



**MEASURING QUALITY OF WORK LIFE OF MUNICIPAL FIREFIGHTERS IN THE  
WESTERN CAPE, SOUTH AFRICA**

by

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**Thesis submitted in partial fulfilment of the requirements for the degree**

**Master of Technology: Business Administration**

**in the Faculty of Business and Management Sciences**

**at the Cape Peninsula University of Technology**

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**District Six Campus**

**August 2019**

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## DECLARATION

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**Signed**

**11 March 2020**

**Date**

## ABSTRACT

Municipal firefighters face a number of risks and much stress at work. In the South African context, the quality of work life (QWL) is impacted considerably by high stress levels and work-related demands. Currently, firefighting organisations face serious challenges that hamper the QWL among municipal firefighters. These challenges include physical and mental challenges, and the element of work which negatively affects the job performance among the firefighters. The primary research objective has been to identify the key factors that impact on the QWL of municipal firefighters in the Western Cape, South Africa. In addition, this study explores a common approach for measuring the QWL and determining an effective way to maintain a better work life for the firefighters.

The quantitative research method was employed. This study measured and analysed the key factors that had impacted on the QWL of municipal firefighters in the Western Cape, South Africa. A questionnaire was used to collect data from a group of 120 municipal firefighters from the Goodwood Fire Department. This study used the ethical principles of informed consent, the right to privacy and honesty, and confidentiality/anonymity in the research process. The quantitative data were analysed using the Statistical Package for the Social Sciences (SPSS).

The findings and results provide insight into and guidance to management and employees in a practical way to improve the QWL among municipal firefighters. The fire department should upgrade the QWL of its workers so as to hold them and get its very own vital needs. The fire department should develop and keep up QWL programmes. Support from ranking employees are basic to a useful QWL programme. In addition, unmistakable upper level management contribution is one of the critical factors in the procedure accomplishment.

**Keywords:** Quality of work life, municipal firefighters, job satisfaction, job performance, organisational culture

## **ACKNOWLEDGEMENTS**

I wish to thank the Lord Almighty for giving me the wisdom and courage to undertake this journey.

I express my sincere gratitude and appreciation to my supervisor, Dr Bingwen Yan, for guiding me through the process. His special interest and knowledge of this field enabled him to provide me with the guidance and motivation which I needed to complete this dissertation.

Special thanks also goes to the Head of Department for providing me with the opportunity to pursue a master's degree.

My sincere appreciation goes to my aunt, Miss Madikane Thembeke, and my late grandmother, Mrs Madikane Manyandube, for their unconditional love and for always reminding me that education is the key to success.

I thank you, my siblings, Ongeziwe, Nasiphi, Alizwa and Akho, for your support, encouragement and concern, and especially to my daughter Lunathi.

I wish to give very special thanks to Mr Lephafa, my best friend/ partner, for encouraging and giving support when I felt hopeless. I will forever value and appreciate you.

Finally, I would like to thank my family. Their support has indeed seen me through all the hardship I have encountered.

## **DEDICATION**

This dissertation is dedicated to my aunt, Thembeke Madikane.

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## **LIST OF ABBREVIATIONS**

CPUT	Cape Peninsula University of Technology
CTFRS	City of Cape Town Fire and Rescue Services
FRC	Faculty Research Committee
HDC	Higher Degrees Committee
MFD	Municipal Fire Department
OHS	Occupational Health and Safety
QWL	Quality of Work Life
SPSS	Statistical Package for the Social Sciences

# **CHAPTER 1: SCOPE OF THE RESEARCH**

## **1.1 INTRODUCTION**

The term *quality of work life* (QWL) involves the issue of how employees are rewarded or experience job satisfaction during the time spent in the work environment. High QWL brings about an impression of satisfaction; thus, contributing toward versatility, high profitability and hierarchical adequacy (Nayeri, Salehi & Noghabi, 2011). Furthermore, other researchers assert that the following four levels of needs must be considered for measuring the QWL which include satisfaction from the work environment, job requirements, supervisory conduct and ancillary programmes (Li & Yeo, 2011; Sirgy, Efraty, Siegel & Lee, 2001).

The study is located in the field of business administration, and has set out to give a broad comprehension of the key factors that impact on the QWL of municipal firefighters in the Western Cape, South Africa, by measuring and analysing those factors. Any concerns that are related to firefighters' QWL may be raised with management in order to enhance the work environment.

A questionnaire has been used as a measuring instrument to collect data from the sample population of municipal firefighters from the Goodwood Fire Department in Cape Town, Western Cape Province. According to Western Cape Community (2018), the City of Cape Town's Fire and Rescue Services (CTFRS) consist of 30 fire stations and deal with all types of fires, emergencies and rescues. The Goodwood Fire Department is the headquarters for the Fire and Rescue Services, as well as its command and control centre.

## **1.2 BACKGROUND TO THE RESEARCH PROBLEM**

The study purpose is to measure the QWL of municipal firefighters in the Western Cape, South Africa. These firefighters are usually exposed to various hazards during the course of their work, resulting in a wide range of stress factors which impact negatively on their QWL. Recent studies

conducted in other countries (Abidin, 2016; Jain & Kaur, 2014; Mosadeghrad, Ferlie & Rosenberg, 2011; Rubel & Kee, 2014; Bamel, Rangnekar & Yadav, 2016) have shown that key factors that impact on the QWL are relationships with colleagues, personality, job competence, job performance, job satisfaction, job security, organisational communication, working environment, etc. In addition, Carey, Al-Zaiti, Dean, Sessanna & Finnell (2011) state that sleep problems, depression, substance use, social bonding are the key factors that impact the quality of life in professional firefighters. This is also supported by Abbasi, Rajabi, Yazdi and Shafikhani (2018) that, sleep is one of significant factors affecting the quality of life in firefighters. Indeed, good sleep is one of the essential needs of firefighters, and poor sleep quality impairs their performance and decision making (Abbasi et al., 2018). Furthermore, exposure to violence at the workplace is common in firefighters, although limited by small numbers, the association between violence and poor mental health is plausible (Pinto, Radon & van Dijk, 2018). Based on the above, this study has measured the QWL of municipal firefighters and analysed these key factors on their performance in the workplace in the South African context.

### **1.3 STATEMENT OF THE RESEARCH PROBLEM**

As previously mentioned, municipal firefighters face a number of risks and stress-causing factors at work (Abbasi et al., 2018; Pinto et al., 2018; Fraess-Phillips, Harris & Wagner, 2017; Muindi & K'Obonyo, 2015; Pawlak, Gotlib & Galazkowski, 2016). These risks include exposure to hazards and violence at workplace, mental health, depression, substance use, social bonding, etc. These factors affecting the QWL of firefighters negatively. In the current South African context, firefighting organisations face serious challenges that negatively affect the QWL of municipal firefighters. These include physical, mental and work challenges such as health and well-being issues, working conditions, job security, job satisfaction, job competence and the work environment (Sinha & Subramanian, 2013) which all negatively affect the job performance of municipal firefighters.

## **1.4 RESEARCH QUESTION AND SUB-QUESTIONS**

The primary research question of this study reads as follows:

What are the key factors that impact on the QWL of municipal firefighters in the Western Cape, South Africa?

To address the primary research question, the following investigative research sub-questions have been formulated to develop the QWL measures and to analyse the key factors that impact on the QWL of the firefighters:

- What is the level of job satisfaction among municipal firefighters in the Western Cape, South Africa?
- What are the key factors that impact on the QWL of municipal firefighters?
- What common quality tools or mechanisms can be used to measure the QWL of municipal firefighters?
- How can a better QWL of municipal firefighters be obtained and maintained?

## **1.5 RESEARCH OBJECTIVES**

The primary objective of this research study is to identify the key factors that impact on the QWL of municipal firefighters in the Western Cape, South Africa. To achieve the primary research objective, the secondary research objectives are to:

- Identify the level of job satisfaction among municipal firefighters in the Western Cape, South Africa
- Discover the key factors that impact on the QWL of municipal firefighters.
- Find out what the common quality tools or mechanisms are that can be used to measure the QWL of municipal firefighters

- Determine an effective way to obtain a better QWL of municipal firefighters

## **1.6 THE RESEARCH PROCESS**

The research process is the well-ordered strategy of developing one's research. It includes distinguishing, finding, surveying, analysing and then developing and expressing one's ideas.

Brynard and Hanekom (2010) pointed out the six fundamental stages of the research process, namely:

- The identification of the research topic
- Definition of the research problem
- Determining the research process
- Collection of the research data
- Data analysis and interpretation of the research results
- Writing the dissertation

## **1.7 RESEARCH DESIGN AND METHODOLOGY**

According to Creswell and Clark (2007), research design as a plan should explain how the participants are to be selected and further elaborate on how data will be gathered. Research design deals with the logical problem. The research design consists of various aspects such as the method and procedures that will be employed to conduct the research.

This chapter provides a detailed approach on how the research has been conducted, including various aspects on the structural design. The research approach used in this study has been selected to determine how the factors that affect the QWL of municipal firefighters in the Western Cape can be measured and analysed. It also highlights how the research processes align with the intended objectives of the study.



Research methodology is a systematic way of carrying out investigations in order to solve real-life problems (Cooper et al., 2006). This study measures the QWL of municipal firefighters in the Western Cape, and in this way, it describes and explains phenomena in real life.

## **1.8 DATA COLLECTION DESIGN AND METHODOLOGY**

The data collection process of collect relevant information in relation to the research question. A quantitative approach has been selected as the research method for this study in order to collect large amounts of data easily. The instrument used to collect data within this research is a questionnaire. Questionnaires fall within the ambit of a more extensive meaning of 'survey research' or descriptive surveys (Brynard & Hanekom, 2010). A survey questionnaire has therefore been used for data collection in this study (Appendix D). The questionnaire allows the respondents to freely express their views and opinions due to anonymity. The questionnaires have been designed in such a way that cross-referencing of data may be done to address the objectives of the study.

## **1.9 MEASURING INSTRUMENTS**

Questionnaires have been used as research instruments. The work of municipal firefighters requires them to attend to any emergencies at any moment. A questionnaire is a flexible and convenient means of data collection for them. All responses have been documented on a 5-point Likert scale (1 means strongly disagree to 5 as strongly agree). This allows the researcher to gain a deep insight into and a thorough understanding of the factors that impact on their QWL. Questions have been designed to have a logical flow, and related questions have been grouped together.

## **1.10 STUDY POPULATION AND SAMPLING PROCEDURE**

Study population and sampling procedures are included in the process followed to select the participants of the research study. The research population comprises municipal firefighters from the Western Cape Province, South Africa. The sampling process includes the sample frame,

size and technique for the study. The Goodwood Fire Department has more than 120 municipal firefighters who provide services to local communities in the Western Cape. Therefore, the data have been collected from municipal firefighters in the Goodwood Fire Department. They form the sample frame for this research.

### **1.11 DATA VALIDITY AND RELIABILITY**

According to Brynard and Hanekom (2010), reliability is the degree to which an assessment tool produces stable and consistent results. The researcher ran a pre-test to evaluate the reliability of the questionnaire and to determine whether it would yield satisfactory results. In this study, the questionnaires were worded carefully so that there were no double-barrelled and ambiguous questions. The internal consistency of the data was determined by using Cronbach's alpha to ensure the reliability of the dataset (Gliem & Gliem, 2003).

Validity is how much an examination precisely reflects or evaluates the particular idea that the research is attempting to quantify; or the potential of the research design or the research instrument to achieve or measure what it is supposed to achieve or measure (Brynard & Hanekom, 2010). In this case, the pilot questionnaire was evaluated for validity as well.

### **1.12 ETHICAL CONSIDERATIONS**

The research followed the required ethical procedures as stipulated by the Cape Peninsula University of Technology. Ethical clearance was obtained from the University's Ethical Review Committee before any participants were given the questionnaires. The participants were all informed about the procedures for the study and that their identity would be kept confidential and protected during and after completion of the study. Consent forms were handed to all participants of the study in which the study implications were communicated clearly in writing. Participants were informed verbally and in writing that they could withdraw from the study at any given point in time.

### **1.13 RESEARCH ASSUMPTIONS**

According to Simon (2011), certain assumptions in research studies might be slightly out of the researcher's control. In this research, it was assumed that the participants would answer the questionnaire in an honest manner, that they had a sincere interest in participating in this study and that they did not have any other motives.

### **1.14 DELINEATION / LIMITATIONS**

The study was delimited to the Western Cape Province and furthermore to collecting data from municipal firefighters in the Goodwood Fire Department only.

Municipal firefighters are ready to respond to emergency situations at any moment. Therefore, due to the time constraints, this study was limited to a quantitative method, as it was more convenient and required less time to complete a questionnaire. It was also more convenient for municipal firefighters to complete at their own pace.

### **1.15 CHAPTER OUTLINE OF THE DISSERTATION**

This dissertation consists of six chapters.

#### **Chapter 1: Scope of the research**

Chapter 1 introduces the dissertation topic and provides background information about the research. It includes the statement of the research problem, the research question, research objectives as well as outlining the research process.

#### **Chapter 2: Holistic overview of the research environment**

This chapter attempts to describe the research environment by providing background information about the Goodwood Fire Department. The meaning and concept of QWL is also introduced. Occupational health and safety (OHS) are very important aspects in the workplace and are therefore included in this chapter. Although QWL has been widely researched, factors

that impact negatively on QWL need to be identified and provide with useful solutions particularly in high-risk organisations.

### **Chapter 3: Literature review**

This chapter reviews existing literature on the key factors that impact on the QWL of firefighters and on employee performance in general.

### **Chapter 4: Research methodology**

This chapter presents the research design and the methodology which have been used to conduct this research study. It covers the target population, the techniques used to select the sample size of the research, the methods used to collect and analyse data, and the ethical standards for professional research in the Social Sciences which includes human participants. They were respected during the study.

### **Chapter 5: Results and discussion**

Chapter 5 presents the quantitative data gathered.

### **Chapter 6: Conclusions and recommendations**

This chapter discusses the conclusions drawn from the findings of the research, and presents recommendations for future studies.

## **1.16 CONCLUSION**

This chapter has introduced the topic of the dissertation and has provided a comprehensive outline of the research background. It has also outlined the problem statement as well as the research questions. The chapter provides the foundation of the research study and offers the motivation for the study.

## **CHAPTER 2: HOLISTIC OVERVIEW OF THE RESEARCH ENVIRONMENT**

### **2.1 INTRODUCTION**

This chapter gives brief outline of the research environment on the QWL of firefighters in the Western Cape, including OHS and relevant policies. The first part of this chapter provides an overview of the safety culture in the working environment at the Goodwood Fire Department. The second part discusses the meaning of their QWL and the third part discusses the QWL of firefighters in a global context.

There is evidence from research that has been conducted that the QWL has a significant relationship with organisational performance (Carey, Al-Zaiti, Dean, Sessanna & Finnell, 2011; Elmuti, Grunewald & Abebe, 2010; Patel, 2016; Sinha, 2012). For example, in the present workplace, organisations should be adaptable and receive systems to improve their employees' nature of work life to fulfil both the hierarchical targets and the employees' needs (Patel, 2016). Indeed, viable nature of work life rehearses in organisations affect worker performance and the overall organisation performance (Patel, 2016).

The QWL is the common obligation of the management and employees as well as of society. Serious endeavours towards the upgrade of QWL would complete a ton to improve the spirit and inspiration of employees. Thus, there will be an improvement in the strength of organisation (Bijaya & Chandran, 2013). QWL signifies all the organisational inputs which go for the employees' fulfilment and at improving authoritative adequacy. The essential reason for existing is to create occupations and working conditions that are magnificent for employees as well as the economic health of the organisation (Sinha & Subramanian, 2013).

Furthermore, QWL alludes to the degree of fulfilment, inspiration, duty and contribution an individual encounters concerning his or her workplace. The QWL is the level of greatness realised by work and working conditions that

add to by and large fulfilment and execution, essentially at an individual level and at last at organisation level (Batra, 2016).

According to Western Cape Community (2018), the City of Cape Town's Fire and Rescue Services (CTFRS) consist of 32 fire stations and deal with all types of fires, emergencies and rescues. The Goodwood Fire Department is the headquarters for the Fire and Rescue Services as well as its command and control centre. Therefore, the research draws a sample frame from the Goodwood Fire Department in Cape Town, Western Cape Province.

## **2.2 OVERVIEW OF THE GOODWOOD FIRE DEPARTMENT**

As per City of Cape Town (2018), the Goodwood Fire Department's vision is to give productive, practical, unbiased and fair flame and salvage administrations to all residents of and guests to the City of Cape Town. The mission is to anticipate the death toll and the obliteration of property, and to shield the environment from the unfavourable impacts of flames and other related dangers and threats. Along these lines it gives a more secure condition to the occupants of and guests to the city.

### **2.2.1 Core Values**

The core values of the Goodwood Fire Department in the City of Cape Town include the following (Western Cape Community, 2018):

- Responding to emergencies within their ambit within the shortest possible time
- Ensuring their benefits and assets are overseen and kept up at the most elevated condition of availability
- Developing and training personnel to increase knowledge and skills
- Creating attention to the risks related with fire in all communities
- Always being prepared for emergencies (*Semper Paratus*)
- Recording, documenting and researching all emergencies and incidents attended

- Educating people within the city to reduce the threats of fire

### ***2.2.2 Legislative Responsibility of the Fire Department***

According to City of Cape Town (2018), major responsibilities of the fire department are to manage a wide range of flames, going from auxiliary flames, casual settlement flames, and mountain and veld flames to little vessel and engine vehicle fires. Fire department services stretch out its work to therapeutic crises and safeguards, including urban pursuit and salvage, jumping, engine vehicle removals and high-edge episodes just as perilous material crises. The responsibilities of the fire department, therefore, are far-ranging and by their nature expose firefighters to extreme stress and physical danger.

### ***2.2.3 Functions of the Fire Department***

In terms of the Fire Brigade Services Act, No. 99 of 1987, the main functions of the Goodwood Fire Department include the following:

- Preventing the outbreak or spread of fire
- Fighting or extinguishing a fire
- The protection of life or property against a fire or other threatening danger
- The rescue of life or property from a fire or other danger

### ***2.2.4 Service Delivery Areas of the Fire Department***

According to Western Cape Community (2018), the Goodwood Fire Department serves in four districts (north, south, east and west), eight divisions (four fire stations per division) and 32 fire stations (eight fire stations per district). Fire departments handle approaching crisis calls and organise resources. In addition, the department keep communication line consistently at all-time linking with emergency vehicles and firefighters. This is to ensure the successful implementation of achieving the best results from any urgent incidents may occur.



Figure 2.1: Community stations in each division

([www.westerncape.gov.za](http://www.westerncape.gov.za))

Table 2.1 below indicates the number of incidents the City of Cape Town’s Fire and Rescue Services (CTFRS) have encountered from 2005 to 2017. As can be seen, 2005/6 has had a very high incidence of fires, as did the period 2014 to 2017.



**Table 2.1: Incident Response Volumes**

Year	Fire Incidents	Special Services	Total
2005	14 502	23 166	37 668
2006	14 028	15 393	29 421
2007	11 990	18 242	30 232
2008	12 450	22 402	34 881
2009	13 698	28 922	42 620
2010	12 848	26 234	39 028
2011	13 642	23 467	37 109
2012	13 001	23 833	36 834
2013	11 807	14 593	26 400
2014	14 200	13 735	27 935
2015	15 840	13 331	29 171
2016	14 523	12 111	26 634
2017	15 471	11 588	27 059

([www.westerncape.gov.za](http://www.westerncape.gov.za))

### **2.3 MEANING AND CONCEPT OF QWL**

QWL is vital for an organisation to pull in and hold gifted and capable workers. It is a dynamic marker identifying with the maintainability of a business concern. An organisation gives a superior QWL when it builds up a sound workplace just as fulfilled employees. High QWL may bring about better hierarchical execution, viability and development. It expresses the individual employee's opportunity to plan his activity capacities to meet his own needs and interests.

QWL strengthens the authentication between the workers and their organisation. It improves their family life just as their work life. QWL is the representatives' psychological view of the physical and mental in the work environment. QWL is identified with the welfare of employees at work; be that as it may, it contrasts from employment satisfaction. The domain of

QWL does not influence the employees' job satisfaction but rather it impacts their lives outside the work, for example, their family, relaxation and social needs. At the point when the necessities of the employees at work are not met, they experience a great deal of work pressure that will have adverse effect on their welfare and job performance (Geetha & Mani, 2016).

The QWL has expected expanding interest and significance in all countries of the world. It is critical with regards to employees' pledge to their work, inspiration and job performance. It is additionally intended to encourage the satisfaction of human needs and objective accomplishment.

Furthermore, QWL alludes to the degree of satisfaction, motivation, contribution and accountability people contribution concerning their lives at work. Organisations keen on upgrading workers' QWL by and large attempt to ingrain in employees sentiments of security, value, pride, family, majority rule government, possession, self-governance, obligation and adaptability. Workers ought to be treated in a reasonable and strong way to open up correspondence in the organisation which looks for more noteworthy hierarchical viability through the upgrade of human respect and development (Jayakumar & Kalaiselvi, 2012).

The study conducted by Nanjundeswaraswamy and Swamy (2013) has shown that improvement in the components of QWL can prompt an expansion in general QWL of university facilities. The degree of satisfaction of the employees is again connected with the QWL.

Therefore, this study will look at favourable responses towards the job satisfaction, wellbeing, health working conditions, chances to create human limits and open doors for proceeded with development and security of the local group of firefighters. Clearly, the QWL has an impact on employees' productivity (Rathamani & Ramchandra, 2013).

The term *quality of work life* (QWL) includes the issue of how employees are compensated or appreciate satisfaction during their time spent in the workplace. It brings about an impression of satisfaction, thus, contributing toward versatility, high efficiency and hierarchical adequacy (Nayeri et al.,

2011). Commonly, the four degrees of need contemplations to accomplish QWL incorporate a requirement for fulfilment in the workplace, work necessities, supervisory conduct and subordinate projects (Li & Yeo, 2011).

Madhu (2015:1) defines QWL as “the degree of excellence of something”. It is the advancing strategy of structure and proceeding with associations by assessing, predicting and fulfilling communicated and recommended needs. Work is a physical or mental movement coordinated towards the creation or achievement of something. Work must have a result or a pre-planned output, but work is also for the sake of pure enjoyment. Certain types of work do not necessarily add value to individual employees or to the organisation. It may, however, add value to the community, to family or children. Work of firefighters is all about this.

Steenkamp and Van Schoor (2002) added that the concept of work in its narrow definition is a way in which employees’ energies and talents are expended to achieve predefined objectives, and by doing so, gain predefined rewards. This implies primarily the provision of basic security and improvement of living standards in terms of material possessions. Work is also related to the realisation dimension which is to enjoy one’s physical, intellectual, spiritual and emotional capabilities.

Furthermore, life is portrayed as a particular way or method for living concerning conditions, character, direct and occupation. The term *quality of work life* (QWL) is used to survey the general thriving of individuals and social requests. Standard markers of the individual fulfilment consolidate wealth and work, yet furthermore the amassed condition, physical and mental health, guidance, diversion and entertainment time, and social having a spot (Madhu, 2014)

Broadly, the meaning of QWL includes four noteworthy parts: a protected work environment, word related human services, reasonable working time and a proper compensation. A secured working environment gives the reason to people to value working. The work should not to represent a wellbeing danger (Reddy & Reddy, 2010).

## 2.4 DIMENSIONS OF QUALITY OF WORK LIFE

According to Santhana (2014), the dimensions of QWL are health and well-being, job security, job satisfaction, competence development, and the harmony among work and non-work life (see Figure 2.2). Every one of the components of QWL from the point of view of employees will be quickly talked about in the literature review. Dimensions of QWL, for example, work and non-work life balance, health and wellbeing, competency development, working conditions, job satisfaction and job security all have a significant influence in execution frameworks and in expanding the productivity and adequacy of an organisation.



Figure 2.2: Dimensions of QWL (Santhana, 2014)

## 2.5 OCCUPATIONAL HEALTH AND SAFETY (OHS)

According to Melius (2001), occupational health and safety programmes for firefighters have gotten expanding consideration throughout the most recent quite a while because of the developing acknowledgment of potential long haul wellbeing dangers for firefighters. These workers face serious physical and mental requests, yet in addition dangers of endless or postponed unfriendly job related health results. Firefighters are routinely presented to countless dangerous substances, for example, carbon monoxide, benzene, particulate, asbestos, poly-atomic fragrant mixes, hydrogen chloride and cyanide just as physical perils, for example, heat and noise. Their crisis medicinal reaction obligations additionally put them in danger of introduction

to irresistible operators. Firefighters are at expanded danger of cardiovascular infection, aspiratory ailment, malignant growth and clamour actuated hearing misfortune. Occupational medical consideration for firefighters needs to screen for these long-term wellbeing dangers.

According to Steenkamp and Van Schoor (2013), OHS management is the way toward making wellbeing and wellbeing rules for an organisation, in light of enactment and the necessities of the organisation. It includes individuals, productivity and the expense of the board. The fundamental target of OHS board is to decrease wellbeing and security perils which must be accomplished through a powerful OHS management programme. The foundations of such a programme are the management duty and worker contribution. Through mindfulness and productive administration it can prompt a progressively gainful workforce and higher nature of item or administration conveyance.

## **2.6 HEALTH AND SAFETY POLICIES**

The executive management of an organisation is in responsible for arranging a health and safety policy. This policy will declare estimations all workers and stakeholders as well as management's obligation to health and safety issues. The health and safety policy should impact all exercises of an organisation. It should in this way reflect the organisation's game plans for recognising, surveying and checking all perils and dangers, and how they will be dispensed with or controlled. The health and safety policy ought to incorporate the accomplishment of the organisational goals, the desires for workers and duties in regards to health and safety. It should express that everyone must be viably drawn in with and accountable for workplace health and safety since this will enable all to keep practical health and safety culture in the organisation (Steenkamp & Van Schoor, 2013).

## **2.7 SAFETY CULTURE**

According to Steenkamp and Van Schoor (2013), the organisation's main goal ought to be to cultivate a compelling, positive safety culture that will make health and safety a lifestyle in the work environment. Frames of mind,

practices and duties of the board and workers will impact this culture. The management of an organisation is in charge of creating and keeping up a successful, proactive and positive wellbeing society. At the point when the board demonstrates promise to health and safety, and it turns into a good example for safe conduct, a successful safety culture can be created in the organisation.

The general characteristics of a safety culture include all employees esteeming health and safety by inclination in charge of the health and safety of collaborators and themselves. Everybody in the organisation ought to be happy to go past the obligation at hand to advance and maintain safety. All employees and stakeholders ought to be focused on performing and effectively thinking about safety practices in the organisation. A compelling safety culture will be exhibited through management's dedication and initiative. Therefore, the organisation should execute compelling correspondence with feasible objectives and destinations that are comprehended and settled after in regards to the issue of safety in the organisation (Steenkamp and Van Schoor, 2013).

## **2.8 QUALITY OF WORK LIFE IN A GLOBAL CONTEXT**

### ***2.8.1 The United States and the UK***

Firefighting is an unsafe occupation. Firefighters are harmed while on obligation, endure work-related diseases, and are constrained into early retirement or die at higher rates than most different workers in the United States (DeJoy, Smith, & Dyal, 2017). From 2010 to 2012, about 70 000 firefighters have been injured in the line of duty each; the majority of these injuries (87%) have occurred in structural fires; approximately 100 firefighters die in the line of duty each year (DeJoy, Smith, & Dyal, 2017).

QWL alludes to the degree of fulfilment with benefits like rewards and remuneration and the promotion policy offered by the organisation. Thus, QWL involves the number of people who can accomplish their significant individual needs while utilised by the organisation. However, there are number obstructions, for example, impression of decency, work pressure,

equal opportunities for rewards and promotion, job security, and upward and downward communication inside the organisation. All of these factors lead to different meanings attached to QWL for everyone.

QWL is key to the profitability of the organisation since the quality of work enhances the morale of the employees' and motivates them to do better work which increases the productivity of the organisation (Cheung & To, 2010).

According to Beloor, Nanjundeswaraswamy and Swamy (2017), the importance of QWL in an organisation is not taken care of well due to lack of awareness of QWL between the employer and employees. The absence of QWL leads to dissatisfaction in the workplace and lack of motivation, morale and productivity while it increases absenteeism and accident rates. These are major reasons for an organisation's non-performance. QWL is essential for the smooth running of organisations. Further, it helps in attracting and retaining efficient and effective employees for the right job profiles which, in turn, leads to the success of employees and organisations. The QWL must be kept up viably to guarantee that all employees are working at their pinnacle potential and free from pressure.

### **2.8.2 Canada**

According to studies conducted by Bos, Frings-Dresen, Mol and Visser (2004), Canada is one of the countries where firefighting is a high-hazard occupation, in charge of various occupations wounds, infections and disarranges. In examination with different occupations, firefighters experience high paces of musculoskeletal, consume and inward breath wounds just as high paces of word related sicknesses, including malignancy, respiratory ailments and post-horrible pressure issue (Bos et al., 2004; Guidotti & Clough, 1992). Wounds frequently happen during flame concealment and preparing exercises, and from total presentation to high physical demand.

Furthermore, firefighters' tasks, organisation and workplace impact their health. For instance, firefighters tasks are discontinuously physically

requesting which increment the danger of damage and disease to their cardiovascular and musculoskeletal systems (Guidotti, 1992; Reichard & Jackson, 2010).

A relative study among firefighters and office workers in a similar fire department (Bos et al., 2004) has shown that firefighters experience higher paces of musculoskeletal, cardiovascular, weariness and rest issue. High physical demands applied on both the musculoskeletal and cardiovascular systems are distinguished as likely factors adding to these unfavourable occupational health reactions.

Furthermore, the 2015 Canadian study conducted by (Negm, MacDermid, Sinden, D'Amico, Lomotan & McIntyre, 2017), determined that 64% of firefighter injuries were musculoskeletal sprains and strains (Frost, Beach, Crosby & McGill, 2015). In the context of musculoskeletal issue, 33% of firefighters wounds were identified with low-back clutters and 89% were identified with upper or potentially lower appendage musculoskeletal injuries.

### ***2.8.3 Asian and Pacific Countries***

Kaur (2016) maintains that improved QWL has not been viewed as a significant factor in India up to this point, as there are increasingly significant looming elements like asset lack, ecological dangers and a few administrations concerning budgetary issues.

QWL programmes have become important in the workplace for the following reasons (Kaur, 2016):

- Increased demands at work
- Loss of long-term employee guarantees
- The requirement for improved workplace aptitudes
- Greater competition for talent
- Increased number of women in the workforce

Great QWL frequently prompts an environment of constructive indifferent relations and profoundly energetic workers who make progress toward their



very own improvement. Despite the fact that financial advantages still possess the primary spot in the expense of components like physical working conditions, work rebuilding and occupation upgrading, profession improvement and limited time openings are quickly picking up significance. As such, workers anticipate that management should improve all these facilities, thereby improving QWL.

Whenever gave great QWL, workers focus more on both individuals just as gathering improvement which thusly prompts by and large advancement. QWL is a philosophy or set of principles which hold that organisations should improve the condition of health and safety for their employees which create affirmative emotions among employees. Organisations need to enhance the efficiency of their workers and maintain a sound working environment for skill development. In addition, organisations need to improve the ongoing changes and transitions.

## **2.9 CONCLUSION**

This chapter has described the research environment by providing background information about the Goodwood Fire Department. The meaning and concept of QWL have also been introduced. OHS are very important aspects to deal with in any organisation; therefore, it is included in this chapter.

In spite of the fact that QWL has been generally looked into and demonstrated to cause high turnover and decrease execution, QWL elements must be investigated and managed, regardless of how minor they may appear, particularly in high-chance associations to improve execution in the workplace.

The literature on QWL will be reviewed in Chapter 3.

## **CHAPTER 3: LITERATURE REVIEW**

### **3.1 INTRODUCTION**

This chapter reviews existing literature on QWL and in relation to firefighters. QWL is a way of thinking or set of standards which holds that individuals are dependable, mindful and fit for making a profitable commitment to the organisation.

QWL has an impact on employee performance. From the viewpoint of health and well-being, QWL can be defined as physical and emotional aspects of an employees in any workplace (Reddy & Reddy, 2010). Firefighters work mostly in a high-risk environment that has a negative impact on the aspects of their health and well-being. Obviously, they will have limited time to maintain a good physical condition and to spend time with family and friends. The high stress levels can lower their job satisfaction, since organisational stress has the strongest impact on the well-being of firefighters (Basinska & Wiciak, 2013).

According to Rose, Beh, Uli and Idris (2006), the best organisations in the world are those that understand the value of their employees and keep to invest in them towards their development and improvement. Venkatesh and Aarthy (2013) added that QWL approach considers individuals as an asset to the organisation rather than as costs. It accepts that individuals perform better when they are allowed to partake in dealing with their work and decide. This methodology rouses individuals by fulfilling their monetary needs as well as their social and psychological ones. To satisfy the new generation workforce, organisations need to focus on job designs and organisation of work. Further, the present workforce is understanding the significance of connection, and is attempting to strike a harmony between career and individual lives.

## **3.2 MEASUREMENTS OF JOB SATISFACTION OF FIREFIGHTERS**

### **3.2.1 Health and Well-being**

Mohamed and Bedelkhalif (2017) define *health* as a total condition of physical, mental and social well-being. Well-being, as a feature of QWL, alludes to the physical and emotional variables of an employee in any workplace. The workplace is the ideal place for health promotion and well-being support, as the workplace is defined as a community with the benefits of social support and the associated economic and organisational productivity.

Firefighters perform physically demanding work while giving needed service to support the health and well-being of communities. Firefighting tasks frequently expose firefighters to work environment factors that are related with harm and sickness that effectively influence their health and well-being (Chetty, 2017). Easton and Van Laar (2018) underscore that emotional well-being issues, transcendentally gloom and uneasiness issue, are normal and majorly affect the health and well-being of the firefighters.

### **3.2.2 Work Life and Non-work Life Balance**

Kumar and Chakraborty (2013) define *work life balance* as the balance between achievement at work and enjoyment in life. Some employees know how to strike a balance between work and life, whereas others do not. The notion of 'total life space' comprises two parts: the professional in the working environment and social life space, and firefighters who are expected to spend equal time on both spaces to strike that work life and non-work life balance.

Kossivi and Kalgora (2016) argue that work life balance is ending up progressively fundamental for employees and will in general influence their choice to remain in the organisation. To an ever increasing extent, firefighters need adaptable work routines which will enable them to deal with both their own and professional lives. The harmony among individual and professional lives is controlled by the measure of penance the individual is

happy to make to the detriment of different zones of his or her life.

Jaggi and Bahl (2016) add that work life balance means to make and to keep up the healthy and strong workplaces which will cause the employees to have an appropriate parity in their expert and individual duties and help them to increase productivity. Amin and Malik (2017) point out that work life balance brings multiple benefits such as enhancement in work satisfaction and loyalty, improved work performance as well as a reduction in staff turnover, recruitment and selection costs plus reduced absenteeism and enhanced organisational productivity.

### **3.2.3 Competency Development**

Wardhani (2017) argues that the competency needs of the work environment include future demands in relation to the organisation's strategic and operational plans and targets; foresee the requirement for a difference in the management and employees; changes to forms, innovation, organisational equipment, and an assessment of the capability of employees in doing the exercises and procedures built up. Competence investigation is to a great extent identified with worker profession advancement, however deciding their degree of skill is required to decide their normal execution level and adequacy.

According to Reddy and Reddy (2010), competency development assists employees in growth, skills and knowledge which is an important aspect in improving QWL. Indeed, competency development is highly relevant to the health and safety well-being of professionals such as firefighters. Teryima, Faajir and John (2016) state that career development opportunities should provide training programmes to improve employees' skills and knowledge, which can result in a better QWL for employees. If an organisation fails to provide opportunities for growth and personal development of employees, it may become very difficult to retain personnel, especially highly talented personnel, in the organisation. This can lead to difficulty in replacing them with people of equal levels of experience and skills.

### **3.3 KEY FACTORS IMPACTING ON THE QWL OF FIREFIGHTERS**

A number of studies have investigated the factors that impact on the QWL of firefighters. These studies have focused on employee attitude, personality, competence and job satisfaction. The following are some of the key factors that were found to impact on QWL:

#### **3.3.1 Working Environment**

Oliveira, Bomfim, Ribeiro, Henrique, Almeida and Boery (2018) state that firefighters experience states of presentation to hazard at work, either through contact with physical and natural specialists during the occurrences or through long working hours in the service. These conditions cause weakness and over-burden, affecting the performance and work routine of these firefighters, accordingly diminishing their work capacity.

Jain and Kaur (2014), explain that the workplace is a social and professional environment for employees to interact with other people. From a psychological and physical point of view, employees are working together, developing social and professional relationships which, if they are positive relationships, will more likely increase productivity. In other words, once employees work in a friendly environment, their work performance will improve; so, a positive work environment will have a positive impact on employees' well-being at work.

The workplace environment is the major contributing influence on employees' work, family and social lives, and on how to balance these. According to Chan, Hsiao and Lee (2016), many employees have certain expectations of the physical environment and comfort at their workplace. A comfortable working environment may support employees well, increase productivity, promote their health and attract new employees to the organisation.

Ghasemi's study (2016), on QWL in government hospitals and its relation to employees' organisational commitment found that a safe and healthy working environment was essential to employees' well-being and

productivity. In that case, meant creating physically safe working conditions and reasonable working hours. Employees' health and safety had become more significant in an organisation where work continued day in and day out.

### **3.3.2 Job Satisfaction**

Job satisfaction alludes to employee's general attitude towards her/his activity and how content an individual is with his or her activity.

QWL has been characterised by various researchers in various ways which has realised certain counterparts, for example, work quality, capacity of occupation content, employees' well-being, the nature of the connections among workers, the workplace, and the harmony between employment requests and choice self-sufficiency or the harmony between control need and control limit (Korunka, Hoonakker & Carayon, 2008; Schouteten, 2004; Van Laar, Edwards & Easton, 2007).

According to Arif and Farooqi (2014), job satisfaction is a widely used research topic relating to different issues such as life satisfaction, organisational commitment and employee turnover intention. Financial advantages, employees relations, workplace and job lucidity are the components that are used to quantify work fulfilment of employees at work. Rubel and Kee (2014) describe job satisfaction as the expression of employees' combined experiences and expectations of their job as well as their feelings in relation to personal fulfilment at work.

Rozaini, Norailis and Aida (2015) argue that job satisfaction represents a mix of positive or negative emotions that employees have towards their work; it is an intricate variable and is affected by situational components of the activity just as the dispositional qualities of the person. Job satisfaction alludes to how well the activity gives the satisfaction of a need or want, or how well it fills in as a source or methods for delight. In this way, a superior comprehension of the connection between employees perceived QWL and job satisfaction is profoundly justified.

Arif and Farooqi (2014) mention that numerous organisations offer preparing projects and advantage bundles to create steadfast representatives. The more extended employees work for an organisation, the more significant these workers become. Job satisfaction is one of the most widely used variables in researching organisational behaviour and it is vital to an organisation's success (Rozaini et al., 2015). Therefore, as Arif and Farooqi (2014) assert, every organisation tries to create a satisfied workforce towards the wellbeing of the organisation because satisfied workers expend more effort on job performance. Committed and motivated employees are necessary for the success of the organisation.

### ***3.3.3 Employee Personality***

Abidin (2016) explains that personality is key to the emotional and behavioural response pattern of an individual. A person's personality is a collection of relatively stable features and temperaments influenced by social, cultural and environmental factors. Some aspects of personality that affect one's behaviour are traits such as caution, stability, emotionality and openness to experience.

According to Funder (2013), one's personality involves thoughts, emotions and behaviours that tend to remain generally consistent over time, forming patterns. Examples incorporate numerous sorts of factors, including thought processes, aims, objectives, methodologies and emotional portrayals. The variables within personality indicate the degree to which many aspects about the individual are displayed.

Andinasari, Sujanto and Mukhtar (2017) state that the personality of each individual is not the same as that of another individual and cannot be changed easily according to the will of others. If the personality of an individual in an organisation is changed, then it will be able to reduce the motivation for work and achievement.

### **3.3.4 Employee Performance**

Employee performance depends vigorously on organisational policies, practices and configuration highlights of an organisation (Anitha, 2014). Hasibuan, Purba and Siahaan (2016:73) define *job performance* as the quality and quantity of work accomplished by an employee in carrying out their assigned duties, tasks and responsibilities, based on their skills and experience. The performance of employees is the extent to which they achieve the goals or targets that have been set in a specific period, and which, therefore, can be determined based on how much the individuals contribute to the organisation (Rubel & Kee, 2014).

Employee performance assessment is a significant component in improving the quality of work (Shaout & Yousif, 2014) and one of the most usually utilised techniques organisational leaders use in the working environment (Long, Kowang, Ismail & Rasid, 2013). As indicated by Kirovska and Qoku (2014), it is a formal, structured system of assessing the characteristics of employee behaviour with regard to outcomes, and is based on the current skills status of the workforce. This requires the collection of diverse accurate and unbiased data in order to assess employees' contributions to the organisation (Shaout & Yousif, 2014) and to make organisational and personnel decisions (Ahmed, Sultana, Paul & Azeem, 2013).

According to Panatik (2012), performance is considered as a behaviour and can be categorised as individual performance, a group's performance and organisational performance. Job stress can lead to physical and psychological ill-health which, in turn, impacts negatively on work performance and commitment to the organisation (Qureshi, Iftikhar, Janjua, Zaman, Raja & Javed, 2013).

## **3.4 MEASUREMENTS FOR THE QWL OF FIREFIGHTERS**

Some of the quality measurements for QWL are discussed below.

### **3.4.1 Job Involvement**



*Job involvement* is defined as the degree to which an individual psychologically identifies with his or her work or the importance of work to his or her total self-image (Su, Cheung, Hung & Cheng, 2017:191). Job involvement occurs when employees put more effort into their jobs, or the degree to which employees are engaged in their work and find job fulfilment. Fulfilment provides personal satisfaction (Zopiatis, Constanti & Theocharous, 2014).

According to Harisha and Kumar (2017), the involvement of employees with interest increases their productivity. Employee involvement leads to high productivity levels and reduces absenteeism in the workplace. It is also a good tool to help every organisation to strive to gain a competitive advantage over the others. The most important factors which influence employee involvement can be leadership, the work environment, teams and co-workers, training programmes, development activities, organisational policies, compensation packages and workplace wellness programmes. The employee's creativity is influenced by his or her involvement in the workplace which must be supported by empowering leadership and psychological empowerment.

#### **3.4.2 Sense of Competence**

According to Santhana (2014), a sense of competence alludes to the sentiment of certainty that an individual has in his very own capability. A sense of competence and job involvement strengthen one another. At the point when an individual procures a more noteworthy sense of competence, he/she turns out to be increasingly more dynamic in work exercises. When he/she feels increasingly skilled, the individual turns out to be progressively engaged with the activity and progressively persuaded. Jafari (2017) includes when people are enabled, they feel a sense of self-viability or they believe they have the required potential and dominance for completing an errand effectively. The engaged people feel a feeling of ability as well as a feeling of certainty to complete an undertaking sufficiently. They feel a sense of individual dominance, and accept that they can learn and develop to face new difficulties.

### **3.4.3 Job Performance**

Tabassum, Khan, Sherani and Khan (2016) define *job performance* as the totality of each one of those normal practices that people bring to their workplace and offer an incentive to the organisation.

When an individual is more involved and productive in the work environment, there is a rise in job performance. It is very important to enjoy one's work because that is where one spends most of one's time (Reddy & Reddy, 2010). The achievement of each organisation relies upon the presentation of its workers. The higher the presentation of workers, the better the odds of accomplishing most extreme efficiency. Each organisation that desires to expand its efficiency needs to decide all strategies through which it can build the exhibition of its workers. Satisfied employees are motivated and when they are motivated, they work hard, are committed to the organisation and work towards the goals of the organisation (Easton & Van Laar, 2014). Job satisfaction has many positive impacts on working relationships which, in turn, increase productivity and result in reduced absenteeism and lower staff turnover (Reddy & Reddy, 2010).

Idris (2018) specifies that performance really has a more extensive significance. It is not just the work, yet it additionally incorporates how the work procedure happens. Performance is the consequence of work that has a solid association with the organisation's vital objectives and community satisfaction, while it likewise adds to the government. Performance is about what to do and how to do it.

According to Wibowo (2016), the factor that drives performance is behaviour. Behaviour is how one acts and not about what or who one is. Behaviour is a manner by which an individual demonstrates or performs. Since it can figure out what will be done in each circumstance, one can decide one's performance. High-level performance is the result of accomplishing something directly at the correct time.

An organisation is shaped to accomplish a specific objective or objectives which the association hopes to accomplish. Organisational objectives can incorporate improving client service, satisfying business sector/network requests, improving item or service quality, expanding aggressiveness and improving the performance of the organisation. Every organisation, group or individual can set its own objectives.

#### **3.4.4 Productivity**

*Productivity* is defined as the successful and effective usage everything being equal, material, work, capital, data and time (Stephen, 2014:22). Gupta (2016) states that employee productivity is worthy in the organisation for growth. If there is a problem with productivity in the organisation, management must assert more effort because that can affect the QWL.

Recently, competitive global organisations have been facing challenges regarding sustained productivity and creating a committed workforce. Reward productivity, the physical work environment, work teams, employee involvement and esteem needs all affect the level of productivity in an organisation.

According to Ampofo and Dartey-Baah (2016), the objective of all organisation is to arrive at high efficiency. Productivity is characterised in various ways over the research literature, contingent upon the necessities of the respective organisation and tasks that an employee needs to achieve as an aspect of their responsibilities depiction. Furthermore, productivity intends to deliver more yield with equivalent or less sources of inputs. It is accepted that satisfied employees contribute definitively to expanding efficiency (Ampofo & Dartey-Baah, 2016).

Shaban, Al-Zubi, Ali and Alqotaish (2017) state that organisations want their employees to be progressively productive. Be that as it may, will inspiration be sufficient to complete things? Furthermore, what inspires their conduct? Employees are considered the most important resources and the winning cards in the hands of management. Low efficiency might be discernible in poor worker inspiration. The achievement and viability of any firm depend

to a huge degree on how well employees are persuaded. Theories of human asset the management just as hypotheses of inspiration propose that roused workers will in general be increasingly inventive and profitable, and it is insightful for any management to utilize these hypotheses so as to build efficiency and intensity.

### **3.5 COMMON WAYS OF MAINTAINING A BETTER QWL**

By keeping up a superior QWL of employees, the management can make a feeling of association, responsibility and harmony among the workers which prepare for a superior QWL (Kaur, 2016).

#### **3.5.1 Job Redesign**

Gupta (2016) claims that redesigning jobs may motivate employees and improve their QWL. It can also incentivise productivity and better work performance. Job redesign is recognised as an effective strategy to retain talents in organisations and to encourage them to fulfil their responsibilities in a better fashion.

Similarly, Jaiswal (2014) claims that careful attention to work design can upgrade the essential relationship among individuals and their employments. The fundamental establishment of this relationship is that the idea of work itself is a ground-breaking effect on specialist inspiration and job satisfaction. Individuals who are content with their employments are characteristically exceptionally energetic. Job enrichment includes purposeful updating of duties and difficulties at work.

#### **3.5.2 Flexible Work Schedules**

Abid and Barech (2017) state that flexible working hours are an agreed arrangement between employer and employee to enhance employee productivity. Reddy and Reddy (2010) maintain that flexible working hours can reduce stress in the workplace and enhance productivity. As previously mentioned, work life and non-work life balance are crucial, while adaptable work arrangements of action help employees to achieve a harmony among work and family roles. This prompts uplifting attitudes, as employees feel

more noteworthy self-rule in choosing about how, when and where to play out their activity obligations, in this way upgrading their job performance.

These positive attitudes may balance employees' negative behaviours and feelings towards their jobs, eliminating reasons to leave their jobs. According to Afsar and Rehman (2017), in a condition where a worker has child rearing obligations, work fulfilment levels will be more noteworthy on the off chance that the person is furnished with adaptability in choosing working hours and work-offering courses of action to peers who are unmarried or have practically no child rearing obligations. This is then converted into positive sentiments about their employments. Along these lines, it very well may be contended that an expansion in working environment adaptability brings about lower work-family struggle, thusly bringing about a decrease in worker turnover (Afsar & Rehman, 2017).

### ***3.5.3 Participative Management***

There are systems that can be used to improve QWL such as quality circles, the management by objectives, and different types of employees' support (Reddy & Reddy, 2010). According to Bartle (2019), participative management, also called representative contribution or participative basic leadership, is a framework where workers of an organisation play a working occupation in the fundamental initiative procedure as it relates to the way wherein the business works.

According to McMillan (2014), a participative management style offers various focal points at all degrees of the organisation. By making a sentiment of ownership in the organization, participative management ingrains a feeling of pride and inspires employees to build efficiency so as to accomplish their objectives. Employees who take part in the basic leadership may experience improved confidence and inventive satisfaction, feel that they are a bit of a gathering with a common goal, and be progressively open to change. Participative management that keeps workers educated regarding up and coming occasions, making them mindful of potential changes, puts the organisation in a proactive mode as

opposed to a responsive one. Participative management can enable employees to pick up a more extensive perspective on the organisation.

Innovativeness and development are two key advantages of participative management, and the organisation benefits from allowing a diverse group of employees to have input into decisions, creating a wider choice of options (Ogbo, Ugwu, Ugbam & Chukwu, 2016).

#### **3.5.4 QWL and Management's Role**

Riggle, Edmondson and Hansen (2009). Defined organisational support as the extent to which workers perceive that the organisation values their contributions and cares about their wellbeing. Managers play a very important role in improving the QWL of employees. Management must address challenges and establish programmes that can assist employees to meet their work and personal duties (Rozaini et al., 2015).

In the present focused business condition, workers can be seen as speaking to a one of a kind hierarchical asset which can be utilised for increasing competitive advantage. Policies and programmes need to be in place in workplaces to provide acceptable levels of support to workers. The organisational environment must improve the quality of working life and promote worker performance and productivity (Rhoades & Eisenberger, 2002).

#### **3.5.5 Organisational Culture and Climate**

There are numerous meanings organisational culture, but the central concept is that it is about the core values of an organisation. A value-based organisational culture enhances the stability of an organisation, provides the organisation's identity and shapes the behaviour of the organisation's members (Kim, Jung & Kim, 2015). In addition, organisational culture is heavily influenced by leadership, determines the atmosphere of a business and affects the performance of its employees. It can be significant in driving competitive advantage and plays a crucial role in achieving results for a company in a rapidly changing environment. It is noted as one of the most

important factors in the sustainability of organisations (Shahmoradi, Rezaee, Sheikhi & Darabian, 2016).

According to Eskandari and Ghanbari (2014), Organisational climate is a significant form with colossal implications for understanding human lead in organisation. Organisational atmosphere research begins with examination at individual level, concentrating on what is named the 'psychological work environment'. In this methodology, individual co-workers are approached to show the atmosphere at their working environment and the measured average of the overall perceptions of these individual employees describes the organisational climate. The organisational climate can greatly influence job satisfaction, individual job performance and organisational performance. Therefore, it helps in determining organisational success and achieving organisational effectiveness. The organisational climate significantly influences processes of communication, problem-solving, learning, knowledge creation as well as transformation, motivation and innovation.

### 3.6 THE CONCEPTUAL FRAMEWORK

In view of the above literature review, the following relationship between QWL and job performance can be identified:

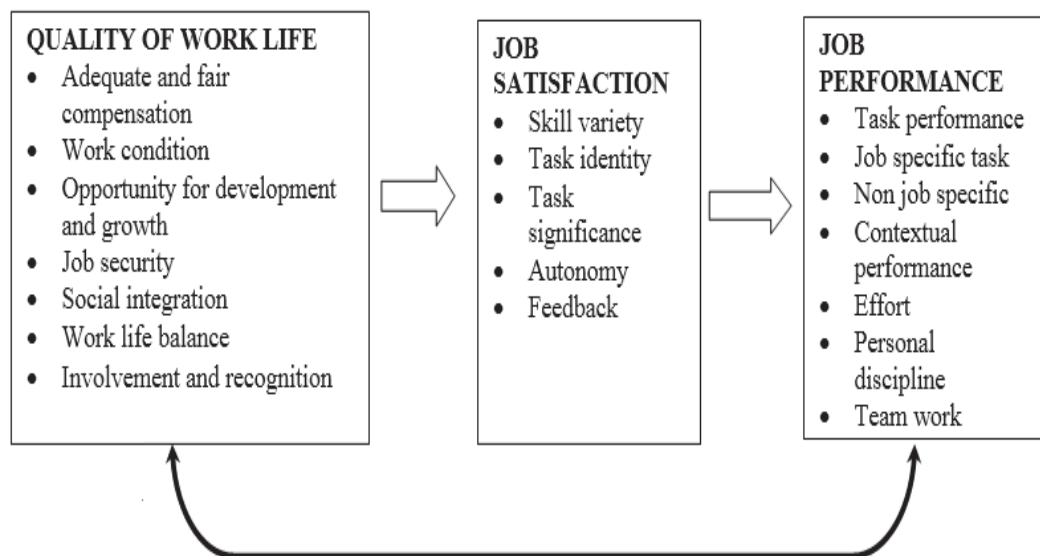


Figure 3.1: Conceptual Model of QWL (Muindi & Obonyo, 2015)

The conceptual model in Figure 3.1 above shows the relationship between QWL and job performance with personality, job satisfaction and competence moderating and intervening in this relationship (Muindi & Obonyo, 2015). According to the conceptual model of QWL by Muindi and Obonyo (2015), the QWL is strongly related to job satisfaction and job performance.

Job satisfaction is the expression of employees' combined experiences and expectations of their job, and their feelings in relation to personal and fulfilment at work (Rubel & Kee, 2014). Job performance involves task performance, effort, personal discipline, team work and so on. If there is a problem with job performance, the organisation will experience some challenges (Rubel & Kee, 2014).

### **3.7 CONCLUSION**

This chapter has reviewed the pertinent literature on the QWL of firefighters. The literature outlines how environmental, physical and emotional stress to which the firefighters are oppressed during their work activities could lead to occupational hazards, injuries and even fatal events. The literature also demonstrates that QWL means all the organisational inputs which impact on employees' job satisfaction and on enhancing organisational effectiveness.

The motivation behind QWL is to give the data important to create jobs and working conditions that are superb for employees just as the monetary health of the organisation. It alludes to the degree of satisfaction, inspiration, duty, and inclusion and individual encounters as for work life. QWL is a solid articulation of specific set convictions and qualities about individuals, about the organisation and at last about society. QWL upgrades are exercises which advance more organisational adequacy through the improvement of human dignity and development.



The next chapter is devoted to an in-depth discussion of the research design and the research methodology which have been employed to conduct this study.

## **CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY**

### **4.1 INTRODUCTION**

This chapter presents the study design and the study methodology which were used to conduct this research study. These aspects cover the target population, the techniques which were used to select the sample size of the research, the methods which were used to collect data and to analyse it, and the ethical standards for professional research in the social sciences relating to human participants.

As explained in the introductory chapter, the primary objective of this study has been to identify the key factors that impact on the QWL of municipal firefighters in the Western Cape, South Africa. The firefighters who have been chosen to participate in this study are all employed by the Goodwood Fire Department, the headquarters for the Western Cape Fire and Rescue Services as well as its command and control centre.

### **4.2 RESEARCH METHOD**

The study was conducted using the quantitative method. As Kumar (2014) points out, the focus of quantitative research is on facts, figures and measurements. This approach is objective rather than subjective in nature. Quantitative research is essentially positivistic in that it seeks to discover the empirical facts pertaining to phenomena and their causes, and is little concerned with the perceptions of individual people. Creswell (2009) explains that quantitative research methodologies endeavour to clarify phenomena by collecting numerical data which are analysed statistically, using suitable and appropriate software.

The quantitative approach is commonly conducted in the natural sciences, is tightly structured and follows a predetermined set of objective procedures emphasising the measurement of variables. It requires a large sample size, lends importance to the validity and reliability quality of discoveries, and passes on finding and total way by reaching determinations and inductions that can be sum up (Kumar, 2014).

According to Bryman and Bell (2015), quantitative research can be delineated as 'counting the party of numerical information and demonstrating the perspective on relationship among hypothesis and research as deductive, a propensity for trademark science approach, and as having an objectivist beginning of social reality'. At the day's end, quantitative appraisals for the most part separate relationship between numerically assessed components with the use of valid frameworks.

The quantitative data collection method is based on random sampling and structured data collection instruments; being numerical in nature, findings of quantitative studies are usually easy to present, summarise, compare and generalise (Leedy & Ormrod, 2013). According to Leedy and Ormrod (2013), quantitative research includes taking a gander at sums or amounts of at least one factors of intrigue. Quantitative analysts look for clarifications and expectations that can be summed up to different people and places; therefore, studies are frequently deductive in nature, contributing to existing theories. Bryman and Bell (2015) add that the intention of quantitative studies is to establish, confirm or validate relationships between variables, and even investigate possible causal relationships, through statistical techniques (Bryman & Bell, 2015).

The quantitative research process applies mathematical models and theories to phenomena being studied, thereby providing a connection between mathematical or statistical expression and empirical observation of variables (Cavana, Delahaye & Sekeran, 2001). Quantitative research designs are often descriptive in nature and deal with matters of logic where they offer "convergent reasoning rather than divergent reasoning" (Cooper et al., 2006:88).

### **4.3 RESEARCH DESIGN AND METHODOLOGY**

Research design as a plan should explain and elaborate on how the participants are to be selected, how data will be gathered, how the information collected will be analysed and how the findings will be interpreted (Creswell & Clark, 2011; Kumar, 2014). Burns and Grove (2003)

include that research design is an outline for directing an investigation with greatest command over variables that may meddle with the legitimacy of the discoveries.

The research design consists of various aspects such as methods and procedures that will be employed to conduct the research. The quantitative research approach used in this study determines how certain factors affect the QWL of municipal firefighters in the Western Cape.

The research methodology is a precise method to solve research problems. The quantitative study has generated numerical data from the administration of a survey questionnaire. The questionnaire has been approved by the Cape Peninsula University of Technology's (CPUT) Faculty Research Committee (FRC) to ensure that the questions are understandable so that the respondents are capable of providing reliable and valid answers to the research questions. The questionnaire method of data collection is an appropriate approach for determining the key factors that impact on the QWL of firefighters.

#### **4.4 DELINEATION OF THE RESEARCH**

A total of 120 firefighters in Cape Town, Western Cape were selected to participate in this research study. The criterion for selection was that each firefighter had to be employed by the City of Cape Town's Fire and Rescue Services in the Western Cape Province.

#### **4.5 DATA COLLECTION DESIGN AND METHODOLOGY**

The concept of *survey* is defined by Bhattacharyya (2006:58) as "the method of collecting data by posing questions from individuals who are thought to have the wanted information". The data collection process gathers information in relation to the research topic. Questionnaires supply standardised answers since respondents receive the same questions and there is a small chance of data being affected by interpersonal factors. Questionnaires fall within the ambit of a more extensive meaning of a 'survey research' or a 'descriptive survey' (Brynard & Hanekom, 2010). The

instrument that has been used to collect data for this study is a survey questionnaire.

#### **4.6 STUDY POPULATION AND SAMPLING PROCEDURE**

The research population selected was municipal firefighters from the City of Cape Town's Fire and Rescue Services in the Western Cape Province, South Africa.

A sampling procedure is the process followed to select participants for a research study. It includes the sample frame, size and technique for the study. The sample frame for this research was municipal firefighters who fall under the supervision of the Goodwood Fire Department which has more than 120 municipal firefighters who provide services to local communities in the Western Cape. However, because of their busy schedules, 120 of these firefighters were randomly selected to participate in the questionnaire survey. Of the 120 questionnaires distributed, 105 were completed and returned.

#### **4.7 ANALYSIS AND INTERPRETATION OF THE DATA**

The data which were gathered in this study were quantitative in nature and was generated by the survey questionnaire. The Statistical Package for the Social Sciences (SPSS) software was used to analyse the data to generate descriptive statistical results presented in Figure 5.7 in Chapter 5. The researcher used the experienced statistician to ensure the correct analysis and presentation of the quantitative data, which were presented in the form of graphs and tables. Tables and graphs made it easy to describe, summarise and present the raw data. Furthermore, data were measured by means and modes to determine the central tendency or what is called the 'location of data'. The results were analysed to give meaning to the responses.

The descriptive data were coded from responses to Q1-Q35 in the questionnaire and shown in Table 4.1 below.

**Table 4.1: Coding of items from the questionnaire**

No.	Statement	Code
1	I am enjoying normal day-to-day activities.	Q1
2	Employees have equal opportunity for growth within the organisation.	Q2
3	I feel that my job is secure at work.	Q3
4	I often feel stressed at work.	Q4
5	I am satisfied with the management team of the organisation.	Q5
6	I am satisfied with the training I receive in order to perform my present job (adopted from Easton & Van Laar, 2014).	Q6
7	I am satisfied with my salary and other benefits that I have received from the organisation.	Q7
8	I have a clear set of goals and aims that enable me to do my job (adopted from Easton & Van Laar, 2014).	Q8
9	I have a good understanding of work standards.	Q9
10	I am satisfied with the rewards offered by the organisation.	Q10
11	I am encouraged to develop new skills (adopted from Easton & Van Laar, 2014).	Q11
12	I think that my job is reliable and secure.	Q12
13	I am satisfied with the career opportunities available to me here (adopted from Easton & Van Laar, 2014).	Q13
14	I feel that it is easy to get along with my colleagues.	Q14
15	There is a balance between work and non-work life.	Q15
16	My health and safety are well-considered by management.	Q16
17	The working hours of the organisation are flexible.	Q17
18	I am satisfied with the health and safety conditions of the work environment.	Q18
19	I often feel under pressure at work.	Q19
20	The workload placed on me is more than I can handle.	Q20

No.	Statement	Code
21	There is friction or anger among colleagues.	Q21
22	I am often unable to find the information I need to perform my job.	Q22
23	The company takes care of the employees working in night shift.	Q23
24	At work, employees and management always work together to ensure the safest possible working conditions.	Q24
25	The organisation provides adequate facilities and flexibility for me to adjust my work to family time (Easton & Van Laar, 2014).	Q25
26	My line manager actively promotes me with flexible working hours.	Q26
27	The organisation provides equal opportunities for employees' skills development.	Q27
28	The training opportunities have really helped in improving the quality of work.	Q28
29	The organisation provides an adequate and fair compensation for employees.	Q29
30	Opportunity for career advancement and growth of personality improves commitment.	Q30
31	The principles of justice, fair and quality are applied in disciplinary procedure, grievance procedures and promotions.	Q31
32	Work rules that are given in the workplace help to create and maintain an orderly atmosphere where it is pleasant to work.	Q32
33	The organisation develops and implements a flexible work policy and procedures.	Q33
34	The organisation has sufficient equipment to help employees to work more effectively and efficiently.	Q34
35	I am encouraged to contribute any ideas for work quality improvement.	Q35

Analysis of Variance (ANOVA) is a statistical technique that is used to compare groups on possible differences in the average (mean) of a quantitative (interval or ratio, continuous) measure. This study grouped 35 statements from the questionnaire (Appendix D) as seven categories. These categories include F1 (Basic satisfaction with organisation: reward /flexibility), F2 (Rules of organisation), F3 (Day-to-work situation), F4 (Work life balance and health and safety), F5 (Job security and career opportunities), F6 (Management), and F7 (Training and compensation). In order to determine the significant difference in the averages between the age levels. This study applied ANOVA analysed the seven categories to find out if there is significant difference in the averages between the age levels.

#### **4.8 DATA VALIDITY AND RELIABILITY**

Reliability is how much an assessment instrument delivers unfaltering and solid results (Brynard & Hanekom, 2010). The Cronbach's alpha test reliability is commonly used to test for reliability in questionnaires using multiple Likert scale questions. The researcher ran a pre-test to evaluate the reliability of the questionnaire to determine whether it would yield consistent results. The questionnaires were carefully worded to avoid double-barrelled and ambiguous questions.

Validity refers to how much an investigation precisely reflects or surveys the particular idea that the researcher is endeavouring to gauge. Validity likewise alludes to the capability of a plan or an instrument to accomplish or quantify what it should accomplish or gauge (Brynard & Hanekom, 2010).

#### **4.9 RESEARCH INSTRUMENTS**

In this research, a questionnaire was employed to collect data from selected firefighters who report to the Goodwood Fire Department. Because of the nature of the work of these municipal firefighters they are required to attend to any emergencies at any moment. Therefore, the questionnaire provided a more flexible and convenient way of gathering data from them than other methods such as interviews.



The researcher distributed 120 questionnaires to the respondents at the workstations and began by introducing herself, asking if they would participate in the survey. The researcher took care to make appointments with all the firefighters who had participated in the study, providing explanations concerning the answering of the questions in the questionnaire when it was necessary to do so. She also arranged times with the respondents for the collection of their questionnaires.

#### **4.9.1 The Questionnaire Design**

According to Kumar (2005), a questionnaire ought to be made in an insightful style. In a questionnaire, a delicate inquiry or an inquiry respondents ought to feel reluctant about noting to be introduced by an intuitive proclamation clarifying the significance of the inquiry. This approach has been adopted in the design of the questionnaire. The questionnaire provided standardised answers in order to reduce the chance of data being affected by interpersonal factors. Questions had a logical flow and related questions were grouped together. The questionnaires enabled the researcher to obtain large amounts of information rapidly.

In this chapter, based on the relevant literature review that was discussed in Chapter 3, the researcher applied the key factors that affecting QWL for professional firefighters into the questionnaire design. These key factors include health and well-being, work life and non-work life balance, skill development, key issues considered in the work environment, employee personality and performance etc. The questionnaire was designed in line with these key factors.

Furthermore, all responses were documented on a 5-point Likert scale (1 means strongly disagree to 5 strongly agree). This allowed the researcher to gain deep insight and a thorough understanding of what factors impacted on QWL.

#### 4.10 ETHICAL CONSIDERATIONS

The research followed the required ethical procedures as stipulated by the University. Ethical clearance was obtained from the University's Ethical Review Committee before any participants were given questionnaires (Appendix A). The participants were all informed about the procedures that were to be implemented for the study. They were also informed that their identity would be kept confidential and protected during and after the study. Consent forms were handed to all participants of the study in which the implications of the study were communicated clearly in writing. Participants were informed verbally and in writing that they could withdraw from the study at any given point in time.

According to Saunders, Lewis and Thornhill (2007:35) "ethics alludes to the propriety of conduct in connection to the privileges of the individuals who become the subject of the work, or are influenced by it". The accompanying proficient moral benchmarks were regarded and conscientiously clung to consistently during the research study:

- *Informed consent:* The standards for conducting ethical research required the researcher to send letters to participants for them to provide their voluntary consent to participate in the study before ethical clearance could be granted. It was explained to the participants that the choice concerning whether to participate would be theirs alone. They were informed in advance of the nature of the study. In addition, a letter of consent (Appendix B) was obtained from the Chief Fire Officer and the Station Commander of the Goodwood Fire Department. They granted the researcher permission to conduct the study at the Goodwood Fire Department (Appendix C).
- *The right to privacy:* The information which was provided by the participants was regarded as being strictly confidential and their anonymity was ensured. The participants were aware that they had the right to withdraw at any time or to refuse to answer any of the survey questions.

- *Honesty towards professional colleagues:* The discoveries were accounted for in a total and legit way without distorting any of the information which had been provided, or intentionally misleading anyone in any way whatsoever. No data were fabricated to support conclusions.
- *Confidentiality and anonymity:* Ensuring confidentiality or anonymity enabled the participants in this research study to provide responses which were frank, open and honest.

All reasonable measures were taken to conduct this study in an ethically responsible manner. According to Brynard and Hanekom (2006), ethical research requires honesty on the part of the researcher and for confidential information to be adequately safeguarded. The researcher used the data which were provided to her for the sole purpose of evaluating the research topic in accordance with the requirements of the Ethics Committee of the Cape Peninsula University of Technology (CPUT). In addition, a letter was also obtained from the Higher Degrees Committee (HDC) in order to obtain permission to conduct the study.

#### **4.11 RESEARCH ASSUMPTIONS**

According to Simon (2011), assumptions in research studies are factors that are slightly out of the researcher's control. In this research, it was assumed that the participants would answer the questionnaire in an honest manner, that they had a sincere interest in participating in this study and that they did not have any other motives.

#### **4.12 RESEARCH LIMITATIONS AND DELIMITATIONS**

Research constrains (limitations) relate to any repressing component which would in any capacity oblige the research student's capacity to direct research in an ordinary manner (Simon, 2011). The study was delimited to the Western Cape Province and data was only collected from municipal firefighters in the Goodwood Fire Department. Municipal firefighters are ready to respond to urgent tasks at any moment. Therefore, because of time constraints, this study was limited to a quantitative method as it requires

less time and it was more flexible for municipal firefighters to complete a questionnaire.

#### **4.13 CONCLUSION**

In this chapter, the research design and data collection methods were defined. A quantitative research method was adopted for this study as it was appropriate for achieving all the objectives. Random selection from a predefined sample population was applied and the research instrument used was a survey questionnaire. During the course of data collection the majority of respondents could understand the questionnaire well and provided answers properly, although a few of them lacked understanding of some statements in the questionnaire due to their limited knowledge of the concept of QWL. Finally, ethical considerations, the study limitations as well as its de-limitations were discussed.

The next chapter presents the quantitative data gathered and a discussion thereof.

## **CHAPTER 5: RESULTS AND DISCUSSION**

### **5.1 INTRODUCTION**

This chapter introduces the methods of data analysis, the format and preliminary analysis of the data, the results of inferential statistics, sampling criteria, and the validity and reliability tests. The data, which were collected from the survey questionnaire, were analysed by means of the SPSS software which is described in more detail later in this chapter. For ease of reference, the data are tabulated and presented in the form of tables and graphs.

### **5.2 DATA FORMAT**

All data were entered into the SPSS program, which followed the requirements of the format of SPSS, to enable data analysis to take place. This information was processed and analysed by the researcher with the guidance of the research supervisor.

### **5.3 REVISITING THE OBJECTIVES OF THE STUDY**

As stated in Chapter 1, the main objective of the study was to identify the key factors that impacted on the QWL of municipal firefighters in the Western Cape, South Africa. The sub-objectives were to:

- Identify the level of job satisfaction among municipal firefighters in the Western Cape, South Africa
- Explore the key factors that impacted on the QWL of municipal firefighters
- Find out the common quality tools or mechanisms that can be used to measure the QWL of firefighters
- Determine an effective way to maintain a better QWL of municipal firefighters

## 5.4 RELIABILITY STATISTICS

Two significant parts of accuracy are consistency and validity. Consistency is calculated by taking numerous measurements on the same subject. A consistency number of 0.7 or higher is indicative of reliability (Santos, 1999).

The table below shows the Cronbach alpha scores of reliability for all the questions that were on the questionnaire. The detailed Cronbach alpha scores for individual variable are showed in Appendix G.

**Table 5.1: Cronbach Alpha Scores**

Factors	Cronbach $\alpha$
F1: Basic satisfaction with organisation: reward/flexibility	.901
F2: Rules of organisation	.824
F3: Day-to-day situation	.796
F4: Work-life balance and health and security	.810
F5: Job security and career opportunity	.754
F6: Management	.697
F7: Training and compensation	.640

The most elevated score (.901) is more prominent than the proposed estimation of 0.7. This demonstrates a high level of acknowledgment and predictable recording for the various groups of the ordinal factors for this study. The majority of the groups have high adequate qualities, aside from Management (.697) and Training and Compensation (.640) which have qualities approximating 0.6. This was fundamentally because of the arrangement of the questions that involved these areas as far as their heading or arrangement.

## 5.5 DATA PRESENTATION AND DISCUSSION

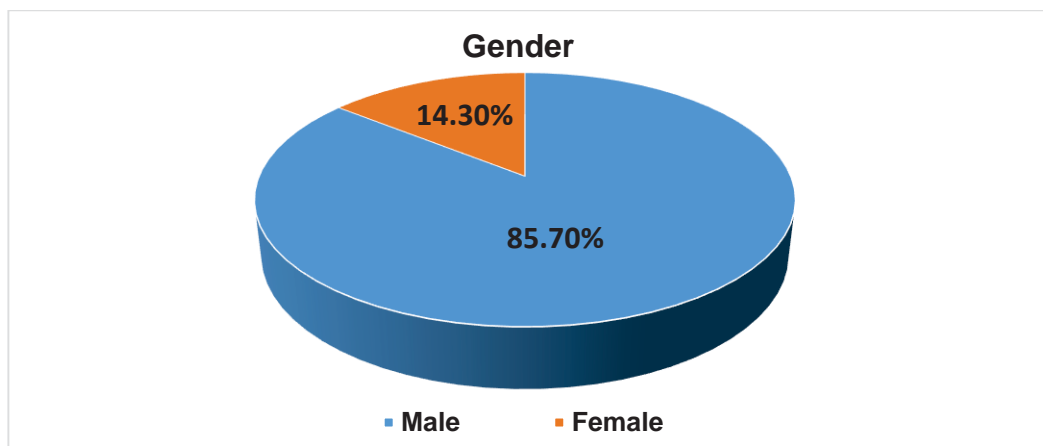
The figures and tables below show the recording outlines of the participants for the factors that comprised the various classification.

### 5.5.1 Demographic Data

The demographic data were gathered to survey the variety in the circulation of participants by gender, age, marital status, education, work experience and ethnic group (Appendix E).

#### 5.5.1.1 Gender proportion of respondents

Figure 5.1 below shows the gender distribution of participants. It indicates that there were 85.70% males and 14.30% females. This suggests that the fire department is highly dominated by male individuals.



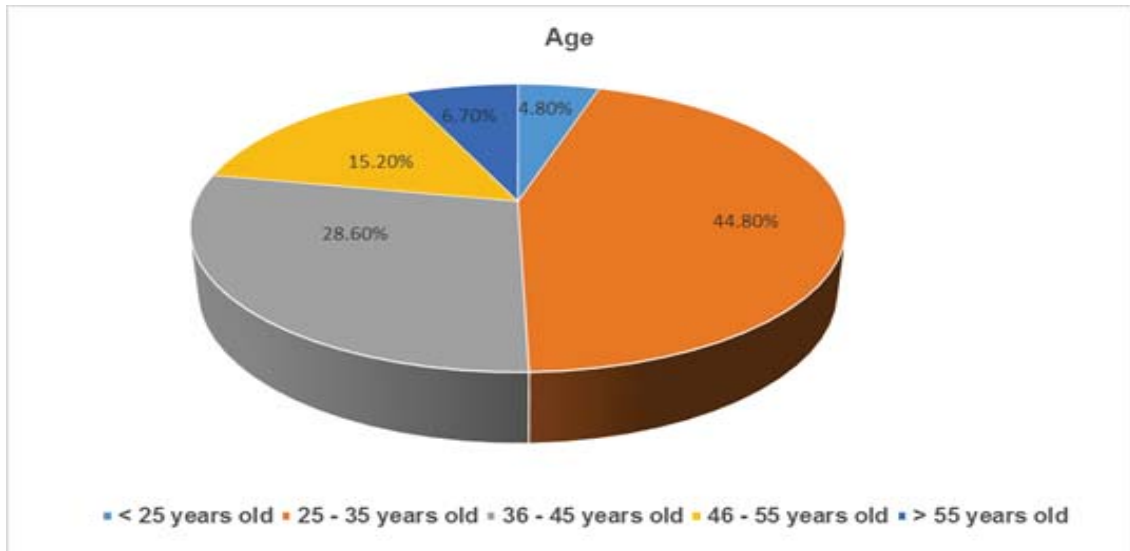
**Figure 5.1: Gender proportion of respondents**

#### 5.5.1.2 Age categories of respondents

Figure 5.2 shows the age categories of participants. The largest age group was 25-35 years old (44.8%), while the second largest group was 36-45 years old (28.6%). Therefore, the majority of respondents were between the ages of 25 and 45 (73.4%).

Of the other age groups, 15.2% were between the ages of 46 to 55, 4.8% were less than 25 years of age, while only 6.7% were above 55 years old.

This indicated that the bulk of the respondents were relatively young, but mature respondents. Accordingly, the fire department employed young to middle-aged individuals who were still energetic.



**Figure 5.2: Age categories of respondents**

### **5.5.1.3 Marital status of respondents**

As shown in Figure 5.3, with regard to the respondents' marital status, 64.8% of the participants were married, 28.6% of the participants were single, 4.8% of the respondents were divorced, while 1.9% of the participants were widowed.

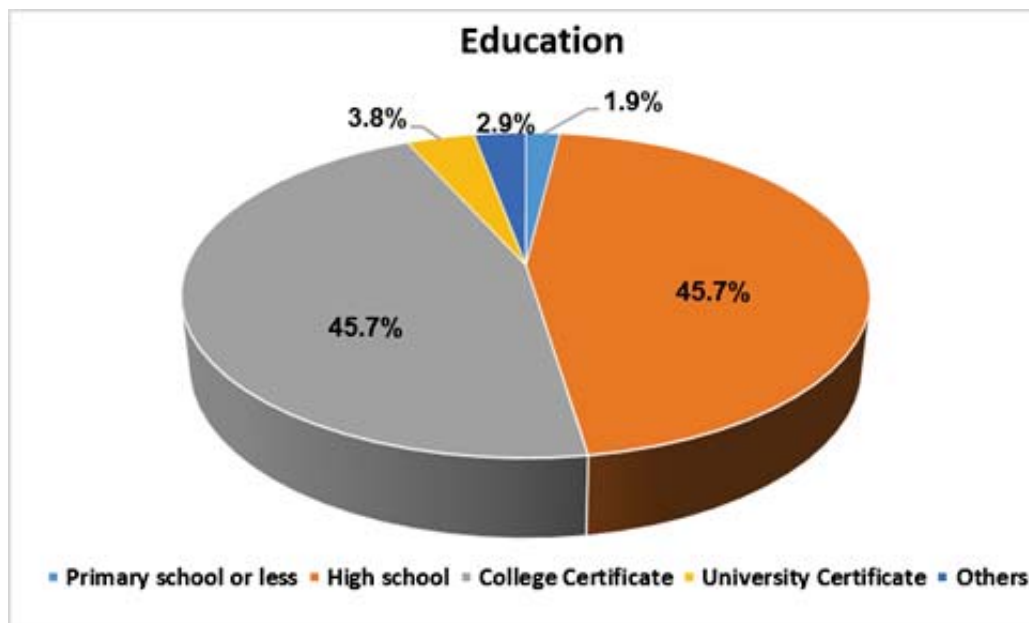


**Figure 5.3: Marital status of respondents**



#### **5.5.1.4 Educational profile of respondents**

The educational profile of the respondents is shown in Figure 5.4 below. It indicates that 45.7% of the respondents were qualified with a high school qualification, 45.7% were in possession of a college certificate, 3.8% of respondents had a university qualification, 2.9% respondents entered the fire department with other qualifications, while the other 1.9% had a primary school education level or less.



**Figure 5.4: Educational profile of respondents**

Accordingly, most of the respondents (45.7%) were in possession of either a high school certificate or college certificate which confirmed the current statutory entry level in the fire department.

#### **5.5.1.5 Work experience of respondents**

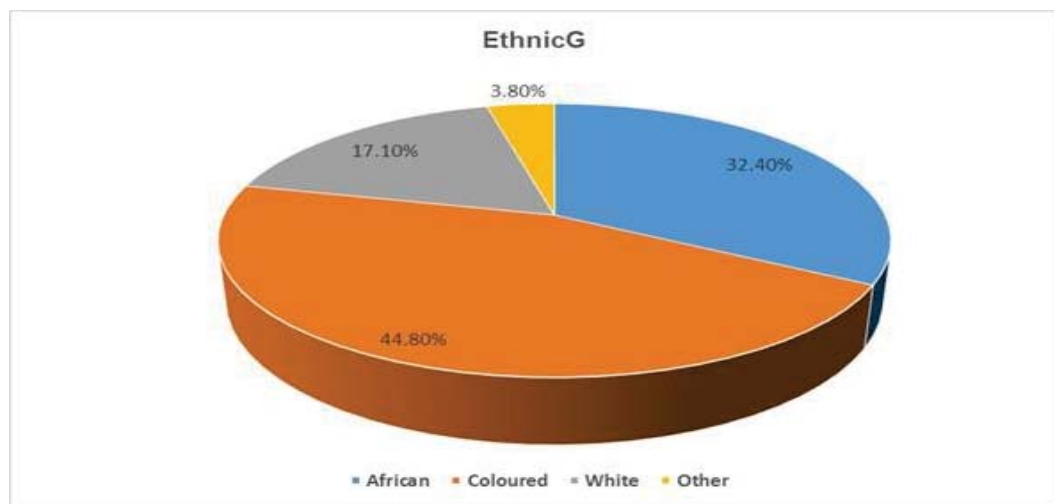
The work experience of the respondents is shown on the 3-D pie chart in Figure 5.5. It indicates that 38.1% of the respondents had between five and 10 years of work experience in the fire department, 3.80% had less than one year, 17.1% had 10 to 15 years' work experience, 12.4% had one to five years' work experience, while 28.6% had more than 15 years of work experience.



**Figure 5.5: Work experience of respondents**

#### **5.5.1.6 Ethnic groups of respondents**

Figure 5.6 reflects that about 44.8% of respondents were coloured, which confirms that the Western Cape is the province in which the coloured population dominates. African respondents formed 32.4% of the sample, 17.1% were white and 3.8% were of another ethnic group.



**Figure 5.6: Ethnic groups of respondents**

#### **5.5.2 Descriptive Results**

Figure 5.7 presents the descriptive results from firefighters in line with the research objectives. The results have been generated through the original

statistical results in Appendix D. The detailed descriptive results for individual variable are included in Appendix F.

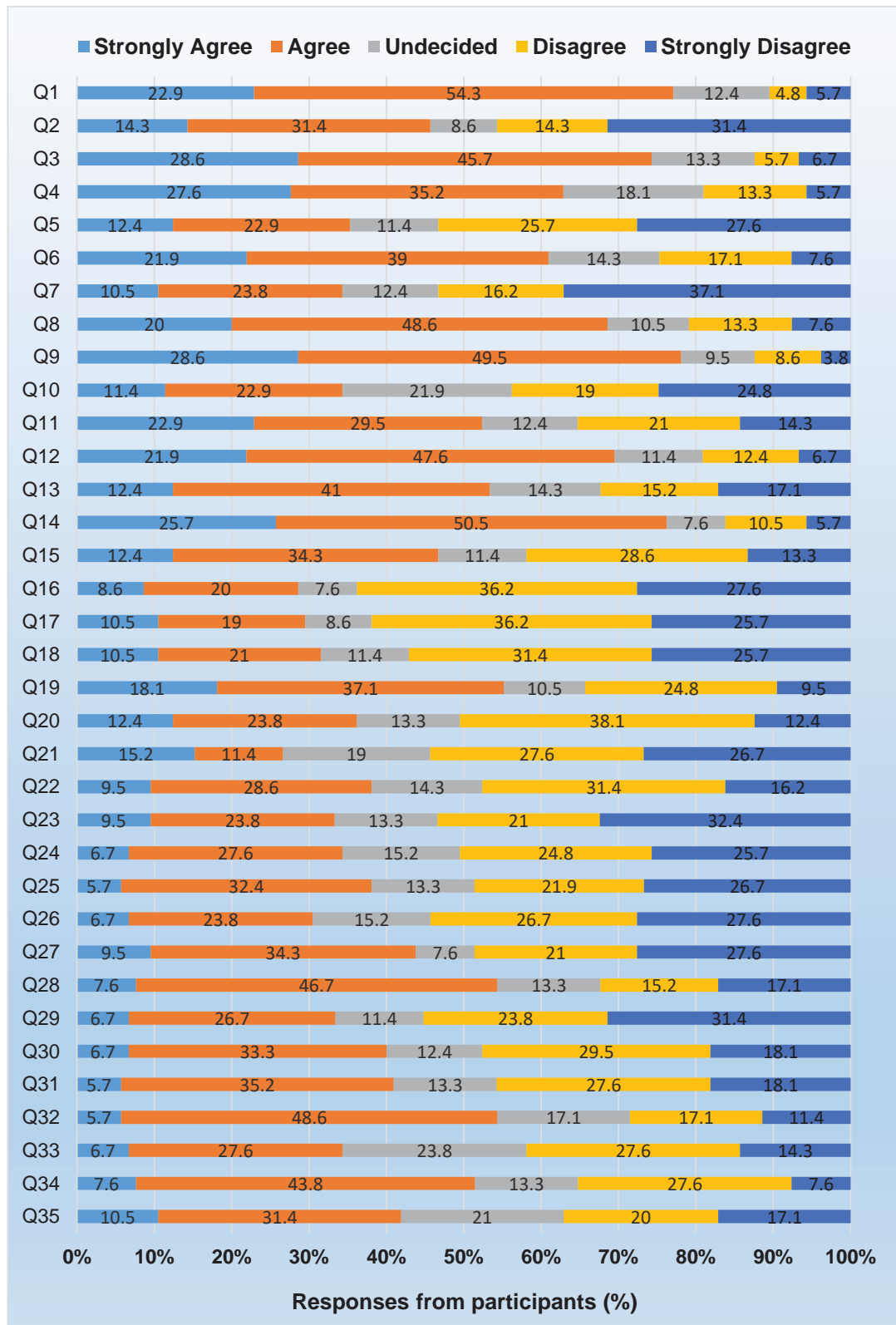


Figure 5.7: Responses from firefighters within the Western Cape

### **5.5.2.1 Job satisfaction among municipal firefighters**

Based on the first research sub-objective, namely to identify the level of job satisfaction among municipal firefighters in the Western Cape, the items concerned include Q1, Q6-8, Q10-13, Q15, Q18-20 and Q27. According to the study results, responses to Q1 (*I am enjoying normal day-to-day activities*) are noteworthy in that 54.3% of respondents agreed that they enjoyed normal day-to-day activities, whereas 22.9% strongly agreed with the statement. However, 12.4% were undecided, while only 4.8% of respondents disagreed and 5.7% strongly disagreed.

As stated by Chetty (2017), the work environment is the ideal place for health promotion and well-being support, as the workplace is defined as a community with the benefit of social support and the associated economic and organisational productivity.

For Q6, about 39.0% agreed that they were satisfied with the training they had received, 21.9% of respondents strongly agreed, 14.3% were undecided, 17.1% disagreed and 7.6% strongly disagreed.

Regarding Q7 (*I am satisfied with my salary and other benefits that I receive from the organisation*), 37.1% of the study participants strongly disagreed that they were satisfied. Moreover, 16.2% of respondents disagreed with the statement, 12.4% of study participants were undecided, while only 23.8% agreed that they were satisfied with their salary and benefits, and 10.5% strongly agreed. Such dissatisfaction with remuneration, as Anitha (2014) points out, could affect employees' job involvement.

On the other hand, nearly 80% of respondents agreed (and 20% strongly agreed) with the statement given in Q8. Other responses were 10.5% undecided, 13.3% disagreed and 7.6% strongly disagreed.

According to Shaout and Yousif (2014), if goals and aims were clear, employee performance and productivity would increase. Employee performance assessment is a significant component in upgrading the quality of work. Kirovska and Qoku (2014) add that employee performance is a

formal, organised system of evaluation the characteristics of employee behaviour in regard to outcomes.

Responses to Q13 showed that 41% of respondents agreed that they were pleased with the career opportunities available in the organisation, 12.4% strongly agreed, 14.3% were undecided, 15.2% disagreed and 17.1% strongly disagreed.

About 52.4% of respondents agreed or strongly agreed with Q11 that stated “I am encouraged to develop new skills (Easton & Van Laar, 2014)”, while 12.4% of respondents were undecided, 21.0% disagreed and 14.3% strongly disagreed. Teryima, Faajir and John (2016) emphasise that career development opportunities should provide appropriate training to improve employees’ skills and knowledge, as this may result in a better QWL among employees.

A high percentage of participants (47.6%) agreed with Q12. They thought their job was reliable and secure. However, 21.9% strongly agreed, 11.4% were undecided, 12.4% disagreed and 6.7% strongly disagreed.

The research findings in Q18 indicated that 31.4% of participants disagreed that health and safety conditions of the workplace were satisfactory. Moreover, 25.7% of respondents strongly disagreed with the statement, 21% agreed, 10.5% strongly agreed and 11.4% were undecided.

According to Jain and Kaur (2014), workplace is a social and professional environment for employees to interact with other people, which involves all the aspects that act and react on the body and mind. From a psychological and physical point of view, employees who are working together build good relationships among themselves’ then an organisation is more likely to increase its productivity. In other words, once employees work in a friendly environment, their work performance will increase.

According to Q27 in the research questions (*The organisation provides equal opportunities for employees’ skills development*), 34.3% of the respondents agreed that the organisation provided equal opportunities for

employees' skill development, while 9.5% strongly agreed, 7.6% were undecided, 21% of the study participants disagreed and 27.6% strongly disagreed. The majority, therefore, disagreed. Therefore, equal opportunities for skills development need to be considered in the fire department.

Regarding Q20, 38.1% of respondents disagreed, 12.4% strongly disagreed, 13.3% of research respondents were undecided, 23.8% agreed and 12.4% strongly agreed with the statement.

In contrast, responses to Q19 (*I often feel under pressure at work*) indicated that as many as 37.1% of the participants agreed that they often felt under pressure at work, with 18.1% who strongly agreed, 24.8% who disagreed, 9.5% strongly disagreed and 10.5% remained undecided.

Responses to Q15 indicated that 28.6% of participants in the survey disagreed that there was a balance between their work and non-work life, while 13.3% strongly disagreed with the statement. However, 34.3% agreed that there was a balance between their work and non-work life, with 12.4% who strongly agreed and 11.4% were undecided. Work life balance is an instrument that helps in ensuring employees' happiness (Kumar & Chakraborty, 2013). In the organisation, support is something that is always needed from the top management made available to the employees.

In response to Q10 (*I am satisfied with the rewards offered by the organisation*), 24.8% of the respondents indicated that they strongly disagreed, 19.0% of respondents disagreed, 22.9% agreed with the statement, 11.4% strongly agreed and 21.9% were undecided.

According to Gupta (2016), rewarding employees is part of job redesign. Job redesigning motivates the employees and improves their QWL. It will also lead to the incensement of productivity and work performance. Job redesign is recognised as an effective strategy to retain the human talents in the organisation and to encourage employees to fulfil their responsibilities in a better fashion.

### **5.5.2.2 Key factors that impact on the QWL**

Based on the study sub-objective, the key factors that impacted on the QWL of municipal firefighters were contained in Q3, Q16, Q22, Q24, Q26 and Q34.

A number of participants (45.7%) showed that they agreed with the statement in Q3 that they felt secure at work, while 28.6% strongly agreed, 5.7% of the respondents disagreed, 6.7% of the respondents strongly disagreed and 13.3% were undecided.

For Q16, 36.2% of respondents disagreed that health and safety were considered well by management and 27.6% of respondents strongly disagreed with the statement. Furthermore, 20.0% agreed that health and safety of the organisation were considered well by management, 8.6% strongly agreed and 7.6% were undecided.

Responses to Q22 showed a high proportion of participants (31.4%) who disagreed that they often fail to get the information they needed to perform their job and 16.2% strongly disagreed. In addition, 28.6% agreed that they often fail to get information they needed to perform their job, with 9.5% of participants who strongly agreed; however, 14.3% were undecided on the matter.

In Q24, 25.7% of research participants strongly disagreed that workers and organisation support always worked together to ensure the safest possible working conditions. A further 24.8% of respondents disagreed with the statement and 15.2% were undecided. In contrast, 27.6% of the respondents agreed and 6.7 of respondents strongly agreed with the statement.

For Q26, the statement "My line manager actively promotes me with flexible working hours" generated 27.6% strong disagreement responses from the study participants with another 26.7% of the participants who disagreed. A total of 23.8% respondents agreed with the statement, 6.7% strongly agreed, while 15.2% remained undecided.

Abid and Barech (2017) note that flexibility in working hours is a source of job satisfaction, and many organisations today encourage and support flexible working hours because it is beneficial to both the employees and the organisation.

A high percentage of responses (43.8%) to Q34 agreed that the organisation had sufficient equipment to help employees to work more effectively and efficiently and 7.6% strongly agreed. However, 27.6% of the study participants disagreed with the statement, while 7.6% strongly disagreed and 13.3% were undecided.

### **5.5.2.3 Tools or mechanisms used to measure the QWL**

According to the research sub-objective, the tools or mechanisms used to measure the QWL of municipal firefighters were included in Q9, Q14, Q22, Q28-30, Q32 and Q35.

A percentage of 49.5% of respondents agreed with Q9 (*I have a good understanding of work standards*) with 28.6% of respondents who strongly agreed, while 9.5% were undecided. In addition, 8.6% disagreed and 3.8% strongly disagreed with the statement.

More than half (50.5%) of the respondents agreed with Q14 that they felt that it was easy to get along with their colleagues and another 25.7% strongly agreed with the statement, but 7.6% were undecided. Moreover, 10.5% disagreed that they got along with their colleagues and 5.7% strongly disagreed with the statement.

Q21 demonstrated that 27.6% of the study participants disagreed that there was friction or anger among their colleagues which meant there was a good policy in place regarding employee personality and how to handle behaviour in the working environment. A further total of 26.7% of the respondents strongly disagreed with the statement. However, 15.2% strongly agreed that there was friction or anger among their colleagues, 11.4% of respondents agreed and 19.0% were undecided.

Abidin (2016) has identified personality as a key aspect in the mixed



emotional and behavioural response patterns of an individual. Furthermore Abidin (2016) added that different personality theorists have presented their own definitions, based on their theoretical positions. It is one of the values that is owned by human as potentials.

In response to Q28, 46.7% of respondents agreed that the training opportunities really helped in improving the quality of their work life, 7.6% strongly agreed, 13.3% were undecided, 15.2% disagreed and 17.1% strongly disagreed with this statement.

A percentage of 31.4% showed that employees strongly disagreed with Q29 that the organisation provided adequate and fair compensation for employees with another 23.8% of respondents who disagreed and 11.4% were undecided. Furthermore, 26.7% of respondents agreed and 6.7% strongly agreed with the statement.

Gupta (2016) states that fair compensation motivates employees to be more productive and more involved in the organisation. Competence and job involvement accompany rewards for work done well. Employees feel more competent when they are involved more in work activities. They then become motivated and more productive (Gupta, 2016).

A total of 33.3% of respondents agreed with Q30 that opportunities for career advancement and growth personality improved commitment, while 6.7% strongly agreed with the statement. However, 12.4% of the research respondents were undecided, 29.5% disagreed and 18.1% strongly disagreed with the statement.

Q32 showed that 48.6% of respondents agreed that workplace rules helped to create and maintain an orderly atmosphere in which it is pleasant to work. 5.7% strongly agreed with the statement, 17.1% were undecided, 17.1% disagreed and 11.4% strongly disagreed.

According to Chan, Hsiao and Lee (2016), a comfortable working environment may support employees, increase productivity, promote the health of the employees and attract new employees to the organisation.

Figure 5.7 above showed that a percentage of 31.4 of respondents agreed with Q35 that they were encouraged to contribute any ideas for work quality improvement, while 10.5% strongly agreed and 21.0% were undecided, with 20.0% of respondents who disagreed and 17.1% strongly disagreed with the statement.

According to Reddy and Reddy (2010), employees must be involved in making decisions, especially on matters that involve their lives. There are systems that can be used to improve employee participation such as quality circles, management by objectives.

#### ***5.5.2.4 Effective ways of maintaining a better QWL***

The last research sub-objective, effective ways of maintaining a better QWL for municipal firefighters in the Western Cape, pertains to Q2, Q4-5, Q17, Q23, Q25, Q31 and Q33.

The findings, as indicated in Q4, showed that 35.2% of respondents agreed that they felt stressed at work and that it could affect the productivity of the organisation, with 27.6% who strongly agreed with the statement and 18.1% were undecided. Furthermore, 13.3% of respondents disagreed with the statement, while 5.7% of respondents strongly disagreed.

Gupta (2016) states that employee productivity is necessary within an organisation for growth to take place. If there is a problem with productivity in the organisation, management must put in more effort because that can affect the QWL of its employees. Stress can likewise negatively affect the organisational performance; along these lines, it is essential for the organisation to evaluate and emphasise address factors that offer ascent to worry in their employees all together for the organisation to work ideally.

The responses to Q5 indicated that 27.6% of respondents strongly disagreed with the statement that they were satisfied with the management team of the organisation and another 25.7% disagreed with this statement. In addition, 22.9% of respondents agreed and 12.4% strongly agreed with the statement, while 11.4% of respondents were undecided.

Rozaini et al. (2015) postulate that an organisation's management team plays a very important role in improving the QWL of employees. Management must address challenges by using personal flexibility to establish programmes that can assist employees to meet their work and personal duties (Rozaini et al., 2015).

A total of 36.2% of the respondents disagreed with Q17 that the working hours of the organisation were flexible, while 25.7% strongly disagreed with the statement. Another 19.0% agreed that the working hours of the organisation were flexible, with 10.5% of the respondents who strongly agreed and 8.6% who were undecided on the matter. These results suggested that the fire department needed to re-examine their flexible working hour practices.

Flexible working hours reduce stress in the workplace and create productivity. It is important that employees have time for their families. Work and non-work life balance is very important (Reddy & Reddy, 2010).

According to Q23 (*The company takes care of the employees working night shift*), 32.4% of respondents reported that they strongly disagreed that the company took care of the employees working night shift, which showed a lack of support by the organisation. Another 21.0% of respondents disagreed with the statement, while 13.3% were undecided on the matter. Only 23.8% of respondents agreed with the statement.

Q25 showed the results on the organisation provided satisfactory facilities and adaptability for employees (Easton & Van Laar, 2014). The responses showed that 32.4% agreed and 5.7% strongly agreed with the statement, while 26.7% strongly disagreed, 21.9% disagreed and 13.3% were undecided on the matter.

The majority of respondents (35.2%) agreed with Q31 that the principles of justice, fairness and quality are applied in disciplinary and grievance procedures as well as promotions that fall under the organisational culture and climate. Another 5.7% of respondents strongly agreed with this statement, while 13.3% were undecided. A total of 27.6% of respondents

disagreed and 18.1% strongly disagreed with the statement.

All organisations have their own culture and this is significantly influenced by leadership. Organisational climate is related to determining the measurable characteristics of the work environment that are directly or indirectly perceived by those who work in this environmental (Shahmoradi et al., 2016). In their responses to Q33, 27.6% of participants disagreed that the organisation developed and implemented a flexible work policy and procedures and 14.3% strongly disagreed with the statement, while 23.8% were undecided. However, 27.6% agreed with the statement and 6.7% strongly agreed with it.

### 5.5.3 RESULTS FROM ONE-WAY ANOVA TEST

Table 5.2 below depicts the results of the one-way ANOVA test conducted with regard to the age of the study respondents.

**Table 5.2: Results of the One-Way ANOVA Test (Age Levels of Respondents)**

		Sum of Squares	Different factors	Mean Square	Factors	p-value
F1 Basic satisfaction with organisation: reward/flexibility	Between Groups	1.519	2	.760	.514	.600
	Within Groups	150.703	102	1.477		
	Total	152.222	104			
F2 Rules of organisation	Between Groups	3.017	2	1.509	1.741	.181
	Within Groups	88.396	102	.867		
	Total	91.413	104			
F3 Day-to-work situation	Between Groups	3.531	2	1.765	2.479	.089
	Within Groups	72.648	102	.712		
	Total	76.179	104			
F4 Work life balance and health and safety	Between Groups	4.742	2	2.371	2.385	.097
	Within Groups	101.401	102	.994		
	Total	106.142	104			
F5 Job security	Between Groups	.472	2	.236	.289	.749

and career opportunities	Within Groups	83.250	102	.816		
	Total	83.723	104			
F6 Management	Between Groups	7.970	2	3.985	3.930	.023
	Within Groups	103.433	102	1.014		
	Total	111.403	104			
F7 Training and compensation	Between Groups	.211	2	.106	.082	.921
	Within Groups	131.203	102	1.286		

Table 5.2 above was used to compare the difference in the averages in the various age levels for the respective constructs. If the p-value is  $\leq 0.05$ , then there is a statistically significant difference in the averages between the age levels. Thus, for construct F1, there is no significant difference in the averages between the age levels.

It is clear from Table 5.3 below, the averages for the respondents' ages in construct F1 are 3.2, 3.47 and 3.23 respectively. All lie between "neutral" and "disagree". However, for construct F6, there is a statistically significant difference in the averages between the age levels. The table below shows the averages for the ages in construct F1 are 3.1, 3.72 and 3.53 respectively.

**Table 5.3: Descriptive Results of the One-Way Test According to Age**

		N	Mean	*SD	*SE	95% Confidence Interval for Mean		Min.	Max.
						Lower bound	Upper bound		
F1 Basic satisfaction with organisation: reward/flexibility	< 35 years old	52	3.20	1.170	.162	2.87	3.53	1	5
	36 - 45 years	30	3.47	1.264	.231	3.00	3.95	1	5
	> 45 years	23	3.23	1.252	.261	2.68	3.77	2	5
	Total	105	3.28	1.210	.118	3.05	3.52	1	5
F2 Rules of organisation	< 35 years old	52	2.91	.949	.132	2.64	3.17	1	5
	36 - 45 years	30	3.30	.946	.173	2.95	3.65	2	5
	> 45 years	23	3.12	.865	.180	2.75	3.50	2	5
	Total	105	3.07	.938	.091	2.89	3.25	1	5
	< 35 years old	52	2.05	.732	.101	1.85	2.26	1	5

		N	Mean	*SD	*SE	95% Confidence Interval for Mean		Min.	Max.
						Lower bound	Upper bound		
F3 Day-to-work situation	36 - 45 years	30	2.48	.991	.181	2.11	2.85	1	5
	> 45 years	23	2.23	.876	.183	1.85	2.61	1	5
	Total	105	2.21	.856	.084	2.05	2.38	1	5
F4 Work life balance and health and safety	< 35 years old	52	3.18	.927	.129	2.92	3.44	1	5
	36 - 45 years	30	3.68	.964	.176	3.32	4.04	1	5
	> 45 years	23	3.37	1.180	.246	2.86	3.88	1	5
	Total	105	3.36	1.010	.099	3.17	3.56	1	5
F5 Job security and career opportunities	< 35 years old	52	2.50	.850	.118	2.26	2.73	1	5
	36 - 45 years	30	2.65	.882	.161	2.32	2.98	1	5
	> 45 years	23	2.52	1.042	.217	2.07	2.97	1	5
	Total	105	2.55	.897	.088	2.37	2.72	1	5
F6 Management	< 35 years old	52	3.10	1.017	.141	2.82	3.39	1	5
	36 - 45 years	30	3.72	.959	.175	3.36	4.08	2	5
	> 45 years	23	3.52	1.044	.218	3.07	3.97	1	5
	Total	105	3.37	1.035	.101	3.17	3.57	1	5
F7 Training and compensation	< 35 years old	52	3.19	1.172	.163	2.87	3.52	1	5
	36 - 45 years	30	3.20	1.022	.187	2.82	3.58	2	5
	> 45 years	23	3.09	1.184	.247	2.58	3.60	1	5
	Total	105	3.17	1.124	.110	2.95	3.39	1	5

\* Standard deviation: SD; Standard error: SE

### **5.5.3.1 Basic satisfaction with organisation: reward/ flexibility**

45.7% of the study participants agree to strongly agree that they had equal opportunities for growth within the organisation with 45.7% disagree to strongly disagree with the statement. However, 8.6% were undecided on the matter (Q2). According to Reddy and Reddy (2010), competency development assists employees to grow in skills and knowledge. These are important aspects to improve QWL. The opportunity for growth within the organisation is part of competency development.

35.3% of respondents agree to strongly agree that they were satisfied with

the management team of the organisation. In addition, 53.3% of study participants disagree to strongly disagree with the statement, while 11.4% of respondents were undecided (Q5). Rozaini et al. (2015) postulate that an organisation's management team plays a very important role in improving the QWL of employees. Management must address challenges by using personal flexibility to establish programmes that can assist employees to meet their work and personal duties (Rozaini et al., 2015).

34.3% of respondents agree to strongly agree that they satisfied with salary and other benefits that they receive from the organisation. Moreover, 53.3% of respondents disagree to strongly disagree that they satisfied with salary and other benefits they receive from the organisation, 12.4% of study participants were undecided (Q7). Such dissatisfaction with remuneration, as Anitha (2014) points out, could affect employees' job involvement.

34.3% of respondents agree to strongly agree that they satisfied with the rewards offered by the organisation, while 43.8% disagree to strongly disagree with the statement, 21.9% were undecided (Q10). According to Gupta (2016), rewarding employees is part of job redesign. Job redesigning motivates the employees and improves their QWL. It will also lead to the incensement of productivity and work performance. Job redesign is recognised as an effective strategy to retain the human talents in the organisation and to encourage employees to fulfil their responsibilities in a better fashion.

In addition 43.8 % of respondents agree to strongly agree to the following statement: (The organisation provides equal opportunities for employees' skills development). On the other hand 48.6% disagree to strongly disagree with the statement and 7.6% were undecided (Q27). Therefore, equal opportunities for skills development need to be considered in the fire department.

#### **5.5.3.2 Rules of organisation**

A total of 40% of respondents agree to strongly agree that opportunities for career advancement and growth personality improved commitment, while

47.6% disagree to strongly disagree with the statement. However, 12.4% of the research respondents were undecided (Q30).

The majority of respondents (40.9%) agreed to strongly agree with the statement that the principles of justice, fairness and quality are applied in disciplinary and grievance procedures as well as promotions that fall under the organisational culture and climate. 45.7% of respondents disagree to strongly disagree with the statement, while 13.3% were undecided (Q31).

Likewise, 54.3% of the respondents confirm that they agree to strongly agree that workplace rules helped to create and maintain an orderly atmosphere in which it is pleasant to work. Contrary to that 28.5% of respondents disagree to strongly disagree with the statement, 17.1% were undecided (Q32). According to Chan, Hsiao and Lee (2016), a comfortable working environment may support employees, increase productivity, promote the health of the employees and attract new employees to the organisation.

A total 34.3% of respondents agree to strongly agree that the organisation developed and implemented a flexible work policy and procedures, 41.9% of respondents disagree to strongly disagree with the statement. While 23.8% were undecided (Q33). All organisations have their own culture and this is significantly influenced by leadership. Organisational climate is related to determining the measurable characteristics of the work environment that are directly or indirectly perceived by those who work in this environmental (Shahmoradi et al., 2016).

41.9% of the respondents agree to strongly agree that they were encouraged to contribute any ideas for work quality improvement, while 37.1% of respondents disagree to strongly disagree with the statement and 21.0% were undecided (Q35). According to Reddy and Reddy (2010), employees must be involved in making decisions, especially on matters that involve their lives. There are systems that can be used to improve employee participation such as quality circles, management by objectives.



### **5.5.3.3 Day-to-work situation**

77.2% of the respondents agree to strongly agree that they enjoyed normal day-to-day activities, whereas 10.5% of respondents disagree to strongly disagree with the statement. However 12.4% were undecided (Q10). As stated by Chetty (2017), the work environment is the ideal place for health promotion and well-being support, as the workplace is defined as a community with the benefit of social support and the associated economic and organisational productivity.

Only 68.6% of the respondents agree to strongly agree that they have clear set of goals and aims that enable them to do their job, 20.9% of respondents disagree to strongly disagree with the statement and 10.5% were undecided (Q8). According to Shaout and Yousif (2014), if goals and aims were clear, employee performance and productivity would increase. Employee performance assessment is a significant component in upgrading the quality of work. Kirovska and Qoku (2014) add that employee performance is a formal, organised system of evaluation the characteristics of employee behaviour in regard to outcomes.

78.1% of the respondents agree to strongly agree that they have a good understanding of work standards, with 12.4% of the respondents disagree to strongly disagree with the statement. In addition 9.5% were undecided (Q9).

76.2% of the respondents agree to strongly agree that they felt that it was easy to get along with their colleagues and 16.5% of respondents disagree to strongly disagree with the statement. Moreover 7.6% were undecided (Q14).

### **5.5.3.4 Work-life balance and health and safety**

46.7% of the respondents agree to strongly agree that there was a balance between their work and non-work life, while 41.9% disagree to strongly disagree with the statement. However 11.4% were undecided (Q15). Work life balance is an instrument that helps in ensuring employees' happiness

(Kumar & Chakraborty, 2013). In the organisation, support is something that is always needed from the top management made available to the employees.

28.6% of the respondents agree to strongly agree that health and safety were considered well by management and 63.8% of the respondents disagree to strongly disagree with the statement. Furthermore 7.6% were undecided (Q16).

A total of 29.5 of the respondents agree to strongly agree that the working hours of the organisation were flexible, while 61.9% disagree to strongly disagree with the statement and 8.6% who were undecided on the matter (Q17). These results suggested that the fire department needed to re-examine their flexible working hour practices. Flexible working hours reduce stress in the workplace and create productivity. It is important that employees have time for their families. Work and non-work life balance is very important (Reddy & Reddy, 2010).

31.5% of the respondents agree to strongly agree that health and safety conditions of the workplace were satisfactory. Moreover, 57.1% of the respondents disagree to strongly disagree with the statement and 11.4% were undecided (Q18). According to Jain and Kaur (2014), workplace is a social and professional environment for employees to interact with other people, which involves all the aspects that act and react on the body and mind. From a psychological and physical point of view, employees who are working together build good relationships among themselves' then an organisation is more likely to increase its productivity. In other words, once employees work in a friendly environment, their work performance will increase.

In addition 33.3% of the respondents agree to strongly agree to the following statement: (The company takes care of the employees working night shift), 53.4% disagree to strongly disagree with the statement and 13.3% were undecided (Q23). In the organisation, support of the employees is something that is always needed from top management (Kumar &

Chakraborty, 2013). Total life space available to an employee can be separated into two parts, namely the professional part in his or her working environment and the social life space. In the workplace, employees need to be satisfied on both the counts professional as well as personal/social space (Kumar & Chakraborty, 2013). Employees are expected to spend equal time on both spaces. Work life balance is an instrument that helps in ensuring employees' happiness (Kumar & Chakraborty, 2013).

#### **5.5.3.5 Job security and career opportunities**

74.3% of the respondents agree to strongly agree that they felt secure at work, while 12.4% disagree and strongly disagree and 13.3% were undecided (Q3). A high percentage of participants (69.5%) agree to strongly agree that their job is reliable and secure. 19.1% disagree to strongly disagree with the statement and 11.4% were undecided (Q12).

53.4% of the respondents agree to strongly agree that they were pleased with the career opportunities available in the organisation, 32.2% disagree to strongly disagree with the statement and 14.3% were undecided (Q13).

Furthermore 51.4% of the participants agree to strongly agree that the organisation had sufficient equipment to help employees to work more effectively and efficiently and 35.2% disagree to strongly disagree with the statement. However 13.3% were undecided (Q34).

#### **5.5.3.6 Management**

34.3% of the respondents agree to strongly agree that workers and organisation support always worked together to ensure the safest possible working conditions. A further 50.5% of respondents disagreed to strongly disagree with the statement and 15.2% were undecided (Q24).

38.1% of the respondents agree to strongly agree that the organisation provided satisfactory facilities and adaptability for employees (Easton & Van Laar, 2014). 48.3% disagree to strongly disagree with the statement and 13.3% were undecided on the matter (Q25).

30.5% of respondents agree to strongly agree with the following statement: “My line manager actively promotes me with flexible working hours”, furthermore 54.3% disagree and strongly disagree with the statement, while 15.2% remained undecided (Q26). Abid and Barech (2017) note that flexibility in working hours is a source of job satisfaction, and many organisations today encourage and support flexible working hours because it is beneficial to both the employees and the organisation.

#### ***5.5.3.7 Training and compensation***

54.3% of the respondents agree to strongly agree that the training opportunities really helped in improving the quality of their work life, 32.3% disagree to strongly disagree with the statement and 13.3% were undecided (Q28).

33.4% of the respondents that the organisation provided adequate and fair compensation for employees, 55.2% of the respondents disagree to strongly disagree with the statement and 11.4% of respondents were undecided (Q29).

## **5.6 CONCLUSION**

This chapter discussed the research results in line with the research questions that addressed in Chapter 1. The main objective of this research was to identify the key factors that impacted on the QWL of municipal firefighters in the Western Cape, South Africa. The discoveries recommended that most of firefighters were not happy with their career opportunities accessible to them. These firefighters felt that their occupations were not dependable and secure.

As indicated by the reactions of these employees, issues that were plainly affecting contrarily on their QWL were an absence of harmony among work and non-work life, health and safety issues, workload and working hours.

Chapter 6 will provide a conclusion of the research and address the limitations of the study, and contributing recommended insights for improving the QWL of firefighters and for further research.

## **CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS**

### **6.1 INTRODUCTION**

The implementation of recommendations from this study may make a significant contribution to improve the QWL of the firefighters in the Goodwood Fire Department.

The research initially began with the research question and objectives that described in Chapter 1. Chapter 2 described the research environment by providing background information about the Goodwood Fire Department. Chapter 3 provided a literature review on the dimensions of QWL. Chapter 4 presented the research design and the methodology which were used to conduct the empirical research. In Chapter 5, the data were presented and analysed in order to obtain findings in relation to the key research objectives of the study. In Chapter 6 conclusions are drawn from the findings, recommendations are made regarding QWL and future research before closing with concluding remarks.

So as to respond to the research question, the research was led by methods for an institutionalized study poll. Data accumulated included anecdotal information of the populace and furthermore the various elements of QWL. The essential point was to identify the key factors that impacted on the QWL of municipal firefighters in the Western Cape, South Africa.

### **6.2 SUMMARY OF KEY FINDINGS**

The key findings are outlined in accordance with the research objectives, namely to:

- Identify the level of job satisfaction among municipal firefighters in the Western Cape, South Africa
- Discover the key factors that impact on the QWL of municipal firefighters
- Find out the common quality tools or mechanisms that can be used to measure the QWL of firefighters

- Determine an effective way to maintain a better QWL of municipal firefighters

### **6.2.1 *The Level of Job Satisfaction among Municipal Firefighters***

Job satisfaction alludes to how well the activity gives the satisfaction of a need or want, or how well it fills in as a source or methods for happiness.

Muindi and Obonyo's (2015) conceptual model describes job satisfaction as comprising elements of skill variety, task identity, task significance, autonomy and feedback. There were negative responses from the research participants regarding job satisfaction. The firefighters were not satisfied with the rewards offered by the organisation, the lack of balance between work and non-work life and the health and safety conditions of the work environment. They also felt under pressure at work and the workload was more than they could handle.

Negative responses about job satisfaction can lead to poor performance; hence reduced productivity, whereas satisfied employees would perform better, improving the chances of organisational success. Arif and Farooqi (2014) confirm that employee satisfaction increases the quality of work of employees. Rozaini et al. (2015) clarify that job satisfaction included mix of positive or negative sentiments that employees have towards their work. It is an unpredictable variable and is impacted by situational elements of the activity. Job satisfaction is one of the most broadly utilized factors in authoritative conduct and it is critical to an organisation's prosperity (Rozaini et al., 2015). In addition, these authors suggest that dispositional characteristics of the individual have a bearing on whether they are satisfied with their jobs or not (Rozaini et al., 2015).

### **6.2.2 *Key Factors that Affect the QWL of Municipal Firefighters***

Muindi and Obonyo (2015) list these key factors that impact on QWL as sufficient and reasonable pay, working conditions, open doors for advancement and development, professional stability, social reconciliation, work life equalization, association and acknowledgment.

There was a high rate of negative responses from research participants regarding the factors affecting their QWL. The responses from the firefighters sampled showed strong disagreement with the following statements:

- Health and safety is well considered by management.
- Working hours in the organisation are flexible.
- The firefighters are regularly able to get the relevant information that is needed for the work that they will perform.
- Line managers actively grant them flexible working hours.

There were positive responses as well, namely that the organisation had sufficient equipment to help employees to work more effectively and efficiently, and the majority of participants felt that their job was secure.

The workplace environment is a major contributing influence on employees' work life, such that a positive workplace has an encouraging impact on their well-being at work. Many employees had an expectation of physical environment and comfort at their work environment. A comfortable working environment may support employees well, increase productivity, promote the health of the employees and attract new employees to the organisation (Kandasamy & Ancheri, 2009).

Ghasemi (2016) asserts that safe and healthy working environments mean creating safe conditions as far as physical safety is concerned. Employees' health and safety become more significant in an organisation. Promoting the level of health at the workplace is considered as each and every attempt to prevent risks and incidents during work hours.

### **6.2.3 Common Tools That Can Be Used to Measure the QWL**

According to respondents, there was a disagreement that the organisation provided adequate and fair compensation for employees as well as opportunities for career advancement and growth. When an individual is more involved and productive in the work environment and given

recognition, there is a rise in job performance. To enjoy one's work is very important because that is where one spends a large amount of one's time (Reddy & Reddy, 2010). When the employees perform well at work, the chances of productivity are very high. For each organisation that desires to expand its efficiency, it needs to execute all strategies through which it can build the performance of its employees (Tabassum et al., 2016).

#### **6.2.4 Effective Ways to Maintain a Better QWL**

Based on the literature review, flexible working hours can reduce stress in the workplace and create productivity, as it will enable employees to spend more time with their families (Reddy & Reddy, 2010). Work and non-work life balance is very important. However, the respondents were very negative about their working hours and the policies and procedures of the organisation. They disagreed that the organisation provided sufficient amenities and suppleness for them to alter their jobs to make their time for family.

There was a high percentage of research respondents that often felt stressed at work. A high proportion also strongly disagreed that they were satisfied with the management team of the organisation, whereas the literature stated management played a significant role in improving QWL of employees. Rozaini et al. (2015) argued that management had to address challenges by using personal flexibilities to establish programmes that could assist employees to meet their work and personal duties.

### **6.3 LIMITATIONS OF THE STUDY**

By its very nature, a research study of this sort has limitations as a result of factors such as time and costs. These are summarised below.

- The scope of the study was limited only to firefighters in the Western Cape, South Africa.
- As fire fighting is a demanding job, there were some challenges when the firefighters answered the questionnaires, such as sometimes the fire alarm went and they had to leave the station and attend to the incident



before completing the questionnaire. The time was always limited because the firefighters has to leave the station at the certain time.

## **6.4 RECOMMENDATIONS**

The following recommendations are offered to the Goodwood Fire Department, arising from the research findings:

### **6.4.1 Job and Career Satisfaction**

- Based on the research results, firefighters were not satisfied with their job and career development (Q2, Q16-18). These aspects drew attention to the study to provide valuable recommendations to the Goodwood Fire Department. Employees felt that they were not given equal opportunities for developing their skills. The Goodwood Fire Department management should, therefore, consider making a helpful domain with vocation open doors for development, which could give firefighters the career and growth opportunities they need.
- Furthermore, the majority of respondents showed a negative perception towards health and safety conditions in the work environment. Other than ensuring that firefighters can play out their present obligations, it is important that the management of the Goodwood Fire Department consider the health and safety of the firefighters in its service and put practices in place that will ensure they are safe when performing their job.
- The majority of the study participants agreed that the working hours of the organisation were not flexible and that it affected their job and career satisfaction, and also their lives outside of work, such as family, leisure and social time. The organisation must try and employ more staff and adjust working shifts.
- The supervisor of the firefighters employed by the Goodwood Fire Department should delegate certain obligations to subordinates with a perspective on offering more command over their assignments, yet in

addition empowering self-awareness through appointment. Successful designation will give subordinates a feeling of strengthening and responsibility, while building up the subordinates simultaneously.

- Management at the Goodwood Fire Department should guarantee viable correspondence and conference among themselves and workers, particularly where framework changes are incorporated.
- Employees ought to be associated with resolutions that affect their department or the entire organisation, since they are excluded from involvement in this process at present.

#### **6.4.2 General Well-Being**

Respondents expressed that they often felt under pressure and stressed out at work. Conducting a health survey can help the management to find the solution to issues concerning health. In addition, the study results can be used as guidelines so that the wellbeing matters should receive urgent attention from the Goodwood Fire Department.

- Health and wellness workshops could be helpful as ways of preventing work-related and individual pressures. It will guarantee that the firefighters can be able to receive important learning helping them to embrace solid way of life propensities.
- A health day occasion could be held to advance attention to individual prosperity.
- Support from ranking staff is basic to a solid health programme. Obvious ranking staff contribution is one of the most significant factors in the accomplishment of such a programme. Ranking staff should go about as health good examples to help with situating the wellbeing programmes as central parts of the organisation.

### **6.4.3 Work and Non-Work Life**

The study findings demonstrated that most participants differ that their manager gave satisfactory regarding the sufficient amenities and suppleness for them to alter their jobs to make their time for family. In addition, respondents reported that they worried about a balance between their work life and non-work life. Many of the study participants also stated that their work requirements interfered with their family and personal life. Supple working activities are significant in adjusting the individual and work life of employees. Therefore, the Goodwood Fire Department should set up an adaptable work schedule that provides the firefighters the chance to plan their work activities and periods as per required which will empower them to manage their time schedules. This will further assist them to accumulate the time for their family.

- A significant number of the respondents unequivocally differ that their line manager effectively promoted adaptable working hours. In this manner, the Goodwood Fire Department should have adaptable working courses of action that are consolidated in the management framework to enable employees to manage individual issues when essential.

### **6.4.4 Stress at Work**

High number research participants agreed that they regularly felt under strain at work. Interestingly, other study respondents disagreed with the statement that the workload set on them was more that they could deal with.

Some study respondents showed that there was no friction or anger among colleagues. Various respondents additionally concurred that they had received the assistance and support they required from their colleagues.

In this research, participants featured stressed at work as an evidence. In this manner, the accompanying control measures are suggested:

- The Goodwood Fire Department must lead chance appraisals to recognise pressure elements, and afterward assess and set up control measures to limit these elements.
- Supervisors ought to likewise be prepared so as to recognise indications of stress among their subordinate.
- Additionally, the organisation, worker delegates and representatives must talk about relevant issues that effect on employees' feelings of anxiety at work.
- Workers must also be stimulated to take customary from work to unwind so as to empower their psyches and bodies.
- The organisation should review the level of work stress factors as well as the conflict among employees.
- All occurrences of physical or psychological mistreatment must be dealt with cautiously, as we realise that firefighters work in a high-pressure condition.
- The participants show that the workload placed on them is more they can deal with, at that point the manner in which the activity is done must be upgraded in accordance with the workers' capabilities. Then again, utilising extra staff on contract premise to help with managing the outstanding task at hand will profit all workers.
- The working hours of the Goodwood Fire Department must be made more flexible because the high number of participants had disagreed with the statement that the working hours of the organisation are flexible.

#### **6.4.5 Working Conditions**

Participants felt that employees' health and safety ought to be organised at workplace. They besides communicated that firefighters and management should cooperate to guarantee the most secure conceivable working conditions. The research discoveries showed that majority of respondents

couldn't help contradicting the explanation that health and safety conditions were attractive.

Along these lines, the following recommendations are offered the Goodwood Fire Department:

- Management and workers must be kept very much prepared and educated about their lawful OHS roles and obligations through training programmes, updates, regular communications and OHS function gatherings.
- Developing an OHS structure will guarantee that the organisation accomplishes its health and safety points of limiting dangers. The system must incorporate an OHS strategy that expresses the management's responsibility to give a healthy and safe workplace.
- Senior managers should be responsible and guarantee that OHS is very much overseen in the organisational assigned job territories.
- Senior management and workers must execute OHS rehearses that will keep up the work environment in a healthy and safe condition.
- Inspections and hazard appraisals need to be completed to distinguish whatever conceivably risky work environment and set up measurements to control such dangers.
- The worksites should be overhauled to suit individuals' needs to make it easier to understand to build solace and proficiency for employees.

#### **6.4.6 Work Policies and Procedures**

Most of the respondents disagreed that the organisation developed and implemented a flexible work policy and work procedures, even though other study participants agreed with the statement.

Therefore, the following recommendations are offered the Goodwood Fire Department:

- Firefighters and the various level of management should be caused mindful of their obligations with respect to QWL- related approaches. There must be an unmistakable relationship between QWL approaches and authoritative objectives. The strategies ought to be reliable with the vision and mission of the Goodwood Fire Department. Organisational policies should likewise be all around lined up with hierarchical objectives and goals.
- In request to accomplish the smooth execution of an arrangement, there must brief sessions for employees in which mindfulness must be raised on QWL activities for both managers and firefighters.
- Management must be predictable in the usage of the strategies.
- Employee delegates must coordinate their objectives with the hierarchical procedure in light of a legitimate concern for the Goodwood Fire Department and its employees.

## **6.5 RECOMMENDATIONS FOR FUTURE RESEARCH**

The study was carried out to identify the key factors that essentially affected on the QWL of municipal firefighters in the Western Cape. Since this research had only covered the most critical factors of QWL, it could expand its scope to include salaries and benefits of firefighters, job descriptions and the matters of propaganda.

Furthermore, future research focus groups could be used for discussion as a qualitative data collection method to better understand aspects of QWL that impact on the work life firefighters in the whole country.

## **6.6 CONCLUSION**

The Goodwood Fire Department should upgrade the QWL of its employees to hold them and achieve its vital objectives. The Fire Department ought to likewise build and keep up quality QWL programmes. Backing from ranking staff is basic to a strong QWL programme; thusly, noticeable senior management contribution is one of the most significant factors in the

accomplishment of the procedure.

Workers should be encouraged and developed to establish long-term relationships with the Fire Department in order to receive commitment from them. Synchronizing correspondence and consultation among the management and employees by interfacing at various degrees of the organisation will help with creating trust and certainty that will make an agreeable workplace with an improved QWL for all engaged with the Goodwood Fire Department.

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## APPENDICES

### Appendix A: Ethical clearance letter from Faculty



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Office of the Chairperson Research Ethics Committee	Faculty: BUSINESS AND MANAGEMENT SCIENCES
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At a meeting of the Faculty's Research Ethics Committee on 02 November 2017, Ethics Approval was granted to Sisanda, Sithole (210106751) for research activities related to the Master of Technology: Business Administration at the University of the Cape Peninsula  
University of Technology

Title of dissertation/thesis/project:	MEASURING QUALITY OF WORK-LIFE OF MUNICIPAL FIREFIGHTERS IN THE WESTERN CAPE, SOUTH AFRICA  Lead Researcher/Supervisor: Dr B Yan
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Comments:

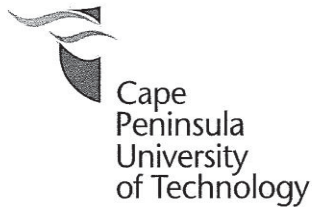
Decision: APPROVED

	25 January 2017
Signed: Chairperson: Research Ethics Committee	Date

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Clearance Certificate No | 2017/FBR/EC492

## Appendix B: Letter of Consent



18 October 2017

### TO WHOM IT MAY CONCERN

#### Re: Data collection for postgraduate research

**Sisanda Sithole** is registered for the MTech: Business Administration degree (full research) at CPUT with student number **210106751**. The thesis is titled "*Measuring quality of work life of municipal fire-fighters in the Western Cape, South Africa*" with the objective to determine the key factors that impact on quality of work life in an organisation. The main supervisor for this research is Dr Bingwen Yan.

In order to meet the requirements of the University's Higher Degrees Committee (HDC) the student must get consent to collect data from organizations which they have identified as potential sources of data. In this case the student will issue a questionnaire to gather relevant data. If you agree to this, you are requested to complete the attached form (an electronic version will be made available to you if you so desire) and print it on your organization's letterhead.

For further clarification on this matter please contact either the supervisor(s) identified above, or the Faculty Ethics Committee Chairperson at 021 460 3291/3534.

Regards

A handwritten signature in black ink, appearing to read "Dr. Michael Twum-Darko".

**Dr. Michael Twum-Darko**

Chairperson: Faculty Ethics Committee  
Postgraduate Studies and Research | Graduate Centre for Management  
Faculty of Business and management Sciences

## Appendix C: Permission Letter from Fire Department



CITY OF CAPE TOWN  
ISIXEKO SASEKAPA  
STAD KAAPSTAD

**SAFETY & SECURITY  
FIRE AND RESCUE SERVICE**

**Ian Schneller**  
Chief Fire Officer

T: 021 590 1738 F: 086 201 2152 M: 084 220 0214  
E: [ian.schneller@capetown.gov.za](mailto:ian.schneller@capetown.gov.za)

EMERGENCY SERVICES - Fire & Rescue Services - Headquarters

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24 October 2017

**TO WHOM IT MAY CONCERN**

**Data Collection for Postgraduate Research**  
**S Sithole (Student Number 210106751)**

In order to meet the requirements of the University's Higher Degrees Committee, permission is hereby granted to Ms Sithole (Student Number 210106751) to gather the relevant data at Goodwood Fire Station as from November 2017.

Thanking you

A handwritten signature in black ink, appearing to read 'I Schneller'.

**I Schneller**  
**Chief Fire Officer**  
**City of Cape Town Fire & Rescue Service**

HEADQUARTERS - GOODWOOD FIRE STATION  
CNR HUGO & FRANS CONRADIE STREETS GOODWOOD 7460  
[www.capetown.gov.za](http://www.capetown.gov.za)

## Appendix D: Survey questionnaire



**Faculty of Business and Management Sciences**

(Cape Town Campus)

Ms Sithole

Telephone: +27 +21 460 3539

Fax: +27 +21 959 6656

E-mail: 210106751@mycput.ac.za

Department: Business Administration

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Dear Respondent

*Re: Measuring quality of work-life of municipal firefighters in the Western Cape, South Africa*

The objective of this survey is to identify the key factors that impact on the *quality of work-life* (QWL) of municipal firefighters in the Western Cape, South Africa. The survey is anonymous. Please do not write your name on the survey. Responses cannot be traced to any individual. The free and frank expression of your own opinion will be most helpful. There are no right or wrong answers to any items in the questionnaire. It is your opinion on each statement made that matters.

The survey contains two main sections, Section One is the demographical data and Section Two is the decision making. Section Two shows a number of statements about quality of work life. You are requested to respond to each of the statements by placing a CIRCLE in the space which most accurately fits the extent to which you agree that the statement describing. If you strongly agree with the statement you would CIRCLE number **1**. If, on the other hand, if you disagree with the statement you would CIRCLE number **4**, and so on. After you have read each statement, please decide the degree to which the statement accurately describes your own situation and your own feelings, using the five point scale. Please do not spend too much time on a particular statement.

When you have completed all the items, place the questionnaire in the envelope provided, it will be collected from you. Thank you for your participation.

Yours faithfully

Ms S Sithole

Please make a “V” on your choice in the shaded block.

**Section 1. DEMOGRAPHIC DATA**

**1.1 Gender**

1	Male	
2	Female	

**1.2 Age category**

1	< 25 years old	
2	25-35 years old	
3	36-45 years old	
4	46-55 years old	
5	> 55years old	

**1.3 marital status**

1	Single	
2	married	
3	widow	
4	Divorced	

**1.4 Education**

1	Primary school or less	
2	High school	
3	College Certificate	
4	University Degree	
5	Others (Please indicate)	

**1.5 Work experience**

1	Less than 1 year	
2	1-5 years	
3	5-10 years	
4	10-15 years	
5	More than 15 years	

**1.6 Ethnic Group**

1	African	
2	Coloured	
3	White	
4	Others (Please indicate)	



## Section 2: Decision making

Please rate the following statement on the basis of (strongly disagree, Disagree, Undecided, Agree, and strongly agree).

Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1	2	3	4	5

No.	Statement	Decision				
1	I am enjoying normal day-to-day activities.	1	2	3	4	5
2	Employees have equal opportunity for growth within the organisation.	1	2	3	4	5
3	I feel that my job is secured at work.	1	2	3	4	5
4	I often feel stressful at work.	1	2	3	4	5
5	I am satisfied with the management team of the organisation.	1	2	3	4	5
6	I am satisfied with the training I receive in order to perform my present job.	1	2	3	4	5
7	I am satisfied with my salary and other benefits that I received from the organisation.	1	2	3	4	5
8	I have a clear set of goal and aims that enable me to do my job.	1	2	3	4	5
9	I have a good understanding on work standards.	1	2	3	4	5
10	I am satisfied with the reward from the organisation.	1	2	3	4	5
11	I am encouraged to develop new skills.	1	2	3	4	5
12	I think that my job is reliable and secure.	1	2	3	4	5
13	I am satisfied with the career opportunities available to me here.	1	2	3	4	5
14	I feel that it is easy to get along with my colleagues.	1	2	3	4	5
15	There is a balance between work and non-work life.	1	2	3	4	5
16	My health and safety is well considered by management.	1	2	3	4	5

No.	Statement	Decision				
17	The working hours of the organisation are flexible.	1	2	3	4	5
18	I am satisfied with the health and safety conditions of the work environment.	1	2	3	4	5
19	I often feel under pressure at work.	1	2	3	4	5
20	The workload placed on me is more than I can handle.	1	2	3	4	5
21	There is friction or anger amongst colleagues.	1	2	3	4	5
22	I am often unable to find the information I need to perform my job.	1	2	3	4	5
23	The company takes care of the employees working in night shift.	1	2	3	4	5
24	At work, employees and management always work together to ensure the safest possible working condition.	1	2	3	4	5
25	The organisation provides adequate facilities and flexibility for me to adjust my work in with my family time.	1	2	3	4	5
26	My line manager actively promotes me with flexible working hours.	1	2	3	4	5
27	The organisation provides an equal opportunity for employees' skill development.	1	2	3	4	5
28	The training opportunities have really helped in improving the quality of work.	1	2	3	4	5
29	The organisation provides an adequate and fair compensation for employees.	1	2	3	4	5
30	Opportunity for career advancement and growth personality improves commitment.	1	2	3	4	5
31	The principles of justice, fair and quality are applied in disciplinary procedure, grievance procedures, and	1	2	3	4	5
32	Work rules that are given in the work place help to create and maintain an orderly atmosphere that is pleasant to	1	2	3	4	5
33	The organisation develop and implement a flexible work policy and procedure.	1	2	3	4	5
34	The organisation has sufficient equipment to help employees to work more effectively and efficiently.	1	2	3	4	5
35	I am encouraged to contribute any ideas for work quality improvement.	1	2	3	4	5

## Appendix E: Frequency Table for Demographical Data

### SSPS DATA Frequency Table for Demographical Data

#### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	90	85.7	85.7	85.7
	Female	15	14.3	14.3	100.0
	Total	105	100.0	100.0	

#### Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 25 years old	5	4.8	4.8	4.8
	25-35 years old	47	44.8	44.8	49.5
	36-45 years old	30	28.6	28.6	78.1
	46-55 years old	16	15.2	15.2	93.3
	> 55years old	7	6.7	6.7	100.0
	Total	105	100.0	100.0	

#### Marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	30	28.6	28.6	28.6
	Married	68	64.8	64.8	93.3
	Widow	2	1.9	1.9	95.2
	Divorced	5	4.8	4.8	100.0
	Total	105	100.0	100.0	

### Level of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary school or less	2	1.9	1.9	1.9
	High school	48	45.7	45.7	47.6
	College Certificate	48	45.7	45.7	93.3
	University Certificate	4	3.8	3.8	97.1
	Others	3	2.9	2.9	100.0
	Total	105	100.0	100.0	

### Ethnic Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	African	34	32.4	33.0	33.0
	Coloured	47	44.8	45.6	78.6
	White	18	17.1	17.5	96.1
	Others	4	3.8	3.9	100.0
	Total	103	98.1	100.0	
Missing	System	2	1.9		
Total		105	100.0		

### Work Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	4	3.8	3.8	3.8
	1 - 5 years	13	12.4	12.4	16.2
	5 - 10 years	40	38.1	38.1	54.3
	10 - 15 years	18	17.1	17.1	71.4
	More than 15 years	30	28.6	28.6	100.0
	Total	105	100.0	100.00	

## Appendix F: SPSS Data: Frequency Table for Likert scale Data

### I am enjoying normal day-to-day activities.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	24	22.9	22.9	22.9
	Agree	57	54.3	54.3	77.1
	Undecided	13	12.4	12.4	89.5
	Disagree	5	4.8	4.8	94.3
	Strongly Disagree	6	5.7	5.7	100.0
	Total	105	100.0	100.0	

### Employees have equal opportunity for growth within the organisation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	15	14.3	14.3	14.3
	Agree	33	31.4	31.4	45.7
	Undecided	9	8.6	8.6	54.3
	Disagree	15	14.3	14.3	68.6
	Strongly Disagree	33	31.4	31.4	100.0
	Total	105	100.0	100.0	

### I feel that my job is secured at work.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	30	28.6	28.6	28.6
	Agree	48	45.7	45.7	74.3
	Undecided	14	13.3	13.3	87.6
	Disagree	6	5.7	5.7	93.3
	Strongly Disagree	7	6.7	6.7	100.0
	Total	105	100.0	100.0	

**I often feel stressful at work.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	29	27.6	27.6	27.6
	Agree	37	35.2	35.2	62.9
	Undecided	19	18.1	18.1	81.0
	Disagree	14	13.3	13.3	94.3
	Strongly Disagree	6	5.7	5.7	100.0
	Total	105	100.0	100.0	

**I am satisfied with the management team of the organisation.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	13	12.4	12.4	12.4
	Agree	24	22.9	22.9	35.2
	Undecided	12	11.4	11.4	46.7
	Disagree	27	25.7	25.7	72.4
	Strongly Disagree	29	27.6	27.6	100.0
	Total	105	100.0	100.0	

**I am satisfied with the training I receive in order to perform my present job.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	23	21.9	21.9	21.9
	Agree	41	39.0	39.0	61.0
	Undecided	15	14.3	14.3	75.2
	Disagree	18	17.1	17.1	92.4
	Strongly Disagree	8	7.6	7.6	100.0
	Total	105	100.0	100.0	

**I am satisfied with my salary and other benefits that I received from the organisation.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	11	10.5	10.5	10.5
	Agree	25	23.8	23.8	34.3
	Undecided	13	12.4	12.4	46.7
	Disagree	17	16.2	16.2	62.9
	Strongly Disagree	39	37.1	37.1	100.0
	Total	105	100.0	100.0	

**I have a clear set of goal and aims that enable me to do my job.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	21	20.0	20.0	20.0
	Agree	51	48.6	48.6	68.6
	Undecided	11	10.5	10.5	79.0
	Disagree	14	13.3	13.3	92.4
	Strongly Disagree	8	7.6	7.6	100.0
	Total	105	100.0	100.0	

**I have a good understanding on work standards.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	30	28.6	28.6	28.6
	Agree	52	49.5	49.5	78.1
	Undecided	10	9.5	9.5	87.6
	Disagree	9	8.6	8.6	96.2
	Strongly Disagree	4	3.8	3.8	100.0
	Total	105	100.0	100.0	

**I am satisfied with the reward from the organisation.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	12	11.4	11.4	11.4
	Agree	24	22.9	22.9	34.3
	Undecided	23	21.9	21.9	56.2
	Disagree	20	19.0	19.0	75.2
	Strongly Disagree	26	24.8	24.8	100.0
	Total	105	100.0	100.0	

**I am encouraged to develop new skills.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	24	22.9	22.9	22.9
	Agree	31	29.5	29.5	52.4
	Undecided	13	12.4	12.4	64.8
	Disagree	22	21.0	21.0	85.7
	Strongly Disagree	15	14.3	14.3	100.0
	Total	105	100.0	100.0	

**I think that my job is reliable and secure.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	23	21.9	21.9	21.9
	Agree	50	47.6	47.6	69.5
	Undecided	12	11.4	11.4	81.0
	Disagree	13	12.4	12.4	93.3
	Strongly Disagree	7	6.7	6.7	100.0
	Total	105	100.0	100.0	



**I am satisfied with the career opportunities available to me here.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	13	12.4	12.4	12.4
	Agree	43	41.0	41.0	53.3
	Undecided	15	14.3	14.3	67.6
	Disagree	16	15.2	15.2	82.9
	Strongly Disagree	18	17.1	17.1	100.0
	Total	105	100.0	100.0	

**I feel that it is easy to get along with my colleagues.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	27	25.7	25.7	25.7
	Agree	53	50.5	50.5	76.2
	Undecided	8	7.6	7.6	83.8
	Disagree	11	10.5	10.5	94.3
	Strongly Disagree	6	5.7	5.7	100.0
	Total	105	100.0	100.0	

**There is a balance between work and non-work life.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	13	12.4	12.4	12.4
	Agree	36	34.3	34.3	46.7
	Undecided	12	11.4	11.4	58.1
	Disagree	30	28.6	28.6	86.7
	Strongly Disagree	14	13.3	13.3	100.0
	Total	105	100.0	100.0	

**My health and safety is well considered by management.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	9	8.6	8.6	8.6
	Agree	21	20.0	20.0	28.6
	Undecided	8	7.6	7.6	36.2
	Disagree	38	36.2	36.2	72.4
	Strongly Disagree	29	27.6	27.6	100.0
	Total	105	100.0	100.0	

**The working hours of the organisation are flexible.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	11	10.5	10.5	10.5
	Agree	20	19.0	19.0	29.5
	Undecided	9	8.6	8.6	38.1
	Disagree	38	36.2	36.2	74.3
	Strongly Disagree	27	25.7	25.7	100.0
	Total	105	100.0	100.0	

**I am satisfied with the health and safety conditions of the work environment.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	11	10.5	10.5	10.5
	Agree	22	21.0	21.0	31.4
	Undecided	12	11.4	11.4	42.9
	Disagree	33	31.4	31.4	74.3
	Strongly Disagree	27	25.7	25.7	100.0
	Total	105	100.0	100.0	

**I often feel under pressure at work.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	19	18.1	18.1	18.1
	Agree	39	37.1	37.1	55.2
	Undecided	11	10.5	10.5	65.7
	Disagree	26	24.8	24.8	90.5
	Strongly Disagree	10	9.5	9.5	100.0
	Total	105	100.0	100.0	

**The workload placed on me is more than I can handle.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	13	12.4	12.4	12.4
	Agree	25	23.8	23.8	36.2
	Undecided	14	13.3	13.3	49.5
	Disagree	40	38.1	38.1	87.6
	Strongly Disagree	13	12.4	12.4	100.0
	Total	105	100.0	100.0	

**There is friction or anger amongst colleagues.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	16	15.2	15.2	15.2
	Agree	12	11.4	11.4	26.7
	Undecided	20	19.0	19.0	45.7
	Disagree	29	27.6	27.6	73.3
	Strongly Disagree	28	26.7	26.7	100.0
	Total	105	100.0	100.0	

**I am often unable to find the information I need to perform my job.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	10	9.5	9.5	9.5
	Agree	30	28.6	28.6	38.1
	Undecided	15	14.3	14.3	52.4
	Disagree	33	31.4	31.4	83.8
	Strongly Disagree	17	16.2	16.2	100.0
	Total	105	100.0	100.0	

**The company takes care of the employees working in night shift.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	10	9.5	9.5	9.5
	Agree	25	23.8	23.8	33.3
	Undecided	14	13.3	13.3	46.7
	Disagree	22	21.0	21.0	67.6
	Strongly Disagree	34	32.4	32.4	100.0
	Total	105	100.0	100.0	

**At work, employees and management always work together to ensure the safest possible working condition.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	6.7	6.7	6.7
	Agree	29	27.6	27.6	34.3
	Undecided	16	15.2	15.2	49.5
	Disagree	26	24.8	24.8	74.3
	Strongly Disagree	27	25.7	25.7	100.0
	Total	105	100.0	100.0	

**The organisation provides adequate facilities and flexibility for me to adjust my work in with my family time.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	6	5.7	5.7	5.7
	Agree	34	32.4	32.4	38.1
	Undecided	14	13.3	13.3	51.4
	Disagree	23	21.9	21.9	73.3
	Strongly Disagree	28	26.7	26.7	100.0
	Total	105	100.0	100.0	

**My line manager actively promotes me with flexible working hours.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	6.7	6.7	6.7
	Agree	25	23.8	23.8	30.5
	Undecided	16	15.2	15.2	45.7
	Disagree	28	26.7	26.7	72.4
	Strongly Disagree	29	27.6	27.6	100.0
	Total	105	100.0	100.0	

**The organisation provides an equal opportunity for employees' skill development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	10	9.5	9.5	9.5
	Agree	36	34.3	34.3	43.8
	Undecided	8	7.6	7.6	51.4
	Disagree	22	21.0	21.0	72.4
	Strongly Disagree	29	27.6	27.6	100.0
	Total	105	100.0	100.0	

**The training opportunities have really helped in improving the quality of work.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	8	7.6	7.6	7.6
	Agree	49	46.7	46.7	54.3
	Undecided	14	13.3	13.3	67.6
	Disagree	16	15.2	15.2	82.9
	Strongly Disagree	18	17.1	17.1	100.0
	Total	105	100.0	100.0	

**The organisation provides an adequate and fair compensation for employees.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	6.7	6.7	6.7
	Agree	28	26.7	26.7	33.3
	Undecided	12	11.4	11.4	44.8
	Disagree	25	23.8	23.8	68.6
	Strongly Disagree	33	31.4	31.4	100.0
	Total	105	100.0	100.0	

**The principles of justice, fair and quality are applied in disciplinary procedure, grievance procedures, and promotions.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	6	5.7	5.7	5.7
	Agree	37	35.2	35.2	41.0
	Undecided	14	13.3	13.3	54.3
	Disagree	29	27.6	27.6	81.9
	Strongly Disagree	19	18.1	18.1	100.0
	Total	105	100.0	100.0	

**Opportunity for career advancement and growth personality improves commitment**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	6.7	6.7	6.7
	Agree	35	33.3	33.3	40.0
	Undecided	13	12.4	12.4	52.4
	Disagree	31	29.5	29.5	81.9
	Strongly Disagree	19	18.1	18.1	100.0
	Total	105	100.0	100.0	

**Work rules that are given in the work place help to create and maintain an orderly atmosphere that is pleasant to work.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	6	5.7	5.7	5.7
	Agree	51	48.6	48.6	54.3
	Undecided	18	17.1	17.1	71.4
	Disagree	18	17.1	17.1	88.6
	Strongly Disagree	12	11.4	11.4	100.0
	Total	105	100.0	100.0	

**The organisation develop and implement a flexible work policy and procedure.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	6.7	6.7	6.7
	Agree	29	27.6	27.6	34.3
	Undecided	25	23.8	23.8	58.1
	Disagree	29	27.6	27.6	85.7
	Strongly Disagree	15	14.3	14.3	100.0
	Total	105	100.0	100.0	

**The organisation has sufficient equipment to help employees to work more effectively and efficiently.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	8	7.6	7.6	7.6
	Agree	46	43.8	43.8	51.4
	Undecided	14	13.3	13.3	64.8
	Disagree	29	27.6	27.6	92.4
	Strongly Disagree	8	7.6	7.6	100.0
	Total	105	100.0	100.0	

**I am encouraged to contribute any ideas for work quality improvement.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	11	10.5	10.5	10.5
	Agree	33	31.4	31.4	41.9
	Undecided	22	21.0	21.0	62.9
	Disagree	21	20.0	20.0	82.9
	Strongly Disagree	18	17.1	17.1	100.0
	Total	105	100.0	100.0	



## Appendix G: SPSS Data: Reliability Statistics

### Factor One

#### Reliability Statistics

Cronbach's Alpha	Number of Items
.901	5

#### Item-total Statistics

	Mean	Scale	Total Correlation	Cronbach's Alpha
Q2 Employees have equal opportunity for growth within the organisation.	13.25	22.419	.832	.861
Q5 I am satisfied with the management team of the organisation	13.09	24.156	.752	.879
Q7 I am satisfied with my salary and other benefits that I received from the organisation.	12.96	23.729	.758	.878
Q10 I am satisfied with the reward from the organisation.	13.19	24.483	.767	.876
Q27 The organisation provides an equal opportunity for employees' skill development.	13.19	25.213	.659	.899

## Factor Two

### Reliability Statistics

Cronbach's Alpha	Number of Items
.824	5

### Item-total Statistics

	Mean	Scale	Total Correlation	Cronbach's Alpha
Q30 Opportunity for career advancement and growth personality improves commitment.	12.14	14.912	.560	.806
Q31 The principles of justice, fair and quality are applied in disciplinary procedure, grievance procedures, and promotions.	12.16	14.502	.620	.788
Q32 Work rules that are given in the work place help to create and maintain an orderly atmosphere that is pleasant to work.	12.53	14.559	.697	.767
Q33 The organisation develop and implement a flexible work policy and procedure.	12.18	14.784	.643	.782
Q35 I am encouraged to contribute any ideas for work quality improvement.	12.31	14.660	.580	.800

### Factor Three

#### Reliability Statistics

Cronbach's Alpha	Number of Items
.796	4

#### Item-total Statistics

	Mean	Scale	Total Correlation	Cronbach's Alpha
Q1 I am enjoying normal day-to-day activities.	6.70	7.137	.650	.726
Q8 I have a clear set of goal and aims that enable me to do my job.	6.46	6.674	.605	.748
Q9 I have a good understanding on work standards.	6.76	6.818	.711	.696
Q14 I feel that it is easy to get along with my colleagues.	6.66	7.535	.482	.806

## Factor Four

### Reliability Statistics

Cronbach's Alpha	Number of Items
.810	5

### Item-total Statistics

	Mean	Scale	Total Correlation	Cronbach's Alpha
Q15 There is a balance between work and non-work life.	13.86	17.951	.538	.791
Q16 My health and safety is well considered by management.	13.28	16.529	.678	.749
Q17 The working hours of the organisation are flexible.	13.34	17.593	.546	.789
Q18 I am satisfied with the health and safety conditions of	13.41	16.071	.705	.740
Q23 The company takes care of the employees working in night shift.	13.39	17.375	.530	.795

## Factor Five

### Reliability Statistics

Cronbach's Alpha	Number of Items
.754	4

### Item-total Statistics

	Mean	Scale	Total Correlation	Cronbach's Alpha
Q3 I feel that my job is secured at work.	8.02	7.865	.607	.667
Q12 I think that my job is reliable and secure.	7.84	7.695	.605	.666
Q13 I am satisfied with the career opportunities available to me here.	7.34	7.458	.513	.722
Q34 The organisation has sufficient equipment to help employees to work more effectively and efficiently.	7.34	8.343	.488	.729

## Factor Six

### Reliability Statistics

Cronbach's Alpha	Number of Items
.697	3

### Item-total Statistics

	Mean	Scale	Total Correlation	Cronbach's Alpha
Q24 At work, employees and management always work	6.76	5.068	.486	.639
Q25 The organisation provides adequate facilities and flexibility for me to adjust my work in with my family time.	6.80	4.585	.582	.515
Q26 My line manager actively promotes me with flexible working hours.	6.67	5.147	.475	.653

## Factor Seven

Cronbach's Alpha	Number of Items
.640	2

### Item-total Statistics

	Mean	Scale	Total Correlation	Cronbach's Alpha
Q28 The training opportunities have really helped in improving the quality of work.	3.47	1.828	.471	.
Q29 The organisation provides an adequate and fair compensation for employees.	2.88	1.610	.471	.

### Appendix H: SPSS Data on T-Test

Factors	Gender	N	Mean	Std. Deviation	Std. Error Mean
F1 Basic satisfaction with organisation: reward/flexibility	Male	90	3.36	1.207	.127
	Female	15	2.85	1.177	.304
F2 Rules of organisation	Male	90	3.04	.942	.099
	Female	15	3.20	.932	.241
F3 Day-to-work situation	Male	90	2.21	.836	.088
	Female	15	2.23	.998	.258
F4 Work-life balance and health and safety	Male	90	3.34	1.025	.108
	Female	15	3.52	.934	.241
F5 Job security and career opportunities	Male	90	2.53	.863	.091
	Female	15	2.62	1.113	.288
F6 Management	Male	90	3.34	1.038	.109
	Female	15	3.53	1.037	.268
F7 Training and compensation	Male	90	3.20	1.139	.120
	Female	15	3.00	1.052	.272

## Appendix I: SPSS Data on ANOVA

		Sum of Squares	Different Factors	Mean Square	Factors	p-value
F1 Basic satisfaction with organisation: reward/flexibility	Between Groups	1.519	2	.760	.514	.600
	Within Groups	150.703	102	1.477		
	Total	152.222	104			
F2 Rules of organisation	Between Groups	3.017	2	1.509	1.741	.181
	Within Groups	88.396	102	.867		
	Total	91.413	104			
F3 Day-to-work situation	Between Groups	3.531	2	1.765	2.479	.089
	Within Groups	72.648	102	.712		
	Total	76.179	104			
F4 Work-life balance and health and safety	Between Groups	4.742	2	2.371	2.385	.097
	Within Groups	101.401	102	.994		
	Total	106.142	104			
F5 Job security and career opportunities	Between Groups	.472	2	.236	.289	.749
	Within Groups	83.250	102	.816		
	Total	83.723	104			
F6 Management	Between Groups	7.970	2	3.985	3.930	.023
	Within Groups	103.433	102	1.014		
	Total	111.403	104			
F7 Training and compensation	Between Groups	.211	2	.106	.082	.921
	Within Groups	131.203	102	1.286		
	Total	131.414	104			



## Appendix J: Grammarian Certificate

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### DECLARATION BY LANGUAGE PRACTITIONER

I, Yvonne Smuts, hereby declare that I have been appointed by Sisanda Sithole (“the candidate”) to attend to the linguistic aspects of the introductory section and chapters 1-6 of the research report that is hereby submitted in fulfilment of the requirements for the degree Master of Business Administration in the Faculty of Business and Management Sciences of the Cape Peninsula University of Technology.

To the best of my knowledge, all suggestions and recommendations made by me regarding these sections have been attended to by the candidate.

Title of dissertation: *Measuring the quality of the work life of municipal firefighters in the Western Cape, South Africa*

Date: 7 August 2019



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