University of Fort Hare
Together in Excellence

Occupational stress and intrinsic motivation as determinants of job engagement in the South African Police Service in Greater Kokstad Municipality

By

Avela Jojo

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SUPERVISOR: MR C. MURUGAN

CO-SUPERVISOR: MR C.K HLATYWAYO

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ABSTRACT

Occupational stress, intrinsic motivation and job engagement are areas of importance for today's management. The main objective of this study was to explore the combined effect of occupational stress and intrinsic motivation in determining job engagement in the South African Police Service. Moreover, the study investigated the relationship between occupational stress, intrinsic motivation and job engagement. The study also sought to enquire into the effects rank and gender has on the study variables. A quantitative approach was adopted. A structured self – administered questionnaire comprising of four sections: biographical information, police stress questionnaire, intrinsic motivation inventory and job engagement scale was used to collect data. Statistical Package for the Social Sciences (SPSS) was used to analyse data, and both descriptive and inferential statistics were utilized.

The results revealed a negative relationship between occupational stress and job engagement. A positive relationship between intrinsic motivation and job engagement was also found. There was no combined effect of occupational stress and intrinsic motivation on job engagement. Lastly, no significant differences in the way police experience stress were found among rank and gender. The researcher concluded that even when police officers are under great amounts of stress they are still engaged in their jobs. Where levels of intrinsic motivation were high for the police officers, so were the levels of job engagement. Demographic variables did not yield any significant relationships to the study variables. These findings are of significance in creating a police force which is productive and meets the goals and objectives of the South African Police Service.

Key Words: Occupational stress, intrinsic motivation, job engagement, South African Police Service.

DECLARATION

I, **Avela Jojo**, student number **200907802**, do hereby declare that the mini dissertation titled "**Occupational stress and intrinsic motivation as determinants of job engagement in the South African Police Service in Greater Kokstad Municipality"** is my original work, and has never been submitted by myself or anyone else at any university for a degree or examination. All the sources that were used or quoted have been given due acknowledgement by means of complete referencing.

I also declare that I am fully aware of the University's ethics policy, and have taken precaution to comply with the policy regulations. In this regard, an ethical clearance certificate for the study was obtained from the University of Fort Hare's Research Ethics Committee. My ethical clearance certificate reference number is MUR041SJOJO1.

.....

AVELA JOJO

29 January 2016

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I dedicate this work to my family, especially mother Nosakhele Jojo and my father Zithulele Jojo for being wonderful parents; for believing in me, for giving me a chance to grow and become a better person in life and for lifting me up in every phase of life; without them, I would not have made it this far.

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CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION AND BACKGROUND OF THE STUDY

Work has become part of our daily lives. At some point, we all need to work and earn a living. Once we start working, it is likely that we might spend nearly all the remaining years of our lives at work (Mxenge, Dywili & Bazana, 2014). Therefore employers must ensure that the workplace is conducive for individuals to work.

The workplace and employees are vital for organisations to deliver their goals (Ulrich, Sandholtz, Johnson, Brockbank, & Younger, 2008), hence the interest in improving employees' job engagement (Sharma, 2012). Levels of employee engagement have been influenced by the globalised and hyper-competitive business environment. This, as stated by Jones and Kagee (2005), interferes with employees' abilities to help the organisation achieve its goals. However, certain organisational factors also interfere with employees' abilities in assisting the organisation to achieve its goals. These factors could lead to stress, low employee morale, disengagement, dissatisfaction and low levels of motivation (Sharma, 2012).

Kahn (1990; 700) described job engagement as an exceptionally crucial concept of motivation, which is "the harnessing of an employee's full self in terms of physical, cognitive and emotional energies to perform the job role". This definition highlights that there is a possible relationship between motivation and engagement. Saks (2006) defined intrinsic motivation as the driving desire of an individual to put full effort into a task in the absence of external controls. Intrinsic motivation is driven by individual work context and differences, which promotes the feelings of competence, relatedness, and autonomy. Rich, Lepine and Crowford (2010); Saks (2006) argue

that intrinsic motivation relates positively to job engagement because the three intrinsic needs mentioned above will require a person to be fully engaged in their jobs.

In addition, engagement is the direct opposite of burnout which is a consequence of stress (Saks, 2006). It is characterised by involvement, efficacy and energy. Occupational stress may lead to burnout; therefore, the mentioned characteristics of job engagement oppose the three characteristics of burnout: cynicism, exhaustion and inefficacy (Maslach, Schaufeli & Leiter, 2001). Research on job engagement and burnout has shown that the main burnout characteristics (exhaustion and cynicism) and job engagement (vigour and dedication) are each other's direct opposite (Saks, 2006).

Highly motivated employees are thus expected to show high levels of job engagement than those who are not motivated (Harter, Schmidt, Killham & Agrawal, 2009). Studies have identified police work as particularly a stressful occupation, comprising various duty-related stressors that differ greatly from most other occupations (Jones & Kagee, 2005; Rothmann, 2008). This is especially so in South African circumstances, where the levels of violence and crime are very high, where general lack of managerial and social support, abusive treatment in the workplace and organisational ineffectiveness and inefficiency are often experienced by police in their line of work (Rothmann, 2008).

In such a stressful occupation, high levels of intrinsic motivation are necessary as they will help employees to remain engaged. Taking into account the role of the South African Police Service, the researcher is interested in investigating the relationships amongst occupational stress, intrinsic motivation and job engagement, as no studies, as far as the researcher could ascertain have been conducted to explore the role of occupational stress and intrinsic motivation in

determining job engagement among police service employees (Rothmann, 2008). This study will explore the related literature intensively.

1.2 PROBLEM STATEMENT

Up to two-thirds of sick leave in organisations may be related to occupational stress (Myendeki, 2008). Employees demonstrating low levels of motivation and high levels of stress cannot carry on forever in an organisation. High levels of occupational stress, among other factors, may also lead to physical and mental ill health, turnover, intention to quit, job dissatisfaction, and stress-related injuries (Mxenge, 2014). High levels of occupational stress together with low intrinsic motivation among employees can be harmful in the long run as it jeopardises employee productivity (Sharma, 2012)

Police employees generally and particularly in South Africa are exposed to different kinds of stressors related to their work which differ, in quality and quantity, from those faced by employees in other lines of work (Jones & Kagee, 2005). The job profile of a police officer includes, inter alia, killing criminals whilst in line of duty, recovering bodies from car accidents, witnessing a fellow police officer in the line of duty being killed, and witnessing community or domestic violence (Myendeki, 2008). There have been many reports in the media of police officers committing heinous crimes such as money laundering, selling drugs, shooting and killing people. The police job profile includes preventing crimes, and bringing perpetrators of offences to justice. Yet various reports in the media suggest that in South Africa it is often police officers who are convicted of crimes instead of preventing them. This clearly suggests that police officers are not motivated enough to perform their jobs and lack a large degree of job engagement. Police work, indeed, is regarded as very stressful and risky (Myendeki, 2008).

Given such high stress levels one wonders how police officers are motivated and to what extent they are engaged in their jobs (Jones & Kagee, 2005). This study argues that the South African Police Service (SAPS) is very vulnerable to stress and to low levels of motivation. Yet employees are neither less engaged nor less committed in their jobs.

This study also seeks to understand the role that occupational stress and intrinsic motivation play in determining the degree to which employees will be engaged in their jobs. In the proposed study, the researcher seeks to identify possible relationships between occupational stress, intrinsic motivation and employee engagement. This raises the following questions:

- Can a stressed employee be engaged and intrinsically motivated?
- Can an employee who is not motivated be engaged?
- Can an employee who is engaged be more intrinsically motivated and resilient towards occupational stress?

1.3 RESEARCH OBJECTIVES

The study seeks to explore the following primary and associated secondary objectives.

Primary objective

To explore the combined effect of occupational stress and intrinsic motivation in determining job engagement in the South African Police Service in Greater Kokstad Municipality.

Secondary objectives

- To determine the interaction between occupational stress, intrinsic motivation and job engagement

- To determine if there are any significant differences in the way Police experience stress across rank and gender.
- To recommend strategies that the South African Police Service can use to minimize employee stress, given the research findings.

- To provide results that will help enhance Police intrinsic motivation and job engagement.

1.4 RESEARCH HYPOTHESES

The study will test the following hypotheses:

Hypothesis 1:

H_0: There is no significant relationship between occupational stress and job engagement among police officers in the Greater Kokstad Municipality.

H_1: There is a significant relationship between occupational stress and engagement among police officers in the Greater Kokstad Municipality.

Hypothesis 2:

H_0: There is no significant relationship between intrinsic motivation and job engagement among police officers in the Greater Kokstad Municipality.

H_2: There is a significant relationship between intrinsic motivation and job engagement among police officers in the Greater Kokstad Municipality.

Hypothesis 3:

H_0: Occupational stress and intrinsic motivation combined do not account for a significantly higher variance in job engagement than the two separately.

H_3: Occupational stress and intrinsic motivation combined account for a significantly higher variance in job engagement than the two separately.

Hypothesis 4:

H_0: There are no significant differences across ranks in the way employees experience occupational stress.

H_4: There are significant differences across ranks in the way employees experience occupational stress.

Hypothesis 5:

H_0: There are no significant differences among gender in the way employees experience occupational stress.

H_5: There are significant differences among gender in the way employees experience occupational stress.

1.5 SIGNIFICANCE OF THE STUDY

The proposed study seeks to understand the relationship that exists among occupational stress and intrinsic motivation on the one hand, and job engagement on the other. Even though stress and motivation are usually perceived as a problem of the individual, they actual are serious problems for the institution as a whole (Greenberg, 2011).

The South African Police Service should, like all organisations, be anxious to understand the state and the well-being of employees that shape and motivate its behaviour. Thus, this study should increase understanding of occupational stress and its causes and develop strategies to overcome it. It should also outline what motivates employees in an organisation, and determine which factors within the job or organisation can enhance job engagement.

The study will improve understanding of the views of employees about their level of stress, motivation and engagement. Gaining insight into the current levels of stress, motivation and job engagement will help identify which interventions and strategies to use. This study will also help managers to understand job engagement which will help them determine how to improve the engagement of their employees. Organisations have to understand that a stressed and unmotivated employee will not be able to carry on working. Such an employee cannot be an asset to the organisation. Knowledge of how occupational stress and intrinsic motivation may lead to job engagement is important in that management could introduce measures in the South African Police Service that will lead to the development of job engagement.

1.6 ETHICAL CONSIDERATIONS

Before collecting data, an ethical clearance certificate was obtained from the University of Fort Hare's Research Ethics Committee. Permission to carry out the research was sought from the National South African Police Service Commissioner, the Station Commander at Kokstad Police Station, as well as members partaking in the study who were shown copies of the permissions obtained before they answered the questionnaires. Consent from the police Commander and the respondents were also obtained. Respondents were told of the purpose of the study and of their right to participate or not. Furthermore, the safety and rights of the respondents will be respected, their identity will not be revealed and the information provided was treated confidentially and

used for research purposes only. The results of the study were presented as objectively as possible.

1.7 DELIMITATION OF THE STUDY

The sample of the study only consists of police officers in one police station in Greater Kokstad Municipality. Generalisation of the results will not be possible as the study will be conducted only in one part of Kwa-Zulu Natal. The study relies heavily on the honesty of the responses received; therefore jeopardy of information by respondents may be a limitation to the research. The researcher assured the respondents that their responses will be kept anonymous and encouraged them to answer as truthfully as possible. Due to the busy schedules of police officers at work, they may not find sufficient time to complete the questionnaire, possibly resulting in a low response rate. The researcher did try to extend deadlines to allow respondents to attend to the questionnaires when they could. The researcher did need to complete the study within a limited time frame, representing a further temporal limitation.

1.8 PROPOSED OUTLINE OF THE STUDY

This study is divided into five chapters. ***Chapter one*** outlines the introduction and background of the study. The research problem, hypotheses, and objectives of the study are also outlined. It concludes by outlining the significance of the study, the ethical consideration and delimitation of the study. ***Chapter two*** reviews the literature on occupational stress, intrinsic motivation and job engagement. Definition of terms and the contributions of previous researchers will also be presented in this chapter. This chapter also outlines the theoretical grounding that underpins the study. ***Chapter three*** outlines the research methodology used in the study. ***Chapter four*** focuses on the statistical analysis of data and provides research results. Tables and graphs will also be used where possible in this chapter to illustrate the research results. The final chapter, ***Chapter***

five provides the discussion, conclusions and recommendations based on the research findings or results. The limitations of the study will also be reviewed in this chapter.

1.9 CHAPTER SUMMARY

This chapter outlined the background of the study, which concerns the possible inter-relationships among occupational stress, intrinsic motivation, and job engagement. The problem was clearly stated and hypotheses to be tested by the study were given. The research objectives and the significance of the study were also thoroughly outlined. The chapter concludes with ethical considerations and delimitation of the study. The proposed outline of the study is also given in this chapter.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The previous chapter focused on the introduction and background of the study, the research problem, the objectives of the study, and the significance of the study were also discussed in the previous chapter. This chapter focuses on the literature review and reflects on some theories that underpin the study. Brief definitions and explanations will be presented to ensure adequate and better understanding. The relationship of these variables, to one another, and how they affect each other is also discussed.

2.2 THEORETICAL FRAMEWORK

Numerous theories have been proposed and used in the literature to explain occupational stress, intrinsic motivation and job engagement. Accordingly, stress theories, intrinsic motivation theory and job engagement theories were used to gain a deeper insight into the theoretical underpinning of the three variables.

2.2.1 Stress theories

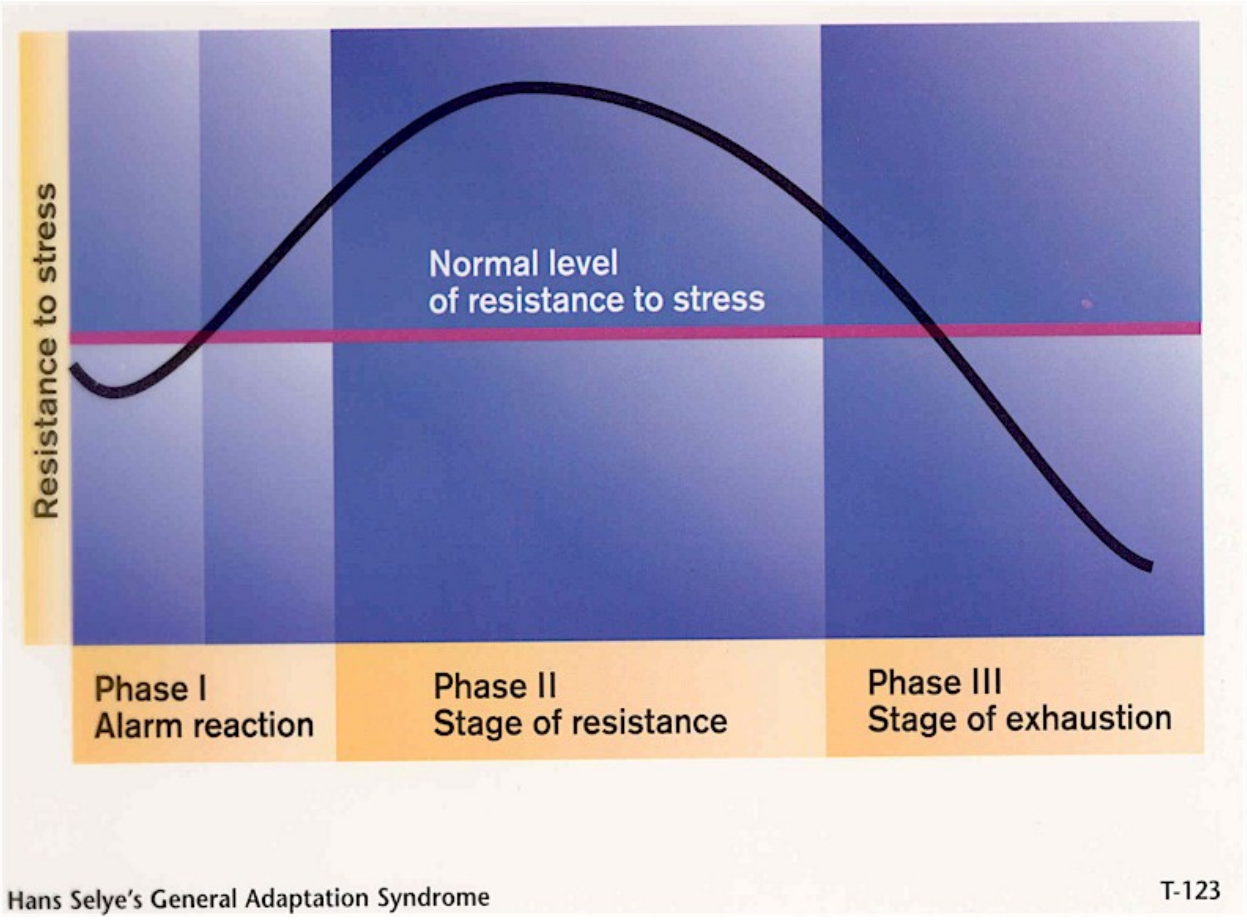
Researchers over the years have developed various theories related to stress. These theories provide a comprehensive framework and help us understand stress better. For this study, two theories of stress are particularly significant: General Adaptation Syndrome (GAS) and Person-Environment Fit Model (P-E)

2.2.3.1 General Adaptation Syndrome (GAS)

One of the theories useful to this study is the General Adaptation Syndrome. This theory explains how employees react or respond to stress. It was developed by Hans Selye, a researcher of stress

during the early 1930s. GAS is a phrase that is used to reflect or describe the body's short and also long-term responses to stress (Selye, 1950). GAS suggests a three-stage physiological response to stress, and these are the alarm stage, resistance stage and exhaustion stage (Selye, 1976a).

Figure 2.1 **General Adaptation Syndrome (GAS)**



Source: *(Selye, 1950)*

The diagram above illustrates how a body reacts to a stressor. The first stage in GAS is called "alarm reaction" at the time that an immediate response or reaction to a stressor arises (Neylan, 2005). It is a "fight or flight" response which prepares the body for physical activity (Selye,

1950). Such a sudden response to stress may also decrease the effectiveness of the immune system and cause a person to be more vulnerable to illness during this phase (Selye, 1950)

If the source of stress persists, the body enters the second stage of GAS which is the stage of 'adaption' (Rice, 2012). During this stage the body shows an increased resistance to a stressor to which it is being exposed (Selye, 1950). It means that the body learns to adapt to or to resist a stressor.

The final stage in GAS is the 'exhaustion' phase, when the bodily resistance to a stressor continuing through the second stage starts to decrease slowly or to collapse very fast (Rice, 2012). During this phase, the stress having continued for some time, the body becomes unable to fight the stressors and to reduce their dangerous effect (Mxenge, 2014). In this phase, the body is worn out and can no longer fight because the adaptive energy is drained away. The exhaustion stage can be referred to as the start towards stress overload or burnout, which can lead to serious health problems if not attended to and resolved immediately (Neylan, 2005). According to (Mxenge, Dywili & Bazana (2014) people who have been suffering from high levels of stress for longer and eventually reach the exhaustion stage without any proper stress management intervention often face awful and undesirable and consequences

According to Selye (1976b) the general adaptation syndrome explains why stress is such a fertile source of health problems. Stress disturbs the natural balance which is important for our well-being, by changing the way our bodies normally function (Rice, 2012). This theory assumes or proposes that any positive or negative demand can provoke the stress response. This may lead to employees being absent from work due to sick leave. It can also reduce employee effectiveness and productivity (Mxenge, 2014).

2.2.3.2 Person-Environment Fit Model (P-E)

In recent years, the Person-Environment (P-E) Fit Model of stress has become accepted and widely used by organisational stress researchers. This model characterises stress as a lack of correspondence between the characteristics of an individual and those of the work environment, and this lack of correspondence between the two is assumed to generate behavioural, psychological and physiological outcomes that lead to increased morbidity and mortality (Edwards, Caplan & Harrison, 1998). Gatchel and Schultz (2012) point out that the P-E fit model relates to how an employee fits into a work environment. It discusses the factors determining how a person engages in his/her work environment. These factors include motivation and ability. They also believe that the connection between an employee and his/her environment is important and is a key to understanding the employee's cognitive, emotional and behavioural responses (Gatchel & Schultz, 2012).

P-E fit theory can also concern how a person fits with the demands of a job (Coetzee & Rothmann 2005). Misfit between a person and his/ her environment can lead to serious conflicts in any work-related environment. Lack of productivity and stress can result from a misfit between a person and his/her work environment (Edwards, 1992). Person-environment fit theory strongly relates to occupational stress in such a way that, if people do not fit well into their work environment they are likely to be stressed. (Coetzee & Rothmann 2005). This theory suggests that person-environment misfit can result in stress and burnout, decreased motivation and disengagement (Gatchel & Schultz, 2012). Poor fit causes strain and reduces employee's psychological well-being.

Furthermore, Mxenge, Dywili & Bazana (2014) state that this theory helps organisations to understand stress better and informs organisations to manage stress and to improve occupational

health and well-being. In conclusion, the person-environment fit model emphasises the fact that there should be a match between what employees want from the organisation and they actually receive. Also there should be a match between their abilities and the organisational demands. (Gatchel & Schultz, 2012).

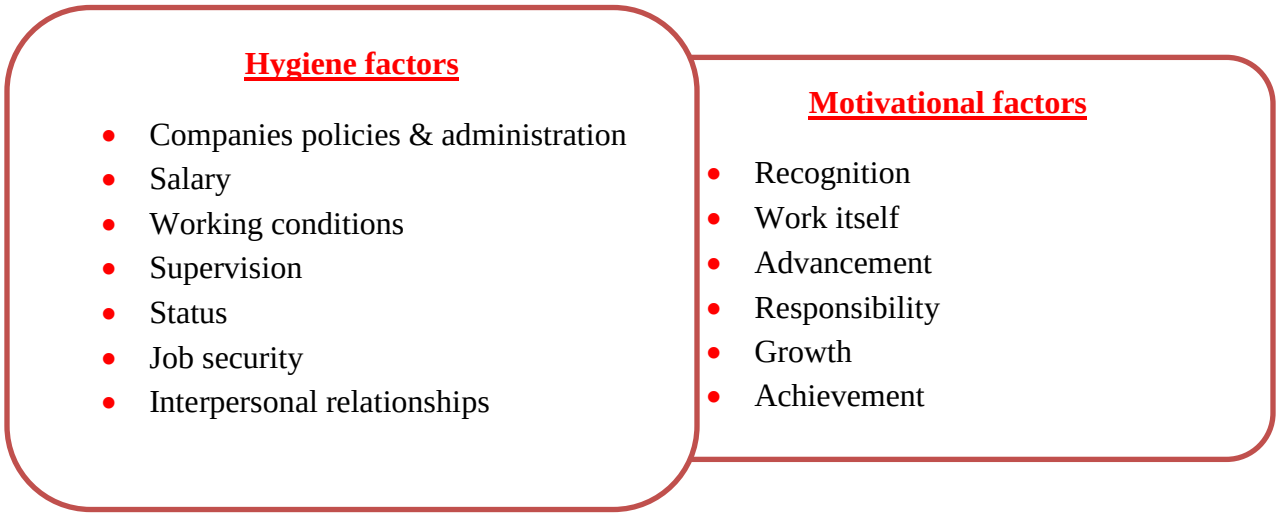
2.2.2 Motivation theory

To understand intrinsic motivation, Herzberg's two-factor theory will be used.

2.2.3.3 Herzberg's Two-Factor Theory

To gain a better insight on employees' attitudes and motivation to engage in their jobs, Herzberg performed a study in the workplace to identify factors that lead to employee satisfaction and dissatisfaction (Hyun, 2009). As far as Herzberg was concerned, the only way to satisfy an employee is to give them work that that is challenging enough to allow them to assume responsibility. Below is an illustration of the Herzberg Two-Factor Model:

Figure 2.2 **Herzberg Two-Factor Model**



Based on this theory, organisations use both motivational and hygiene factors to keep their employees satisfied, motivated and willing to perform their jobs. Motivated employees also stay with the company or an organisation for a long time (Hyun, 2009). Factors associated with good feelings concerning the job (motivators), are mostly derived from the job itself whilst hygiene factors which involve physical or psychological aspects of the environment are mostly external to the job. According to Herzberg, true motivation comes from factors associated with the job itself. The intrinsic nature of the work is only one factor among many that affect employee motivation and job engagement, and motivation factors are often said to lead to high job engagement (Hyun, 2009).

Herzberg (1968) suggested that, a lack of hygiene factors in the work place may result to employee job dissatisfaction. Hygiene factors are basically intended to prevent employees' dissatisfaction. He holds that these factors do not necessary lead to higher levels of motivation however, their absence leads to dissatisfaction (Daft, 2003). Unlike hygiene factors, motivational factors can truly inspire employees to work hard, to be committed, and enjoy their jobs. These factors "involve what people actually do on the job and should be engineered into the jobs employees do in order to develop intrinsic motivation within the workforce" (Herzberg, 1984, p.19).

2.2.3 Job engagement theory

Job engagement, also termed employee or work engagement, has gained popularity in recent years (Kong, 2009). Yet, there is a lack of critical academic literature on the topic, and relatively little is known about how management can influence work engagement (Emmott 2006). Currently, there is no consistent definition of job engagement (Saks 2006). Even so, definitions of job engagement incorporate mental, emotional and behavioural factors (Meyer & Gagne,

2008; Sakovska, 2012; Kong, 2009). From these definitions, a couple of job engagement theories are slowly emerging. For this study a self-determination theory of job engagement will be used, as it explains engagement as a motivational component.

2.2.3.1 Self-determination theory

This theory explains job engagement together with behavioural consequences and psychological states that can result from the absence of employee engagement. This theory makes a significant difference concerning the nature of motivation in basing employee engagement on two types of motivation: intrinsic and extrinsic (Fernet, 2013). Further, these kinds of motivation impact employee wellbeing and functioning differently.

Intrinsic motivation refers to acting with will, as when employees engage in their jobs for the inherent pleasure and satisfaction they encounter and simply because they generally support the significance or worth of their work (Meyer & Gagne, 2008). Extrinsic motivation encourages employees to perform tasks for instrumental reasons. However, extrinsic motivation is predominant in the work environment (Gagné & Deci, 2005). Intrinsic motivation has been associated positively with job satisfaction, psychological well-being, and job engagement. On the other hand, extrinsic motivation has been associated with bad consequences for employees, such as burnout, occupational stress and turnover intention. This theory holds that employees who are engaged in their jobs experience better psychological and physical well-being than those employees who are less engaged (Fernet, 2013).

Therefore, this theory suggests that employees engage in their jobs for intrinsic and extrinsic benefits, and how they engage is based on their self-determination (Ryan, 2009). This study's interest is primarily in intrinsically motivated job engagement.

2.3 LITERATURE REVIEW

For several years, organisations perceived employees' health and well-being as something personal, and as a result organisations would only intervene in extreme situations (Mxenge, 2014). Nevertheless, problems related to employees' health and sense of well-being are huge and can be costly to organisations. As a result, employee health and well-being have become vital areas of focus in many organisations. To be successful, an organisation depends on employees who are able and motivated to do their work, who are less stressed and well engaged. Employee health and well-being is important to organisational success (Mxenge, 2014; Bazana, 2012; Mathumbu, 2012).

Therefore, this section reviews and reflects on the literature. To ensure adequate understanding of each of the study variables and how they relate to each other, some brief explanations and definitions are introduced, as well as distinctions between the three variables. These variables are occupational stress, intrinsic motivation, and job engagement. To also gain a better insight into these variables previous studies done in these areas have also been consulted.

2.3.1 Occupational stress

2.3.1.1 Stress defined

Stress is used frequently in everyday language to express a variety of human experiences that are disturbing. Daily, we all experience feelings of pressure or annoyances placed on us by others or by events or incidents and we attempt to cope with, and adjust to these pressures (Myendeki, 2008). Stress differs from person to person. What is stressful to one individual might not be stressful for another person. Stress has been highlighted and defined from different theoretical bases in terms of how it works and how it leads to health problems (Bazana & Dodd, 2013). The

construct of stress is extremely complex, in such a way that researchers are not in agreement about a single definition of stress. A number of different definitions have been given by different researchers and authors (Mxenge, 2014**)**.

2.3.1.2 Types of stress

Although we normally think of stress as something horrible, it may include both negative and positive aspects (Myendeki, 2008). Some stress researchers distinguish negative stress, which is unpleasant termed distress (such as being under pressure at work or losing a job) from positive stress, called eustress, which is pleasant such as taking pleasure in a job well done (Grobler, Warnich, Carrell, Elbert & Harfield, 2011). According Greenberg and Baron (2008) eustress is a type of stress which is pleasant and it only occurs when stress is converted into positive energy and become motivating. Further, they add that eustress has been identified as a desirable outcome of stress.

Some stress is normal, and it often provides individuals with the motivation and energy to meet daily challenges both at work and at home (Mxenge, 2014). Such stress assists employees to rise to any challenge and meet set goals and deadlines (Rothmann, 2008). Eustress is not considered as stressful because, having met the challenge, one is happy and satisfied. Greenberg and Baron (2008) argue that, it is very important to remember that when we talk about stress, we are referring to negative sources and outcomes of stress. As with many things, too much stress can have negative impacts. When the challenges at work or at home become too demanding, and when the feeling of satisfaction turns into dissatisfaction, exhaustion and frustration, we begin to see negatives signs of stress (Grobler et al., 2011). All these negative signs of stress add up to distress. Various stress researchers refer to distress “as emotions we feel as we begin to sense a

loss of our feelings of security and adequacy" (Mxenge, 2014, p. 17; Grobler et al., 2011; Bazana, 2012, p 34; Greenberg & Baron, 2008; Rothmann, 2008; Viljoen & Rothmann, 2009).

2.3.1.3 Occupational stress

A lot of attention in research has been paid to stress in the workplace (Ursin & Eriksen, 2004). Major research findings have found that prolonged stress negatively affects individual health and their attitudes towards the organisation (Kula, 2011). Adverse effects of stress in the workplace are job dissatisfaction, low employee motivation, reduced productivity, absenteeism, job disengagement and high staff turnover (Cropanzano, Rupp and Byrne, 2003). They further state that, occupational stress is one of the most expensive work-related health issues in terms of loss of organisational resources (Cropanzano et al., 2003). According to Kula (2011), common costs that are directly caused by work stress are increased absenteeism, reduced productivity and employee turnover. Feelings of pressure at the workplace are commonly referred to as occupational stress (Greenberg, 2011). Occupational stress can transpire when there is a gap between the workplace demands and an employee's ability to carry out these demands. Frequently a stressor can lead the body's physiological reactions which are strenuous, physically and mentally, to an individual (Bazana & Dodd 2013).

Furthermore, occupational stress refers to the damaging physical, mental and emotional responses of the employee when the job demands do not match to his or her capabilities, resources or needs. Therefore, occupational stress can also be viewed as a workplace demand on the employee to cope, adjust or adapt (Mxenge, 2014). Basically occupational stress is the response that is usually experience by employees when faced with work demands and pressures that are beyond or do not match up to their competencies and which are often challenging their ability to cope (Greenberg & Baron, 2008). According to Syle (1976) stress is primarily a

psychological reaction to some threatening environmental events. In Syle's view occupational stress therefore refers to the stress caused by certain threatening events in the work environment. French (1982) states that occupational stress results from misfit between an employee's abilities and skills and the demands of the job and those of the workplace. Meaning that, an employee who does not qualify for a particular job will be more stressed in that job. Bazana (2012) agrees with Lazarus (1991) "transactional" view of worker stress, and takes stress to be the result of the employee's perception that certain environmental events are a threat or a challenge. According Lazarus, people interpret the same event very differently. What one person might find stressful the next person might see as totally harmless or possibly even as pleasantly challenging (Bazana & Dodd, 2013).

Occupational stress is defined "as a disturbance of the balance of the cognitive, emotional, and environmental system by external factors" (Pienaar & Rothmann, 2006, p 72). There are three main components of stress, which are sources of stress met in the workplace, perception and appraisal of a certain stressor by an employee, and finally the emotional reactions that are aroused when a stressor is considered as threatening (Rothmann, 2008). In other words, stress can be defined "as the pattern of emotional states and psychological reactions happening in response to demands within or outside the organisation" (p, 19). Stressors are referred to as terrible conditions that cause extreme demands on employee which leads to stress reactions when they are considered as threatening, and beyond one's control (Mxenge, 2014).

A recent South African study on stress management in the workplace reveals that South Africans from all occupations experience unusually high levels of stress that often lead to typical emotional behaviour and disengagement (Oosthuizen & van Lill, 2008). Greenberg (2011) holds that stress at work is unavoidable but often dangerous to both the individual and the organisation.

Pienaar and Rothmann (2006) have also raised concerns about stress at work, in that it could cause illness. For organisations to have productive and happy employees, levels of stress need be reduced, because occupational stress hinders ones happiness (Rothmann, Jorgensen & Marais, 2011). Mxenge, Dywili & Bazana (2014) agree with this viewpoint and insist that organisations and managers should be more concerned about the effect of stress on employees and on other important "bottom-line" variables, such as absenteeism, productivity and turnover. They further argue that if occupational stress leads to stress-related illnesses that could lead to an increase in absenteeism rates. At a psychological level, stress can result in anxiety, feelings of fatigue, mental strain, and depression which can reduce an employee's quality of work (Mxenge, 2014). However, if a job becomes too stressful, employees may be forced to quit and find a less stressful position (Myendeki, 2008). Therefore, worker stress may influence turnover as well (Mxenge, Dywili & Bazana, 2014). Occupational stress can be, in many ways, the flip side of job satisfaction and job engagement which are good things related with one's work. Occupational stress is a way of conceptualising the bad things or the negatives, the pressure, strains and conflicts associated with a job (Rothmann, Jorgensen & Marais, 2011). Thus, organisations should have a huge interest in it as it is experienced on daily basis (Posig & Kickul, 2003).

The current study is focused on stress associated with the policing profession, which is recognised as highly stressful and particularly hazardous because of the physical dangers involved. (Alexander, 1999; Selye 1978; Anshel, 2000; Paton & Violanti, 1999). The day-to-day dangers facing police officers are certainly stressful. However, some studies suggest that the excitement and challenge of dealing with physical danger may actually be motivating and inspiring to many police officers (Posig & Kickul, 2003).

2.3.1.4 Stressful nature of police work

Jones and Kagee (2005) state that police and particularly in South Africa, are exposed to different work-related stressors that are very different, in terms of quality and quantity, from those employees in other lines of work experience. Stress and burnout are usually considered to be expected products of police work. Rothmann (2008) postulates that the statistics of crime and violence in South Africa are so high which lead to increased pressure and overworking in the police service as extra hours and long shifts must be worked to combat crime and violence.

People employed in jobs where they are required to deal with other people's problems, such as teaching, health care, and more especially police or law enforcement are prone to suffer stress more than people in other occupations do (Kula, 2011). To some degree stress is common and cannot be completely eliminated, but only minimized or reduced through interventions like education and training in stress management (Waters & Ussery, 2007). Being regularly exposed to stress, if not managed well can be devastating for police, and can affect their mental and physical, the quality of their work, and also affect their working environment (Maslach, 2003). Stress in police has received attention because of its diverse influences at the individual, the organisational, and the community level (Kula, 2011). Occupational stress among police can cause physical and psychological health problems such as anxiety, chronic anger and depression (Bazana, 2012; Rothmann, 2008; Jones & Kagee, 2005; Posig & Kickul, 2003).

Police work is both complex and broad; it is a highly stressful occupation with hazardous effects exposing employees to personal, occupational, and organisational stressors (Bazana & Dodd, 2013; Myendeki, 2008). Anshel (2000) further states that the dangerous nature of police work has a lot to do with the need to respond to both criminal and non-criminal situations so that police officers are likely to experience more stress and pressure. According to Greenberg (2011)

this negatively affects job performance, engagement, employee motivation, and effectively leads to high turnover, burnout, and suicide among police officers.

The job profile of a police officer includes recovering bodies from car accidents, killing someone in the line of duty, witnessing a fellow officer killed in the line of duty, witnessing domestic or community violence (Myendeki, 2008). Waters and Ussery, (2007) further add that criminal activities, riots, corruption, injury or death are also some of the thing that police officers must face up to. Police are expected to cope in deeply depressing social situations such as hostage situations, raid situations, scenes of abuse and murder (Myendeki, 2008). However, the death of a partner in the line of duty or having to take a life were rated as events which cause major stress among police officers (Bakker & Geurts, 2004; Janssen, Anderies & Walker 2004; Montgomery, Collins, Buffington & Abbe, 2003). Bakker and Geurts (2004) added that being exposured to such events have a negative impact on the officer's psychological health, personality, and general wellbeing, and also on the lives of those close to them. The nature of police work clearly shows the stress levels experienced by police to be extremely high and they exact an emotional toll.

2.3.1.5 Potential stressors and sources of stress in the police service

According to O'Toole, Vitello, and Palmer (2006) the success of any police service rests largely upon a complete understanding of the stressors affecting the organisation and also on the effort made by the organisation to identify and alleviate their impacts. Two major source of stress within the police service has identified: organisational stress and operational stress (Zhao, 2002). Organisational stress refers to the challenging organisational aspects of police work such as lack of trust and confidence in management, endless organisational and policy change, and no communication among the members of the organisation. Operational stress arises from the nature

of police work such as exposure to danger, shift work, facing unforeseeable incidents and physical threats (Kula, 2011).

2.3.1.5.1 Organisational stress

Many researchers have studied the sources of stress in policing, and they found that external factors are the primary or main source of stress for police workers (Kula, 2011; Bazana & Dodd, 2013; Gulle, Tredoux & Foster, 2003; Pienaar & Rothmann, 2006; Rothmann, 2008; Myendeki; 2008; Ellison, 2004). However since the 1990s, organisational culture and characteristics of the work environment of the police service have also been investigated as major sources of stress. (Gordon, 2008; Ellison, 2004).

Organisational stress has been defined "as certain characteristics of the organisation and behaviours of its employees that may create stress for the employees" (Kula, 2011, p, 9). Pienaar, Rothmann and Van de Vijver (2007) noted that inconsistent disciplinary procedures, management style, and lack of administrative support are potential stressors affecting police. The policies and practices that the members of police are required to follow when doing their daily jobs are also considered as potential factors of organisational stress. (Ellison, 2004). Moreover, perceived lack of support from the leaders, supervisors, management and the community, bureaucratic processes, and lack of promotion opportunities in the organisation, has also been highlighted as organisational stressors affecting police (Stinchcomb, 2004). Violanti and Aron (1995) add that excessive workload and administrative duties can also create a stressful work environment.

Many scholars have examined favouritism as a critical organisational stress that affects the wellbeing and morale of police (McCreary & Thompson, 2006). Burke and Mikkelsen (2006)

argue that if the work environment does not encourage personal development and accomplishment, and autonomy for employees, they become non-productive and dissatisfied. McCreary & Thompson (2006) have viewed discrimination or inequality at work as also a main factor diminishing employee morale and productivity.

In addition to being exposured to numerous stressful events on the street, other organisational characteristics, such as continuous organisational change and lack of internal communication also represent the organisational stressors for police. According to Kula (2011) the bureaucratic structure "strict command-and-control mechanism" in which police officers work under is also a source of stress affecting police. Further, poor supervision, conflicting and dynamic policy status, and concern over possible disciplinary action due to misunderstanding of policies and procedures or practices are other specific stressors that an officer might face (Kula, 2011; Bazana, 2012; Myendeki, 2008; Violanti and Aron, 1995).

In studies investigating stress in police, a consistent finding has been that organisational characteristics are more troublesome than the operational aspects (Miller, 2005; Gulle et al., 2003; Rothmann, 2008; Kohan & Mazmanian, 2003; Pienaar & Rothmann, 2006; Violanti and Aron, 1995; Zhao, 2002). Researchers have concluded that the reason why organisational stressors have more effect than operational stressors is inability to take corrective action (Kula, 2011). Contrast to various other organisations where the factors of organisational stress receive necessary attention in order to ease their effects on employees, police organisations are not determined to identify organisational stressors and their possible effects on police officers (Miller, 2004). Ignoring the potential effects of organisational stress in the police service may have more severe consequences than in other occupations (Myendeki, 2008). Failure to manage stress among police can lead to police officers behaving inappropriately when interacting with

the public (Violanti & Aron, 1995). Montgomery (2008) argues that the effects of organisational stress in the police service can be reduced by adopting organisational strategies that are accepted and used by other organisations.

2.3.1.5.2 Operational stress

The usual daily events facing police officers cause stressful situations for them to deal with (Kula, 2011). Operational stress arises from the nature of police work or the intrinsic aspects of police work (Myendeki, 2008). Police officers are faced with operational stressors as part of the job on a daily basis (Kula, 2011) and unless well managed the way they react to these incidents usually have negative effects; physically, emotionally, and psychologically (Dowler & Arai, 2008). Being exposed to traumatic events (assaults, deaths murder, shootings), dealing with crime perpetrators and victims, dealing with the criminal justice system, limitations to social life and the obligations of shift work are referred to as operational stressors that are inherent in policing (Burke and Mikkelsen, 2006; Ellison, 2004).

Inherent or operational stressors in police members also include the constant exposure to citizens and their grievances, working under the risk of violence, and hazardous events including death. These stressors are both physically and psychologically harmful to police officers wellbeing (Dowler, 2005; Dowler & Arai, 2008). Constant physical contact with suspects and unpredictable incidents are also strong factors in operational stress (He, Zhao & Archbold, 2002; Dowler, 2005).

Recognising and being aware of the kinds of operational stress that police experience and go through is important. Identifying the actions needed by managers or supervisors to support their subordinates are also necessary steps to alleviate the effects of operational stress. According to

Dowler and Arai (2008) the effects of operational stress I a long run does not only include early retirement, but it also includes alcohol and drug abuse, absenteeism and turnover intentions (Ellison, 2004). In addition to operational stressors in police such as role ambiguity, role conflict, work-overload and under load (Dowler, 2005), also working conditions that range from an exciting to a boring routine (Rothmann, 2008), media attention on the police service, and the criminal justice system have been cited as sources of operational stress in police (Kula, 2011).

Kula (2011) further argues that the media tends to focus on problematic events involving police officers, even when such events include only a small part of police activities. He points out that such reports give an impression in the public eye that the police are all the same and that they misuse their power over people. According to Loo (2003), that feeling of being always under scrutiny causes stress for police officers. Courts are important instructions in police work (Dowler & Arai, 2008), but dealing with the required court procedures causes stress for police (McCreacy & Thompson, 2006; Kula, 2008).

2.3.1.6 Occupational stress in the South African Police Service

Police officers judge their job and work environment according to how often and severe certain job demands, as well as organisational difficulties (policy and procedure based) take place, and by the support provided by co-workers and supervisors (Myendeki, 2008; Bazana, 2013; Rothmann, 2008; Pienaar & Rothmann, 2006). Studies conducted on occupational stress in the police have two categories of occupational stressors in policing (Biggam, Powers, McDonald, Carcary & Moodie, 1997; Alexander, Walker, Innnes & Irving, 1993; Brown & Campbell, 1990, 1994; Bazana & Dodd, 2013; Rothmann, 2008; Pienaar & Rothmann, 2006; Myendeki, 2008; Kula, 2011): they are organisational stress and operational stress. Organisational aspects such as continuous organisational change, a lack of internal communication and lack of confidence in

management constitute a first category of stressors in the police. The second category includes the nature or operational aspects of police work such as shift work and facing the unknown, physical threats and exposure to danger. The organisational aspects are the most prominent sources of stress (Myendeki, 2008; Mostert & Rothmann, 2006; Rothmann, Steyn & Mostert, 2005; Pienaar & Rothmann, 2006).

South Africa has a long history of unrest, change, socio-economic and political turmoil following the end of apartheid, all of which makes police work particularly stressful in South Africa (Pienaar & Rothmaan, 2006). The role of police force has for long been related with oppression of the majority of the South African population (Myendeki, 2008). The South African Police Service experienced a major transformation of itself as an organisation. Certain structures were re-arranged and roles had to be redefined (Rothmann, 2008). The transformation from a police force to a police service took place (Van der Walt, 2002) affirmative action was implemented and the rank structure also changed from a military one (Pienaar & Rothmann, 2006). According Myendeki (2008) the South African Police Service is no longer a unified body and has stopped being an organisation which supports, protects, and prescribes to its members. Employees or members of the South African police Service find their present conditions anxiety-provoking and feel abandoned and rejected by this new structure. The police members are required to be accountable to the community (Rothmann, 2008). However, “the openness to public opinion about the quality of their work performance also produces additional pressure” (Myendeki, 2008).

On the 21st of June 2012, The Minister of Police in South Africa released statistics that indicate that the attempted suicide rate in 2010 to 2012 among South African Police Service members was 84%, 10 636 police officers were believed to be suffering from depression while 2,763

suffered from post-traumatic stress disorder (Bazana, 2012). In his report, the minister indicated that, policing remains a challenging and difficult job and it requires commitment and engagement. An article in The Star newspaper reported that about 100 to 130 police officers commit suicide and kill family members every year in South Africa due to stress caused by the nature of police work and organisational stressors such as lack of support from management, and corruption amongst leaders in the South African Police Service. Hitchens (2012) of The Star newspaper noted that even women police officers were affected by stress when he told the story of a woman constable who killed herself due to high stress levels (Hitchens, 2012).

The South African Police Service as an organisation creates stress over and above the stress already associated with the nature of police work (Myendeki, 2008). Police officers are obliged to provide a safe environment for South African residents, but their duties are not always carried out in a safe environment and they work under very stressful conditions (Bazana, 2012).

Myendeki (2008); Bazana and Dodd (2013) state that South African Police Service members are under severe stress caused by the nature of their work, poor pay, uncertainty about their future, serious exposure to horrible crimes and failure to manage family demands which at times results in such officers killing their family members. A former minister of South Africa's police, Charles Nqakula reported in 2002 that 508 police officers committed suicide due to stress (Sunday Tribune: 12 November 2006). Police suicides caused by organisational and operational stress have shown a constant increase over the past two decades and according to Meyer, Rothmann and Pienaar (2003), the instant availability of firearms, the social strain caused by shift-work, constant exposure to death and injury, a general lack of social support and a negative public image of police officers have all been identified as possible stressors and reasons for police suicide.

Basson (2005) reported that “police sections involved with child abuse, sexual offences and family violence had 254 vacancies (20% of total number of jobs). The average number of criminal cases managed by each detective ranges from 32 (Northern Cape) to 52 (Eastern Cape), with a national average of 43, whereas the ideal is that each detective should not investigate more than 18 cases. Police members, detectives in particular, experience high job demands” (Pienaar & Rothmann, 2006, p, 74).

Gulle *et al.,* (2003) investigated inherent and work stress in the South African Police Service. Their study included the sample of 91 Police members consisting of 85 males and 6 females, ranging from the age of 21 to 53 years. The results indicated that by comparison with American police stressors, which were all intrinsic in the nature of police work, South African police stressors, were more organisational oriented. Myendeki (2008) and Bazana (2012) also state that South African sample generally displayed a greater degree of stress as compared to American sample. The manner in which the South African Police Service operates creates stress over and above the inherent pressure already provided the nature of police work. Gulle *et al.,* (2003) also found that insufficient manpower, excessive paperwork, inadequate or poor quality equipment, fellow officers not doing their job, and inadequate salaries commonly stressors among the police.

Studies evaluating differences in the levels of stress experienced by female and male police officers reported little difference (Ortega et al., 2007; McCarty, Zhoa & Garland, 2007; Martocchio & O’Leary, 1989). Other studies suggest that male police officers experience burnout where females experience physical symptoms of stress (Wells, Colbert & Slate, 2006). Martocchio and O’Leary (1989) did a meta-analysis of studies “investigating the relationship between gender and occupational stress” and they concluded that there were no differences among gender in the way police experience stress. Myendeki (2008) reported that female officers

are exposed to more traumatic events such as child and spousal abuse, suicide, natural disasters than their male partners. It is suggested that possibly female officers approach incidents with more empathy than men, and that gender differences in psychological behaviour concerns the frequency of exposure to victims, the degree of identification with the victim and different coping styles (Myendeki, 2008).

Police officers reported amounts of work stressors varying according to rank (Kaufmann & Beehr, 1989; Brown & Campbell, 1990; Brown, Cooper & Kirkcaldy, 1996), and gender (Violanti & Aron, 1995). Cooper & Bramwell (1992) Terry & Calan (1997) and Rahman, Aman, Adnan, Ahmad and Darus (2014) found that those higher in rank or organisational hierarchy experienced higher levels of stress. Pienaar and Rothmann (2006) in their study of stress including a sample of 2145 police, the results showed that gender played an important part in how occupational stress is experienced in the South African Police Service. Female police experienced crime-related stressors less frequently and less intensely than their male colleagues. They argue that the reason why female police officers experienced crime-related stressors less intensely and frequently, might be the fact that they are less operationally involved. Kula (2011) states that, above the stressful traumatic incidents experienced in policing, some police officers experience additional environmental factors because of their gender. Pienaar and Rothmann (2006) further found that rank also had a significant impact on the experience of occupational stress among police. In contrast with other ranks, they found that constables experienced stress less frequently because of lack of support and job demands and also experienced less stress caused by crime-related stressors.

Rothmann (2008) conducted a study which included 677 policemen in the North West Province. The police officers experienced high levels organisational stress than operational stress. The

results also showed that sergeants experienced high levels of stress than other officers; this is due to the high number of work events sergeants perform than the other ranks. As rank and years of police experience increased, the effects of occupational stress decrease. In other words police officers who are high in rank or who had more years of working experience showed lower levels of occupational stress.

2.3.1.7 Strategies to manage and minimise occupational stress in the South African Police Service

Stress on the job creates high costs for an organisation; it reduces morale, productivity, motivation and engagement. Organisational stress management strategies or interventions involve changing the organisational climate, providing treatment under employee assistance programs (EAPs) while stress can also be minimized by the employees themselves through some relaxation training programs and behaviour modification (Mostert & Joubert, 2005). There is a great variety of strategies and techniques designed to manage occupational stress in the workplace. There are organisational and individual strategies that can be implemented by organisations in order to manage occupational stress effectively (Oosthuizen & Van Lill, 2008).

The South African Police Service must carefully consider the right systems and procedures to adopt in order to manage stress affecting their members. The police officers should also be mindful of systems and procedures that govern their organisation, and be aware of stress management resources available to them. The South African Police Service can use internal resources that are used by other organisations to manage stress in the workplace (Oosthuizen & Van Lill, 2008). These resources include an in-house counsellor or psychologist, training departments, occupational health services, and hiring personnel skilled in managing employee's well-being. Greenberg (2011) emphasises the importance of formal programs, such as employee

assistance program to help employees who face different problems and challenges in their work lives, and encourages every organisation to have these in place. These programs help address stress by training employees in a number of different stress management techniques such as relaxation and meditation. Having a good relationship with superiors and fellow colleagues can help police officers to cope with stress. Engaging in team building exercises will also help to reduce stress among police officers (Viljoen & Rothmann, 2009).

Among the major causes of stress highlighted by research in the police service is lack of resources and work overload (Rothmann, 2008). The police officers maintain that lack of resources keeps them for doing their work effectively and that creates a lot of stress. In addition to lack of resources police complain that there is not enough manpower to do a job, hence one police officer ends up doing work that is supposed to be done by three officers. The SAPS should employ more police officers. Myendeki (2008) states that there are many South African citizens who could be employed in the police since they need to work that might not only help in managing the work overload experienced by police officers daily but it will also combat unemployment (Bazana, 2012). The Government should intervene by providing adequate resources and equipment for the police service as a strategy to reduce stress caused by the lack of resources.

Coping strategies can also be used by police officers as a mechanism to minimize stress. Coping is defined as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus and Folkman, 1984, p. 141). According to Mostert and Joubert (2005) coping is an essential component in stress and burnout research. Many scholars have focused on the individual's coping responses to various sources of stress (Myendeki, 2008). Studies conducted

within the South African Police Service showed that coping plays a significant role in the stress and burnout relationship (Mostert & Joubert, 2005; Storm & Rothmann, 2003).

The term “coping” is used in reference to behavioural, cognitive or perceptual responses that are utilised to control, manage and avoid circumstances that could be regarded as challenging, stressful and difficult (Myendeki, 2008). Coping refers both to strategies and results, as a strategy, it refers to different strategies and methods that one might use to manage his/her challenges, and as a result, coping refers to the ultimate outcome of a strategy a person adopted. Coping is categorised into two types which are problem-focused and emotion-focused (Mostert & Joubert, 2005). Problem-focused coping is directed at the problem and finding ways to manage and solve it, and emotion-focused coping is directed at reducing the effects of stress triggered by unpleasant experiences through social activities, relaxation, the use of drugs and alcohol, and/or defence mechanisms, such as avoidance (Rothman and Storm, 2003; Myendeki, 2008).

A maladaptive coping strategy used by some police is the extreme consumption of alcohol in trying to ease stress and improve psychological well-being (Rothmann & Van Rensburg, 2002). Drug and alcohol abuse is a dysfunctional and non-productive measure to cope with stress (Ortego, Brenner & Leather, 2007).

Effective communication between employers and employees can decrease the levels of stress employee’s experience. Viljoen and Rothmann (2009), state that accurate communication can increase the predictability of the work environment. Organisations are always faced with many changes such as decreasing budgets and increasing work demands or outputs, and these are often not communicated to employees. Unpleasant surprises can lead to stress and destroy employee

morale (Viljoen & Rothmann, 2009). Mxenge (2014) recommends that managers should communicate openly with their employees, even when the communication is about unpleasant events that might take place in the organisation. She emphasizes that communication builds trust and helps the employees feel cherished, and when employees feel good and appreciated, they usually experience lower levels of stress.

The following section discusses intrinsic motivation from different researchers' point of view and how the police service can use these opinions to develop a highly motivated workforce.

2.3.2 Intrinsic motivation

2.3.2.1 Motivation explained

How employees behave at work is influenced by each individual's aspirations, interests, and needs and by the characteristics of his/her work environment (Bruno, 2013). Ajang (2007) adds that each employee acts in a manner that allows him/her to get the desired effects and results. Therefore, what motivates individuals to work differs from person to person and from on life stage to another (Armstrong, 2006).

Employee motivation has received considerable attention because of its connection to the quality of employees' life (Hyun, 2009). Ramlall (2004**)** claimed that increasing the employees' motivation and morale is essential to eliminate absenteeism, reduce turnover and, eventually raise productivity. Grant and Shin (2011) discovered that decreased motivation is related to higher absenteeism and turnover rates. Increased motivation leads to employee job engagement, stronger organisational commitment, and willingness to remain with the organisation. However, the opposite true for decreased motivation.

Motivation is essential in an organisation. It helps explain what drove “Nelson Mandela” to become the first black president of South Africa, “Florence Nightingale” to improve nursing practices, “Thomas Edison” to invent the first light bulb, Maya Angelou to write poetry, “Benjamin Franklin” to create fire and police departments, and “Michelangelo” to paint the Sistine Chapel (Grant & Shin, 2011, p. 2). The knowledge of work motivation helps to shed light on big collective activities and achievements to date such as building a bridge in the middle of the sea, discovering flight, inventing the computer and the telephone and landing on the moon (Ramlall, 2004). Behind all of these endeavours and activities is a strong desire to take action (Grant & Shin, 2011).

According to Ryan and Deci (2000, p. 54) motivation “means to be moved to do something”. A person who feels no impulsion or inspiration to do something is therefore characterized as unmotivated, while a person who is eager to do something or who is activated to an end is considered motivated (Hyun, 2009). Researchers describe motivation as those psychological developments that arouse order, excitement, and drive of voluntary behaviour that is goal aligned. Robbins (2003, p.5) construes motivation as the “consent to employ immense levels of commitment toward organisational goals, bound by the commitment’s ability to appease some personal need.” Kim (2007, p. 8) defined motivation as “an internal energy, based on an individual’s needs that encourages oneself to accomplish something”.

Herzberg’s Two-Factor Theory holds that there are two factors driving employee satisfaction in the workplace: motivation factors and hygiene factors. The absence of hygiene factors in the workplace can result in employee dissatisfaction (Hyun, 2009). Hygiene factors are there to simply to avoid employees’ dissatisfaction. This means that, these factors do not necessarily lead to or result in higher levels of motivation, but without them, employees remain unmotivated and

dissatisfied. Bruno (2013) argues that contrary to hygiene factors, motivational factors encourage employees to enjoy their jobs and work hard. These factors include what employees actually do and should be engineered into the jobs they perform in order to develop intrinsic motivation within personnel (Ramlall, 2004). This study however, is more interested in the intrinsic motivation of employees and the factors which cause employees to be intrinsically motivated than in hygiene factors.

2.3.2.2 Intrinsic motivation explained

Bainbridge (2010) asserts that intrinsic motivation is a type of motivation that comes from within a person and not from hygiene factors or external merits as referred to by Herzberg in his Two-Factor Theory as organisational interpersonal relations, policy, job conditions, supervision, money, guaranteed retirement fund and career stability, (Herzberg, 2003). According to Oyedele (2010) when the external motivators do not support a person's expectations he/she becomes unmotivated or dissatisfied. For example, if a person is motivated by money when he/she does not receive enough salary or get a salary increase, dissatisfaction result.

Intrinsic motivation comes from the comfort a person reaches from the work itself and from the satisfaction experienced in completing the task and being engaged with a task. Being intrinsically motivated does not suggest, though, that a person will not pursue merits. It rather argues that such merits are not enough to maintain a person's motivation. According to Ryan and Deci (2000) an intrinsically motivated person, for example, may wish to score a high mark for a project, however, if the project itself does not arouse his/her interest, then the probability of a high mark will not be enough to motivate that person to put an effort into the project.

Motivated employees are aroused by internal values relative to other values that are attached to the working environment (Oyedele, 2010). Evidently, motivation is aroused internally by factors native to the work, Herzberg's "motivators", which are the factors that intrinsically motivate individuals. These are; the work itself, advancement, achievement, responsibility, recognition, social responsibility, personal growth, opportunity for advancement, passion for the job, respect and praise. Oyedele (2010) also presented intrinsic motivational factors that significantly influenced individuals who participated in his research. These motivational factors were: challenging/interesting work, a sense of belonging to the organisation, freedom for innovative thinking, job security and training and development.

According to Bruno (2013) employees who are perceived as motivated in their work are likely to be determined, inspired and gratifying, producing a high quality work that they absolutely devote themselves to. Oyedele (2010) describes unmotivated employees as likely to be less diligent in their jobs, abstain from the organisation as much as possible, leave the organisation if they are presented the opportunity and do less excellent work. Ajang (2007) raised an interesting point that money can be a motivator or a hygiene factor. If money does not have any meaning other than "buying power", it should be considered as just a hygiene factor. However, money could be a motivator if it signifies a symbol of achievement at work. Employees' loss of intrinsic motivation can result in their unwillingness to provide services for the organisation or in quitting their jobs and, finally, in failure to reach organisational objectives. Thus, it is necessary to know the employees' motivational factors and to pay more attention to them in organisational planning (Bahadori, Nik, Ravangard, Yaghoubi, Teymourzadeh, 2013).

Different studies have been conducted on motivation. Some of these have confirmed Herzberg's theory (Hamoozadeh, Sadeghifar & Moradkhani, 2013; Mahmmoudi, Ebrahemian, Soleymani,

Ebadi, Hafezi, Feizi, et al, 2008; Ahmed, Hawaz, Igbai, Ali, Shaukat, & Usman, 2010; Hyun, 2009). Others have cast doubt on it (Kazemzade & Hashemi, 2010; Aliabodi, Noroozi & Hosseini, 2005; Teck-Hong & Waheed, 2010). Faraji, Pourreza, Hosseini, Arab and Akbari (2009) in their study found that the effects of job characteristics on employees' motivation are greater than those of workplace characteristics. Sommerfeldt (2010) in a study of Police officers showed that a sense of being valuable, success, relationships, job nature, salary and working conditions were the main motivational factors. Lakra, Kadam, Hussain, Pati, Sharma and Zodpey (2012) found that progress and success in the job were the most important motivating factors, while working conditions and salary were the most important of the hygiene factors.

2.3.2.3 Intrinsic motivation among police

Police work tasks differ and need the ability to make serious decisions, take command, be self-directed, and demonstrate leadership (Sommerfeldt, 2010). He further states that police usually perform their work in pairs or sometimes by working alone. According to Hyun (2009) police perform their work under pressure, being watched by a supervisor and great reliance is placed on high motivational levels. Research has shown that highly motivated employees produce better outcomes (Herzberg, 2003). It is therefore important that police officers are highly motivated to provide a quality service to the community.

Each country’s police force is responsible for protecting the community and ensuring that criminals are caught and brought to justice (Alina-Viorica, 2014). This requires a strong and highly motivated police force. Proper and best use of these valuable employees is necessary because if they are not sufficiently motivated to perform their duties and tasks, it is impossible for the organisation to meet its aims and objectives (Deci & Ryan, 2007).

The restructuring of the police force coupled together with financial constraints imposed a motivation system tends to reduce satisfaction: losing certain rights, salary decreases or even redundancy. According to Alina-Viorica (2014) uncertainty in the workplace climate, the economic and political climate, legal restrictions which no longer allow a monetary incentive for performance and decreased benefits have largely limited the employers' capacity to build a positive extrinsic motivation system. The only option left is in the form of verbal appreciation, creation of more fulfilling and challenging work, giving employees' autonomy over their work, creating opportunities for growth and advancement and recognising employee efforts.

The biggest challenge in the police service is to find the most adequate strategies to motivate employees, as it is often not enough to motivate employees through external rewards. From this point of view, Ryan and Deci (2000), state that a man is a curious, active, playful being with a wish to learn and to explore, without needing external stimuli to do so. As a result, the work motivation of policemen can increase with intrinsic motivation. According to Sommerfeldt (2010) the orientation towards police work can also be based on the pleasure in perfoming the job, and the work motivation of police officers is to some extent due to some intrinsic motivational factors connected with the nature of the work.

There are limited studies which measure intrinsic motivation among police officers (Rothmann, Jorgensen & Marais, 2011). The relevant and extant research on intrinsic motivation focuses on sport settings, students and/or teachers (Ryan & Deci, 2000; Parker & Martin, 2009; Milot & Ludden, 2009). There is a need, therefore, to conduct an investigation on police intrinsic motivation.

2.3.2.4 Factors that promote intrinsic motivation

It has been recognised that higher levels of intrinsic motivation lead to higher levels of commitment or engagement and better performance (McDonald, 2012). In order for levels of intrinsic motivation to increase, employers must be mindful of the factors that promote intrinsic motivation. Adonis (2006) states the importance of promoting employee intrinsic motivation, and emphasized that increased levels of intrinsic motivation benefit both the organisation and employees. These benefits includes lower absenteeism, higher retention rates, employees intentions to stay with the organisation, improved employee morale, increased engagement, better relationships between employees and supervisors, increased productivity and elevated end results.

Studies have identified seven main factors that are crucial in promoting intrinsic motivation (McDonald, 2012; Mgedezi, 2013; Shroff 2009). These are "challenge, curiosity, control, fantasy, competition, cooperation and recognition" (McDonald, 2012, p. 3). The South African Police Service can adopt these factors and find ways to embrace and enhance these aspects within police work. Figure 2.3 summaries these factors.

***Figure 2.3*Factors that promote intrinsic motivation**

FACTOR	DESCRIPTION	RELATED GUIDELINES
Challenge	Individuals are to a large extent motivated when they are working toward personally meaningful goals whose accomplishment requires activity at a constantly best (intermediate) level of complexity.	1. Set personally meaningful goals. 2. Make attainment of goals probable but uncertain. 3. Give performance feedback. 4. Relate goals to individuals' self-esteem.
Curiosity	Refers to something in the physical environment that attracts the individuals' attention or an optimal level of discrepancy between present knowledge or skills and what these could be if the employee engaged in some activity. Curiosity is the source of internal motivation.	1. Stimulate sensory curiosity by making abrupt changes that will be perceived by the senses. 2. Stimulate cognitive curiosity by making a person wonder about something (i.e., stimulate the employees' interest).
Control	Control involves an individual making the decisions directly affecting the outcome of what happens to them. People have a basic tendency to want to control what happens to them.	1. Make clear the cause-and-effect relationships between what individuals are doing and things that happen in real life. 2. Enable individuals to believe that their work will lead to powerful effects. 3. Allow individuals to freely choose what they want to learn and how they will learn it.
Fantasy	Individuals use mental images of things and situations that are not actually present to stimulate their behaviour.	1. Make a game out of activity. 2. Help individuals imagine themselves using the learned information in real- life settings. 3. Make the fantasies intrinsic rather than extrinsic.
Competition	Individuals feel satisfaction by comparing their performance favourably to that of others.	1. Competition occurs naturally as well as artificially. 2. Competition is more important for some people than for others. 3. People who lose at competition often suffer more than the winners' profit. 4. Competition sometimes reduces the urge to be helpful to other learners.
Cooperation	Refers to satisfaction achieved by helping others and working together to achieve shared goals.	1. Cooperation occurs naturally as well as artificially. 2. Cooperation is more important for some people than for others. 3. Cooperation is a useful real-life skill. 4. Cooperation requires and develops interpersonal skills.
Recognition	Individuals feel satisfaction when others recognize and appreciate their accomplishments.	1. Recognition requires that the process or product or some other result of the learning activity be visible. 2. Recognition differs from competition in that it does not involve a comparison with the performance of someone else.

Source: McDonald (2012, p. 3 - 6)

2.3.2.5 Intrinsic rewards

Motivational dynamics have radically changed over the years (Mgedezi, 2013). According to Thomas (2009) one of the main changes has been the increase in importance of intrinsic rewards, and the decrease of extrinsic or materiel rewards within the workplace. This section explains the popularity of these intrinsic rewards and they can be utilised to build a high-engagement culture especially within the police service.

The following are the descriptions of four intrinsic rewards and how employees view them:

1. **Sense of meaningfulness -** This intrinsic reward or merit includes the importance or meaningfulness of the purpose the employee is trying to fulfil (Thomas, 2009). According to Mgedezi (2013) individuals sense that they have a chance or an opportunity to achieve something of real value which matters in the larger system. This may include employees achieving day to day goals or outcomes they set for themselves which are important to the fulfilment in the organisational goals and objectives. Once employees feel that they add value to an organisation they invest their time and energy.
2. **Sense of choice** - It is rewarding, fulfilling and motivating for individuals to perform their tasks when they see that they have a choice, and that they are not forced or compelled. Thomas (2009) insists that individuals have a choice on how to accomplish their work. This is called result oriented approach rather than a process oriented approach. How employees do their work is sometimes not important, what is crucial is the result they yield. Employees use their best judgment to select work activities that make the most sense to them and perform them in ways that seem appropriate. This causes them to feel ownership of their work and to be more responsible and accountable (Thomas, 2009).

3. **Sense of competence** - We all feel good when we are doing very well in our work and are sure of what we are doing (Emery & Barker, 2007). A sense of competency at work is motivating you to excel in your work (Mgedezi, 2013). Thomas (2009) further highlights that employees should feel that they are handling their work activities well and that their performance meets or exceeds their personal standards. Knowing that you are doing a good and high-quality work makes you feel a sense of creativity, pride and satisfaction (Thomas, 2009).
4. **Sense of progress** - Seeing progress in your work and that you are developing and growing in your own field is motivating. Individuals are encouraged when they see that their work is moving in the right direction and when their efforts are really accomplishing something (Mgedezi, 2013). When employees start seeing convincing signs that things are working out, it gives them confidence in the future and in the choices they have made (Thomas, 2009).

These intrinsic rewards appear to create strong, win/win outcomes for both employees and an organisation because they lead to the attainment of overall organisational objectives and goals. This type of motivation "is focused on the shared desire that the employees' work makes an effective contribution to the entire organisation" (Thomas, 2009, paragraph 22). It is also cost effective as it does not rely on large sums of money to generate extra effort on the side of employees (Thomas, 2009).

Employees who are intrinsically rewarded pay more attention to details and are more effective (Tymon, Stumpf & Doh, 2010). They further state that, the intrinsic rewards are also strong predictors of employee retention, employees who are intrinsically rewarded turns out to be more loyal to the organisation. In their turn they become informal marketers and recruiters for their

organisation (Thomas, 2009). They recommend the organisation as a place to work to their peers, they also advise potential customers on its services and products. Intrinsic rewards are also a source of employee wellbeing. When employees experience high levels of intrinsic rewards there is little chance that they will experience burnout and they report fewer stress symptoms. Employees experience positive feelings more than negative ones on the job and they also tend to show higher job satisfaction, and are more likely to feel more engaged in their jobs (Thomas & Tymon, 2009). Therefore, the following section considers job engagement.

2.3.3 Job engagement

Moving from one job to another has become common in the modern day context, and organisations looking for ways to retain their employees (Gokul, Sridevi & Srinivasan, 2012). Instead of looking at retention strategies, which are normally reactive in nature, the proactive approach is to keep employees engaged in their jobs and committed to the organisations. Employee or job engagement is important as it is a strategic move to drive, improve and encourage organisational development and change, as Mathumbu and Dodd (2013) argues and they further state that engaged employees behave in a desirable manner, adopt processes and systems to anticipate and respond to any organisational need. Therefore job engagement occurs when employees are committed, passionate, and enthusiastic about their work and the organisation (Ram, 2011).

2.3.3.1 Job engagement defined

The term job engagement has received attention recently and many scholars and researchers have tried to define the concept. One of the main challenges presented by the literature is a lack of academic research on job engagement and the lack of a universally accepted definition of job engagement (Saks, 2006).

Khan (1990) defined job engagement “as the harnessing of organisational members’ selves to their working role, either by physical, emotional and cognitive engagement” (p. 694) He further adds that being engaged means that one needs to be psychologically present when performing and occupying an organisational role (Khan, 1990). The physical aspect of job engagement includes the physical energies exerted by employees to achieve their roles. The emotional aspect includes the way employees feel about the organisation, the management, and working conditions. Employees can either have negative or positive attitudes toward the organisation and its leaders. Finally the cognitive aspect of job engagement concerns employees’ beliefs about the organisation, the working conditions and its leaders (Kular, Gatenby, Rees, Soane, & Truss, 2008).

Rothbard (2001) agrees with Kahn (1990) and defines job engagement "as being psychologically present when occupying an organisational task” (p. 656) and further states that it includes two critical components, and these are attention and absorption. Attention refers to “cognitive availability and the amount of time one spends thinking about a role” and absorption “means being engrossed in a role and refers to the intensity of one’s focus on a role” (p. 656)

Schaufeli and Bakker (2004) define engagement as “a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption” (p. 295). They further indicate that vigour is characterized by increased levels of mental resilience and energy while carrying out organisational tasks, determination or persistence when faced with difficult situations and eagerness to put more effort into one’s work. Dedication includes a sense of meaning, enthusiasm, challenge, pride, and inspiration. Absorption is when one is fully concentrated and happily occupied in one’s work, whereby one is attached to his or her work no matter how much

time it takes to the extent that it is difficult to be detached in one's job (Schaufeli & Bakker, 2004).

Burnout and employee engagement researchers define job engagement as the positive antithesis or opposite of burnout (Gonzalez-Roma & Bakker, 2002; Maslach, Schaufeli & Leiter, 2001; Saks, 2006; Schaufeli, Salanova, Gonzalez-Roma, Schaufeli, Bakker & Lloret, 2006). Maslach *et al.,* (2001) further state that job engagement is characterized by involvement, efficacy and energy. These characteristics are the opposite of the three burnout dimensions: cynicism, inefficacy and exhaustion. In addition, the main dimensions of burnout (exhaustion and cynicism) and engagement dimensions (vigour and dedication) are opposites of each other (Saks, 2006). In most cases engagement has been defined as "emotional and intellectual commitment to the organisation or the amount of discretionary effort exhibited by employees in their jobs" (Saks, 2006, p. 601). This definition highlights that employee engagement is divided into two categories: organisational engagement and job engagement.

Human resources also offer definitions on employee engagement (Sakovska, 2012). Towers Perrin's Global Workforce Study, 2003 defines engagement as "employees' willingness and ability to contribute to company success by placing discretionary effort into their work, in the form of extra time, brainpower and energy" (paragraph four). The Gallup organisation defines job engagement as the enthusiasm for work and involvement with one's work. Gallup, as cited by Sakovska (2012) relates engagement to employees' commitment and a positive employees' emotional attachment. As reported by Robinson, Perryman and Hayday (2004) the Institute of Employment studies defines employee engagement "as a positive attitude held by the employee towards the organisation and its value" (p. ix). They further state that an engaged employee "is aware of business context, and works with colleagues to improve performance within the job for

the benefit of the organisation" (Robinson, Perryman & Hayday, 2004, p. ix). According to Rothmann, Jorgensen and Marais (2011) engagement is a "psychological state of involvement, commitment and attachment to a work role" (p.2) Engaging in a work role can result in fulfilment for employees. Highly engaged employees have good relationships with their employers and they also show positive attitudes and intentions (Saks, 2006).

Job engagement is distinguishable from related concepts like organisational citizenship behaviour, workaholism, job involvement, organisational commitment, job embeddedness and job involvement (Saks, 2006). Although its definition and meaning often overlaps with and is confused with these constructs. From the above definitions, it is evident that job engagement is a unique and distinct concept that consists of behavioural, emotional and cognitive components related to employee job performance (Shuck & Wollard, 2010)

Strategies to increase job engagement among employees are important, because job engagement predicts employee job performance and employee satisfaction (Rothmann & Rothmann, 2010). Hence the following section discusses the importance of job engagement for both the organisation and individuals.

2.3.3.2 Importance of job engagement

Job engagement is important for its positive consequences for both the employees and organisation. According to Gonzalez-Roma *et al.,* (2006) job engagement is a positive experience in itself and there are many benefits to building job engagement. Nearly all big consultancy firms state that job engagement lead to increased profitability through increased sales, higher productivity, employee retention and customer satisfaction (Leiter & Bakker, 2010). The following are the organisational and employee outcomes of positive job engagement.

2.3.3.2.1 Organisational outcomes

- **Organisational performance**

A study by Harter, Schmidt and Hayes (2002) is one of the studies which indicate the importance of job engagement at the organisational level. They linked job engagement to outcomes relevant for most organisations: productivity, customer or client satisfaction, employee turnover, profit and safety at work and they found out that job engagement had a positive effect on all these categories. Harter *et al.*, (2009) in their meta-analysis study also found that engaged employees have lower rates of absenteeism (-37%), internal employee theft (-27%), turnover (-25% to -49%), work quality defects (-60%), safety incidents (-49%), and patient safety incidents (-41%) than unengaged employees. They further state that job engagement has a positive effect on the following organisational performance indicators: employee turnover, safety, and customer satisfaction. Other researchers, such as Saks (2006), Leiter and Bakker (2010), also support Harter *et al.* (2002) and (2009) and agree that employee engagement is important in every organisation because it could predict organisational success, and also influence employee loyalty and productivity and employee retention.

- **Advocacy of the organisation**

Engaged employees may also become advocates of their organisation (Sakovska, 2012). In other words, engaged employees are willing to promote the organisation as a possible employer, which means that future expenses of recruitment could be reduced by the introduction/ recommendation of new staff by existing workers. They are also willing to promote its services and products which increase public awareness of the organisation (Sakovska, 2012). Results from the Chartered Institute of Personnel and Development survey in 2006, showed that public sector employees are more critical of their organisation than employees in the private sector. In addition

to these findings, Sakovska (2012) states that Penna (2006) presented a 'Meaning at work research report' which indicated that organisations sometimes also have a group of employees who are disengaged, and such employees would keenly discourage other people from joining their current organisation. This group of employees is referred to as 'corporate terrorists' (Sakovska, 2012). The results from these two studies indicate that highly engaged personnel are more likely to bring an extra benefit to an organisation, while, disengaged employees can even damage the organisation.

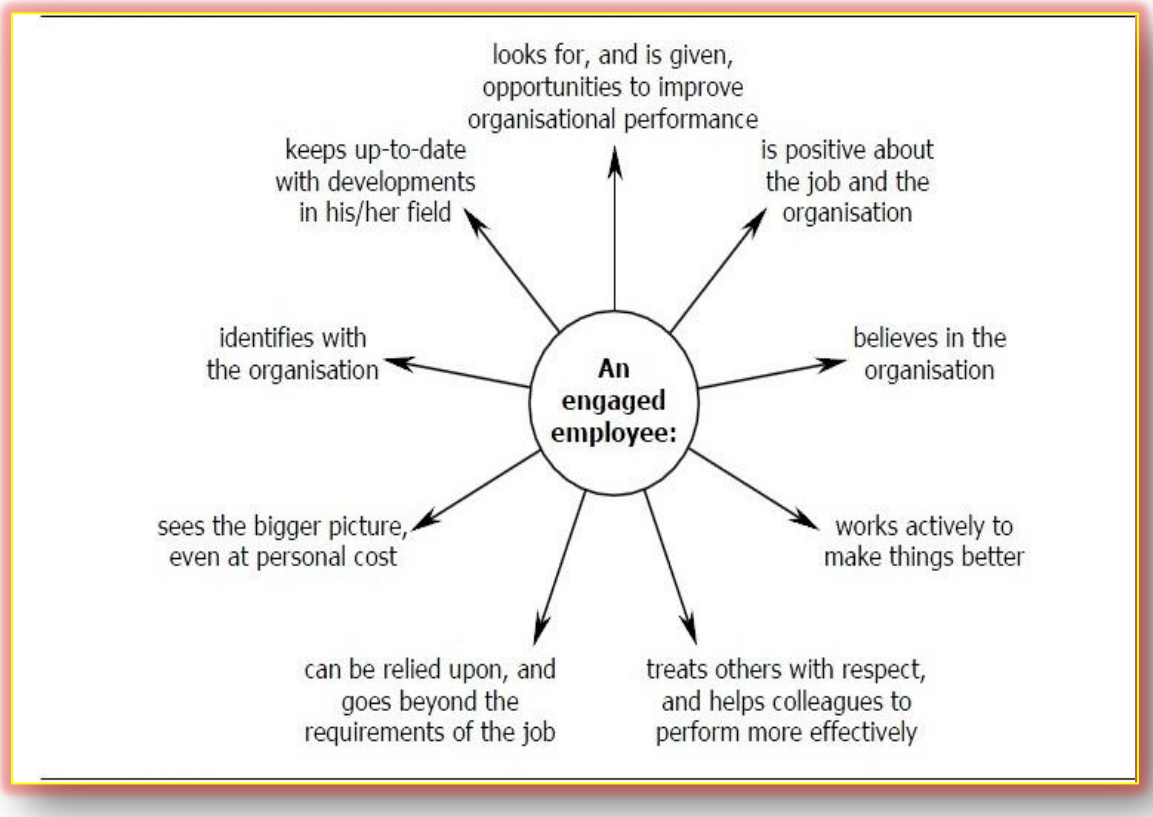
- **Employee retention**

Organisations invest a lot in terms of recruitment, induction, and training and development. Thus, employee turnover must be minimized (Ongori, 2007). A number of researches (e.i. Leiter & Bakker, 2010; Harter et al., 2002; Harter et al., 2009; Saks, 2006; Schaufeli & Bakker, 2004; Sakovska, 2012) have indicated that job engagement has an impact on employee turnover intentions. Human Resources consultancy Towers Perrin in 2003 also discovered that employees who are highly engaged are more stable in the organisation. The results of their survey indicated that around 66% of highly engaged employees had no plans to leave their jobs as compared to 36% of employees who are moderately engaged and just 12% of the disengaged ones. Kular *et al.,* (2008) argued that high levels of job engagement do not guarantee employee retention, because employees would still consider the right opportunities elsewhere. However, they state that it does increase the probability that perhaps highly engaged employees will stay in the organisation (Kular et al., 2008).

- **Employee productivity**

The Institute for Employment Studies summarized the characteristics of engaged employees and the way in which they behave at work (see Figure 2.3) (Sakovska, 2012).

***Figure 2.4* Characteristics of engaged employees**



Source: Sakovska (2012, p.16).

According to Kahn (1990) job engagement affects employee performance. Sakovska (2012) concurs with this, and states that higher levels of engagement assist workers in pursuing their goals and taking initiative. Above all, engaged employees are committed to the organisation and more satisfied with their job (Saks, 2006). Engaged employees do not only have more energy, but they also actively use their energy in their work (Towers Perrin, 2003). Engaged personnel have the urge to meet challenging goals and to succeed in all they do. According to Sakovska (2012) they respond to opportunities, develop new knowledge, support the company, go the extra mile and involve themselves in mentoring and volunteering. Khan (1992) suggested that on the organisational level, job engagement influences the productivity and growth of the organisation,

and on the individual level, engagement affects the quality of employees' work and their experience of doing the work. Kahn (1990) further states that engaged employees see meaningfulness in their work. When employees do not see meaning in their work, they detach and alienate from their job, which means that they become less motivated and committed to their work. Leiter and Bakker (2010) add that engaged employees intensively pay attention to details and are drawn in their work. Engaged employees also go beyond their job description, and they possess positive attitude that stimulates the creative and integrative side that adds value to the organisation (Leiter & Bakker, 2010).

2.3.3.2.2 Employee outcomes

As noted by Harter *et al*., (2002) employee engagement has been variously and differently defined. Some of these definitions assert that job engagement is created or caused by characteristics of the work environment, while other definitions emphasize that it is something that an employee brings to the workplace. Job engagement is said to lead to positive outcomes for the employees at work. Job engagement can lead to job satisfaction, organisational commitment, employee retention or reduced need to quit, organisational citizenship behaviour, reduced stress and increased employee motivation (Mathumbu, 2012). The following are also outcomes of job engagement.

- **Psychological outcomes**

Employees are looking for ways to find better fulfilment from their work, and Sakovska (2012) believes that job engagement can help employees to do so, because it will provide an opportunity that will push them to invest themselves in work. Saks (2006) suggested that self-efficacy is a possible outcome of job engagement. They state that engaged employees believe that they can make a difference in their organisation, and this is a strong predictor of their performance and

behaviour at work. According to Leiter and Bakker (2010) highly engaged employees believe that they can positively influence the quality of customer service and their organisational products, and also the costs in their job or unit.

- **Health and well-being**

Job engagement is said to result in positive feelings towards an organisation, wellbeing and to work itself among employees (Rothmann & Rothmann, 2010). Gallup organisation in 2005, reported better health among engaged employees. Highly engaged employees reported that their work positively affects their general well-being and physical health (Sakovska, 2012). Schaufeli and Bakker (2004) in their study of different organisations found that engaged employees as compared to disengaged ones suffer less from stress, stomach aches, cardiovascular problems, and self-reported headaches. Therefore, when employees are engaged their health conditions allow them to perform better at work than do disengaged employees (Rothmann & Rothmann, 2010).

- **Positive emotions**

Schaufeli *et al.,* (2002) describe job engagement as a positive and fulfilling work-related state of mind. Employees who are engaged experience positive feelings, such as enthusiasm, happiness and joy. Happy employees are said to be more helpful to others, open to opportunities at work, exert more confidence and are generally more optimistic (Mathumbu and Dodd, 2013). Kular *et al.,* (2008) states that when employees experience positive emotions, they are able to think more flexible and open-minded, they are likely to cope effectively, they become less defensive and feel greater self-control. According to Sakovska (2012) positive emotions cause employees to be engaged in their work and feel good in the present and in the future.

2.3.3.3 Strategies to increase job engagement

Employers can use different practices to build job engagement. Actions should be taken on both employee and organisational level to build employee engagement (Saks, 2009).

- **Performance appraisal**

The ways in which employees are given feedback on their performance have an influence on the levels of engagement employees will demonstrate (Rothmann & Rothmann, 2010). A great starting point for increasing engagement at the individual level is to give a positive feedback to employees about their job performance. Sakovska (2012) states that, work related feedback focusing on employees' strengths, not weaknesses, can increase the levels of their job engagement. Some organisations focus more on the employees' personality and performance strengths rather than on personality and performance weaknesses in their performance review. A survey by The Corporate Leadership Council (2002) showed that 77% of employees who are engaged stated that their supervisors focused more on positive characteristics when giving perfomance feedback, compared to 23% of the employees who are moderately engaged and only 4% of employees who are disengaged. Sakovska (2012) states that, when employees receive feedback that is focused on performance strengths, they believe that they have the needed resources to perform their job. They also feel that they are in the right job causing them to be highly engaged with their job. On the other hand an emphasis on performance weaknesses can make employees feel they are in the wrong job and decrease their performance. How organisations conduct formal performance reviews with employees is important. Giving employees' negative feedback, without ideas to improve performance, undermines the purpose of performance review.

- **Job design**

Job design refers to the manner tasks are put together to form complete jobs (Attridge, 2009). From an organisational view, employees know exactly what to do and they are accountable. From the individual view, the job requirements and the responsibilities of employees are clear. Job design ensures that employer and employees have a common understanding of the job to be done (Attridge, 2009). Employees are assigned jobs because they are able to fulfil its requirements but employees should be assigned work that is best suited to their abilities and knowledge (Sakovska, 2012). Job design is said to lead to improved job engagement, because employees get motivated and engaged at work when they feel they are making a difference in their jobs, and jobs can be designed with that mentality. Job design can results a motivated and engaged workforce, in clear job descriptions and successful completion of tasks (Schaufeli & Bakker, 2004).

- **Resource support**

Mathumbu (2012) relates low levels of job engagement to a low level of organisational support and support from colleagues and supervisors. According to Schaufeli and Bakker (2004), and Mathumbu (2012), when employees experience high job demands, their levels of engagement can be enhanced if the organisation provides them with more job resources, and support such as positive appreciation, supervisor support, collaborative organisational culture and innovative problem solving. Providing employees with support and the correct job resources helps maintain job engagement and can protect them from negative consequences, such as fatigue, having headaches, burnout and feeling anxious.

- **Working conditions**

To create the suitable environment which will enhance engagement, organisations should diminish the main predictors of employees' burnout and/or exhaustion, such as stressful working conditions and difficult job demands (Sakovska, 2012). Working conditions and work environment should be conducive, allowing employees to work smoothly. Practices to achieve this may include providing workplace equipment that is more user-friendly, removing unfavourable or problematic aspects of technical operations and tasks, introducing or allowing employees to take part in decision making and providing more role clarity, and creating opportunities for positive social interactions at work (Saks, 2006)

- **Organisational culture**

Organisational culture refers to the way things are done in an organisation, it reflects the organisation and differentiates one organisation from another (Gordon, 2008). Therefore, organisational culture is to an organisation what personality is to a person (Johnson, 2009). The culture and setting of any organisation may affect how satisfied the employees are with their jobs, and can stimulate their notions to leave the organisation. Employees become more engaged in their jobs when the organisation fulfils their requirements, needs and expectations better (Tsai, 2011). It is essential to change the culture of an organisation from time to time in order to avoid or reduce organisational factors that can cause employees to be stressed at work, to be absent from work and to disengage in their jobs (Attridge, 2009). Organisational culture sets the tone for engagement, Lockwood (2007).

- **Effective leadership style**

When employees receive sufficient support, coaching and inspiration from the supervisor they might see their work as more satisfying, involving and motivating which gradually makes them

highly engaged (Bakker and Demerouti, 2007). The type of leadership and support employees receive contributes to employee engagement (Attridge, 2009). He further state that inspirational motivation through encouraging higher performance expectations, sharing the vision and appealing to employees' emotions, on the part of the leader, encourages workers to be more task-committed and engaged. The most effective leadership style that enhances employee engagement is transformational leadership (Attridge, 2009). Transformational leadership is defined by Tims, Bakker and Xanthopoulou (2011) "as a leadership behaviour that transforms the norms and values of the employees, whereby the leader motivates the workers to perform beyond their own expectations" (p. 122). Transformational leaders are able to stimulate the feeling of engagement, commitment, involvement and performance in employees (Attridge, 2009).

2.4 RELATIONSHIP BETWEEN OCCUPATIONAL STRESS, INTRINSIC MOTIVATION AND JOB ENGAGEMENT

2.4.1 Occupational stress and job engagement

Schiffrin and Nelson (2010) state that stress hinders happiness at work and job engagement is an important factor of happiness at work and the only way to increase job engagement among employees is to reduce their levels of occupational stress. According to Schaufeli and Bakker (2004); Rothmann, Jorgensen and Marais (2011), there is no relationship among occupational stress and job engagement because, even when exposed to long work hours and high stressful job demands some employees do not display any signs of disengagement. Instead, they appear to find enjoyment in dealing with these stressors.

The research done on the relationship between stress and engagement is limited, but it has been found that occupational stress may limit the way employees engage in their work, and also job engagement may limit the effect of stress in certain areas (Schaufeli & Bakker, 2004).The more an employee is stressed the more likely that they will be disengaged; on the other hand, less engaged employees are more likely to become more affected by stress levels (Saks, 2006; Schaufeli & Bakker, 2004). Sharma (2012) states that engaged workers are capable of dealing with the demands of their jobs. a study by Parker and Martin (2009) of the "effects of coping and buoyancy on teachers' work-related well-being and engagement", it was shown that employee well-being (less stress) directly predicts job engagement. A study by Lees (2009) found that lower levels of stress do not guarantee high levels of engagement and vice versa.

The relationship which exists between occupational stress and job engagement is not well understood in the academic literature. There is a need for more research to grow the body of research and to develop a deeper understanding of how different types of occupational stress relate to job engagement (Rothmann, Jorgensen and Marais, 2011). According to Sharma (2012) much of the research on occupational stress and job engagement has dealt with these separately. But very little has been said about the effect of occupational stress on job engagement. The relevant and existing research concentrates on teachers and/or students, and on sport settings (Rothmann, Jorgensen and Marais, 2011). For the purpose of this study, the relationship between occupational stress and job engagement was closely observed.

2.4.2 Intrinsic motivation and job engagement

A careful review of literature shows that little has been said of a direct relationship between intrinsic motivation and job engagement. Existing studies have investigated these constructs separately with other variables (Christain, Ghaza & Slaughter, 2011; Kahn, 1990). Intrinsic

motivation comes from within an individual and the best way to experience it, is to believe in oneself and to like what you do. Intrinsic motivation involves an inner drive to do something as a result of having an interest in it (Mgedezi, 2012). Therefore, intrinsic motivation is considered to be strongly associated with job engagement and it was found to be important in the enhancement of intrinsic motivation (Masvaure, Ruggunan and Maharaj, 2014). In their study Masvaure, Ruggunan and Maharaj (2014) discovered that intrinsic motivation increases the level of job engagement. Their results revealed a statistically significant positive correlation between intrinsic motivation and job engagement. Their findings also showed that higher levels of intrinsic motivation are related with higher levels of job engagement and lower levels of intrinsic motivation are related with lower levels of job engagement. The result of their study revealed that there is a significant association between intrinsic motivation and job engagement. Highly motivated employees are thus expected to be engaged in their jobs than the ones who are not motivated (Harter, et al., 2009).

According to Khan and Iqbal (2013) many studies found an indirect relationship between intrinsic motivation and job engagement. They further assert that intrinsic motivation and job engagement result in increased organisational productivity, job satisfaction, organisational citizenship behaviour, good employee morale, employee performance, and other positive organisational outcomes. Therefore, most researchers have linked motivation and engagement to these factors.

Lee and Lee (2015) argue that it is not always the case that motivated employees are engaged; nor is it the case that the engaged are always motivated. For example, lecturers may be highly intrinsically motivated by their role, possibly because they love interacting with students in class. Yet, it is completely possible that their work environment and other aspects of their job such as

marking and setting examination papers may not be particularly engaging. Harter, *et al.*, (2009) agrees with Lee and Lee (2015) and states that organisations may provide as many motivating features as they can, but if a given employee is happy in doing his/her job or feels challenged by it, they are likely to be disengaged (Harter, et al., 2009; Lee & Lee, 2015).

In view of the above, this study concludes that the relationship between intrinsic motivation and job engagement, especially in Law Enforcement, is an ignored topic. Therefore this study investigates the relationship between intrinsic motivation and job engagement among police officers.

2.5 CHAPTER SUMMARY

This chapter presented an overview of the literature in order to provide basis for the study. Theoretical models that underpin the study were introduced in order to provide a context of this study, and various definitions related to the study variables (occupational stress, intrinsic motivation and job engagement) were explored. Previous studies were referred to and the chapter concluded with the relationship between occupational stress, intrinsic motivation and job engagement.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The previous chapter discussed the relevant literature and the theories adopted. This chapter discusses the research design for the investigation of the hypotheses and research problem. It focuses on the sample description and the procedure that was followed to gather the data. It further highlights the measuring instruments used to collect the data, and the psychometrics properties of these instruments are also addressed. The chapter concludes with the techniques used to analyse the data.

3.2 RESEARCH METHODOLOGY

According to Cooper and Schindler (2006; 22) for a study to produce objective and replicable research results, "it should follow the principles of scientific research which are defined as systematically and empirically based procedures". A research methodology is simply a framework which illustrates the methods and procedures that are followed in collecting and analysing research data (Welman, Kruger & Mitchell, 2005). Research methodology is not only important because it is a scientific approach to the research process, but it also provides researchers with a detailed overview of the process to be followed in conducting research (Babbie, Halley & Zaino, 2007). Research methodology comprises of three sub areas namely research design, methods of data collection and data analysis.

3.2.1 Research design

Research design refers to the steps followed by a researcher to complete a research study from the beginning to the end (Marvasti, 2004). It is a plan of how the research objectives are to be achieved. Research design is a "structure in which a specific problem" will be resolved (Van der

Merwe, 2003, p. 174). He further highlights that choosing a research design to utilised may be difficult due to the availability of a variety of sampling plans, methods and procedures. Research design comes up with a research approach that will assist to determine how the information will be obtained. For the purpose of this study a descriptive research design, following the quantitative tradition, was used in order to meet the research objectives of this study.

3.2.2 Types of research design

Research design is divided into three main types namely: descriptive, exploratory and causal research designs. Below, each type is briefly explained in order to justify the selected research design used in this study.

- **Descriptive, Exploratory and Causal Research**

According to Burns and Burns, (2008) a descriptive research design is when the researcher seeks to estimate exactly the nature of existing conditions or maybe the characteristics of the target population (Van Der Merwe, 2003) . Descriptive research is suitable when the research objectives is to determine the extent to which variables are correlated and making predictions about the occurrences of phenomena under study (Leedy & Ormrod, 2001). With this research design, the researcher has no influence or control over the area under study, but examines a situation as it is. Descriptive research design does not include modifying or changing the situation nor is it intended to identify cause and affect relationships, but it is able to draw inferences about the respondents and provide results that are accurate (Marvasti, 2004). This research design is useful for making simple management decisions.

Exploratory research is defined as research “conducted to gain new insights, discover new ideas, and for increasing knowledge of the phenomenon” (Burns & Groove, 2001, p. 374). Exploratory

research design is centred on data gathering in an informal or unstructured process. This will however, result in the development of new concepts and theories and it is not concerned with providing conclusive information (Burns & Burns, 2008).

Lastly, Cooper and Schindler (2003) say that a causal research design is to determine whether one variable causes a certain effect in another variable or not. It aims to identify the cause and effect relationship among independent variables and the dependent variable (Burns & Burns, 2008). Causal research is suitable when the objective of research is to identify variables that cause a phenomenon being predicted and to understand why they cause what is being projected.

This study's research design can be regarded as descriptive in nature. It collects information that demonstrates relationships between variables without manipulating the environment. Descriptive research designs are associated with specific research methodologies namely quantitative and qualitative research approaches. These are discussed briefly in the next section.

- **Qualitative and quantitative research**

Little is still known about how to distinguish between qualitative and quantitative research methodology. Qualitative research employs certain types of research methods in exploratory research designs where the key goal is to attain a number of preliminary insights to identify and discover decision problems and opportunities (Hair, Black, Babin, & Anderson, 2010). It offers "in-depth, non-numeric information and it includes the collection and analysis of data" that has to do with meanings, attitudes and beliefs (Krauss, 2005, p. 761). However, in qualitative research data can be collected within short period of time and data analysis is usually restricted to subjective content (Van der Merwe, 2003).

Often qualitative research is likely to focus on the group of detailed numbers of primary data from quite small samples of respondents by observing behaviour or asking questions (Hair et al., 2010). This type of research it is difficult to quantify or summarise the data into meaningful forms or numbers (Tustin, Van Aardt, Van Wyk & Lightlem, 2005).

- **Quantitative research**

A quantitative research design is usually utilised in order to answer questions about the relationship between measured variables with the intention of e predicting, xplaining, and controlling phenomena (Hair et al., 2010). Hair *et al.*, (2010) further states that the quantitative research design entails "data collection that focuses on the use of formalised, standard and structured questioning practices in which the response options have been predetermined by the researcher and administered to significantly large numbers of respondents" (p, 66). Quantitative research design results in numerical counts of data from which statistical inferences can be drawn (Ghauri & Gronhaug, 2005). According to McDaniel and Gates (2001) methods in quantitative research design are more related to causal and descriptive research designs than to exploratory designs. The key goal of "quantitative research" is to provide specific data that researchers can employ to make "accurate predictions, gain meaningful insights or verify and validate existing relationships" among variables under study (Tustin et al., 2005, p. 89). However, the ability to interpret numerical data into meaningful narrative information it is important when using quantitative research (Van der Merwe, 2003). Despite the fact that quantitative research designs do not generate theory and provide the strong in-depth explanations of qualitative enquiry, it is still used in hypothesis confirmation and validity testing (Shammout, 2007).

This study adopted quantitative research design to collect information from the South African Police Service. The use of the quantitative research was based on the properties of this research design which allows data to be analysed through hypothesis testing and statistics while also allowing for the generalisation of the research results to a wider setting. Moreover, this research design is more scientific and the results obtained through quantitative research are objective (Ghauri & Gronhaug, 2005). The use of a quantitative research design also helps the researcher to establish statistical evidence on the strength of the relationships between certain constructs (Perri & Bellamy, 2012).

The researcher sought to find the relationship between occupational stress, intrinsic motivation and job engagement which can mainly be achieved through the use of a quantitative research design. The researcher did not use the qualitative research design because it focuses on in-depth issues and its aim is to study occurrences rather than to draw population-wide conclusions (Cooper and Schindler, 2006).

Figure 3.1 below outlines the differences between quantitative and qualitative research designs and illustrates the inapplicability of the qualitative research design to the study at hand.

***Figure 3.1* differences between quantitative and qualitative research**

Quantitative Research	Qualitative Research
Primary purpose is to determine cause and effect relationship.	Primary purpose is to determine on-going process.
The independent variable is controlled and manipulated.	There is no specific independent variable; the concern is to study naturally occurring phenomena without reference.
Data is represented and summarised in numerical form.	Data is represented or summarised in narrative or verbal forms.
Reliability and validity is determined through established and logical method.	Reliability and validity is determined through multiple sources of information (triangulation).
Samples are selected to represent the population.	Samples are purposefully selected or single cases are studied.

Source: Cooper & Schindler (2006, p. 237)

3.3 POPULATION

According to Burns and Burns (2008, p. 182) a population is described as "*the entire collection of all the observations of interest (this could be people, objects or events) to the researcher*". Malhotra (2004) states that the population of a study can also be defined as an aggregate of the elements that share a common set of characteristics and that comprise the universal group for the goal of the research problem. The survey population is described by McDaniel and Gates (2001) as a list of all elements from which the sample will be drawn. Churchill and Brown (2007) agree to this by stating that all the objects or individuals that meet certain designated requirements for being part of a certain group, comprise the survey population. Levy and Lemeshow (2008, p 11) add that a population is "*the entire set of individuals to which the findings of the survey are to be extrapolated*". For this study all the members of the South African Police Service in the Greater Kokstad mucipality, Kwa –Zulu Natal in Kokstad police station (N = 154) constitute the

population. This includes the support stuff, employees under the Public Service Act (34) and functional police, employees under the Police Act (120).

3.3.1 Population census

A population census involves data obtained from every member of the population of interest (McDaniel and Gates 2001). It is a practical method to use when information can be obtained from the whole population and when the population of interest is identifiable. For the present study, no formula was used to calculate the sample size because a population census was used and all the units had the questionnaire administered to them. The census population was used because of the practicality of using the census survey, the population of interest being small, including only the Functional Police under the Police Act (n=120). Sampling would eliminate important cases from the study. The respondents included males and females, contract and permanent police officers, ranging from the ages of 21 and younger to more than 50 years, across the following ranks: Colonel, Lieutenant Colonel, Major, Captain, Lieutenant, Warrant Officer, Sergeant and Constable.

3.4 DATA COLLECTION

This section outlines how the data was collected, the procedure and method that was followed, the response rate and also a description of the measuring instrument used to collect data.

3.4.1 Data collection method

This study used a structured self – administered questionnaire to collect data from police officers in Kokstad. The questionnaire is one of the main instruments for collecting data from respondents. Babbie (2009) describes a questionnaire “as a document containing questions and other types of items designed to gather information appropriate to analysis” (p. 262). Hair,

Wolfinbarger, Ortinau and Bush (2008) also describe a questionnaire "as a document that consists of a set of questions and scales to gather primary data" (p, 170). The questionnaire is a convenient method of data collection because questionnaires are practical. They are efficient because they can be used to collect data from a large number of respondents, they are not time consuming and cost effective and they always allow respondents anonymity and privacy encouraging honest responses. According to Welman *et al.*, (2005) the reason for using this method is that it allows the researcher to gather data within a reasonable amount of time. Another important factor about questionnaires is that their use allows the researcher to analyse and quantify the information gathered quite easily. The questionnaire is comprised of close-ended Likert type questions.

3.4.2 Procedure

Before conducting research or gathering data permission to conduct research at Kokstad police station was requested from the National Commissioner of the South African Police Service, who forwarded the request to the Provincial Commissioner, Kwa-Zulu Natal, who granted permission to conduct research. Upon receiving the letter of permission to conduct research, the researcher approached the station's Cluster Manager for permission to conduct the research at Kokstad police station she was shown the letter, and an arrangement was made by the Cluster Manager for the researcher to meet with the station Commander. The Station Commander was shown letter of permission. The rationale behind the study was explained to the station Commander, that the study would contribute to the already existing police studies and that the study would make recommendations and propositions for the police sector. Upon receiving the consent, the respondents partaking in the study were also showed copies of this letter before answering questionnaires and their permission was also obtained. The researcher distributed questionnaires

to participants explaining beforehand why the research was conducted and for officers who were not available questionnaires were left with the heads of different sections for further distribution. Participants were allowed three weeks to return the questionnaires and were allowed to complete the questionnaires at their own convenience time.

3.4.3 Questionnaire administration and response rate

A total of 120 questionnaires were personally delivered by the researcher to Kokstad Police Station for all the police officers to complete, and after two months the questionnaires were collected. Table 3 presents information about the response rate. The response rate in survey research refers to the ratio of the number of people who answered the survey in relation to the total number of the sample.

Table 1

Response rate

Sample Category	Number	Percentage %
Initial sample	**120**	**100**
Not returned	11	9.2
Discarded	4	3.3
Total Sample loss	**15**	**12.5**
Usable Sample	**105**	**87.5**

Table 1 shows that 11 respondents did not return the questionnaires. Follow up calls to expedite the research were made before reaching the final decision regarding usable sample size. However, of 109 questionnaires returned to the researcher 4 participants did not respond or discarded the questionnaire. Therefore, 105 respondents or 87.5% of the respondents were available for the survey. According to Sekaran (2003) 30% response rate of is regarded as acceptable for most research purposes.

3.4.4 Research instruments

A self-administered questionnaire was used as data collection instrument. The research instrument comprised four sections: Section A (Biographical Questionnaire), Section B (Police Stress Questionnaire), Section C (Intrinsic Motivation Inventory or IMI) and Section D (Job Engagement Scale or JES). A detailed description of the instrument is given below.

Biographical Questionnaire

A self-designed biographical questionnaire was used where respondents could provide information about their demographic variables (age, race, and gender) and their occupation (rank and length of service)

Police Stress Questionnaire (PSQ)

Background

Organisational Police Stress Questionnaire (PSQ-org) and Operational Police Stress Questionnaire (PSQ-op) were developed as a reliable measure of occupational stress among police (McCreary & Thompson, 2006). McCreacy and Thompson (2006) developed this scale after several studies they conducted showing that police officers categorized stressors into these categories: Organisational and operational.

Items:

The short 20 items version was used in this study (10 items for each scale) i.e. operational stress and organisational stress.

Scoring:

Operational Police Stress Questionnaire (PSQ-op) and Organisational Police Stress Questionnaire (PSQ-org) are self-scoring questionnaires. Police officers were asked to rate their perceptions of organisational and of operational stress. Participants indicated to what extent they agree with operational and organisational stress statements relative to the past six months. Answers to every item were rated using a five-point Likert scale with anchors labelled: 1 = strongly disagree and 5= strongly agree.

Reliability and validity

Many studies have examined the reliability of the PSQ. McCreary and Thompson (2006), inventers of the scale, reported .93 Cronbach alpha for the operational scale and a .92 Cronbach alpha for the organisational scale. Kula (2011) reported .88 Cronbach alpha for the operational scale and a .81 Cronbach alpha for the organisational scale. Shane (2010) found a Cronbach Alpha of .68 for the operational scale and .85 for the organisational scale.

Validity of the PSQ was tested by McCreary and Thompson (2006) to see whether the instrument truly measures the police organisational and operational stress. They studied police officers from different police station and over 3406 people participated in the study. They found evidence of content and construct validity. Further, proof of validity of the PSQ has been found by other researchers (Wiese, Rothmann & Storm, 2003; Rothmann, 2008; Kula, 2011). All of them give support for the validity of PSQ as an instrument to measure organisational and operational police stress. Shane (2010) validated the PSQ using data from 796 police officers and found evidence of the convergent and discriminant validity of the PSQ instrument. The results of these studies show that the instrument is reliable and valid.

Intrinsic motivation Inventory (IMI)

Background

Intrinsic Motivation Inventory (IMI) was used to measure intrinsic motivation. IMI was originated by Ryan (1982). IMI is intended to measure participants' personal experiences that are job related. It has also been utilized in numerous experiments associated with self-regulation and intrinsic motivation. The instrument assesses participants' feelings while performing a job, and IMI items are modified to suit a specific task or occupation.

Items:

The questionnaire consists of 20 items divided into four subscales: interest/enjoyment (7), perceived choice (5), pressure/tension (4) and effort/importance (4).

Scoring:

Intrinsic Motivation Inventory is a self-scoring questionnaire, answers were rated using a five-point Likert Scale ranging from 1 (strongly disagree) to 5 (strongly agree) to each of the 20 items.

Reliability and validity

McAuley, Duncan, and Tammen (1989) in a study conducted to test the validity of the scale, reported strong support for its validity and documented proof of convergent and discriminant validity. Results of the study indicated convergent correlations of between .36 and .75. Asif (2011) reported reliability of this scale with a Cronbach alpha of .85 for interest/enjoyment scale, .71 for perceived choice scale, .80 for pressure/tension scale and to .90 for effort/importance scale. Tsigilis & Theodosiou (2003) found Alpha ranges of .78 to .92 for the overall scale.

Job Engagement Scale (JES)

Background

The Job Engagement Scale (JES) was used to measure job engagement. JES was developed by Rich, Lepine and Crawford (2010) following Kahn's (1990) meaning of job engagement which conceptualises that an individual can be engaged in his or her job in three ways; namely physically (job intensive), cognitively (psychological factors) and emotionally (feeling positive, pleasantness), therefore JES measures these three dimensions.

Items:

The Job Engagement Scale has 18 items; each dimension is represented by six questions: Physical (6), Cognitive (6) and Emotional (6).

Scoring:

The Job Engagement Scale is a self-scoring questionnaire, and responses to these 18 items were rated using a five-point Likert Scale ranging from 1 "strongly disagree" to 5 "strongly agree".

Reliability and validity

The items for each dimension of the scale were averaged and formed reliable measuring scales with the Cronbach alpha ranging between .89 and .94 for the overall scale Rich *et al.*, (2010). Mxenge, Dywili & Bazana (2014) state that the JES was administered in over 50 studies and the results of these studies revealed that the JES have high levels of discriminant and convergent validity, and also reflected strong support for its external and internal validity. The results of these studies also show that the instrument is reliable and valid.

3.5 DATA ANALYSIS

According to Welman *et al.,* (2005) data analysis involves converting raw, meaningless information into meaningful data that can be analysed used to guide important decision making. It is the application of reasoning in understanding collected data (Zikmund & Babin, 2012). Malhotra (2012, p. 432) attests that data analysis "is a process of collecting, modelling and converting data with the goal of highlighting useful information, suggesting conclusions, and supporting decision making". Data analysis usually includes reducing accumulated data to a manageable size, looking for patterns, applying statistical techniques and building up summaries (Cooper & Schindler, 2003). It also involves the explanation or interpretation of research findings in light of the research questions, and determining whether or not the results are consistent with the research hypotheses and theories (Malhotra, 2012). This section deals with the procedure that is followed when doing data analysis. It first discusses the data preparation, and then provides a detailed account of the descriptive statistics and, finally, the inferential statistics.

Data preparation

During the data preparation process the quality of the data gathered was checked and converted into an electronic format that can be read and manipulated by computer software (Malhotra, 2012). Data preparation ensures that high quality data is available for statistical analysis. The data preparation process includes a number of steps which need to be followed. These are: data validation, editing, coding, data entry and data cleaning (Roberts-Lombard, 2002). This study followed these steps and they are briefly discussed below.

- **Data validation**

Validation of data is the first stage in data preparation and involves inspection of the raw data to ensure that the information collected is accurate and correct. Validation can be described as the process of determining if interviews, a survey, or observations were conducted properly and free of bias and fraud (Cant et al, 2005). The purpose of doing data validation is to see whether any shortcuts were taken during the fieldwork or data collection period, and also to determine if the researcher followed important fieldwork instructions.

- **Data editing**

Data editing includes a serious inspection of the completed questionnaires in terms of compliance with standards for collecting meaningful data, and to deal with questionnaires that are spoilt or not completed (Cooper and Schindler, 2003). It consists of screening the questionnaires to identify incomplete, illegible, inconsistent, incomplete or ambiguous questions (Roberts-Lombard, 2002). In this study, questionnaires were checked thoroughly for ambiguities, omissions, inconsistencies and other aspects.

- **Coding**

According to Roberts-Lombard (2002, p. 151) “coding involves assigning numbers or other symbols to answers so that responses can be grouped into a limited number of classes or categories”. Sorting data into limited categories is important for effective data analysis even though it sacrifices some data. The purpose of coding is to change answers of respondents to survey questions into symbols or codes that can easily be entered into and read by a statistical analysis software package.

In this study, two approaches to coding were adopted. The first was pre-coding which refers to assigning codes to response options before field work began and hence printing the relevant

codes on the questionnaire. Pre-coding was done with dichotomous questions by assigning numbers to possible answers, for example, 1 for strongly disagree and 5 for strongly agree. Final coding was done during data preparation to establish a codebook describing each variable in the dataset.

- **Data entry**

Data entry or data capturing entails the transfer of data from any acceptable data collection instrument (questionnaire in this study) into the computer. Cooper and Schindler (2006) describe data entry as a process which includes the tasks involved with the direct input of the coded data into some specific software package that will then be used to transform and manipulate the raw data into useful information. In this study data was entered into Microsoft Excel before it was imported into SPSS for analysis.

- **Data cleaning**

The process of checking coded and entered data for errors before starting data analysis is called data cleaning. Cooper and Schindler (2006) argue that data cleaning is very important especially in cases where data coding and entry has been done manually, as in this study. A thorough data cleaning process was done before analysis.

3.5.1 Statistical analysis

The statistical technique used to test the hypotheses and analyse the research data was the Statistical Package for the Social Sciences (SPSS). Both descriptive and inferential statistics were integrated to analyse the data.

3.5.1.1 Descriptive statistics

Descriptive statistics provided a very practical and initial examination of data, and also helped to present data in a transparent way, using tables and graphs.

3.5.1.2 Inferential statistics

To test the study's hypotheses, inferential statistics, in the form of Pearson's Product Moment Correlation Technique was used to test the relationship between the variables, Analysis of Variance (ANOVA) was utilised to determine the significant differences between the experiences of occupational stress across rank and the T-test was used test such differences among gender groups. Finally, Standard multiple regression analysis was also done to measure the contribution of independent variables (occupational stress and intrinsic motivation) to the variance in the dependent variable (job engagement).

3.6 ETHICAL CONSIDERATIONS

Participants must be treated with respect, dignity and courtesy. The researcher considered the most basic ethical. These considerations include permission, informed consent, and protection from harm, confidentiality and honesty when reporting research findings. Before collecting data an ethical clearance certificate was obtained from the Research Ethics Committee of the University of Fort Hare. The principles of the Helsinki Declaration (1967) and Belmont Report (1979) were also considered, and they are as follows:

- **Protection from harm**

There was no risk of physical harm in this research study. Respondents were treated with dignity and respect.

- **Confidentiality and right to privacy**

Respondents' personal details are private and confidential and cannot be released without their permission. The questionnaire was anonymous; and did not require respondents to fill in their personal details.

- **Permission**

Permission to carry out research was sought from the National Police Commissioner, and the Kwa-Zulu Natal Provincial Commissioner and a copy of this consent was shown to all relevant Heads at Kokstad Police Station.

- **Informed consent and Honesty when reporting findings**

The present study informed participants of the nature and purpose of the study through a letter that was hand delivered emphasising the confidential and voluntary nature of the current research along with a consent form. Respondents were clearly informed of their right to participate or to withdraw from the research at any time. They were also informed that information obtained is solely for academic purposes. Findings of this study were reported honestly and without any manipulation of data.

3.7 CHAPTER SUMMARY

This chapter discussed the research methodology used in the present study. This included a broad discussion of the organisation of the survey, the scope of the survey and the sampling method. Furthermore, it also discussed the data collection technique adopted for the study and the rationale for using the selected data collection method (the questionnaire) was also highlighted. In addition, the statistical package used to analyse data was highlighted. In conclusion all the ethical considerations were observed. The following chapter will focus on the analysis of data collected through the research instrument outlined above and will be presented graphically and a discussion will follow to explain the data further.

CHAPTER 4

DATA ANALYSIS AND RESULTS

4.1 INTRODUCTION

The previous chapter discussed research methods that were utilised by the researcher to collect the relevant data. The present chapter explains and presents the overall findings of this study. Descriptive statistics such as bar charts and pie charts, and graphical tables were used to aid the analysis of data and make the results clearer. The results of the study in relation to the hypotheses are also being presented in this chapter. To clearly present and discuss the results, this chapter begins with the presentation of the demographic and occupational distributions and linking that information to the issues in question. To test the hypotheses, descriptive statistics as well as correlations were used. The following sections present the analysis and interpret the data obtained from the respondents through the questionnaire.

4.2 INTERNAL CONSISTENCY

4.2.1 Cronbach's Alpha for Occupational stress Questionnaire

Cronbach Coefficient Alpha	
Variables	**Alpha**
Raw	0.957585
Standardized	0.957833

The Cronbach's coefficient alpha of the occupational stress questionnaire in the study was 0.95 which shows that the instrument was reliable in measuring occupational stress among the employees.

4.2.2 Cronbach's Alpha for Intrinsic motivation Questionnaire

Cronbach Coefficient Alpha	
Variables	**Alpha**
Raw	0.837363
Standardized	0.832767

The Cronbach's coefficient alpha of the intrinsic motivation questionnaire in the study was 0.83 which shows that the instrument was reliable in measuring the intrinsic motivation among the employees.

4.2.3 Cronbach's Alpha for Job engagement Questionnaire

Cronbach Coefficient Alpha	
Variables	**Alpha**
Raw	0.952797
Standardized	0.953534

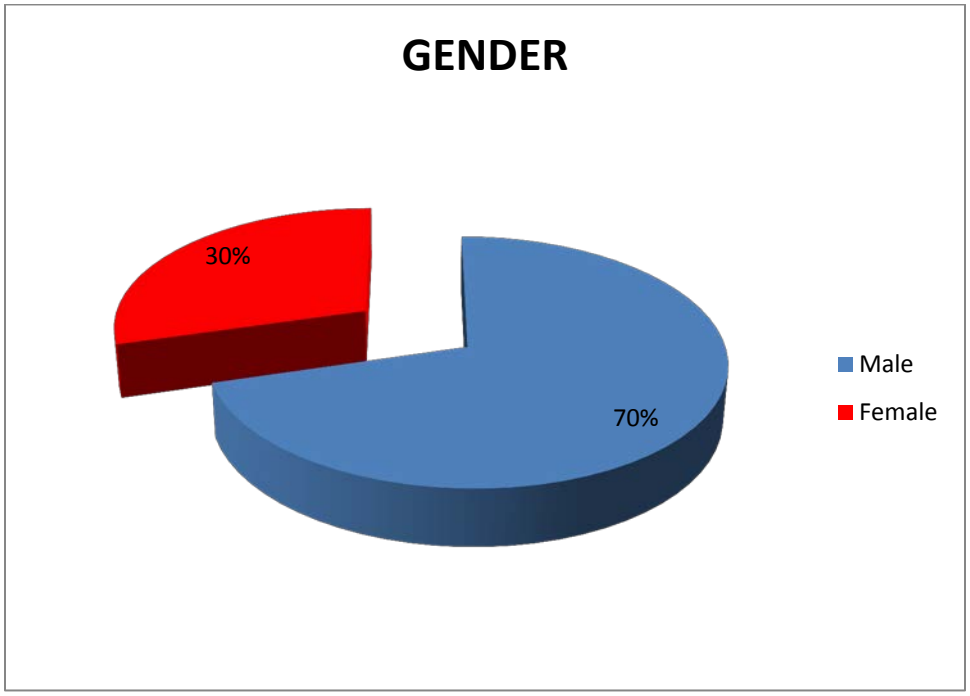
The Cronbach's coefficient alpha of the job engagement questionnaire in the study was 0.95 which shows that the instrument was reliable in measuring job engagement among the employees.

4.3 DESCRIPTIVE STATISTICS

4.3.1 Distribution of Respondents by gender

Figure 4.1 below depicts the gender of respondents. The majority of the respondents (70%, n=74) are male employees, while female employees comprised 30% of the respondents (n=31).

Figure 3.1 **Gender Distribution**



4.3.2 Distribution of Respondents by race

Figure 4.2 **Race distribution**

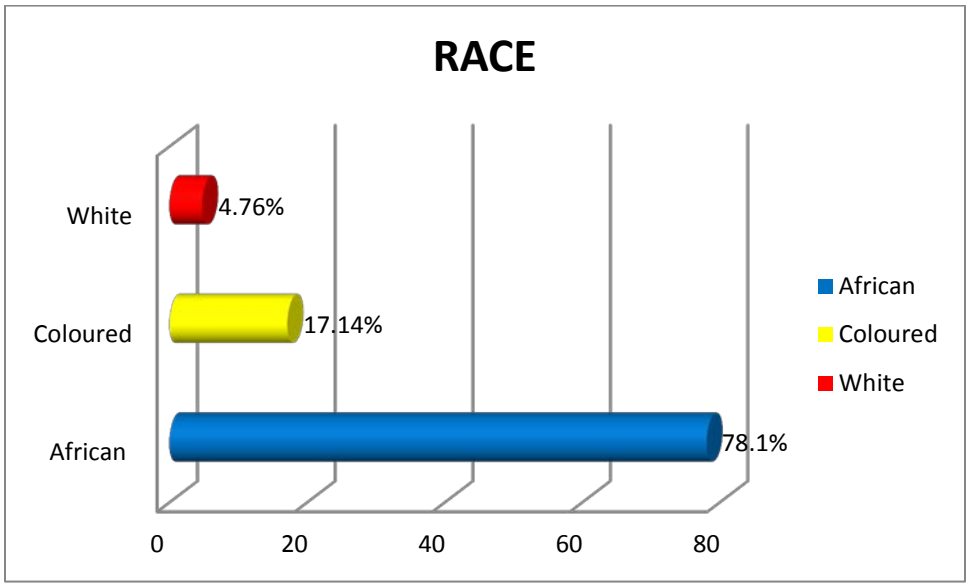


Figure 4.2 above illustrates that the majority of the employees, (n=82) or 78.1% were Black Africans, while a further 17.14% (n=18) were Coloured employees. Five respondents (4.76%) were White employees.

4.3.3 Distribution of Respondents by age

Figure 4.3 **Age distribution**

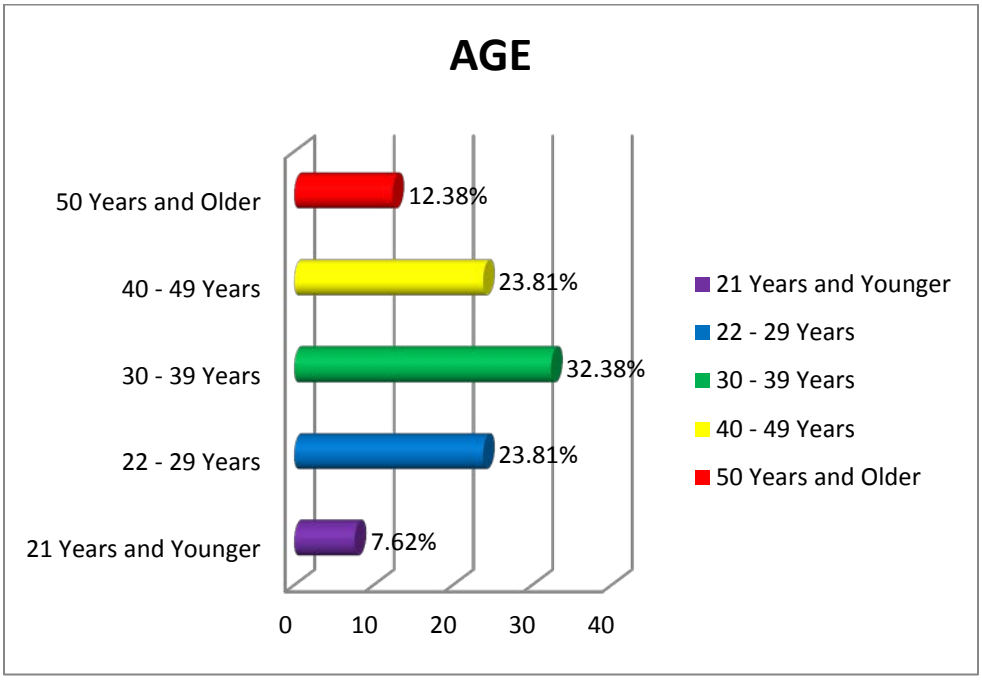
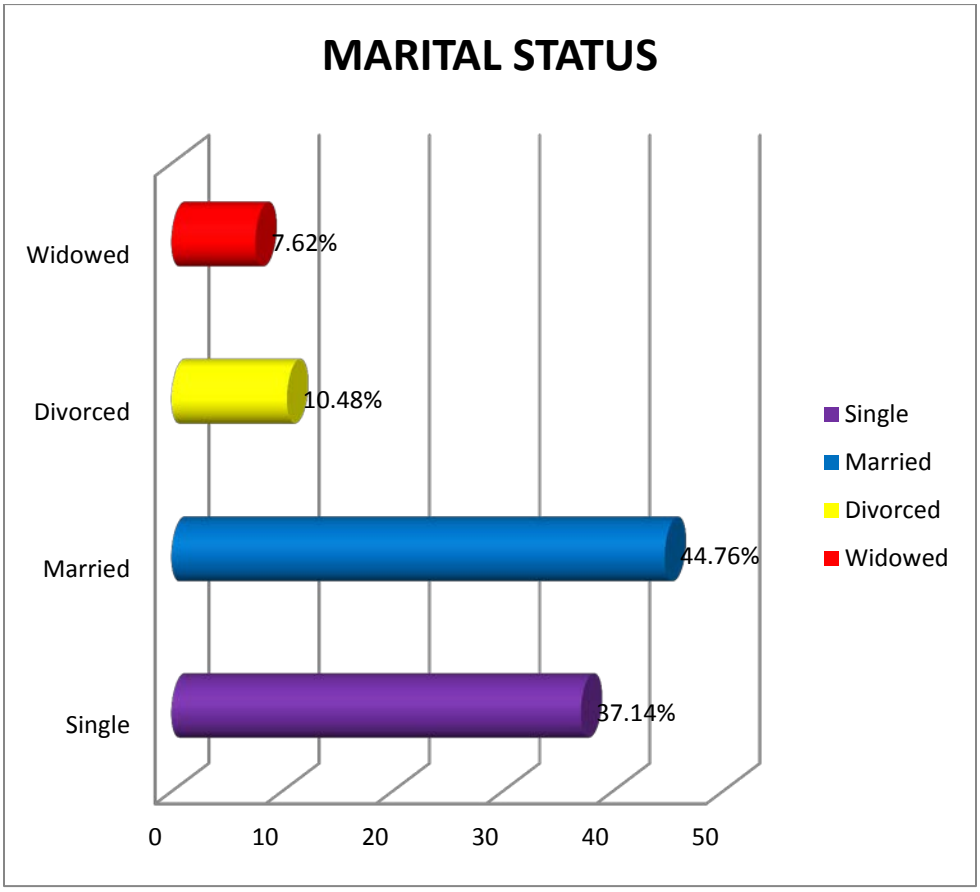


Figure 4.3 above shows the distribution of respondents according to their age. The majority of the respondents (32.8%, n=34) are in the age group 30-39years. The 22-29 years and 40-49 years age group all comprise 23.81% (n=25) of the total number of the respondents. Thirteen respondents (12.38%) fall in the age group of 50 years and older, and 7.62% (n=8) of the respondents are in the age group of 21 years old and younger.

4.3.4 Distribution of Respondents by marital status

Figure 4.4 below demonstrates that the majority of the respondents (n=47) or 44.76% were married employees. Single respondents constituted 37.14% (n=39) of the total number of respondents, while 10.47% (n=11) of the respondents were divorced and 7.62% (n=8) of the respondents were widowed.

Figure 4.4 **Marital status distributions**



4.3.5 Distribution of Respondents by education qualifications

Figure 4.5 **educational qualifications distribution**

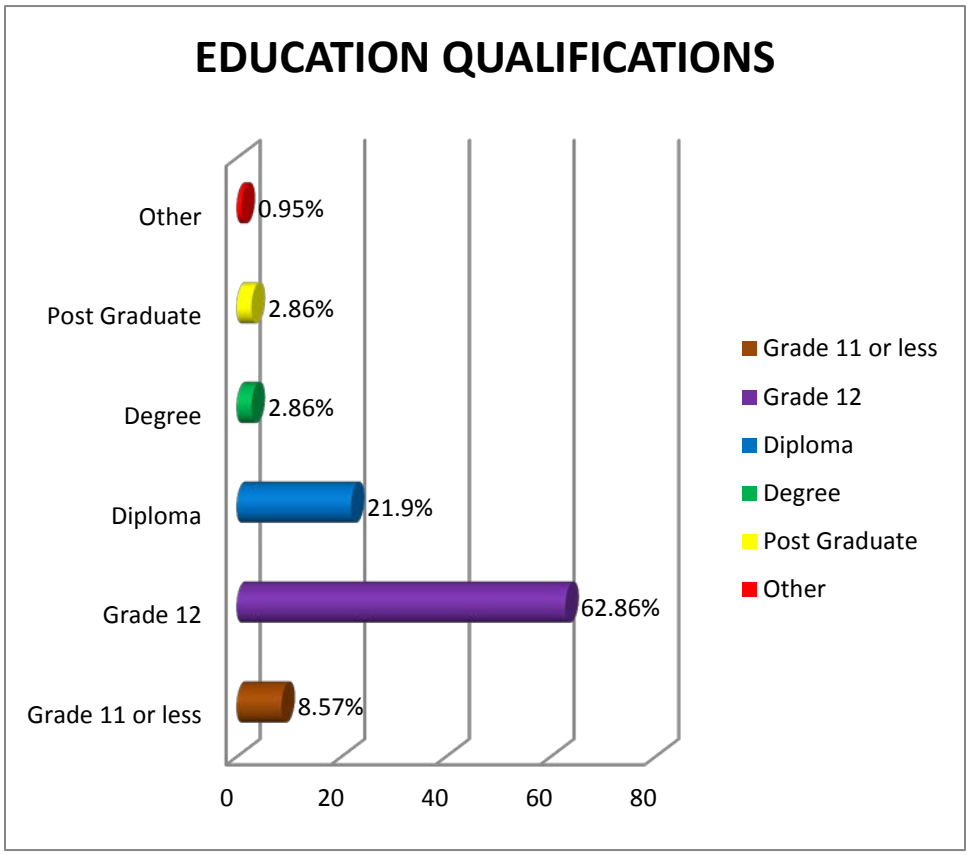


Figure 4.5 illustrates respondents' education levels. The graph shows that the majority of the respondents, 62.86% (n=66) had a Grade 12 education qualification, whilst 21.9% (n=23) possessed a diploma. Nine respondents (8.57%) had Grade 11 or lower. Respondents with degree constituted 2.86% (n=3) of the total sample of the respondents, while Respondents with degree constituted 2.86% (n=3) and 0.95% (n=1) of the respondents had other educational qualifications.

4.3.6 Distribution of Respondents by years of service

Figure 4.6 **Years of Service in the SAPS distribution**

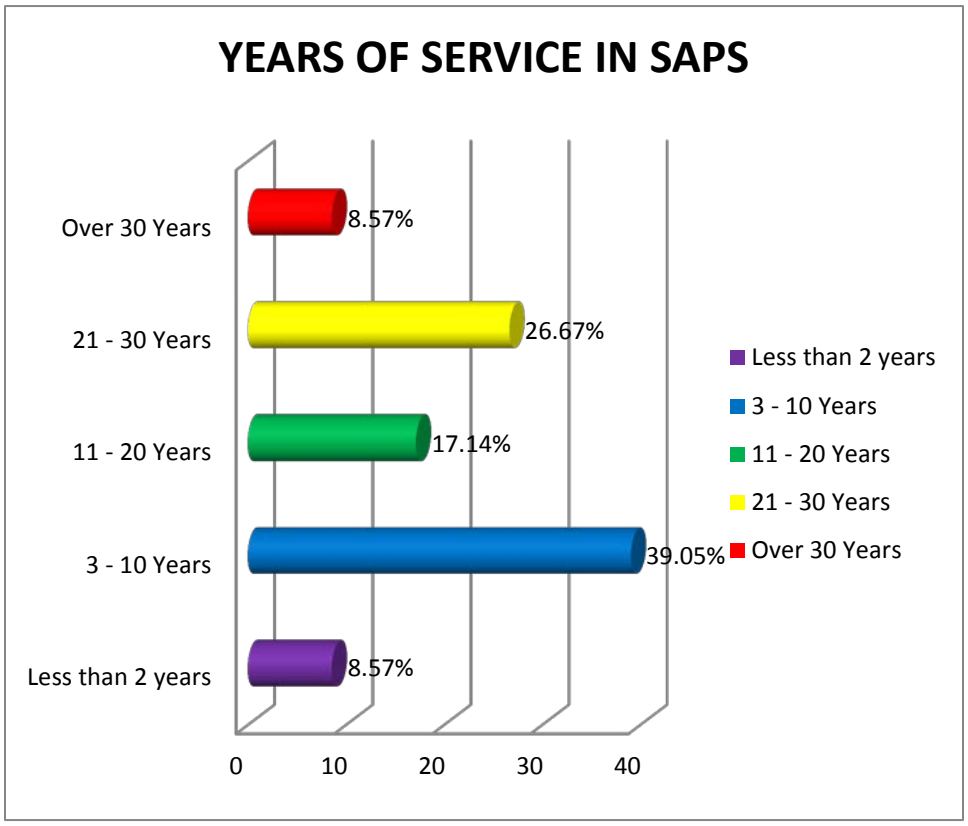


Figure 4.6 above shows that the majority of the respondents in the study have worked for 3-10 years (39.05%; n=41) while 26.67% (n=28) of the sample have worked in the SAPS for a period of 21-30 years. Respondents who have worked for 11-20 years constitute17.14% (n=18) of the total sample size. Respondents who have worked for over 30 years and less than 2 years constituted 8.57% (n=9) of the total sample size of the respondents.

4.3.7 Distribution of Respondents by job status

Figure 4.7 **Job status distribution**

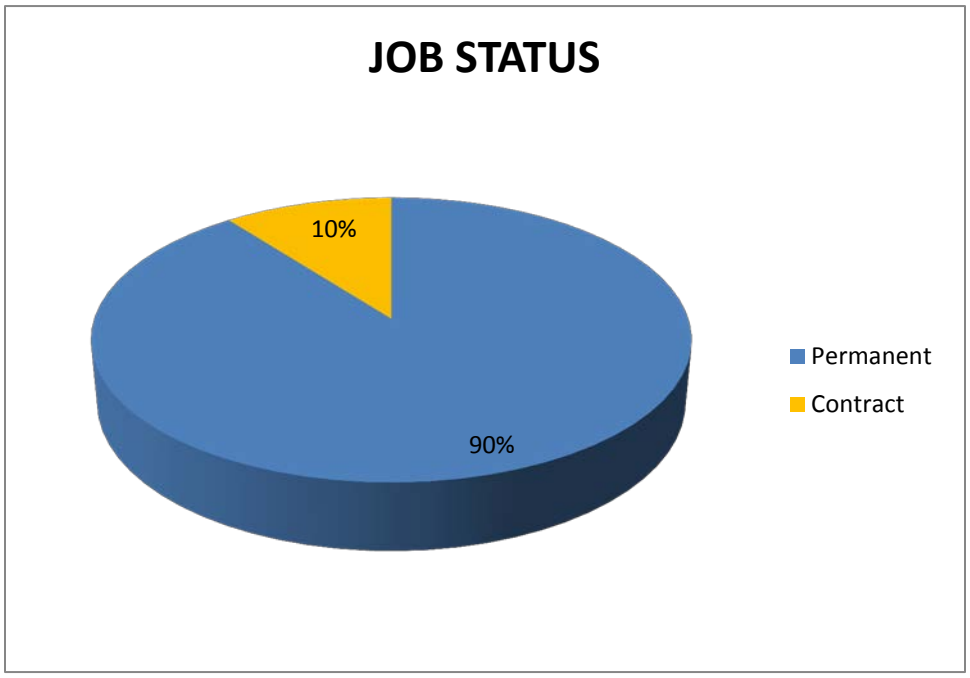
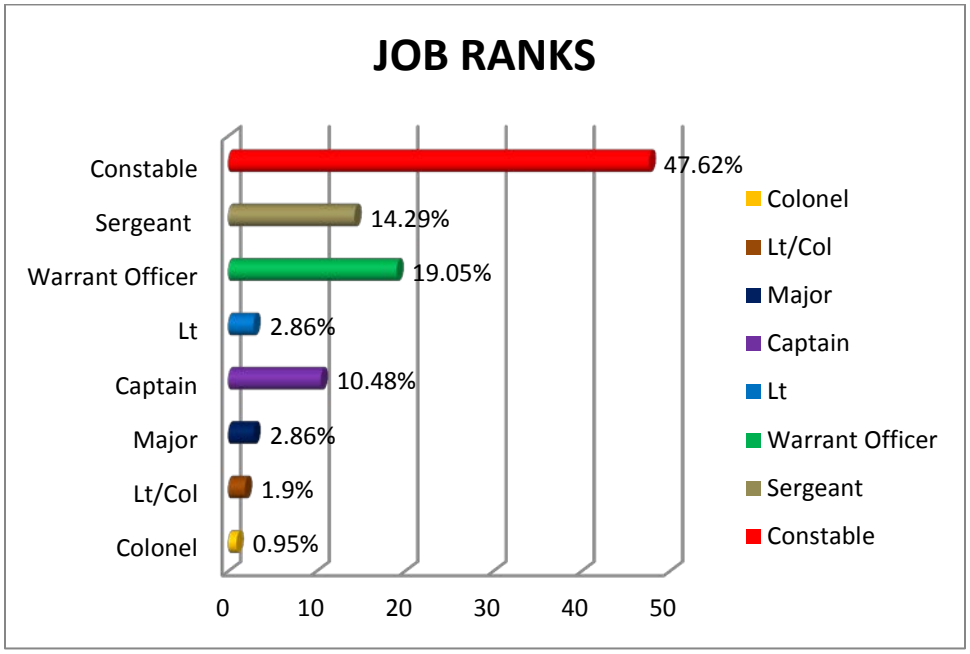


Figure 4.7 above illustrates the distribution of respondents based on job status. With respect to the employment category, the majority of respondents, 90% (n=94) are permanent employees. Only, 10% (n=11) of the respondents are employed on a contract basis.

4.3.8 Distribution of Respondents by job ranks

Figure 4.8 below shows the job ranks held by respondents. The job ranks of the sample comprises 47.62% (n=50) constables, 19.05% (n=20) warrant officers, 14.29% (n=15) sergeants, 10.48% (n=11) captains, 2.86% (n=3) lieutenants, 2.86% (n=3) majors, 1.9% (n=2) Lt/Colonel and 0.95% (n = 1) colonels.

Figure 4.8 **Job ranks distribution**



4.4 INFERENTIAL STATISTICS

4.4.1 Demographics and study variable correlations

Table 4 below shows the correlations between study variables and demographics. There was no correlation between study variable and demographic factors such as gender, race, marital status and educational qualification of respondents.

Age showed a positive significant correlation with occupational stress (r=0.302000; p=0.0018) and intrinsic motivation (r=023632; p=0.0152). However, age did not show any significant correlation with job engagement (r=0.18551; p=0.581).

In respect of number of years in service of respondents, it showed a positive significant correlation with job engagement (r= 0.19329; p= 0.482) and occupation stress (r=0.28286; p=0.0036). On the other hand it did not show any significant correlation with intrinsic motivation (r=0.14459; p= 0.141).

The job status of respondents did not show any significant correlation with job engagement and intrinsic motivation. However job status showed a negative correlation with occupational stress (r=-0.30012; p=0.0020).

Table 2

Correlation of occupational stress, intrinsic motivation and job engagement for demographics

Spearman Correlation Coefficients Prob > |r| under H0: Rho=0 Number of Observations			
	JOB ENGAGEMENT	**OCCUPATIONAL STRESS**	**INTRINSIC MOTIVATION**
Gender	-0.04217 0.6693 105	-0.01892 0.8488 104	0.03792 0.7009 105
Race	0.08366 0.3962 105	0.13364 0.1762 104	0.07294 0.4597 105
Age	0.18551 0.0581 105	0.30200 0.0018 104	0.23632 0.0152 105
Marital	0.11722 0.2337 105	0.16214 0.1001 104	-0.01741 0.8601 105
Education	-0.02629 0.7901 105	-0.06027 0.5433 104	-0.01137 0.9084 105
Service	0.19329 0.0482 105	0.28286 0.0036 104	0.14459 0.1411 105
Job Status	0.02317 0.8145 105	-0.30012 0.0020 104	0.10064 0.3070 105

4.4.2 Hypotheses testing

Table 3

Correlation among occupational stress, intrinsic motivation and job engagement

Spearman Correlation Coefficients Prob > |r| under H0: Rho=0 Number of Observations			
	JOB ENGAGEMENT	**OCCUPATIONAL STRESS**	**INTRINSIC MOTIVATION**
JOB ENGAGEMENT	1.00000 105	0.14797 0.1339 104	0.45670 <.0001 105
OCCUPATIONAL STRESS	0.14797 0.1339 104	1.00000 104	0.14342 0.1464 104
INTRINSIC MOTIVATION	0.45670 <.0001 105	0.14342 0.1464 104	1.00000 105

Hypothesis 1

H_0: There is no significant relationship between occupational stress and job engagement among police officers in the Greater Kokstad Municipality.

H_1: There is a significant relationship between occupational stress and engagement among police officers in the Greater Kokstad Municipality.

The results show that there is no significant relationship between occupational stress and job engagement (ρ=0.14797; p=0.1339). Therefore the alternative hypothesis is rejected in favour of the null hypothesis. Occupational stress does not affect how employees engage in their work.

Hypothesis 2

H_0: There is no significant relationship between intrinsic motivation and job engagement among police officers in the Greater Kokstad Municipality.

H_2: There is a significant relationship between intrinsic motivation and job engagement among police officers in the Greater Kokstad Municipality.

The results show there is a significant positive relationship between intrinsic motivation and job engagement among police officers (ρ=0.45670; p=<.0001). The null hypothesis is rejected in favour of the alternative hypothesis. As intrinsic motivation increases, job engagement also increases.

Hypothesis 3

H_0: Occupational stress and intrinsic motivation combined do not account for a significantly higher variance in job engagement than the two separately.

H_3: Occupational stress and intrinsic motivation combined account for a significantly higher variance in job engagement than the two separately.

To determine if occupational stress and intrinsic motivation account for a significantly higher variance in job engagement, occupational stress and intrinsic motivation were first separately modeled as explanatory variables for job engagement using the Generalized Linear Model (GLM).

When first separately modelled as explanatory variables for job engagement, the resulting models (see Tables below), show that the only significant model was the one with intrinsic motivation as an explanatory variable (F=19.44; Pr>F=<.0001). Only 15.8% of the variation in

job engagement is explained by intrinsic motivation whilst only 1.8% of the variation in job engagement is explained by occupational stress. This outcome is presented below.

GLM for effect of occupational stress on job engagement

Table: Feasibility of Model

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	1.30469682	1.30469682	1.87	0.1741
Error	102	71.03786610	0.69644967		
Corrected Total	103	72.34256292			

Table: Resultant R-Square

R-Square	Coeff Var	Root MSE	JOB_ENGAGEMENT Mean
0.018035	22.34021	0.834536	3.735577

Table: Parameter Estimates

Source	DF	Type I SS	Mean Square	F Value	Pr > F
OCCUPATIONAL_STRESS	1	1.30469682	1.30469682	1.87	0.1741

Parameter	Estimate	Standard Error	t Value	Pr > |t|
Intercept	3.394325805	0.26241019	12.94	<.0001
OCCUPATIONAL_STRESS	0.106737192	0.07798406	1.37	0.1741

The overall *F* statistic of the occupational stress model is not significant (Pr > F=0.1747). The tests of job insecurity in the Type I sums of squares show that the linear term in the regression model is not significant. The model does not fit. The table of parameter estimates indicates that the intercept is the only significant parameter in the estimated regression equation.

GLM for effect of intrinsic motivation on job engagement

Table: Feasibility of Model

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	11.48785760	11.48785760	19.44	<.0001
Error	103	60.85488197	0.59082410		
Corrected Total	104	72.34273956			

Table: Resultant R-Square

R-Square	Coeff Var	Root MSE	JOB_ENGAGEMENT Mean
0.158798	20.57720	0.768651	3.735450

Table: Parameter Estimates

Source	DF	Type I SS	Mean Square	F Value	Pr > F
INTRINSIC_MOTIVATION	1	11.48785760	11.48785760	19.44	<.0001

Parameter	Estimate	Standard Error	t Value	Pr > |t|
Intercept	1.929687298	0.41632887	4.64	<.0001
INTRINSIC_MOTIVATION	0.550777214	0.12490664	4.41	<.0001

The overall *F* statistic is significant (Pr > F=<.0001). The tests of intrinsic motivation in the Type I sums of squares show that the linear term in the regression model is significant. The model fits well. The parameter estimates show all the parameters to be significant and hence the resultant model is:

Job Engagement = 1.93 + 0.55* intrinsic motivation

A further multiple regression model using the GLM was used to test whether the combined effect of occupational stress and intrinsic motivation accounts for a significantly higher variance in job engagement. The two variables, i.e occupational stress and intrinsic motivation were both modeled as explanatory variables for job engagement using the Generalized Linear Model (GLM). The resultant model is significant (F=9.85; Pr>F=0.0001) as shown in the outcome reflected below.

The combined effect of the explanatory variables explains 16.3% of the variation in job engagement. The parameter estimates on this multiple regression model shows that only intrinsic motivation (t-value=4.19; Pr > |t|=<.0001) and the intercept (t-value=4.06; Pr > |t|=<.0001) had a significant effect on job engagement.

GLM for the effect of the combined factors of occupational stress and intrinsic motivation for job engagement

Table: Feasibility of Combined Model

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	11.80976154	5.90488077	9.85	0.0001
Error	101	60.53280137	0.59933467		
Corrected Total	103	72.34256292			

Table: R-Square of Combined Model

R-Square	Coeff Var	Root MSE	JOB_ENGAGEMENT Mean
0.163248	20.72416	0.774167	3.735577

Table: Parameter Estimates of Combined Model

Source	DF	Type I SS	Mean Square	F Value	Pr > F
OCCUPATIONAL_STRESS	1	1.30469682	1.30469682	2.18	0.1432
INTRINSIC_MOTIVATION	1	10.50506472	10.50506472	17.53	<.0001

Parameter	Estimate	Standard Error	t Value	Pr > |t|
Intercept	1.818054420	0.44834174	4.06	<.0001
OCCUPATIONAL_STRESS	0.049772884	0.07361127	0.68	0.5005
INTRINSIC_MOTIVATION	0.536913847	0.12824485	4.19	<.0001

The overall *F* statistic for the combined model is significant (Pr > F=0.0001). The tests of the independent variables in the Type I sums of squares show that intrinsic motivation is the only linear term in the regression model that is significant. The model fits, with an R^2 of 16.3. The table of parameter estimates indicates that the estimated regression equation is

Job Engagement = 1.82 + 0.53*Intrinsic Motivation

Thus occupational stress and intrinsic motivation explained a smaller variation separately (1.8% and 15.8% respectively) for job engagement as compared to their combined effect which

explained 16.3% of the variation in job engagement. A Chi-Square test for proportions was carried out so as to determine if there exists a significant difference in these variations. The R-square for the combined model was tested with the R-Square values for the two separate models.

Chi-square Tests for R-square values of Occupational Stress and Combined Model

Statistic	DF	Value	Prob
Chi-Square	1	12.7719	0.0004
Likelihood Ratio Chi-Square	1	14.5250	0.0001
Continuity Adj. Chi-Square	1	11.0710	0.0009
Mantel-Haenszel Chi-Square	1	12.7080	0.0004
Phi Coefficient		-0.2527	
Contingency Coefficient		0.2450	
Cramer's V		-0.2527	

Chi-square Tests for R-square values of Intrinsic Motivation and Combined Model

Statistic	DF	Value	Prob
Chi-Square	1	0.0093	0.9233
Likelihood Ratio Chi-Square	1	0.0093	0.9233
Continuity Adj. Chi-Square	1	0.0000	1.0000
Mantel-Haenszel Chi-Square	1	0.0092	0.9235
Phi Coefficient		-0.0068	
Contingency Coefficient		0.0068	
Cramer's V		-0.0068	

There exists a significant difference in the amount of variation being explained by the occupational stress model as compared to the combined model (p=0.0004). There is no

significant difference between the variation explained by the intrinsic model and the combined model on job engagement.

Hypothesis 4

H_0: There are no significant differences among rank in the way employees experience occupational stress.

H_4: There are significant differences among rank in the way employees experience occupational stress.

In order to test this hypothesis a one-way ANOVA test using the Welch's test for differences in mean was applied. The outcome is shown below.

Welch's ANOVA for OCCUPATIONAL_STRESS			
Source	**DF**	**F Value**	**Pr > F**
Rank	6.0000	3.54	0.0561
Error	7.4860		

The value of Pr>F is greater than 0.05 hence we do not reject the null hypothesis and conclude that there are no significant differences among rank in the way employees experience occupational stress.

Hypothesis 5

H_0: There are no significant differences among gender in the way employees experience occupational stress.

H_5: There are significant differences among gender in the way employees experience occupational stress.

A T-test was used to test for this hypothesis. The resulting p-value (Pr > |t| =0.9340) is greater than 0.05 hence we do not reject the null hypothesis and conclude that there are no significant differences among gender in the way employees experience occupational stress. This is further supported by the outcome of the descriptive statistics which reveals that males showed a mean occupational stress level of 3.2027 which is almost that of their female counterparts which is 3.1839. The output is given below.

T-Tests					
Variable	**Method**	**Variances**	**DF**	**t Value**	**Pr > |t|**
OCCUPATIONAL_STRESS	**Pooled**	Equal	102	0.08	0.9340

Statistics									
Variable	**Gender**	**N**	**Lower CL Mean**	**Mean**	**Upper CL Mean**	**Lower CL Std Dev**	**Std Dev**	**Upper CL Std Dev**	**Std Err**
OCCUPATIONAL_STRESS	**1**	73	2.9593	3.2027	3.4462	.	1.0433	.	0.1221
OCCUPATIONAL_STRESS	**2**	31	2.7813	3.1839	3.5864	.	1.0975	.	0.1971
OCCUPATIONAL_STRESS	**Diff (1-2)**		-0.432	0.0189	0.4694	0.932	1.0596	1.2279	0.2271

4.5 CHAPTER SUMMARY

The chapter focused on data analysis, the collected was personally analysed by the researcher with the assistance of a statistics expert. The SPSS package was used to find the empirical inferential statistics used in this study. The Cronbach alpha coefficients for the questions measuring the different variables were computed and were found to be internally consistent, thus indicating that the three scales used in the study are reliable and valid. Empirical results which were obtained from data analysis indicated direct relationships among study variables and job status, age and tenure.

The results from the study show that there is a significant positive relationship between intrinsic motivation and job engagement, whilst there is no significant relationship between occupational stress and job engagement. Both occupational stress and intrinsic motivation explained a smaller variation separately for job engagement as compared to their combined effect. Lastly there were no significant differences among rank in the way employees experience occupational stress and also no significant difference was found among gender in the way employees experience occupational stress.

CHAPTER 5

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The previous chapter discussed the analysis of the data collected from the respondents and the discussion of the results from descriptive and inferential statistical analysis. With special reference to the results discussed in the previous chapter, this chapter will focused on the conclusions, limitations, and recommendations and also suggest future research directions in related studies.

5.2 DISCUSSION OF THE RESULTS

5.2.1 Demographic information about the sample

The sample comprised of 105 police officers employed by the South African police Service in Greater Kokstad Municipality, Kwa Zulu-Natal. Constables constituted the larger number of respondents that participated in the study (n=50 or 47.62%) The majority of respondents were Black (n = n=82 or 78.1%) with the sample being more representative of males than females (n = 74 or 70%). Most of the respondents had a Grade 12 education level (n = 66 or 62.86%), were in the age group 30-39 years (n = 34 or 32.8%) and were married (n = 47 or 44.76%). The majority of respondents are permanently employed (n=94 or 90%) and have 3-10 years of service in the South African Police Service (n = 41or 39.05%).

5.2.2 The relationship between demographics and study variables

In terms of gender, race, marital status and educational qualifications the study found no correlation between these demographics and the study variables of occupational stress, intrinsic motivation and job engagement. These results are similar to other studies conducted by various

researchers. Alabsi and Aamer (2014) found no correlation amongst gender and age of respondents with job engagement. In addition Mostert and Rothmann (2006) investigated whether personality traits, background variables and job stress were able to predict police officers job engagement. Utilising a cross-sectional survey of 1,794 members of South African Police Service, they found that background variables (e.g. race, age and gender) make only a minor contribution to job engagement.

Age was found to have a significant positive correlation with occupational stress in this study. As employees become older they experience more stress than do young employees. The current findings also tie in with a study by Sakthi (2013) who found that there is a significant relationship between age and occupational stress. However, this finding is inconsistent with that of some British researchers (Johnson et al., 2005 as cited in Martinuessen et al, 2007) found that as police officers grow old, they experience higher levels of job satisfaction or motivation and less stress.

The study also supports a positive association among age and intrinsic motivation. This shows that when the levels of intrinsic motivation are high, older employees are likely to be engaged. This finding concurs with the results of other studies which have shown that intrinsic values are stronger in older than in younger employees (Inceoglu, Sergers, Bartman, & Vloeberghs, 2009; Barnes-Farrell & Mathews, 2007).

In respect of number of years in service of respondents the study found a positive significant correlation with job engagement. As the number of years in the organisation increase the level of job engagement also increases. These results tally with those of Alabsi and Aamer (2014) and

Kong (2009) who all found that employees who had been with the organisation for many years had the highest levels of engagement.

Furthermore, number of years in service of respondents showed a positive correlation with occupational stress. As tenure increases the occupational stress also increases. This result is consistent with a study by Chaudhry (2012) who outlined that as employees' age and gain more status and work experience or occupy higher position within the organisation, they seem to take on additional responsibilities and therefore experience an increase in job demands. Rahman, Aman, Adnan, Ahmad and Darus (2014), also, found that employees at senior levels are more stressed due to higher workloads.

5.2.3 Correlation between occupational stress and job engagement

The study found no significant correlation between occupational stress and job engagement. This means that when employees experience occupational stress it does not affect their job engagement. Concerning the relationship among occupational stress and job engagement, research has revealed that even when exposed to long working hours and high job demands, some employees do not show signs of disengagement (Schaufeli & Bakker, 2004). The lack of a statistically significant relationship among occupational stress and work engagement tallies with the findings of Jackson, Rothmann and Van de Vijver (2006) as well as Schaufeli and Bakker (2004).

5.2.4 Correlation between intrinsic motivation and job engagement

Intrinsic motivation revealed a positive correlation with job engagement. When levels of intrinsic motivation are high so are the levels of job engagement. This result tallies with previous study done by Demerouti, Bakker, De Jonge *et al.,* (2001), Hallberg and Schaufeli (2006), Rothmann

and Storm (2003) who all found that intrinsic motivation influences levels of job engagement. This finding also provides statistical evidence for the conceptual framework presented by Chalofsky and Krishna (2009), which proposes that meaningfulness is a deeper level of intrinsic motivation influencing employee engagement.

5.2.5 The contribution of occupational stress and intrinsic motivation to variance in job engagement

The results of the study revealed that there exists a significant difference in the amount of variation being explained by the occupational stress model as compared to the combined model. There is no significant difference between the variation explained by the intrinsic model and the combined model for job engagement. Occupational stress and intrinsic motivation combined do not account for a significantly higher variance in job engagement than the two separately. There is not much research done to support these results, and the literature on occupational stress, intrinsic motivation and job engagement does not reveal any information about these findings. Thus, further research should be carried out about the combined effect of occupational stress and intrinsic motivation on job engagement.

5.2.6 Differences among rank in the experiences of stress

The results revealed that there is no significant correlation between police officer ranks and occupational stress. This shows that the rank that a police officer occupies does not affect occupational stress. This finding is inconsistent with some research such as that of Terry and Calan (1997), Myendeki (2008) and Pienaar and Rothmann (2006) who showed that those higher in rank or organisational hierarchy experience higher levels of perceived stress. Pienaar and Rothmann (2006) acknowledged that constables experienced stress less frequently because of lack of support, crime-related stressors, and job demands as compared to other ranks. Therefore

they concluded that constables were not exposed to lack of support, crime, and job demands to the same extent and length as other police officers. Also, police members higher in rank experienced less frequently crime-related stress than inspectors, sergeants, and captains.

5.2.7 Differences among gender in the experiences of stress

This study does not support an association between gender and occupational stress. From the data analysis the data showed that there was no significant relationship between gender and occupational stress for police officers. Gender does not influence how police officers experience occupational stress. This is supported by various researchers such as Spielberger and Reheiser (1994), Health and Safety Executive (2000), Antoniou, Davidson and Cooper (2003), McCarty, Zhoa & Garland (2007) Ortega et al., (2007) who found no significant correlation between gender and occupational stress. Furthermore, Martocchio and O'Leary (1989) conducted a meta-analysis of fifteen studies that examined gender differences in occupational stress, their results indicated that there are no gender differences in the way employees experience occupational stress. These findings are contrary to the results of Wells, Colbert and Slate (2006) who found that female police officers report physical symptoms of stress where males experience burnout. Pienaar and Rothmann (2006) also found that female police officers experience stress less frequently than male police officers. They argue the reason why female officers experience crime-related stressors less frequently and less intensely is the fact that they are less operationally involved.

5.3 RECOMMENDATIONS AND MANAGERIAL IMPLICATIONS

The findings of this study suggest one major implication in terms of application of findings. Job engagement is a critical part of an organisation's ability to deliver on its goals. Efforts to enhance job engagement and intrinsic motivation while reducing occupational stress must come from the

combined efforts of the employee and the employer. Managers must be aware of the intrinsic factors that can help increase employee engagement in their task. Employers can make attempts to set the work environment up in such a way as to reduce occupational stress and enhance job engagement. Employees must take steps to control demographic and personal variables that lead to occupational stress while employers must take steps to reduce occupational stress. There is a great variety of strategies and techniques designed to manage occupational stress, intrinsic motivation and job engagement in the South African Police Service.

The South African Police Service can use internal resources that are used by other organisations to manage stress in the workplace (Oosthuizen & Van Lill, 2008). These resources include an in-house counsellor or psychologist, training departments, occupational health services, and hiring personnel skilled in managing employee's well-being. Greenberg (2011) emphasises the importance of formal programs, such as employee assistance program to help employees who face different problems and challenges in their work lives, and encourages every organisation to have these in place. These programs help address stress by training employees in a number of different stress management techniques such as relaxation and meditation

As much as there has been a concentrated effort to employ more students and to train them so that works in the police service, statistics suggest that the intake is not even near to balancing the numbers in terms of what is demanded. More police officers need to be recruited in order to reduce the work load in the police service. South African Police Service heads should also improve the way they communicate with employees. Unpleasant surprises can destroy the employee morale, job engagement, and intrinsic motivation and lead to stress. Mxenge (2014) contend that managers should communicate openly with their employees, even when the communication is about unpleasant events that might take place in the organisation. She

emphasizes that communication builds trust and helps the workers feel cherished. Employees who feel appreciated usually experience lower levels of stress, high motivation and high level of job engagement.

The jobs can also be designed to increase skills variety, task importance, autonomy, and provide opportunities for learning, development, advancement and growth. Flexibility in work schedules of police officers should be improved so that there will be a work-life balance. The selection and promotion procedures must match the abilities of employees to the demands of the work they need to do. Also the police officers must be engaged in the mission and objectives of the SAPS, once employees are engaged they will be more committed to the organisation.

A way for the SAPS to get these processes and strategies working is to improve the working environment. It is also of critical importance that the organisation tries to create an atmosphere that is conducive to work in. This can be achieved by creating a relaxed and less hostile environment that is accommodating and empowering for all employees (Rhoades & Eisenberger, 2002). Other challenges for the SAPS are lack of or absolute resources that cause the working environment to be unpleasant (Myendeki, 2008). The government should ensure that funding is available to buy new equipment and provide enough resources so that day to day policing activities are performed smoothly. The availability of adequate resource will cause police officers to be more motivated to do their job and be engaged in their tasks.

5.4 LIMITATIONS AND RECOMMENDATIONS FOR FUTURE STUDY

Several recommendations and limitations have been identified throughout this study which may direct future studies. The limitations include the fact that the sample of the present study was rather small. Also, the study only used questionnaires as data collection instruments. It is

possible that in some cases respondents wanted some clarity before answering some questions but could not get it. Also a desire for social desirability may have caused some respondents to answer some questions untruthfully or to want to impress the researcher with their answers.

To solve this, future researches showed use multiple methods of data collection to strengthen and enrich the findings. The research instrument used was a questionnaire. For purposes of triangulation and in order to avoid common method variance, data collection methods other than self-administered questionnaires should be used in future research. Also, in future, a larger random sample should be used as this would increase the generalisability of the findings. The sample should be drawn from a larger population than just employees in the Border Region. This would ensure external validity.

5.5 CONCLUSIONS

The central objective of the study was to explore the combined effect of occupational stress and intrinsic motivation in determining job engagement in the South African Police Service in the Greater Kokstad Municipality. It also looked at the relationship between occupational stress, intrinsic motivation and job engagement. Most of the correlational results found in the study add to the generally high level of support for most of the relationship as found in the literature. In summary, the conclusions of the study are presented below:

- Various demographic and occupational variables such as gender, race, marital status, rank and educational qualification did not influence occupational stress, job engagement or intrinsic motivation

- There is no significant relationship between occupational stress and job engagement. How employees behave when they experience occupational stress does not affect their job engagement.
- Intrinsic motivation showed a positive significant correlation with job engagement. When police officers experience high intrinsic motivation their engagement levels increase.
- Tenure showed a positive correlation for job engagement and occupational stress which shows that as employees get older they are more engaged in their work even as occupational stress increases.
- Job status showed a negative correlation with occupational stress. When employees are permanently employed they have less occupational stress than when employed on a contract basis.

In terms of the stated research hypotheses the following specific empirical findings emerged from the investigation:

- There is no significant relationship between occupational stress and job engagement among police officers in the Greater Kokstad Municipality.
- There is a significant relationship between intrinsic motivation and job engagement among police officers in the Greater Kokstad Municipality.
- Occupational stress and intrinsic motivation combined do not account for a significantly higher variance in job engagement than the two separately.
- There are no significant differences among rank in the way employees experience occupational stress.
- There are no significant differences among gender in the way employees experience occupational stress.

5.6 CHAPTER SUMMARY

This chapter served to discuss the results of this study, to highlight the limitations of the study and to make recommendations for future research as well as provide recommendations to the South African Police Service so as to reduce stress, improve motivation and job engagement.

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APPENDICES

Appendix A: Ethical clearance certificate

University of Fort Hare
Together in Excellence

ETHICAL CLEARANCE CERTIFICATE
REC-270710-028-RA Level 01

Certificate Reference Number:	MUR041SJOJ01
Project title:	**Occupational stress and intrinsic motivation as determinants of job engagement in the South African Police Service in Greater Kokstaad Municipality, Kwazulu Natal**
Nature of Project:	Masters
Principal Researcher:	Avela Jojo
Supervisor:	Mr C Murugan
Co-supervisor:	N/A

On behalf of the University of Fort Hare's Research Ethics Committee (UREC) I hereby give ethical approval in respect of the undertakings contained in the above-mentioned project and research instrument(s). Should any other instruments be used, these require separate authorization. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above.

Please note that the UREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the document
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

The Principal Researcher must report to the UREC in the prescribed format, where applicable, annually, and at the end of the project, in respect of ethical compliance.

Special conditions: Research that includes children as per the official regulations of the act must take the following into account:

Note: The UREC is aware of the provisions of s71 of the National Health Act 61 of 2003 and that matters pertaining to obtaining the Minister's consent are under discussion and remain unresolved. Nonetheless, as was decided at a meeting between the National Health Research Ethics Committee and stakeholders on 6 June 2013, university ethics committees may continue to grant ethical clearance for research involving children without the Minister's consent, provided that the prescripts of the previous rules have been met. This certificate is granted in terms of this agreement.

The UREC retains the right to

- Withdraw or amend this Ethical Clearance Certificate if
  - Any unethical principal or practices are revealed or suspected
  - Relevant information has been withheld or misrepresented
  - Regulatory changes of whatsoever nature so require
  - The conditions contained in the Certificate have not been adhered to
- Request access to any information or data at any time during the course or after completion of the project.
- In addition to the need to comply with the highest level of ethical conduct principle investigators must report back annually as an evaluation and monitoring mechanism on the progress being made by the research. Such a report must be sent to the Dean of Research's office

The Ethics Committee wished you well in your research.

Yours sincerely

Professor Gideon de Wet
Dean of Research

23 September 2014

Appendix B: Letter of request to collect data

University of Fort Hare
FACULTY OF MANAGEMENT AND COMMERCE
Alice (main) Campus
Private Bag X1314, King William's Town Rd, Alice, 5700, RSA
Tel: +27 (0) 40 602 2533 Fax: +27 (0) 40 602 2514

University of Fort Hare
Together in Excellence

TO WHOM IT MAY CONCERN

REQUEST TO CARRY OUT RESEARCH FOR COMPLETION OF A DEGREE PROGRAMME.

Ms Avela Jojo is a full-time registered student of the University of Fort Hare. She is registered for the **Masters Degree** in Industrial Psychology/Human Resources Management. In order for her to complete the programme, the student is required to carry out a practical research in an organisation of her own choice. The idea is to let the student put into practice what she has learnt in class.

Your organisation has been identified by the student as a place where she wants to do her research. We therefore request your permission to allow our student to carry out her research within your organisation. Her research will focusing on ***"Occupational stress and intrinsic motivation as determinants of job engagement in the South African Police Service in the Greater Kokstad Municipality, Kwa-Zulu Natal."*** We assure you that the results of the research will not be disclosed to any other party, but only used for academic purposes. We would also be at liberty to disclose to you the results of the study should you wish us to do that.

Your help in the above-mentioned issue will be highly appreciated.

If there is anything you need further clarification on, please do not hesitate to contact me on +27 40 602 2120 or cmurugan@ufh.ac.za

Yours sincerely

C. Murugan (Senior Lecturer/Supervisor: Industrial Psychology)
Department of Industrial Psychology
15 September 2014

DEPARTMENT OF
INDUSTRIAL PSYCHOLOGY
UNIVERSITY OF FORT HARE
PRIVATE BAG X1314
ALICE 5700

East London Campus:
P.O. Box 7426, 50 Church Street, East London, 5201, RSA
Tel: +27 (0) 43 704 7000 Fax: +27 (0) 40 602 2515
V/C Dial Up: +27 (0) 43 704 7143/7144

Bhisho Campus:
P. O Box 1153, KWT 5600, Independence Avenue , Bhisho, 5600, RSA
Tel: +27 (0) 40 608 - 5310 Fax: +27 (0) 40 602 2514

www.ufh.ac.za

Appendix C: Letter of permission

South African Police Service

Suid-Afrikaanse Polisiediens

Umbutho Wamaphoyisa Aseningizimu-Afrika

Our Reference / U Verwysing / Inkomba Yakho		THE PROVINCIAL COMMISSIONER
My Reference / My Verwysing / Inkomba Yami	25/7/12/2/3 (282)	KWAZULU-NATAL
Enquiries / Navrae / Buza	Colonel A.D. van der Linde / CAC R. Moodley	P O BOX 1965
Telephone / Telefoon / Ucingo	031 – 325 4841 / 6116	**DURBAN**
Fax No / Faks No	031 – 325 6022	4000

Ms A. Jojo
Tyali 1, East Campus
University of Fort Hare
1 King Williams Town Road
ALICE
5700

RE: RESEARCH REQUEST: OCCUPATIONAL STRESS AND INTRINSIC MOTIVATION AS DETERMANTS OF JOB ENGAGEMENT IN THE SAPS IN KOKSTAD: MASTERS STUDY: UNIVERSITY OF FORT HARE: RESEARCHER: MS A. JOJO

Attached, please find Head Office minute 3/34/2 dated 2014-11-03 from the office of Major General Menziwa regarding permission to conduct the above-mentioned research.

Recommendation to conduct the said research has been granted in terms of SAPS Research Policy (National Instruction 1/2006).

Approval from the office of the Provincial Commissioner is hereby granted to conduct the said research at SAPS Kokstad on condition that the contents stipulated in paragraph 4 of Head Office minute 3/34/2 dated 2014-11-03 are adhered too.

RE: RESEARCH REQUEST: OCCUPATIONAL STRESS AND INTRINSIC MOTIVATION AS DETERMANTS OF JOB ENGAGEMENT IN THE SAPS IN KOKSTAD: MASTERS STUDY: UNIVERSITY OF FORT HARE: RESEARCHER: MS A. JOJO

Attached, please find statement of undertaking that must be completed and returned to this office (MoodleyRohine@saps.gov.za) prior to the commencement of the research study.

For any queries, please contact Colonel A.D. van der Linde on the following numbers:

Office: 031 325 4841

Cell: 082 496 1142

Thank you.

.....**MAJOR GENERAL**
DEPUTY PROVINCIAL COMMISSIONER: OPERATIONS OFFICER: KWAZULU-NATAL
P.E. RADEBE

DATE: 2014-11-13.....

G.P.-S. 002-0222

SAP 21

SUID-AFRIKAANSE POLISIEDIENS

SOUTH AFRICAN POLICE SERVICE

Privaatsak/Private Bag X94

Reference Nr Verwysing	3/34/2
Navrae Enquiries	Col J Schnetler Lt-Col GJ Joubert
Telefoon Telephone	012-393 3177/3118
Faksnommer Fax number	012-393 3178

STRATEGIC MANAGEMENT COMPONENT
HEAD OFFICE
PRETORIA

The Provincial Commissioner
KWA-ZULU NATAL

(Attention: Col Van der Linde)

RE: RESEARCH REQUEST: OCCUPATIONAL STRESS AND INTRINSIC MOTIVATION AS DETERMANTS OF JOB ENGAGEMENT IN THE SAPS IN KOKSTAD: MASTERS STUDY: UNIVERSITY OF FORT HARE: RESEARCHER: MS A JOJO

1. The research request of MS Avela Jojo, pertaining to the above mentioned topic, refers.

2. The aim of the research is investigate the levels of, and the relationship between, occupational stress, intrinsic motivation and job engagement amongst police officials at the Kokstad police station (see proposal attached).

3. The study population will consist of all police officials at Kokstad police station in Kwa-Zulu Natal. A self-administered questionnaire will be used to collect information from the respondents.

4. The proposal was perused according to National Instruction 1 of 2006 by this office and it is recommended that permission be granted for the research subject to the final approval and further arrangements by the office of the Provincial Commissioner: Kwa-Zulu Natal and that the undertaking be obtained from the researcher prior to the commencement of the research that –

4.1. the research will be at his/her exclusive cost;

4.2 he/she will conduct the research without any disruption of the duties of members of the Service and where it is necessary for the research goals, research procedure or research instruments to disrupt the duties of a member, prior arrangements must be made in good time with the commander of such member:

4.3 the information will at all times be treated as strictly confidential;

4.4. he/she will donate an annotated copy of the research work to the Service and

RE: RESEARCH REQUEST: OCCUPATIONAL STRESS AND INTRINSIC MOTIVATION AS DETERMANTS OF JOB ENGAGEMENT IN THE SAPS IN KOKSTAD: MASTERS STUDY: UNIVERSITY OF FORT HARE: RESEARCHER: MS A JOJO

4.5 the researcher should bear in mind that participation in the interviews must be on a voluntary basis.

With kind regards,

_____**BRIGADIER**
F/HEAD: STRATEGIC MANAGEMENT
J SURAJBALI

Date: 2014-11-03

Appendix D: Undertaking to conduct research

UNDERTAKING TO CONDUCT RESEARCH IN THE SOUTH AFRICAN POLICE SERVICE (N/I 1 of 2006)

I, ~~Dr./Mr./~~Ms AVELA JOJO

TJALI 1, EAST CAMPUS, UNIVERSITY OF FORT HARE

1 KWT RD, ALICE, 5700 (full address) and presently working as

INTERN: HR SERVICES in the UNIVERSITY

OF FORT HARE

For the purpose of CONDUCTING RESEARCH FOR THE FULFILMENT OF MASTER OF COMMERCE INDUSTRIAL PSYCHOLOGY AT KOKSTAD POLICE STATION. hereby undertake to comply with the following terms and conditions of the SAPS:

1) The research will be conducted at my exclusive cost;

2) I will conduct the research without any disruption of the duties of members of the Service and where it is necessary for the research goals, research procedure or research instruments to disrupt the duties of a member; prior arrangements will be made in good time with the commander of such member;

3) The information at all times will be treated with confidentiality;

4) I will donate an annoted copy of the research work to the Service; and

5) I will also bear in mind that participation in the interviews will be on a voluntary basis.

Signature A. Jojo

Date 16/11/2014

Name AVELA JOJO

Appendix E: Research instrument (questionnaire)

University of Fort Hare
Together in Excellence

Dear respondent

I am Avela Jojo, a student in the Department of Industrial Psychology, Faculty of Management and Commerce, at the University of Fort Hare. I am conducting a research on "**Occupational stress and intrinsic motivation as determinants of job engagement"**. The research is done as part of the Master's degree requirements in Industrial Psychology. The research is done strictly for academic purposes only. The information solicited will be kept confidential and anonymity is assured. The survey questions are short and straight forward and should not take more that 15 minutes of your time. You are cordially requested to complete the questions that follow.

SECTION A: BIOGRAPHICAL INFORMATION
(Information about yourself)

Indicate your choice by marking a tick **(√)** in the box of your choice

(1) Gender

Male	
Female	

(2) Race

African	
Coloured	
Indian	
White	

(3) Age

21 years and younger	
22 - 29 years	
30 - 39 years	
40 – 49 years	
50 years and older	

(4) Marital status

Single	
Married	
Divorced	
Widowed	
Other (specify)	

(5) Educational level

Std 9/ grade 11 or less	
Matric/ grade 12	
Diploma	
Degree	
post graduate	
Other (specify)	

(6) Years of Service in SAPS

Less than 2 years	
3– 10 years	
11 – 20 years	
21 – 30 years	
Over 30 years	

(7) Job status

Permanent	
Contract	

(8) Rank (e.g. Constable, Captain, sergeant)

SECTION B: *POLICE STRESS QUESTIONNAIRE (PSQ)*

Below is a list of items that describe different aspects of being a police officer. Please indicate the extent to which you agree with each statement regarding organisational and operational stress you have experienced over the past six months. Please mark with an (x) in the appropriate box using the following response scale:

1= Strongly Disagree, 2= Disagree, 3= Neither Disagree nor Agree, 4= Agree 5= Strongly Agree

Police organisational stress					
1. The feeling that different rules apply to different people (e.g. favoritism) has been stressful.	1	2	3	4	5
2. Excessive administrative duties have caused stress	1	2	3	4	5
3. Constant changes in policy / legislation have caused stress	1	2	3	4	5
4. Staff shortages have caused stress	1	2	3	4	5
5. Lack of resources has caused stress	1	2	3	4	5
6. Unequal sharing of work responsibilities has caused stress	1	2	3	4	5
7. Internal investigations have caused stress	1	2	3	4	5
8. Dealing with the court system has caused stress	1	2	3	4	5
9. Dealing with co-workers and supervisors has been stressful	1	2	3	4	5
10. feeling like you always have to prove yourself to the organisation have cause stress	1	2	3	4	5
Police operational stress					
11. Shift work has been stressful	1	2	3	4	5
12. Overtime demands have caused stress	1	2	3	4	5
13. Risk of being injured on the job has caused stress	1	2	3	4	5
14. Traumatic events (e.g. domestic violence, armed robberies, deaths, car accidents, injuries) have caused stress	1	2	3	4	5
15. Lack of understanding from family and friends about my work has been stressful	1	2	3	4	5
16. Negative comments from public have caused stress	1	2	3	4	5
17. limitations to my social life (e.g. spending time with friends has caused me stress	1	2	3	4	5
18. Working alone at night has been stressful	1	2	3	4	5

19. Being always on the job/ at work has caused you stress	1	2	3	4	5
20. Occupation-related health issues (e.g. back pain, headache, etc) have caused stress	1	2	3	4	5

SECTION C: *INTRINSIC MOTIVATION INVENTORY (IMI)*

With respect to your own feelings and level of motivation about your job, please indicate the extent to which you agree or disagree with each statement. Please mark with an(x) in the appropriate box using the following response scale:
1= Strongly Disagree, 2= Disagree, 3= Neither Disagree nor Agree, 4= Agree 5= Strongly Agree

Interest/enjoyment					
1. I enjoy doing my job very much	1	2	3	4	5
2. My job is fun to do	1	2	3	4	5
3. I think my job is boring	1	2	3	4	5
4. My job does not hold my attention at all	1	2	3	4	5
5. I would describe my job as very interesting	1	2	3	4	5
6. I find my job very enjoyable	1	2	3	4	5
7. While doing my job, I think about how much I enjoy it	1	2	3	4	5
Perceived choice					
8. I believe I have a choice in doing my job	1	2	3	4	5
9. I feel like I do not have a choice in doing my job	1	2	3	4	5
10. I am doing my job because I want to	1	2	3	4	5
11. I am doing my job because I have to	1	2	3	4	5
12. I am doing my job because I have no choice	1	2	3	4	5
Effort/importance					
13. I put a lot of effort in doing my job	1	2	3	4	5
14. I try very hard to do the best I can when doing my job	1	2	3	4	5
15. It is important to me to do well when I am doing my job	1	2	3	4	5
16. I do not put much effort or energy in my job	1	2	3	4	5
Pressure/tension					
17. I always feel tense when I am doing my job	1	2	3	4	5
18. While working I feel anxious/nervous	1	2	3	4	5
19. I feel pressured when doing my job	1	2	3	4	5
20. I don't feel nervous when doing my job, I am always relaxed	1	2	3	4	5

SECTION D: *JOB ENGAGEMENT SCALE (JES)*

Listed below is a statement about your job engagement. Please indicate the level of your job engagement by placing tick or mark with an (x) in the appropriate box using the following response scale:

1= Strongly Disagree, 2= Disagree, 3= Neither Disagree nor Agree, 4= Agree 5= Strongly Agree

Physical engagement					
1. I work with intensity on my job	1	2	3	4	5
2. I exert my full effort to my job	1	2	3	4	5
3. I devote a lot of energy to my job	1	2	3	4	5
4. I try my hardest to perform well on my job	1	2	3	4	5
5. I strive as hard as I can to complete my job	1	2	3	4	5
6. I exert a lot of energy on my job	1	2	3	4	5
Emotional engagement					
7. I am enthusiastic in my job	1	2	3	4	5
8. I feel energetic at my job	1	2	3	4	5
9. I am interested in my job	1	2	3	4	5
10. I am proud of my job	1	2	3	4	5
11. I feel positive about my job	1	2	3	4	5
12. I am excited about my job	1	2	3	4	5
Cognitive engagement					
13. At work, my mind is focused on my job	1	2	3	4	5
14. At work, I pay a lot of attention to my job	1	2	3	4	5
15. At work, I focus a great deal of attention on my job	1	2	3	4	5
16. At work, I am absorbed by my job	1	2	3	4	5
17. At work, I concentrate on my job	1	2	3	4	5
18. At work, I devote a lot of attention to my job	1	2	3	4	5

Thank you for your participation