helps them not to feel as if they are outcasts, it would even help to address issues around staff retention.”

The above statement shows that there is a need for the department to revise its OSD to ensure that it can recruit and retain employees with critical skills. Failure to invest in government employees who have critical and technical skills would also mean that this challenge will continue to haunt the department. Hence there is a need to address such discrepancies to ensure that employees with technical skills will not leave their jobs. Other discrepancies highlighted are in salaries for candidates and those

registered where salary differences are not great, except for the fact that those registered can get a permanent job with a job-related salary package. One of the respondents highlighted that:

“The OSD is rigid, hence each department should be able to apply or amend it based on the department’s circumstances rather than applying it the same way across the entire public service. More so, if you register with technicians and you have got to register as a technologist there is no huge gap on the salary level.”

The above citation shows that OSD makes it difficult for recruiting and retaining employees with technical and critical skills. A need to remove the linkage between OSD and those who are professionally registered was pointed out as this had hindered recruitment and retention of technical and critical skills employees. One of the respondents argued:

“There is a need to remove the link between the OSD and those who are professionally registered. If the intention of the OSD was to retain skills by giving them recognition, why did they limit it to people with registration or a qualification?”

This seems to suggest that OSD needs to be amended where there is a removal of links between OSD and those who are professionally registered. This in a way will then assist in recruitment and retention of technically skilled employees in the KZN DOT.

4.4.3 Effective methods of recruiting and retaining scarce and technical skills

Objective three focused on exploring effective methods to recruit and retain technically skilled employees in the KZN DOT. Succession planning and mentorship emerged as dominant themes within the evaluation of the recruitment and retention practices for scarce and critical technical skills in the KZN DOT.

4.4.3.1 Succession Plan and Head Hunting

The researcher found out that in order to improve the recruitment and retention of people with scarce and critical technical skills, a need to ensure that a succession plan is in place was emphasised. It was noted that the department needs to put in place a tailor-made succession training programme with the emphasis on managerial and leadership skills training. In addition to that it was noted that the recruitment of employees is a complementary process where both parties play a pivotal role in filling up vacant posts. Headhunting was seen as an effective way of recruitment and retention of employees

with scarce and critical technical skills Succession planning is put in place to ensure that those headhunted are retained. Such a method is flexible as opposed to the DOT traditional methods of recruitment and retention which were cited as inflexible making it difficult to recruit and retain the right people. The following excerpts are examples which support the findings.

Most of the participants indicated that there is a need to be specific in the succession plan programme and focus on both technical and managerial leadership competencies for a successful training programme and that there is a need for a succession plan programme which would take 3 to 5 years with clear documentation of standard operating procedures and terms of reference. Furthermore, the participants indicated that for succession plan to be effective, there is a need to remove those who about to retire, three years prior to retirement so that they can mentor new employees thereby enabling new junior employees to grow into new positions. For example, one of the participants, in support of what others have said, indicated that:

“There is a need for a succession plan to be put in place which must be very clear to the junior staff that going through the succession plan does not mean getting a senior job when a senior employee retires. The succession plan should ensure that the incumbent grows into any position that becomes available as long as they have the right guidance and clear development”.

Participants also argue that the department should be able to headhunt for employees with technical and critical skills while putting in place a good succession plan in place. One of the participants pointed out:

“In my view, I think that as a department we should be able to headhunt, yes I know that we headhunt after probably advertised two or three times, but on the onset we should be able to headhunt for the right skill and if you see those potential individuals or mix the combination of headhunting and advertising. We also need to invest a lot on the young and skilled by training the staff.”

This seems to suggest that for the recruitment and retention of technically skilled employees, headhunting and talent management is critical. This would assist in recruiting the right persons. More so, junior employees will also be able to feel at home and grow into new roles without having to run the risk of having unqualified persons in certain roles and within the succession programme in place. Managerial and leadership skills training would then ensure that there is a proper succession programme which would warrant that no gaps would be created by those who would have retired from the department.

4.4.3.2 Mentorship

The researcher found out that for succession planning to work, there are training interventions needed where mentorship programme for employees to get an opportunity to learn from senior staff, to grow and improve their career paths was noted. It was also noted that the government needs to look into a succession plan policy through competence packages, improving the working environment in the department where employees are able to learn and be mentored on their own growth path. One participant suggested that:

“There is a need to help employees to gain experience. There is a need for a mentorship programme, which is ongoing so that a succession planning programme can be effective.”

The above caption clearly shows that a mentorship programme will ensure that succession planning would also be effective. A need to groom people from the level below to meet the competence package for other posts above was suggested as a way of allowing fair competition when a post is vacated. Most of the participants argue that this will create an in-house capacity to take care of any gaps in the department and there would be no need to outsource from the private sector or to consultants.”

For mentorship programme to work, participants suggested that there is a need to groom towards emotional and maturity levels and culture of the organisation with its world class academy or training centre for technical skills. Most respondents argue that the current environment in the department does not give direction to junior staff as they lack in-house diversity of the scope of work. All participants argue that there is need to give these employees more responsibility and skill them continuously through exposing them to training and continuously assessing them on their level of competency as an organisation. One respondent argued that:

“A need for grooming towards emotional and maturity levels and the culture of the organisation is important within the DOT as it would help with employees’ personal development and fitting in to the organisational culture. Such a mentorship programme should be an ongoing process where a supervisor can access the environment, assists and elevates an employee to improve the career growth of an individual.”

This seems to suggest that mentorship programmes where employer grooms people from the lower level to a higher level, exposing employees to various trainings and responsibilities would ensure that when one retires, there would be no gaps created. This would benefit both an individual and the DOT.

4.4.4 Measures for effective recruitment and retention processes

The fourth objective focused on establishing measures for effective recruitment and retention processes. Flexibility on recruitment and policy is a theme which emerged responding to an evaluation of the recruitment and retention practices for scarce and critical technical skills in the KZN DOT.

4.4.4.1 Flexibility on Recruitment and Selection Policy

The researcher found out that most respondents argued that there is a need to negotiate salary levels during recruitment where remuneration should be considered in relation to personal profile not the profile of the job. However, a need for flexibility on remuneration for people with critical skills was emphasised while taking into consideration the need to clarify what qualifications are required when recruiting and also bring up new recruitment methods. There seems to be recruitment methods which are not flexible or accommodating special cases. In addition to that, the researcher found out that very few people are aware of the policies and some of these policies are not implemented. One of the participants argued:

“There is a need to look at other avenues to remunerate staff as a way of retaining them. Remuneration could include time off, flexi-hours, working from home and adding more responsibility.”

The above statement shows that there is for the department of transport to learn from other private enterprises such as Eskom and Transnet and remunerates accordingly while in cooperating flexibility within its policies. Most respondents highlighted that there is no flexibility within the department in terms of salaries for scarce skills because these skills are bought. Therefore, a need for flexibility in compensating employees with scarce skills was proposed by most participants.

The researcher also found out that the department’s recruitment processes are very slow and rigid and a lot of time is wasted using old methods of recruitment as noted by one of the participants who argued that:

“There is a need to change the CV mail posting system to electronic mailing and the whole process so that it becomes quicker rather than spending a lot of time using old methods of recruitment. The public service is a legislated environment guided by certain prescripts and legislation where there is not enough room for flexibility. Hence there is a need for flexibility in compensating employees with scarce skills and also recognising that persons with critical and scarce skills are specialists and most importantly reward them accordingly so that they do not leave. There is therefore a need to review the legislation itself because it hinders on the implementation of retention strategies.”

This suggests the need for flexibility on remuneration matters so that employees with scarce and critical technical skills will stay in an environment where there is limited or reduced outsourcing from the private sector and consultancies creating space for government employees to gain experience. Flexibility in aligning and changing policies to make them relevant and competitive with other sectors would ensure that employees with scarce and critical technical skills can be recruited and retained.

4.5 CONCLUSION

The chapter managed to present and analysed the data that was collected. Issues discussed were related to reasons for the exit of employees with scarce and critical technical skills, how to improve recruitment and retention, why it is difficult to recruit and retain this group and how to improve on recruiting and retaining scarce and critical technical skills. In addition to that, the chapter presented results on suggestions and training needed for the recruitment and retention of the group under study, the succession policy and suggestions related thereto, how to improve the OSD and strategies on how to recruit and retain staff with scarce and critical skills. Themes which included remuneration, job satisfaction, motivation for employees, amendment of OSD, succession plan, mentorship and flexibility on recruitment and selection policy were recognised. The next chapter will look into the identified themes and discuss them whilst engaging with the literature. A summary of all the chapters, conclusion and recommendations will also be considered.

CHAPTER 5

DISCUSSION OF THE RESEARCH FINDINGS

5.1 INTRODUCTION

This chapter seeks to discuss the data presented in Chapter four with themes emerged and a literature review paying attention to the four objectives of the study which focused on shortcomings of the OSD, factors affecting recruitment and retention processes for the department to utilise for recruitment and retention processes of employees with scarce and critical technical skills, effective methods of recruitment and retention and to establish measures for effective recruitment and retention processes. An analysis will then be between what the researcher found out and the literature around the themes in line with the objective of the study. In addition to discussion a summary of all the chapters, conclusion and recommendations for this research will also be provided.

5.2 DISCUSSION OF THE RESEARCH FINDINGS

The discussion on the research findings was based on themes which include remuneration, job satisfaction, motivation for employees, amendment of the OSD, succession plan, mentorship and flexibility on recruitment and selection policy based on four research objectives.

5.2.1 Remuneration

The discussion relates to the OSD. Shortcomings of the OSD were regarded as objective 1 to this study. The researcher found out that most participants pointed out that the main reason for exit is linked to remuneration where the KZN DOT is unable to offer competitive salaries as provided by the private sector and municipalities. Employees in the private sector and municipality tend to earn more than those in the provincial government. It was noted that OSD plays a role in the recruitment and retention of scarce and critical technical skilled employees. The implementation of the OSD for Engineers and Related Professionals pose challenges in the retention of technical skills in the KZN DOT. The OSD by its nature is stringent and does not allow flexibility. OSD states “Candidate posts are entry level posts Additional to the Establishment (ATE)” (Annexure A, Occupation Specific Dispensation for Engineers and Related Professionals 2011, p.6). Employees are appointed on a contract basis until such time that the ECSA registration requirements by the Candidate have been complied with. It has been noted that, individual’s job security is compromised since there is uncertainty about the future and

professional registration is not guaranteed. In addition to that, OSD is not flexible in relation to the remuneration of employees leading to staff exiting the DOT. The ATE appointment means the professionals do not receive fringe benefits like housing allowance, medical aid and pension. Therefore, the professionals cannot invest in their personal wealth.

The discussion relates to the remuneration or compensation of employees. All six participants pointed out that the main reason for the exit of employees with scarce and critical technical skills is linked to remuneration where the department is unable to offer competitive salaries provided by the private sector and municipalities. Mabuza and Proches, (2014, p. 12) “pointed out that employees with scarce skills are in high demand within the SA government and technical staff have been difficult to replace and retain”. The KZN DOT also faces the same challenges of staff retention due to staff turnover which is also caused by lack of emphasis and insufficient capacity building opportunities for staff where there is limited access to staff growth and proper training opportunities (Windapo, 2016). Lack of a competitive compensation system and remuneration which is on par with output of staff demotivated many staff, leading to the exit of many employees. Lack of sufficient resources to perform duties is another challenge noted regarding staff retention and staff turnover. The DPSA emphasised that institutions need to put in place resources that meet the demands for the job so that employees are retained. Job stress is also another challenge for retention. If employees stress levels are high, chances are high, employees are then unproductive and sad (Windapo, 2016).

In relation to remuneration and compensation as factors affecting the recruitment and retention of employees with scarce and critical technical skills, work-life balance was also noted as another reason for exits or a factor affecting recruitment and retention. Hoffman and Tadelis, (2018) defined work-life balance as the contented state of equilibrium accomplished between an employee’s private lifestyle and their primary priorities of their employment position. Metha *et al.* (2014) stated that an employee’s intention to stay in an organisation is directly related to the ability to achieve a healthy work-life balance. In addition, Hlengwa (2015) noted that the degree of flexibility is positively aligned with employee retention. Various participants also noted that many people leave the department because of its failure to remunerate and compensate staff especially in relation to competitive salary and other forms of remuneration such as time off and working from home.

In order to retain employees with scarce and critical technical skills, several methods and suggestions were proposed. The retention policy states that there are direct and indirect methods of retention at the

department. The direct method attempts to retain employees through the implementation of mandatory exit interviews where employees exiting the public service on account of incapacity due to ill-health or injury, retirement and resignation. Other direct methods of retention involve the development of accurate job descriptions that clearly identify the core competencies required, integration of staff into the workplace from commencement, utilisation of the Employee Performance Management and Development System (EPMDS) to monitor, measure and link what employees do on a continuous basis, the setting of employee's salary above the minimum notch, offering promotion and counter offers at the discretion of the head of the department (KZN DOT Retention Policy, 2011). In addition, other methods of staff retention noted include promoting effective communication, recruitment and selection strategies which attract and retain scarce and critical skills, the implementation of the OSD and creating a career pathing model for all occupational levels. Such suggestions were also emphasised by participants while other participants emphasised the need to correct the challenge with remuneration making it competitive with the private sector and allowing staff to be flexible and becoming creative thinkers.

This suggests that salary scales offered by government are not competitive, there is a huge difference between Candidate and Professional categories. In addition, the KZN DOT does not have enough mentors and relies on consultants which often result in skills not being transferred while the government's salary entry level remains very low and making it difficult for attracting required technical skills.

5.2.2 Job satisfaction

The researcher found out that job satisfaction plays a role in recruiting and retaining staff. The level of growth that people with scarce and critical technical skills get in the private sector seems better and favourable than working within the DOT. Job satisfaction which involves the ability to perform certain functions in a good environment was found to be unavailable. In addition, thereto, job titles and the level of responsibility led to the exit of many employees who are not satisfied with the exposure and experience they get in a limited environment. Job satisfaction is however defined as the overall attitude towards an individual's current job incorporating the moods, opinions, feelings and thoughts about the job (Kaplan, 2015). Ahmed *et al.* (2013) revealed that there is a positive correlation between job satisfaction and the intention to stay in an organisation. Fisher (2016) is also of the opinion that a satisfied employee will remain longer within the organisation. Building from the motivation theories, work content is considered an intrinsic motivating factor and thus job satisfaction plays an essential role in sustaining the motivation levels of employees (Hoffman and Tadelis, 2018).

In relation to job satisfaction, such concepts would lead to retention where a need for creating a vibrant and interesting workplace with limited outsourcing to the private sector and consultants. It was noted that most DOT employees are not satisfied with their jobs because the department tends to out-source expertise from consultants and the private sector leaving DOT employees with little or less work to do causing job dissatisfaction. It was expressed that government work should be performed by the departments not consultants. By so doing, an environment for growing careers would be created and a long-term program of developing the scarce and critical technical skills would also be developed leading to experience and job satisfaction. Once one is satisfied with one's job, job security is also strengthened and assured. Other avenues of remunerating staff such as time off, working from home and adding responsibility could lead to job satisfaction and security.

5.2.3 Motivation for employees

In relation to objective 2 which focused on factors affecting the recruitment and retention of scarce and critical technical skills in the KZN DOT, motivation for employees and amendment of the OSD were noted as the themes which emerged. The researcher noted that over-reliance on consultants and the private sector made it tough for the government to recruit and retain employees with relevant skills. It was noted that there has been no motivation for employees to join or stay in the department. This was also caused by poor remuneration, administrative work and the over reliance on consultants. This made it difficult for government employees to gain more experience as a lot of work was given to the consultants leading to demotivation of government employees who ended up not gaining experience on their jobs.

Fisher (2016) argues that a satisfied employee will remain longer within the organisation. Building from the motivation theories, work content is considered an intrinsic motivating factor and thus job satisfaction plays a critical role in sustaining the motivation levels of employees (Hoffman and Tadelis, 2018). This implies that motivation of employees and job satisfaction work hand in hand. Literature demonstrated that similar study conducted by Al-Emadi *et al.* (2015) showed positive association between intrinsic motivation and job satisfaction. Contributing factors include the employee-employer relationship, job security, culture, work conditions, compensation, and training and development. Incorporating these factors into strategies will increase satisfaction, motivation, company performance and hence retention (Metha *et al.* 2014). It is, however, pertinent to note that, employees with technical skills need good remuneration and less reliance on consultants, so that government employees would be motivated as these aspects play a key role in DOT.

5.2.4 Amendment of the OSD

Research participants were asked on how to improve OSD. It was found out that OSD can be improved through spending time in training and recognise it, investing in employees in order to retain them and increasing salaries when an employee moves to the next level. It was also noted that the review of the OSD would address discrepancies which in turn will attract technical staff. A need to amend OSD was highlighted by all respondents where it will be applied based on departmental circumstances without having a link between the OSD and those individuals who are professionally registered. It is pertinent to note that South Africa's legislation on the recruitment and retention process is influenced by various pieces of legislation such as the amended 1996 Constitution which clearly shows that any law or conduct against the Constitution is regarded as invalid. Another piece of legislation on the recruitment and retention process is the OSD. Its focus is to provide norms and standards to the public service with the aim of improving government's ability to attract and retain skilled employees. In addition to that the Labour Relations Act 66 of 1995 sets out the laws that govern labour relations in South Africa. It is guided by Section 27 of the Constitution, which entrenches the rights of workers and employers to form organisations for collective bargaining. There is also the Employment Equity Act 55 of 1998 as amended which emphasise elimination of discrimination, favouritism and creating equal opportunities for everyone. The aim of these legislations especially OSD is to build the capacity of South African workforce. However, it was noted within this research that the OSD has led to difficulties in recruiting and retaining technical staff. A need for amendment of OSD was then proposed by respondents to ensure that the DOT recruits and retain right and suitable staff.

5.2.5 Succession Plan and Head Hunting

In relation to objective 3 which focused on effective methods on recruiting and retaining technically skilled employees in the KZN DOT, the researcher found out that in order to improve the recruitment and retention of people with scarce and critical technical skills, a need to ensure that a succession plan is in place was emphasised. It was noted that the department needs to put in place a tailor-made succession training programme with the emphasis on managerial and leadership skills training. In addition to effective methods on recruitment and retaining technically skilled employees, it was noted that headhunting is another recruitment method which could help the department to recruit and retain employees with scarce and critical technical skills. It is, however, important to note that the recruitment of employees is a complementary process where both parties play a pivotal role in filling up vacant posts. Hence headhunting was seen as an effective way of recruitment and retention of employees with scarce and critical technical skills. Such a method is flexible as opposed to the DOT methods of

recruitment and retention which were cited as inflexible making it difficult to recruit and retain the right people. In relation to recruitment methods, it was noted that these methods used to appoint employees are either active or passive recruitment methods. Passive recruitment methods involve organisations employing a strategy which makes such organisation wait and see approach to fill their vacant posts. (Henkens, Remery and Schippers, 2017) while active recruitment methods involve employers being more active than employees, where employers use recruitment agencies or approach institutions of higher learning to search for graduates who have completed their studies (Henkens *et al.* 2017).

Henkens *et al.* (2017) argue that formal recruitment involves institutions posting employment vacancy on public domains such as newspapers and websites. This method uses the intermediate between the employer and potential employee. The department uses this method to advertise its vacancies in the national newspapers to attract many people. Several challenges were, however, noted within the recruitment process. Such challenges include the uncertainty about the demands of the job and the uncertainty about the applicant's competence (Otoo, *et al* 2018) and Russo *et al* (2016). Other challenges include a lack of linking recruitment and selection policies to human resource strategy (Otoo *et al* 2018), failure to carry out reference checks on candidates during the shortlisting process and HIV/AIDS posing a challenge regarding absenteeism in the workplace, staff turnover, loss of skills, decline of morale and loss of tacit knowledge as noted by the United Nations (2000).

It seems headhunting is ideal as it addresses some of the challenges encountered in recruitment of technical skills employees while a succession plan would then ensure that those headhunted are exposed to a plan which would ensure that they are retained. The absence of a long-term programme for developing critical skills and an organisational plan to recruit and retain staff and government's rigidity on administrative work were noted as some of the challenges on the recruitment and retention of technical employees. However, such challenges could be addressed through the mentorship programme.

5.2.6 Mentorship

The researcher found out that for succession planning to work, there are training interventions needed where mentorship programme for employees to get an opportunity to learn from senior staff to grow and improve their career paths was crucial. It was also noted that the government needs to look into a succession plan policy through competence packages, improving the working environment in the department where employees are able to learn and be mentored on their own growth path. A need for effective recruitment processes or strategies was noted. Such strategies would address the challenges noted on recruitment and these include integrating employees into the institution's culture which builds

employee's capacity. A working environment conducive to newly appointed staff should be made available where coaching skills are offered (Pregolato, Bussin and Schlechter 2017). The second strategy noted in the literature reviewed, involved good communication as a way of retaining staff where poor communication makes employees leave the organisation. Institutions should also build a channel of communication which builds trust and commitment leading to mutual interest between the employee and the employer (Amos *et al*, 2016). The third strategy is development of employees through training as noted in the South African National Development Plan 2030 (NDP). Employers should develop the technical skills of employees through training programmes in conjunction with training institutions and professional councils and associations. The fourth strategy noted relates to the development and preparation of job descriptions in advance before employees are appointed. If a job description is not put in place before a new employee joins, one is likely to leave as that person would likely not meet the expectations which were not clarified at the inception of the job.

Training is defined as the intended effort to expedite the learning of skills and knowledge that are related to the job whilst development is the acquisition of new skills that simultaneously benefit the employee and the organisation (Getha-Taylor, Fowles, Silvia, and Merritt, 2015). Commitment and motivational levels decrease when organisations fail to provide meaningful work. An organisation that fosters training and development encapsulates the essence of recognising and valuing their employees and demonstrates management commitment (Larsen, 2017). Meyers and van Woerkom (2014) in their study found a significantly positive relationship between training and employee retention. This is further reinforced by Fisher (2016) who argued that there is a positive correlation between company performance and effective training and development. Training and development thus aid in achieving a competitive advantage as they simultaneously increase commitment, retention and organisational success (Larsen, 2017). In relation to measures for the department on recruitment and retention processes, it was noted that the need for skills development where employees are trained, and gain experience was emphasised. Some of the participants pointed out that there is a need to improve the working environment in the department where employees are able to learn and be mentored on their own growth path to upscale their skills and gain experience. A need for a mentorship programme which is ongoing so that skills can be developed and a succession planning programme can be effectively implemented was emphasised.

This seems to suggest that a mentorship programme where a supervisor can access the environment and, assist and elevate an employee to improve the career growth of an individual would ensure that employees are retained. It was noted and expressed that employees leave their bosses, not their jobs because what they would have left would be a toxic environment that pushed them away. Hence it was

noted that employees sometimes leave their jobs because of the environment and the treatment they get from their supervisors. The department needs to have an organisational culture which mentor junior staff and ensure that employees with scarce and critical technical skills are recruited and retained.

5.2.7 Flexibility on Recruitment and Selection Policy

In relation to objective 4 which focused on measures for effective recruitment and retention processes, the researcher found out that most respondents argued that there is a need to negotiate salary levels during recruitment where remuneration should be considered in relation to personal profile not the profile of the job. However, need for flexibility on remuneration for people with critical skills was emphasised while taking into consideration the need to clarify what qualifications are required when recruiting and also bring up new recruitment methods. A need for a standard operating procedure and the minimisation of outsourcing to the private sector were also noted as measures which the department needs to utilise.

Literature suggests that in the KZN DOT, delays in the advertising of posts are partly due to cost cutting measures in the Province. The procedure requesting authority to advertise posts which, is obtained from the Premier of KZN is somehow lengthy. Moreover, some Selection Committees do not adhere to the Recruitment and Selection Policy causing delays because the interview minutes have to be corrected or the entire process may at some point be requested to be re-done. Some heads of directorates take long to commence with the shortlisting process when the sifting process has been concluded. There are delays in obtaining security screening results because this process sometimes takes up to two months as well as obtaining Employment Reference checks from employers for lower level posts. Lower level posts sometimes attract a large number of applications (± 5000 applications for a single post) and there is a limited capacity to deal with these applications. Salaries offered by the public service are not competitive with the private sector, hence some of the engineer posts have been advertised more than once, but do not attract any candidates.

There seems to be recruitment methods which are not flexible or accommodating special cases. In addition to that, the researcher found out that very few people are aware of the policies and some of these policies are not implemented causing delays and failure to recruit and retain technical employees within the DOT.

5.3 CONCLUSION

This chapter focused on the discussion on research findings taking into consideration the themes from four research objectives and the literature around the subject. The four objectives guided the discussion which involved themes such as remuneration, job satisfaction, motivation for employees, amendment of OSD, succession plan, mentorship and flexibility on recruitment and policy. From the discussion, the researcher will then come up with conclusions and recommendations which forms chapter six.

CHAPTER 6

RECOMMENDATIONS AND CONCLUSION

6.1 INTRODUCTION

The main aim of this research was to evaluate the recruitment and retention of scarce and critical technical skills within the Department with the objectives of establishing the shortcomings related to the OSD for technically skilled employees in the Department, determining factors affecting the recruitment and retention of scarce and critical technical skills in the Department, exploring effective methods to recruit and retain technically skilled employees in the Department and establishing measures for the Department to adhere to the appropriate recruitment and retention processes. This section discusses the reinforcement of findings on what the Department has done well and what it has failed to do under recruitment and retention.

6.2 ANSWERS TO RESEARCH QUESTIONS

This section will analyse the implications of the four research objectives aligning them to the data collected from the research respondents.

- **What are the shortcomings related to the Occupation Specific Dispensation for employees with scarce and critical technical skills in the KZN DOT?**

It was noted that the present recruitment strategies utilised by the Department are more traditional and do not yield the best results and there was a suggestion to move to a social media recruitment strategy. It was however noted that the OSD provisions are not flexible for recruitment purposes. Not all of the Department's employees are aware of the recruitment policy and some were never trained on this policy making it difficult for employees to understand what the policy requires, proving it difficult for employees to know whether the manner in which adverts are crafted is flexible enough to attract scarce and critical technical skills. The issue of austerity measures was another concern as it takes too long to fill a post once it has been vacated because the request to fill needs to go to the MEC for Finance and the Premier for approval. Different views about advertising of posts internally and externally were expressed. It was also noted that salary scales offered by government are not competitive, there is a huge difference between Candidate and Professional categories. In addition, the KZN DOT does not have enough mentors and relies on consultants which often result in skills not being transferred while

the government's salary entry level remains very low and making it difficult for attracting required technical skills.

The researcher found out that besides remuneration, job satisfaction plays a role in recruiting and retaining staff. The level of growth that people with scarce and critical technical skills get in the private sector seems better and favourable than working within the DOT. Most employees in the DOT are not satisfied with their jobs because the department tends to out-source expertise from consultants and the private sector leaving DOT employees with little or less work to do causing job dissatisfaction. Consultants tend to do more of government work thereby causing job dissatisfaction. There seem to be no an environment for growing careers for developing the scarce and critical technical skills.

- **What factors contribute to the attraction and retention of technically skilled employees in the KZN DOT?**

With regards to the retention policy, the implementation of the OSD has had a negative impact on the salary, benefits and career progression of employees where retention was noted as inflexible within the OSD. In addition to that, the implementation of the OSD was noted as having a negative impact on the salary, benefits and career progression of staff with scarce and critical technical skills. Working conditions in the Department are favourable though the issue of remuneration remains a challenge. The level of training and development which staff receive, is not adequate to enable staff to carry out their duties. Training and development are of paramount importance though budgetary constraints remain a hindrance to the process. Engineers and technicians need training in order to earn CPD points to assist with Professional Registration. Internal training is minimal and not yielding the intended results.

The researcher noted that over-reliance on consultants and the private sector made it tough for the government to recruit and retain staff with relevant skills. There has been no motivation for employees to join or stay in the department because of poor remuneration, administrative work and the over reliance on consultants. This implies that it becomes hard for government employees to acquire expertise because a lot of work is given to the consultants leading to demotivation of government employees. OSD led to difficulties in recruiting and retaining technical staff. A need for amendment of OSD was then proposed by respondents to ensure that the DOT recruits and retain right and suitable staff.

- **What effective methods could be used to recruit and retain technically skilled employees in the KZN DOT?**

The Department uses recruitment methods that promote fairness. The way the adverts are crafted is flexible in attracting scarce and critical technical skills where the majority highlighted that there is fairness in the recruitment process. In addition, it was noted that political interference does not play a role in the recruitment policy where recruitment is purely based on skills, competencies and employment equity. There were different views about advertising of posts internally and externally. Half of the participants felt that all posts should be advertised externally to attract a larger pool and the other half felt that the Department should advertise internally first before advertising externally as most internal employees do possess the required skills. Headhunting was also emphasised as ideal as it addresses some of the challenges encountered in recruitment of technical skills employees while a succession plan would then ensure that those headhunted are exposed to a plan which would ensure that they are retained. The mentorship programme was also noted as the most effective programme where a supervisor can access the environment and, assist and elevate an employee to improve the career growth of an individual would ensure that employees are retained. A need for an organisational culture which mentor junior staff and ensure that employees with scarce and critical technical skills are recruited and retained was, however, noted.

- **What measures are in place to ensure effective recruitment and retention processes and procedures?**

The recruitment methods within the DOT are not flexible or accommodating special cases. In addition to that, very few people are mindful of the recruitment and retention policies. This has made it difficult to implement such policies causing delays and failure to recruit and retain technical employees within the DOT. Most employees are not aware of allowances paid by the Department to technically skilled employees due to the fact that these employees have not received training on government policies particularly the retention policy. The retention policy was noted as ineffective as it has been overtaken by the implementation of the OSD. A need for the review of the OSD was noted because it is doing more harm than good. An example of appointing a qualified Civil Engineer with a Diploma as an ATE Technician and not a permanent employee is very frustrating to the graduates. Hence there are no measures in place which ensure effective recruitment and retention processes and procedures. In addition to that there seems to be recruitment methods which are not flexible or accommodating special

cases. In addition to that, the researcher found out that very few people are aware of the policies and some of these policies are not implemented causing delays and failure to recruit and retain technical employees within the DOT.

6.3 RECOMMENDATIONS FOR POLICY MAKERS

Several recommendations for policy makers are proposed based on the findings and the objectives of this research which focused on the shortcomings of the OSD, factors affecting recruitment and retention, effective methods of recruitment and retention and the measures for the Department on the recruitment and retention process of employees with scarce and critical technical skills.

6.3.1 Policy Level

A need to for a conversation around OSD amendment and the recruitment and retention policies and strategies at policy level was noted within this research. This would then ensure that all other outstanding issues are addressed.

6.3.1.1 The Occupation Specific Dispensation (OSD)

The DPSA should open discussions on the review of the OSD. As much as there are positives, a lot of harm has been caused with the implementation of the OSD. It has been noted that compulsory registration with a professional body such as the ECSA and or the South African Geomatics Council (SAGC) for appointment and promotion within the respective OSD is a barrier because there are very few candidates who are professionally registered. Some departments do not implement the OSD properly resulting in employees in this Department being disgruntled when they see posts advertised and filled differently. The OSD also makes it difficult for government departments to employ engineering graduates permanently immediately after completion of their studies. Hence there is a need for a review of the OSD where the link between OSD and those who are professionally registered is removed, amendment of the OSD applying it based on departmental needs and addressing discrepancies within the OSD.

6.3.1.2 Recruitment and Retention Policies and Strategies

The Department has struggled to recruit and retain skilled technical employees for many years due to recruitment and retention strategies which are not competitive. There is a need to review the current strategies and align them with the current economic climate to recruit and retain scarce and critical technical skills in the Department. In order to improve the recruitment and retention of people with scarce and critical technical skills, there is a need to correct challenges with remuneration making it competitive with the private sector and allowing staff to be flexible and become creative thinkers. The recruitment policy should focus on both the technical skills and behaviour of an individual and decision-making processes in managerial positions. There is a need to negotiate on salary levels during recruitment where remuneration should be considered in relation to personal profile and not the profile of the job. The recruitment strategy should be flexible regarding remuneration for people with critical skills. In addition, the current recruitment policy needs to be reviewed so that it can accommodate several outstanding issues.

For the government to retain staff, it should have a clear succession training programme and policy which focuses on both technical and managerial leadership competencies. There should be a vibrant and interesting workplace where limited outsourcing from private sector and consultants is practiced. Government should also create an environment for growing careers with a long-term program of developing the scarce and critical technical skills. In order to retain staff, the government must find other remuneration strategies which will help to retain staff. Such creative remuneration strategies should involve time off, flexi-hours, working from home and adding responsibility, especially with the implementation of projects which would help employees with scarce and critical technical skills to have more exposure and experience. In order for retention to be effective, government should look into a succession plan policy through competence packages and improving the working environment in the Department where employees are able to learn and be mentored on their own growth path. It is also critical that the Department intensify the Candidacy Development Programmes in order to fast track professional registration. In relation to strategies for the Department to recruit and retain critical technically skilled employees, government should create a training centre for technically skilled employees so that it acquires the required capacity to deliver. This will help to reduce over-reliance on consultants and the private sector.

The KZN DOT should also implement scarce skills allowances in terms of the Scarce Skills Framework approved by the DPSA in 2005 in order to effectively respond to the challenges of recruitment and retention faced by the Public Service.

6.3.1.3 Public Service Regulations, 2016

Current regulations are stringent when it comes to counter offers and or retention. The withdrawal of the regulation relating to the setting of the salary of an employee above the minimum notch in order to attract and or retain an employee for OSD production posts does not permit the Department to counter offer an OSD employee who has been offered a better salary by another Department or private sector.

6.3.2 Practical and Managerial Level

Mentorship and skills development programmes for both new and existing staff tend to produce practical benefits for organisational development. A need for training and development programmes at managerial level for both new and current staff was proposed as a way of retaining employees with technical skills.

6.3.2.1 Training and Development Programmes

The Department should form partnerships with Higher Education Institutions to come up with relevant training programmes which are recognised for earning Continuing Professional Development (CPD) points including short courses for technically skilled employees. Partnerships should also be forged with the relevant Engineering Councils to assist technicians and fast track candidate and professional registrations. The Department should also revive the Technological Training Centre to cater for the training needs of all technical employees within the Department. In addition to training and development programmes, the government should have its own sector training centre which would capacitate its employees with scarce and critical technical skills so that they gain the experience required in their field. This will also help employees to understand the culture of the Department and learn more about recruitment and retention policies and procedures. The government should also have mentorship and skills development programmes to support both new and current employees as a way of retaining its employees. It was generally noted that many employees are not conscious of the recruitment and retention policies, hence the Department should organise a programme to make employees conscious of the recruitment and retention policies and provide training deemed of importance.

6.4 RECOMMENDATIONS FOR FUTURE STUDIES

Having noted the recommendations for the Department which emphasise the OSD, recruitment and retention policies and strategies, and training and development programmes, there is a need for future studies to research how government working conditions for line managers and employees with scarce and critical technical skills have been implemented and research is required into those who stay in the Department with technical skills while others leave the organisation for municipalities and the private sector. It is suggested that more similar studies be conducted in other provinces DOT to ascertain whether similar challenges are experienced and how they could be dealt with.

A need for research on the analysis of government departments' policies on recruitment and retention in comparison with those of municipalities is deemed of importance. Within this context, the user pay principle vis-a-vis government policies would also need to be investigated where one would need to understand how best government is able to address issues around remuneration which municipalities are able to address. An Indaba on the Single Public Service should take place to avoid employees migrating to municipalities due to a gap in salaries based on the fact that municipalities form one sphere of government. There is also a need for further research on critical skills which are not technical in nature to establish if the same challenges are experienced and how the Department could resolve them.

6.5 CONCLUSION

Considering the objectives of the research, literature reviewed, data collected and presented with themes emerging, it can be concluded that the Department of Transport in KZN is efficient in its recruitment of staff with scarce and critical technical skills. However, there is a need to review policies relating to recruitment so that other challenges raised by research participants can be addressed where flexibility on the recruitment and selection of new employees may be considered. It is quite obvious that the Department conforms with the Public Service Regulations on the selection of employees where a fair selection process is conducted for interviews though flexibility in terms of requirements needs to be relooked at and amended. The research found that the Department finds it difficult to retain employees with scarce and critical technical skills, more so because most staff members retire without transferring skills to the remaining employees leading the Department to rely on consultants and the private sector for the implementation of projects which require technical expertise. This clearly shows that the Department needs to look at its retention policy and amend it with the focus on succession planning where recommendations were made. It was noted that employees of the Department lack career paths, experience in implementation of technical projects, managerial expertise and, in general, the negative

effects of the OSD which has consequences for remuneration and the recruitment and retention of scarce and critical technically skilled employees.

REFERENCES

- Abdulrahman, A, S. Hui, X. (2018). Implication of Motivation Theories on Teachers Performance in the Context of Education System in Tanzania. *International Journal of Secondary Education*. 2018:6(3): 46-53.
- Ahmed, S., Tolera, M., and Angamo, M. (2013). Assesment of Job Satisfaction among Pharmacy Professionals in South-West Ethiopia. *International Journal of Pharmaceutical Sciences and Research*, 4(6), 2351–2358.
- Al-Emadi, A. A. Q., Schwabenland, C., and Wei, Q. (2015). The vital role of employee retention in human resource management: A literature review. *IUP Journal of Organisational Behavior*, 14(3), 7.
- Alshememri, M. Shahwan-Akl, L. Maude, P. (2017). Herzberg's Two-Factor Theory. School of Health Sciences (Nursing and Midwifery), RMIT University, Melbourne Australia. *Life Science Journal* 2017:14(5).
- Amos, T.,Pearse, N.Ristow, N. and Ristow, A. (2016). Human Resource Management. 4th Ed Juta South Africa.
- Anyim, F. Ekwoaba, O. Ideh, D. (2012). The role of Human Resource Planning in Recruitment and Selection Process. *British Journal of Humanities and Social Sciences*. Vol.6(2).
- A Toolkit on Recruitment and Selection (2002) Public Service Commission.
- Alvesson, M. (2014). Understanding organisational culture. London: SAGE Publications.
- Bassett, Jones, N., and Lloyd, G. C. (2015). Does Herzberg's motivation theory have staying power? *Journal of Management Development*, 24(10), 929-943.
- Balwanz, D. and Ngcwangu, S, (2016). Seven Problems with the 'Scarce Skills' Discourse in South Africa. *South African Journal of Higher Education*, (2): 31-52.
- Bernocchi, M. (2018). Recruitment and Selection Challenges in Public Government: Addressing recruitment and selection challenges for Public Employers in the Greater Los Angeles Area. California State University, Northridge.

- Bickman, T. Rog, W. (2016). Key elements of focus Group Discussions practices. *International Journal of Scientific Research and Management (IJSRM)*. Volume 05 issue. 09 September 2016.
- Bogatova, M. (2017). Improving Recruitment, Selection and Retention of Employees. Bachelors Thesis. South Eastern Finland University of Applied Sciences.
- Breier, M. and Erasmus, J. (2009) Skills shortages in South Africa: case study of key professions. Cape Town:HSRC, South Africa.
- Brixiová, Z., Ncube, M., and Bicaba, Z. (2015). Skills and youth entrepreneurship in Africa: analysis with evidence from Swaziland. *World Development*, 67, 11-26.
- Brown, R.B. (2006) “Doing Your Dissertation in Business and Management: The Reality of Research and Writing” Sage Publications.
- Bryman, A, (2016). Social Research Methods (5th ed.). London: Oxford University Press.
- Budget Vote 12 policy statement 2018/19 delivered by MEC for Transport, Community Safety and Liaison, Honorable T.M. Kaunda, KwaZulu-Natal Provincial Legislature, Pietermaritzburg Tuesday, 8 May 2018.
- Business Report. 2019. Engineering brain drain is alarming-Saice. IOL Business report. Edward West.
- Chala, S, A. (2017). Bidirectional Job Matching through Unsupervised feature learning.University of Siegen.
- Chandrasekara, C,M,B,R,D. and Perera, G,D,N. (2016). The Effect of Recruitment Prtactices on Employee Retention in Selected Large Scale Apparel Firms in Kandy District, Sri Lanka. 3rd International HRM Conference, Vol 3, No.1, 08th October, 2016. Department of Human Resource Management, University of Sri Jayewardenepura. ISSN: 2420-7608.
- Coetzee, M., and Stoltz, E. (2015). Employees' satisfaction with retention factors: Exploring the role of career adaptability. *Journal of Vocational Behavior*, 89, 83-91.
- Coetzee, M. Mitonga-Monga, J and Swart, B. (2014). Human Resource Practices as predictors of engineering staffs organisational commitment. SA Journal of Human Resource Managemnt/SA Tydskrif vir Menslikehulpbronbestuur,12(1), Art.

- Creswell, J. W. (2014). *Research Design. Qualitative, Quantitative, and Mixed Methods Approaches*. 4th ed. London: SAGE Publications.
- Deery, M., and Jago, L. (2015). Revisiting talent management, work life balance and Retention Strategies. *International Journal of Contemporary Hospitality Management*, 27(3), 447- 453.
- Department of Higher Education and Training. (2013). White Paper for Post-School Education and Training. Building an Expanded, Effective and Integrated Post-School System.
- Draai, E., and Oshoniyi, O. (2013). Scarce And Critical Skills For Local Government: Assessing The Nelson Mandela Bay Metropolitan Municipality. *Journal of Public Administration*, 48(4), 867-882.
- Emanuela, T, A. (2018). The Impact of Social Media on Recruitment. Ovidius University Annals, Economic Sciences Series Volume XVIII, Issue 2/2018.
- Elegbe, J. A. (2016). *Talent management in the developing world: Adopting a global perspective*: Routledge.
- Etikan, I, Musa, S, A. and Alkassim, R, S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*. 5(1): 1-4.
- Eva, T, P. (2018). Recruitment and selection Strategies and Practices in the Private Sector Commercial Banks of Bangladesh:Evidence from Human Resource Practitioners. *European Business & Managemnt*, 2018:4(1: 28-38).
- Fisher, J. G. (2016). *Strategic reward and recognition : improving employee performance through non-monetary ... incentives*. London, England: Kogan Page Stylus.
- Getha-Taylor, H., Fowles, J., Silvia, C., and Merritt, C. C. (2015). Considering the effects of time on leadership development: A local government training evaluation. *Public Personnel Management*, 44(3), 295-316.
- Ghosh, P., Satyawadi, R., Joshi, J. P., and Shadman, M. (2013). Who Stays With You? Factors predicting employees' intention to stay. *International Journal of Organisational Analysis*, 21(13), 288-312.
- Goksoy, A. (2016). *Organisational change management strategies in modern business*.

- Grobler, P. A. (2011). Human resource management in South Africa. Australia: Cengage Learning.
- Gumbo, M.T. (2014). The Reality of Research and Writing. *Pilot studies*. Sage Publications.
- Henken, Y. Remery, T. and Schippers, D. (2017). Effective Changes in Human Resources, process outsourcing. University of Sunderland, Chandigarh University.
- Hlengwa, H. (2015). Retention of Scarce and Critical Skills at the Durban University of Technology: *A Challenge for Human Resources Management*. University of KwaZulu-Natal, Westville.
- Hoffman, M., and Tadelis, S. (2018). People Management Skills, Employee Attrition, and Manager Rewards: An Empirical Analysis.
- Hollenbeck, J. R., Noe, R. A., and Gerhart, B. A. (2018). *Human resource management gaining a competitive advantage*. New York, NY: McGraw-Hill Education.
- Ibidunni, S., Osibanjo, O., Adeniji, A., Salau, O. P. and Falola, H. (2015). Talent Retention and Organisational Performance: A Competitive Positioning in Nigerian Banking Sector. *Periodica Polytechnica Social and Management Sciences*. 24(1), pp 1-13. Covenant University, Nigeria.
- Kaplan, D. E. (2015). The Structure and Performance of Manufacturing in South Africa. *Structural Change and Industrial Development in the BRICS*, 244.
- Kalina, M. and Rogan, M., (2016). Recruitment of future skills demand. LMIP Report. Vol.14. No.3:393-414.
- Koch, T. Gerber, C. De Klerk, J, J. (2018). The impact of socila meadi on recruitment:Are you linkedin?. *SA Journal of Human Resource Managemnt*. ISSN (Online) 2071-078x,(Print) 1683-7584.
- Kothari, C.R, (1985). *Research Methodology- Methods and Techniques*. New Delhi, Wiley Eastern Limited.
- Kougija, E. (2014). Increasing Employee Satisfaction and Motivation. Hamk University of Applied Sciences. Case Company: Top Connect OU.
- Kruger, N. (2016). South Africa has a skills Shortage. How do we fix it? Africa has a skills shortage. How do we fix it? World Economic Forum. Available:

- <http://www.weforum.org/agenda/2016/05/south-africa-skills-shortage-how-do-we-fix-it>. (Accessed 22 April 2017).
- Kumar, R. (2005). *Research Methodology-A Step-by-Step Guide for Beginners*, (2nd.ed.). Singapore, Pearson Education.
- Larsen, H. H. (2017). Key issues in training and development. In *Policy and Practice in European Human Resource Management* (pp. 107-121): Routledge.
- Letshokgohla, M.P. (2015). *An assessment of the Recruitment, Selection and Retention of Technical Staff in the The Limpopo Department of Agriculture*. Master's thesis. University of South Africa.
- LGSETA, (2016). *Local Government Sector Education and Training Authority Scarce and Critical Skills Guide* , South Africa: LGSETA.
- Lin, P, P. (2017). *How to Improve Engineering Recruitment and Retention*. American Society for Engineering Education. Cleveland State University.
- Paper presented at the American Society for Engeneering Education Zone II Conference, Cleveland, USA.
- Persal Technical Report (2019). KwaZulu Natal Office of The Premier.
- Pregolato, M. Bussin, M,R. Schlechter, A, F. (2017). Total Rewards that retain: A study of demographic preferences. SA Journal of Human Resource Management. ISBN: (Online) 2071-078x, (Print) 1683-7584.
- Mabuza, P. F., and Proches, C. N. G. (2014). Retaining Core, Critical and Scarce Skills in the Energy Industry. *Indian Journal of Industrial Relations*, 49(4), 635-648.
- Maluleka, R., 2018. *Quarterly Labour Force Survey Q2: 2018*, s.l.: Statistics SA.
- Maslow, A. H., Stephens, D. C., Heil, G., and Maslow, A. H. (1998). *Maslow on management*. New York: John Wiley.
- Maslow, A.H., (1943). A theory of Human Motivation. *Psychological Review*, 50(4), pp.370-396.
- Mateus, A, D., Lie, C, A. and Iwu, C, G. (2014). Skills Shortage in South Africa: Interrogating the Repertoire of Discussions. *Mediterranean Journal of Social Sciences*. 5 (6). 63. MCSER Publishing Rome Italy.

- Maxwell, J. A. (2013). *Designing a Qualitative Study*. Chapter 7. Available online: https://us.corwin.com/sites/default/files/upm-binaries/23772_Ch7.pdf (Accessed 04 June 2018).
- Mbugua, G. M., Waiganajo, E. W. and Njeru, A. (2015). Relationship between Strategic Recruitment and Employee Retention in Commercial Banks in Kenya. *International Journal of Business Administration*. 6(1). Available online: www.sciedu.ac/ijba.
- Mencil, J., Wefald, A. J., and van Ittersum, K. W. (2016). Transformational leader attributes: interpersonal skills, engagement, and well-being. *Leadership and Organisation Development Journal*, 37(5), 635-657.
- Metha, M., Kurbetti, A., and Dhankhar, R. (2014). Study on Employee Retention and Commitment. *International Journal of Advanced Research in Computer Science and Management Studies*, 2(2), 154-164.
- Meyers, M. C., and van Woerkom, M. (2014). The influence of underlying philosophies on talent management: Theory, implications for practice, and research agenda. *Journal of World Business*, 49(2), 192-203.
- Meyer, T. (2017). *Shaping Africa's Talent: Enabling Africa's Potential*. 1st. Randburg: KR Publishing.
- Mncayi, P. (2016). An Analysis of The Perceptions of Graduate Unemployment among Graduates from a South African University. *International Journal of Social Sciences and Humanity Studies*. Vol8, No1,2016 ISSN:1309-8063(Online).
- Mohlala, J., Goldman, A. and Goosen, X. (2014). Employee retention within the information division of a south African bank. *SA journal of Human Resource Management*, 12(1);13-15.
- Nel, E. (2017). South Africa's manufacturing economy: problems and performance. In *Geography and Economy in South Africa and its neighbours* (pp. 81-94): Routledge.
- Nel, W.,(2017). *Human Resource Management: 10th Ed* Cape Town, South Africa.
- Nishishaba, M., Jones, M, and Kraner, M. K. (2014). *Research Methods and Statistics for Public and Non-Profit Administrations*. 2nd London. SAGE Publications Inc.

- Noe, R., Hollenbeck, J. R., Genhart, B. and Wright, P. M. (2018). *Human Resource Management: Gaining a Competitive Advantage*. 8th. New York: McGraw-Hill Education.
- Northouse, P. G. (2018). *Leadership: Theory and practice*: Sage publications.
- Oaya, Z.C.T., Ogbu O. J. and Remilekun O., G. (2017). Impact of Recruitment and Selection Strategy on Employees' Performance: A study of Three Selected Manufacturing Companies in Nigeria.
- Occupation Specific Dispensation. (2009). *Engineers and Related Professionals*.
- Onah, F. O. and Anikwe, O. S. (2016). The Task of attraction and retention of academic staff in Nigeria Universities. *Journal of Management and Strategy*. 7(2), 10.
- Oshoniyi, O., and Draai, E. (2013). Scarce and critical skills for local government : assessing the Nelson Mandela Bay Metropolitan Municipality. *Journal of Public Administration*, 48(si-1), 867-882.
- Otoo, I.C. Assuming, J. Agyei, P. M. (2018). Effectiveness of Recruitment and Selection Practices in Public Sector Higher Education Institutions: Evidence from Ghana. *European Scientific Journal*. May 2018 edition. Vol.14 No 13 ISSN:1857-7881.
- Pichère, P., and Cadiat, A.-C. (2015). *Maslow's hierarchy of needs*. Namur: 50minutes.
- Rathi, N., and Lee, K. (2015). Retaining Talent by Enhancing Organisational Prestige: An HRM Strategy for Employees Working in the Retail Sector *Personnel Review*, 44(5), 454-469.
- Ravitch S., M., and Rigga M., (2017). *Reason and Rigor: How Conceptual Frameworks Guide Research*, 2nd Edition. New York: McGraw-Hill Education.
- Rees, G and Smith, P.E (2014). *Strategic Human Resource Management: An International Perspective*: New Dehli, Sage Publications.
- Republic of South Africa. Department of Higher Education and Training. (2016). *Transport SETA Sector Skills Plan*. Transport Education Training Authority. Pretoria: Government Printers.
- Republic of South Africa. Department of Higher Education and Training. (2018). (Vol. 636, No. 41728). Pretoria: Government Printers.

Republic of South Africa. Department of Home Affairs. (2014). (Vol.588, No. 37716). Pretoria: Government Printers.

Republic of South Africa. Department of Public Service and Administration. (2016). Public Service Regulations. Government Printers.

Republic of South Africa. KZN Department of Transport. (2013). Strategic Plan 2013-2017. KwaZulu-Natal: Government Printers.

Republic of South Africa. KZN Department of Transport. (2012). Retention Policy.

Republic of South Africa. Department of Transport. (2017). Workplace Skills Plan 2017/18 KwaZulu-Natal: Government Printers.

Republic of South Africa. Department of Water and Sanitation. (2016). Addressing SA's Scarce Skills: Infrastructure News. Available: <http://www.infrastructurene.ws/2016/08/05/addressing-sas-scare-skills> (Accessed 27 April 2018).

Republic of South Africa. KZN Provincial Government. (2018). PERSAL Report February 2018 KwaZulu-Natal: Government Printers.

Republic of South Africa. KZN Department of Transport. (2014). Expanded Public Works Programme. KwaZulu-Natal: Government Printers.

Republic of South Africa. KZN Department of Transport. (2018). Public Service Sector Education and Training Authority. KwaZulu-Natal: Government Printers.

Republic of South Africa. KZN Treasury. (2017). Budget Speech. Budget Address by Finance MEC Belinda Scott on 7 March 2017: 2017/18 MTEF Budget in the Provincial Legislature.

Republic of South Africa. KZN Department of Transport. (2011). Recruitment and Selection Policy.

Republic of South Africa. KZN Department of Transport. (2018). Working Draft 2 (as of 23 April 2018).

Republic of South Africa. Public Service Act, (1994). (Proclamation 103 of 1994). Pretoria: Government Printers.

Republic of South Africa. Public Service Regulations, (2016). Pretoria: Government Printers.

- Republic of South Africa. Road Infrastructure Strategic Framework for South Africa. Available online
http://www.transport.gov.za/documents/11623/21913/RISFSAOct2016_comppages11to20.pdf/2d533503-e2d4-44af-bae3-20dc16688769 (Accessed 27 April 2018).
- Rose, S., Spinks, N. and Canhoto, .A. I. (2015). *Management Research: Applying the Principles. Case study research design.* 1-10.
- Saunders, M., Lewis, P. and Thornhill, A. (2012) “*Research Methods for Business Students*” 6th edition, Pearson Education Limited.
- Schein, E. H. (2010). *Organisational culture and leadership.* San Francisco: Jossey-Bass.
- Sekaran, U. and Bougie, R. (2013). *Research Methods for Business; A skill building Approach.* 6th. united kindom. John Wiley and Sons Ltd.
- Selesho, J, M. and Naile, I. (2014). Academic Staff Retention as a Human Resource Factor: University Perspective. *International Business and Economics Research Journal.* 13(2), 295.
- Shadding, C. R., Whittington, D., Wallace, L., Wandu, W. S., and Wilson, R. K. (2016). Cost-Effective Recruitment Strategies That Attract Underrepresented Minority Undergraduates who persist to STEM Doctorates. *Sage Publication,* 1-15.
- Silverman, D. (2013). *What Counts as Qualitative Research? Some Cautionary Comment.* Goldsmiths’ College, London University, UK.
- Singh, K. (2007). “*Quantitative Social Research Methods*” SAGE Publications.
- South Africa Yearbook (2017/18) Transport
- Swanepoel, B, J., Erasmus, B, J., Schenk, H, W. and Tshilongamulenzhe, M, C. (2014). *South African Human Resource Management Theory and Practice.* 5th ed. Cape Town South Africa. Formeset Print.
- Taquette, S, T. Minayo, M, C. (2015). *Research Design: Qualitative, and Mixed Methods Approaches Third.* D. C. Laughton et al., Eds California: Sage Publications, Inc.
- Thapa, T. (2011). *Attracting and retaining scarce skills through scarce skills allowance in the Botswana Public Service: A case study of city of Francistown Council.* The University of Namibia.

- The Hays Global Skills Index. (2017). Recruiting experts world wide. London.
- Thomas A, (2002). Employment Equity in South Africa: Lessons from the global school, *International Journal of Manpower*, (23): 237-255.
- Tripathi, P.C and Shukla, A. (2005). *A Textbook of Research Methodology in Social Sciences*, Sultan Chand and Sons Educational Publishers, New Dehli.
- Umeozor, S, N. (2018). Motivation and Human Resource in Libraries. *International Journal of Knowledge Content Development & Technology*. Vol 8, 29-40.
- Van Dyk, J., Coetzee, M., and Tebele, C. (2013). Organisational commitment and job embeddedness of service staff with critical and scarce skills. *South African Journal of Labour Relations*, 37(1), 61-78.
- Van Dyk, J., Coetzee, M., and Tebele, C. (2014). Organisational commitment and job embeddedness of service staff with critical and scarce skills. *South African Journal of Labour Relations*, 38(01), 61-78.
- Vasquez, D. (2014). Employee Retention for Economic Stabilization: A Qualitative Phenomenological Study in the Hospitality Sector. *International Journal of Management, Economics and Social Science*, 3(1), 1-17.
- Wärnich, S. (2015). *Human Resource Management in South Africa*. Cengage Learning Ltd.
- Windapo, A, O. (2016). Skilled Labour Supply in the South African Construction Industry: The Nexus between Cetificatio, Quality of Work output and Shortages. *SA Journal of Human Resource Management*. ISSN: (Online) 2071-078X.
- XPATWEB Work Permit and Epatriate Solutions. (2018). Critical skills survey, foreigners working in South Africa. Available online <http://www.xpatweb.com/critical-skills-survey-2018/>. (Accessed 27 April 2018).
- Yin, R.K. (2008) *Case Study Research: Design and Methods*, New York, Sage Publications.
- Zikmund, G, W., Babin, J, B., Carr, C, J. and Griffin,M. (2013). *Business Research Methods*. 9th. United Kingdom. Cengage.
- Zohrabi, M. (2013). Mixed Method Research: Instruments, Validity, Reliability and Reporting Findings. *Theory and Practice in Language Studies*. 3(2), 255.

ANNEXURE A: RESEARCH INSTRUMENT



UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

ANNEXURE A

UNIVERSITY OF KWAZULU-NATAL

SCHOOL OF MANAGEMENT, INFORMATION TECHNOLOGY AND
GOVERNANCE

Information Sheet and Consent to Participate in Research

July 2018

Dear respondent,

I, **Miranda Cindy Zwane**, am a part-time postgraduate student of the University of KwaZulu-Natal in South Africa. I am in the Faculty of Law and Management Studies in the School of Management, Information Technology and Management based at the Pietermaritzburg campus. I am undertaking a research project titled: **An evaluation of recruitment and retention practices of scarce and critical technical skills in the KwaZulu-Natal Department of Transport**. This project is being supervised by **Dr O. E. Okeke-Uzodike** and **Dr W. B. Zondi** from the University of KwaZulu-Natal.

I am writing to invite you to consider participating in a study that involves an evaluation of human resource practices relating to scarce and critical technical skills in the Department. The aim and purpose of this study is to explore effective methods to recruit and retain employees in possession of scarce technical skills in the KwaZulu-Natal Department of Transport. One hundred and five (105) employees and ten (10) senior managers are expected to take part in this study. Your participation in this study is purely voluntary and your anonymity will be protected by the researcher.

This study will involve the filling of the questionnaire via the web link and it will take not more than 45 minutes to complete. I will be personally administering the questionnaire to the employees without computers and if there are any doubts or clarity seeking questions I will be

able to respond. The questions will be closed-ended. Questionnaires will remain confidential and data will be used to generate findings that will form the basis of my Masters dissertation.

It is my hope that this study will help bring attention to challenges of scarce technical skills in the Department of Transport in KwaZulu-Natal and how human resource practices could be improved.

All data, both electronic and hard copy, will be securely stored during the study and archived for 5 years. After this time, all data will be destroyed.

Please contact **Cindy Zwane** if you have any questions about the study, or would like more information.

Cell no.:	082 8044 032
Email:	217080393@stu.ukzn.ac.za
Address:	University of KwaZulu-Natal Pietermaritzburg Campus, Pietermaritzburg, South Africa.
Supervisor:	Dr O E Okeke - Uzodike
Contact:	071 6057174
Co-supervisor:	Dr W B Zondi
Contact:	074 412 7054

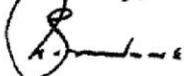
Alternatively you may contact the UKZN Humanities and Social Science Research and Ethics Committee:

Mrs Mariette Snyman

Humanities and Social Science Ethics (HSSREC) Research Office,
Govan Mbeki Building, Westville Campus, Private Bag X54001, DURBAN 4000
Tel: 031 260 8350 Snymanm@ukzn.ac.za

Thank you in advance for your cooperation with this research exercise.

Sincerely,



Miranda Cindy Zwane

ANNEXURE B: INFORMATION CONSENT FORM

ANNEXURE B



UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

Title of research project:

An evaluation of recruitment and retention practices of scarce and critical technical skills in the KwaZulu-Natal Department of Transport.

Name and Position of Researcher:

Miranda Cindy Zwane, Postgraduate student, School of Management, IT and Governance, University of KwaZulu-Natal.

CONSENT FORM

I, _____, confirm that I have read the information sheet that describes this study and have had an opportunity to ask questions so as to understand the purpose of the study.

I understand that my participation is **voluntary** and that I am free to withdraw at any time without giving any reason.

I understand that I do not wish to answer all the questions if I do **not** wish to and may take a break or leave the interview at any time.

I understand that if I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

Mrs Mariette Snyman

Humanities and Social Science Ethics (HSSREC) Research Office,
Govan Mbeki Building, Westville Campus, Private Bag X54001, DURBAN 4000
Tel: 031 260 8350 Snymanm@ukzn.ac.za

I am aware that any information I provide will be treated in the strictest confidence.

Please tick box

Yes No

I agree to take part in responding to a questionnaire.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

I give permission for brief extracts of my interview to be used for research purposes with strict adherence to anonymity.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Audio-recording

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Signature of participant:

Date:

Signature of witness:
(Where applicable)

Date:

Signature of translator:
(Where applicable)

Date:

ANNEXURE C: FOCUS GROUP DISCUSSION QUESTIONS

ANNEXURE C

FOCUS GROUP DISCUSSION QUESTIONS

1. What are the main reasons for the exit of employees with scarce and critical technical skills in the KwaZulu-Natal Department of Transport?
2. What has the Department done to ensure the correct implementation of the recruitment and retention policies? Are there any strategies in place for recruiting and retaining employees with scarce and critical technical skills?
3. What are the reasons making the Department experience difficulties in attracting the required scarce and critical technical skills?
4. How can the Department of Transport improve the retention and recruitment of people with scarce and critical technical skills?
5. What are the training interventions needed for the succession planning programme?
6. What would you suggest as a way of improving the programme?
7. How should the Department of Transport improve the recruitment policy to align it with the retention policy?
8. How can the Occupation Specific Dispensation (OSD) be improved? What are your recommendations to the Department on the OSD?

ANNEXURE D: SENIOR MANAGEMENT INTERVIEW SCHEDULE

ANNEXURE D

Senior Management Interview Schedule

A1. What are the main reasons for the exit of employees with scarce and critical technical skills?

A2. How can the Department improve the implementation of the Recruitment and Retention Policies in order to recruit and retain more scarce and critical technical skilled employees?

A3. Why is the Department experiencing difficulty in attracting the required technical skills?

A4. During the process of conducting exit interviews what important issues do you come across which you think might improve the recruitment and retention of scarce and critical technical skilled employees?

A5. What can you suggest for the department to have a succession policy? What training interventions are needed for the succession planning programme and the duration of the programme?

A6. What suggestions do you have to improve the recruitment policy to be aligned with the retention policy?

A7. How do you think the Occupation Specific Dispensation (OSD) could be improved?

A8. In general having given me the above views, what strategies could the KwaZulu-Natal Department of Transport utilise in order to recruit and retain technically skilled employees?

Thank you for taking time to complete the survey. Your time, effort and energy is appreciated.

Information provided by you will remain strictly confidential.

ANNEXURE E: GATEKEEPERS LETTER

ANNEXURE E



transport

Department:
Transport
Province of KwaZulu-Natal

Street Address: 172 Burger Street,
Pietermaritzburg, 3200
Postal Address: Private Bag X9043,
Pietermaritzburg, 3200
Tel: (27)(33) 355 8902
Fax: (27)(33) 355 8924
Email: Cindy.Zwane@kzntransport.gov.za

HUMAN RESOURCE MANAGEMENT

Attention: Mr B S Gumbi
HOD: KZN TRANSPORT

RE: PERMISSION TO CONDUCT RESEARCH IN THE DEPARTMENT OF TRANSPORT ON RECRUITMENT AND RETENTION OF SCARCE AND CRITICAL TECHNICAL SKILLS

The above subject refers.

I hereby request approval from the Head of Department to conduct a research on recruitment and retention of employees with scarce and critical skills in the Department.

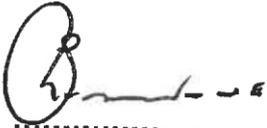
I am a Master of Commerce student in Human Resource Management at the University of KwaZulu-Natal Pietermaritzburg Campus. The topic of the study is: **EVALUATION OF RECRUITMENT AND RETENTION OF SCARCE AND CRITICAL TECHNICAL SKILLS IN THE DEPARTMENT OF TRANSPORT.**

The objectives of the research are:

- To explore effective methods to recruit and retain technical skilled employees in the KwaZulu-Natal Department of Transport.
- To establish the shortcomings related to the Occupation Specific Dispensation (OSD) for technically skilled employees in the KwaZulu-Natal Department of Transport.
- To determine factors affecting the recruitment and retention of scarce and critical technical skills in the KwaZulu-Natal Department of Transport.
- To establish measures for the department to adhere to the appropriate recruitment and retention processes.

Data collected from the department will be kept confidential and respondents will be assured of anonymity at all cost.

(Subject): PERMISSION TO CONDUCT RESEARCH IN THE DEPARTMENT OF TRANSPORT ON RECRUITMENT AND RETENTION OF SCARCE AND CRITICAL TECHNICAL SKILLS



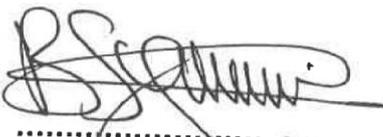
MS MIRANDA CINDY ZWANE (RESEARCHER)

DATE: 14/05/2018

HOD'S COMMENTS:

.....
.....
.....

APPROVED / NOT APPROVED



.....
B S GUMBI
DATE: 14/05/2018

'prosperity through mobility'

OFFICE OF THE CHIEF DIRECTOR: HUMAN RESOURCE MANAGEMENT: MS MC ZWANE
Street Address: 172 Burger Street, Pietermaritzburg, 3201 Republic of South Africa
Postal Address: Private Bag X9043, Pietermaritzburg, 3200 Republic of South Africa
Tel: (27) (33) 355 8902 Fax: (27) (33) 394 1040
Web site: <http://www.kzntransport.gov.za/home.htm>

ANNEXURE F: ETHICAL CLEARANCE

ANNEXURE F



15 February 2019

Ms Miranda Cindy Zwane (217080393)
School of Management, IT & Governance
Pietermaritzburg Campus

Dear Ms Zwane,

Protocol reference number: HSS/0983/018M

Project title: An evaluation of recruitment and retention practices of scarce and critical technical skills in the KwaZulu-Natal Department of Transport

Approval Notification – Amendment Application

This letter serves to notify you that your application and request for an amendment received on 04 December 2018 has now been approved as follows:

- Change in Research Methodology
- Change in Research Instrument

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form; Title of the Project, Location of the Study must be reviewed and approved through an amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for period of 3 years from the date of original issue. Thereafter Recertification must be applied for on an annual basis.

Best wishes for the successful completion of your research protocol.

Yours faithfully

.....
Dr Rosemary Sibanda (Chair)

/ms

cc Supervisor: Dr OE Okeke-Uzodike and Dr Wellington B Zondi

cc Academic Leader Research: Professor Isabel Martins

cc School Administrator: Ms Jessica Chetty

Humanities & Social Sciences Research Ethics Committee
Professor Shenuka Singh (Chair)/Dr Shamila Naidoo (Deputy Chair)
Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 3587/8350/4557 Facsimile: +27 (0) 31 260 4609 Email: ximbap@ukzn.ac.za / snymam@ukzn.ac.za / mohunp@ukzn.ac.za

Website: www.ukzn.ac.za



Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

ANNEXURE G: EDITORS'S REPORT

ANNEXURE G

EDITOR'S REPORT AND DECLARATION

A grammar and language edit was performed on the Masters dissertation of Ms. M C Zwane. The major issues edited include:

- Inclusion of definite (the) and indefinite (a, an) articles which had been omitted.
- Where specific reference is being made to the KZN Department of Transport, the word "Department" is capitalized because it has been defined to mean the KZN Department of Transport. All other references to a department/s in general are not capitalized.
- Word order has been changed to assist with the flow of the document and correct grammar usage where necessary. Split infinitives were changed to the correct form of the infinitive. The word order of adverbial and adjectival clauses was changed to promote understanding. Relative pronouns were corrected where they were incorrectly utilized.
- Changes were effected to tenses for the sake of consistency. Where tenses were mixed, changes were effected to ensure correctness and assist with comprehension.
- Punctuation marks that had been omitted (mainly commas) were inserted at relevant points. Sentences that started without a capital letter, were corrected so that each sentence now starts with a capital letter.
- Vocabulary was changed to promote understanding where verbose language clouded the actual issues and word choice was not fit for purpose in certain sentences.
- Paragraphs with unclear meaning were highlighted but could not be corrected further due to the editor not being able to understand the content of the paragraphs highlighted.

A suggestion has been made to the author to consider rewording or removing information that has been repeated unnecessarily because it adds nothing to the content of the dissertation. The document is awkward to read in parts because of the repetition of information in successive paragraphs for apparently no reason. This disturbs the flow of the document and does not promote understanding. All changes suggested to the author were suggested to promote an understanding of the issues that are being addressed and not to change or alter the content of the dissertation in any way. Besides the issues mentioned above, no further changes were made to the dissertation.

To the best of my knowledge the content of the dissertation is the work of Ms M C Zwane and the editor did not contribute to the content of the dissertation and had no substantive input into the dissertation.


E. JANSE VAN RENS RG (BA HONS HDE BSc LLB LLM)
01/11/2018 BU

ANNEXURE H: TURN IT IN REPORT

ANNEXURE H

CINDY DISSERTATION FINAL Turn IT IN 30 July 2019 (1).docx

ORIGINALITY REPORT

10%	7%	1%	8%
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