

**SOURCES OF OCCUPATIONAL STRESS AMONG
CORRECTIONAL OFFICIALS IN A GAUTENG
CORRECTIONAL CENTRE**

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A research report submitted to the Faculty of Health Sciences,
University of the Witwatersrand, Johannesburg, in partial fulfilment of the
requirement for the degree of Master of Science in Nursing

Johannesburg

2018

DECLARATION

I, **Gladys Rukanani Masingi**, declare that this research report is my own work. It is being submitted for the degree of Master in Nursing in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

Work used or cited in this research report has been appropriately indicated and acknowledged both within the text and by means of complete references.

Signature _____

(Gladys Rukanani Masingi)

Date _____

The research report has been approved for submission by the supervisor, **Ms. Agnes Alice Huiskamp**

Ethical Clearance Number: M140702

DEDICATION

This work is dedicated to these very special people in my life:

❖ My son, **Thabang Masingi**

Who supported and encouraged me throughout my study

❖ My parents, The late **Frank Mkhathshani** and **Maria Khonzaphi Masingi**

who have taught me the importance of education and for always encouraging me to do my best

ACKNOWLEDGEMENTS

First I acknowledge and exalt the Almighty God for His faithfulness, everlasting love, amazing graces and providence which saw this work coming to fruition amidst many challenges and obstacles.

SPECIAL THANKS AND APPRECIATION

My heartfelt thanks and appreciation is extended to various people who contributed immensely to the successful realisation and completion of the research. I therefore wish to acknowledge the following persons to whom I am greatly indebted:

- ❖ **Ms Agnes Alice Huiskamp**, my supervisor for her support, patience, resourcefulness, endurance and professional motivation in guiding and directing me in this research.
- ❖ **The Department of Correctional Services** for giving me permission to conduct my research and allowing access to the Gauteng correctional centre.
- ❖ **My research participants**. A big thank to all correctional officials who willingly took time off their busy schedules to participate in this survey and for their tremendous input and effort.
- ❖ **My mother, Maria Khonzaphi Masingi (nee Mashazi)** for her prayers and words of encouragement, for constantly guiding and supporting me throughout the whole study
- ❖ **The Wits statisticians**, Tobias Freeman Chirwa, Esnat Chirwa and Daniel Lopez for input in the use of the STATA package and interpretation of the statistics.
- ❖ My siblings and their families who have shared my joys.
- ❖ **The developer of the questionnaire Durak, Durak and Gencoz** for giving me permission to use the questionnaire.

ABSTRACT

Background: Work stress is recognised worldwide as a major challenge to the worker's health and the healthiness of their organisation. Correctional officials as a professional group are exposed to unique and powerful stressors such as taking charge of an unwilling and potential violent population. The stressors of correctional officials are well documented in literature; however the sources of occupational stress in the selected prison are not known and have not been investigated.

Aim and Objective: The overall purpose of the study was to investigate the sources of stress among correctional officials in a selected Gauteng Prison and the objective was to describe the sources of stress among correctional officials.

Research design and Method: The study was a quantitative, descriptive survey, the survey design was cross-sectional using a structured open and closed ended questions, self-administered questionnaire that was developed by MithatDurak.

Findings: A total of 72 questionnaires were completed, yielding a response rate of 48%. The majority of correctional officials were concerned about safety and the fact that the type of work they are doing is putting them at risk. Nevertheless, Correctional officials were not concerned about workload. They reported low on role conflict and role ambiguity (95.8%) reported that they know their duties and responsibilities and they know how to get their job done. Majority of correctional officials are concerned about absence of rewards (47%, n=34) reported that it hurts to learn that their work is associated with lack of rewards and the fact that they don't spend quality time with their families due to work commitments

Data Analysis: Descriptive statistics were used to analyse data, statistical assistance was obtained from statistician. Data was analysed using the data analysis and statistical software version 15 software(STATA) and presented in tables, categorical data presented using frequencies and percentages.

Conclusions: Limited research was done on the sources of stress among correctional officials in South Africa on the OCH point of view.

Implications for OHN practice: The research will contribute to the body of knowledge of occupational health nursing, occupational health as well as occupational psychology. It is also envisaged that the research provides scientific information for the motivation, development and implementation of a stress prevention and management programme in correctional workplace settings.

Key words: Sources, Stress, Occupational stress, Correctional Centre, Correctional Official

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NOMENCLATURE

CO	Correctional Official
COIDA	Compensation for Occupational Injuries and Diseases Act
CVI	Content Validity Index
DCS	Department of Correctional Services
JD-R	Job Demand and Resource Model
GEMS	Government Employees Medical Scheme
ILO	International Labour Organisation
OH&S	Occupational health and safety
OHN	Occupational health nursing
OHNP	Occupational health nurse practitioner
OHS	Occupational health services
OHSA	Occupational Health and Safety Act
RSA	Republic of South Africa
WSSCO	Work Stress Sources for Correctional Officers
WHO	World Health Organisation

CHAPTER ONE

ORIENTATION TO THE RESEARCH

1.1 INTRODUCTION

“The correctional officer’s job, known for its extreme psychological demands and potential for physical altercations within a constrained, overcrowded environment, makes the officer subjective to some of the highest levels of job stress” (McCarthy 2012 p 3).

This chapter provides an orientation to the background of the research problem, the motivation for doing the research, the problem statement, research questions, aim and objectives. A description of the research method and design, demarcation of the research as well as definitions of the main concepts are given.

1.2 BACKGROUND

According to the World Health Organisation (WHO,2007) the two important roles of a department of correctional services are to ensure the safety of both employees and offenders, to maintain security and punish unwanted behaviour by providing appropriate behavioural procedures, and to facilitate the rehabilitation of offenders so that they become productive members of society. In addition, the WHO (2007) is also of the opinion that correctional officials have an important duty ensuring the smooth running of correctional centres by ensuring safe custody of offenders. They have an impact on instilling acceptable /positive behaviour in offenders through daily interaction, and therefore helping to maintain a safe and friendly environment. However, this responsibility causes lot of stress for correctional officials, as they are often exposed to violent and aggressive behaviour from offenders (Ghaddar, Mateo and Sanchez (2008). The WHO (2007) further states that correctional centres are still using the old military management style which was more focused on strict rules and policies where people are respected according to the position they hold or their line of authority. There are poor relations amongst personnel and managers. There is no participatory management, employees are not included in decision making about things that affect them directly, they are only told what to do and all these factors cause stress among correctional officials (WHO, 2007).

South African correctional centres are characterized by overcrowding and understaffing which contribute to the many hazards and risks correctional officials are exposed (Ramsewaki and Coetzee 2015).

According to Walmsley (World Prison Brief 11th Edition 2015) South Africa had a prison population of 159,241 at 31/03/2015, with an estimated national population of 54.57 million and a prison population rate of 292 per 100,000 of the national population. The statistics reveal as reflected in table 1.1 below that the occupancy level was 132.7 % in 2015.

Table 1.1 Prison populations in South Africa (World Prison Brief)

“Prison population total (including pre-trial detainees / remand prisoners)	161 984 at 31.3.2016 (national prison administration)
Prison population rate (per 100,000 of national population)	291 based on an estimated national population of 55.58 million at end of March 2016 (from Statistics South Africa figures)
Number of establishments / institutions	232 (31.3.2016 - active correctional centres; there are 243 in all)
Official capacity of prison system	120 000 (31.3.2015)
Occupancy level (based on official capacity)”	132.7% on (31.3.2015)

Walmsley (2015)

Ramsewaki and Coetzee (2015 p 8)" state that officials working in correctional centers are at high risk of falling victim to assaults by offenders and of contracting communicable diseases such as tuberculosis (TB)". Bezerra, Assis and Constatino (2016) identified overcrowding as one of the sources that causes stress among correctional officials due to the fear of being assaulted by offenders. According to a statement issued by the Police Prison Civil Rights Union (POPCRU, 2015), overcrowding has been a national concern which has reached alarming proportions, and, as a result, correctional centres are regarded as highly stressful working environments (Bhoodram, 2010). The World Health Organisation (WHO, 2007) states that overcrowding also has an impact on the provision of programmes, as officials are often unable to reach the targets they set.

Despite overcrowding and understaffing, some correctional centres in South Africa have positive programmes. Offenders are equipped with skills to prevent them from returning to a life of crime. In Boksburg correctional centre offenders are taught how to make furniture and all the furniture used by correctional officials have been made by offenders. Offenders in Zonderwater knitted 67 blankets to contribute to Mandela Day. Correctional centres such as Zonderwater, Leeuwkop, Groenpunt and Baviaansport are teaching offenders gardening and they are therefore able to supply other correctional centres food and they also supply charity organisations with food to feed the needy. In order to expand and deliver better and smarter services to the Department of Correctional Services, advocate Michael Masutha, the current minister of correctional services, created Operation HIRA with the aim of attracting professionals who can make a contribution towards the rehabilitation of offenders. This operation was decided upon during the budget vote speech of 2015, according to a press release by the South African Government in 2015. As part of staff development, the Department of Correctional Services is offering bursaries to those employees who are willing to further their careers for the benefit of the organisation.

Correctional Services has employed a person who is responsible for special programmes in each correctional centre. He/she is responsible for the wellness and occupational health and safety (OHS) programmes. Although there is no occupational health and safety service in the centre, there are occupational health and safety committees who meet on a monthly basis to ensure that the centre complies with the Occupational Health and Safety Act, 1993 (Act No 85 of 1993 as amended). The person responsible ensures that employees and managers are provided with education and training regarding safety and the identification of risks and hazards as well as the Occupational Health and Safety Act, 1993 (Act no.85 of 1993 as amended). There is no specific health and safety policy for correctional centres; they are using the Wellness Management Policy for Public Services of Act ,1994 (Act No 103 of 1994). This policy applies to all national and provincial departments as stipulated in the Public Service Act, 1994 (Act No 103 of 1994).

The following are the outcomes that the policy aims to achieve:

- To ensure the wellbeing of all employees working for the government by minimising the occurrence of diseases/injuries and providing treatment for illnesses or diseases.

- To ensure that factors such as communication, leadership support, rewards/incentives, employee behaviour, job performance and dress codes are able to ensure a healthy workplace, as well as a holistic assessment of the situation and the removal of psychosocial sources that are harmful to the health of employees.

The government has prioritised the wellbeing of employees by acknowledging that the health and well-being of workers have a positive influence on organisational performance. Employees are responsible for the daily functioning of the organisation and it is important to help them perform to their best ability (Public Service Act, 1994). The development of this policy, based on the EHW (Employee Health and Wellness) Strategic Framework for Public Service (2008), was a departure from the Employee Assistance Programme (EAP), which was limited in scope and practice and was reactive rather than proactive. This new wellness management programme is largely preventative in nature and focuses on both primary (avoid the risk or condition) and secondary (minimize the effects of the condition) prevention. This policy serves as a broad guide for government public service organisations in responding to wellness in the public service world of work. It provides line departments with guidelines on how to implement wellness management programmes in the workplace. Practically, the policy seeks to strengthen and improve the efficiency of existing services, programmes, and infrastructure and to introduce additional interventions based on recent advances in knowledge, Public Service Act 1994 (Act No 103 of 1994).

This wellness/health promotion programme deals with minimising the occurrence of diseases and with the treatment of the illness or injury by minimising its effect and focus on physical, psycho-social and organizational wellness. In addition Work-life Balance and Employee Assistance Programmes are addressed and as well policy implementation to prevent inequality.

The physical part of wellness aims to strengthen the physical well-being to ensure that workers perform their duties to their best potential level. It also aims to attend to medical conditions in order to maintain a general state of good health, as general well-being can be achieved through both exercise and the provision of effective health promotion activities or programs by external stakeholders such as GEMS (Government Employees Medical Aid Scheme) and Non-Governmental Organisations such as the Aurum Institute.

The development of psycho-social wellness awareness aims to ensure that employees are able to form good personal relationships; live up to their role expectations and duties; control their emotions and increase their self-confidence, positivity, a sense of belonging and flexibility. Additional aims are to provide support, give guidance, foster the ability to make positive decisions, and encourage financial wellness/stability. The Department of Correctional Services has given permission to employees to be part of various social clubs of their choice where they make a monthly contribution that is deducted from their salaries.

The main focus of organisational wellness is to support an organisational system where employees have common goals, interests and cultural beliefs which guide them regarding their behaviour and an organisational code of conduct. A work-life balance program supports change or has the ability to change according to the situation in the workplace in order to ensure a balance of work and family life, which has an impact on organizational productivity due to increased job satisfaction and commitment. To ensure work-life balance, correctional officials are allowed to work shifts that are best suited to their needs, unless when there is a shortage of staff due to sick leave or exam times for those members who are developing their careers, they may be requested to cover for a particular shift on a rotational basis.

Policy recommendations:

1. Development of top of the range wellness centres which provide exercise and sporting equipment as well as other activities. There are different sporting events that correctional officers could engage in such as soccer, rugby, netball, table tennis, and aerobics classes. These activities should help correctional officials to relieve stress.
2. Providing training and awareness programs regarding healthy diet, weight management, disease management, lifestyle and lifelong/incurable diseases. The Aurum Institute which is a non -governmental organisation (NGO) assists with TB screening for correctional officers, and the Government Employees Medical Scheme (GEMS) comes annually to check of vital health data and to provide health education to those officials who are at risk.
3. Planning in regard to distribution of wellness information to all employees through computer programmes, pamphlets and posters.
4. Wednesdays are regarded as sports days for every correctional centre. As from 14h00 every Wednesday, officials engage in different sporting activities as part of their wellness programme (Management Policy for Public Services of Act, 1994 (Act No 103 of 1994).

Employee Assistance Programmes:

EAPs have expanded human resource consultation to offer more services to employers. They have evolved to offer education and prevention services including health promotion and stress and supervisory coaching programs. EAP offers a service that allows supervisors to connect their concern about lowered performance with an offer of assistance (Bhoodram, 2010).

Anecdotal evidence suggests that there is a gap regarding the identification and management employees who are presenting with mental health problems. They are treated by their own specialist psychiatrist/psychologist and placed on light duties as per recommendation from the psychiatrist. Most of them are not performing their duties to the optimum level as they are either on treatment with serious side effects.

1.3 MOTIVATION AND RATIONALE FOR THE RESEARCH

The researcher, both a registered nurse practising in a correctional centre and an occupational health nursing student, realised the importance of a combined occupational health and workplace health promotion programme that is based on the hazard identification and risk assessment (HIRA) of the occupational setting. As evidenced from the literature, correctional officials are exposed to many physical, biological and psycho-social hazards and risks (WHO 2005).

Stress, seen from an occupational health and occupational health nursing perspective, is a psycho-social hazard, and it is therefore of vital importance that the sources of stress be assessed so as to develop a stress prevention and management programme within a health promotion and prevention of ill health in the workplace framework. Although correctional officials have access to an employee assistance and wellness programme, there is no formalised occupational health service existing in the Gauteng correctional centre

1.4 SIGNIFICANCE OF THE RESEARCH

The research can potentially contribute to the body of knowledge regarding occupational health nursing, occupational health, and occupational psychology. It is also envisaged that the research will provide scientific information pertaining to the motivation for and development and implementation of a stress prevention and management programme, in correctional

workplace settings. Furthermore the results of the study could provide guidance to occupational health nurse practitioners (OHNPs), human resource managers and employers as to the importance of stress prevention and management in the workplace.

1.5 PROBLEM STATEMENT

McCraty, Atkinson, Lipsentha and Arguelles (2009) claim that in order to improve correctional officials' performance, enhance staff morale, and increase institutional safety by reducing the risk factors that contribute to stress, there is a need for the establishment of stress management programs. Morse, Dussetschler, Warren and Cleriak (2011) are of the opinion that to improve organizational performance, productivity and employee well-being, it is important for every employer to protect and promote the health of workers. The Occupational Health and Safety Act 85 of 1993 (OH&S act) states very clearly the duties of employer and employees with regard to health and safety in the workplace. According to the OH&S act, it is important that every employer provides its employees with healthy working conditions. It also recognises the need for employee participation in health and safety issues that directly affect employees.

However, no occupational health service exists in the selected Gauteng correctional centre. There is an occupational health and safety committee which comprises of correctional officials, and their duties is to ensure that every employee accepts personal responsibility for the prevention and reporting of practices which could endanger themselves and others or the environment. They also need to ensure that managers see to employees receiving appropriate training regarding compliance to policies and standards.

The stressors of correctional officials are well documented in the literature; however the sources of occupational stress in the specifically selected correctional centre for this study are not known and have not been investigated. The problem for this study is then that the occupational stressors of correctional officials in this setting are not known and that no occupational stress prevention and management programme, within a comprehensive occupational health service, exists for correctional service officers in the selected Gauteng prison.

1.6 RESEARCH QUESTION

What are the sources of stress experienced by correctional officials in the selected correctional centre?

1.7 THE AIM AND OBJECTIVE OF THE RESEARCH

The aim of this study was to describe the sources of stress that correctional services officials experience in a selected Gauteng correctional centre. The following objective motivated this research in order to achieve the above aim: To describe the sources of stress experienced by correctional officials in the selected prison.

1.8 DEMARCATION OF THE RESEARCH

The research was demarcated in terms of the following criteria: setting, population, employee category and time as explained below:

Research setting: The research was limited to one correctional centre in Gauteng.

Population: The target population consisted of correctional officials.

Employee category: The research was limited only to correctional officials who were in Grades 1 (Warrant Officers), 2 (Sergeants) and 3 (Constables).

Time: The research was conducted between October 2014 and December 2014.

1.9 RESEARCH DESIGN AND METHOD

This study was a cross sectional descriptive design with a survey method that used a structured questionnaire with items relating to shift work, prison management, prison culture, decision latitude, family life, as well as the safety both of the correctional centre environment and as a data collection tool for this study. Quantitative implies quantity or amounts, information collected in the course of the study is in a quantified or numeric form, this is referred to as statistical evidence (White and Miller 2014).

A comprehensive description of the research design and method is discussed in Chapter 3 of this report.

1.10 DEFINITIONS OF THE MAIN CONCEPTS

Sources: Someone or something that provides what is wanted or needed, the cause of something (such as a problem), a person or book (Mirriam-Webster, 2010).

Stress: Stress is a state of psychological and/or physiological imbalance resulting from the disparity between situational demands and the individual ability and/or motivation to meet those demands (Akrani, 2011).

Occupational Stress: Occupational stress/work-related stress is the reaction people display with regard to work overload or work demands where there is inadequate or poor training of employees, as far as knowledge of and skills for the job are concerned. This causes stress where employee will find it difficult to manage/deal with their stress levels (WHO, 2007).

Correctional Official: A correctional official means an employee of the department of correctional services employed under the Public Service Act (1(e) Act 25 of 2008).

Correctional Centre : This term refers to all land, branches, out-stations, camps, buildings, premises or places and quarters used in connection with any such correctional centre established under the Correctional Service Act 111 of 1998, for the purposes of incarceration, detention, confinement, protection, training or treatment of persons liable for detention in custody, or to detention in placement under protective custody.

1.11 OUTLINE OF THE RESEARCH REPORT

This research report is represented in the following chapters:

- **Chapter 1:** Provided an orientation to the study
- **Chapter 2: Literature Review**
In this chapter the information pertaining to the relevant literature review, will be addressed. Evidence from international, African and South African studies will be provided.
- **Chapter 3: Research Design and Method**
A description of the research design and the method of data collection are discussed in chapter 3.

- **Chapter 4: Presentation and Discussion of Research Findings**

This chapter focuses on the presentation and discussion of the research findings.

- **Chapter 5: Conclusions, Limitations, and Recommendations.**

Conclusions, limitations of the study, and recommendations are discussed in this chapter.

1.12 Summary:

This chapter presented an introductory orientation and background to the research and explored the rationale and significance of the problem. The aim and objective of the research, the research question, and operational definitions were also clarified in this chapter.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter examines evidence from the literature relating to occupational stress, stress theories and models, causes of occupational stress, stress prevention and management as well as, in particular, stress in the context of correctional centres among correctional officials.

To enable the researcher to do this research project, an extensive literature review was undertaken to facilitate understanding and acquire knowledge pertaining to the topic. Sources of literature used in the review included journals, textbooks, unpublished master's theses, electronic databases, doctoral dissertations, South African Acts of Parliament and policies, internet sources utilising the search engines Google as well as PubMed and EBSCO Host for the CINAHL and ProQuest. Key search words used were: Sources of stress experienced by correctional officials, effects of stress on the health and wellbeing of correctional officials, stress prevention and management in the correctional settings, occupational stress as an occupational health concern, stress and occupational stress theories and models.

2.2 SOURCES OF STRESS EXPERIENCED BY CORRECTIONAL OFFICIALS

The literature revealed that studies have been conducted on sources of stress, stress prevention and management in correctional settings in many countries.

According to Brower (2013 p1), "Health and wellness among correctional agencies is an issue that has always existed but is just starting to get increasing attention it deserves". In addition, Brower (2013) conducted research on evidence based studies regarding sources and manifestation of stress among correctional officials (COs), as well available literature on COs' health promotion programs and how they can be helpful. Brower (2013) identified the stressors of COs as is depicted in table 2.1 below.

Table 2.1: “Stressors of Correctional Officials by Brower (2013)”

“Inmate-related Stressors	Occupational Stressors	Organizational/ Administrative Stressors	Psycho-Social Stressors
Violence/threat Injury	Closed work environment	Poor leadership/trust/support	Individual: fear, lack of assertiveness, over-aggressive
Gang activity	Role ambiguity (rehabilitation vs. punishment)	Mismanagement / unfair policies and procedures (real or perceived)	Work/family conflict (lack of family support)
Overcrowding	Physicality of the job (standing, equipment)	No input in decision-making	Public misperceptions of profession
Mental illness	Hyper-vigilance	Poor performance evaluation/ disciplinary processes	Media/political scrutiny (scandals, Prison breaks)
Substance abuse	Code of silence/machismo (help a sign of weakness)	Poor salaries/benefits, poor selection and training of employees	
Suicide		Involuntarily overtime/shift work	
Other unlawful acts (sex, bringing unauthorized items)		Understaffing/turnover, Inadequate resources/ Equipment	
		Conflict with co-workers and supervisors	
		Few confidential services”	

Keinan and Malachi- Pines (2007) state that previous and recently conducted literature on correctional officials’ stress showed that work overload is the highest risk factor or greatest cause of stress for most correctional officials. Additionally, job engagement (i.e. work overload or under load as well as role ambiguity), and organizational climate (i.e. management style, poor communication and poor working relationships) cause a various levels of stress with which correctional officials are unable to cope (Armstrong & Griffin, and, Keinan et al, 2007).

Fisher (2008) conducted a study on 289 correctional officials in nine provincial facilities in British Columbia to investigate the challenges experienced during changing working conditions due to overcrowding and changing inmate populations. The findings of the study

showed that most correctional officials experienced significantly negativity regarding job experience. Of the 289 participants, 35% were concerned about safety they reported that they have been assaulted at least three times in a year and 90% reported that they have witnessed violent behaviour. In addition overcrowding, understaffing, poor staff training, allocation or qualifications of new staff, poor salaries, unclear policies/practices and poor relations with managers contributed to stress among correctional officials (Fisher 2008).

To assess correctional officials' views of inmates and the subsequent effect on their stress levels, Misis, Kim, Cheeseman, Hogan & Lambert (2013) conducted a survey study on a sample of 501 correctional officials employed by a Southern America Prison System. The findings showed that correctional officials who viewed inmates as arrogant, unfriendly and anti-social reported lower stress levels than correctional officials who viewed inmates as friendly and social/ friends because, as they become closer to offenders, the offenders used this to their advantage to manipulate the officials to do favours for them e.g. by bringing in unauthorised items, hence causing stress for correctional officials. Furthermore lack of support from supervisors and the view of their work as being unsafe also contributed to increased stress levels (Misis, et al 2013).

Ghaddar, Mateo and Sanchez (2008) performed research to examine the relationship between workplace psycho-social causes of stress and the mental health among correctional officials in a Spanish penitentiary centre. The findings showed increased stress ratings related to psychological pressures; correctional officials viewing themselves as being low in the hierarchy with lack of autonomy and decision making power; moderate ratings on social support from colleagues and supervisors; exposure to dangerous situations and concerns about safety at work and decreased ratings on mental health. In relation to psychological pressures, 52% reported that they didn't have control over the workload allocated to them and this led them to work faster in order to meet deadlines. Of the correctional officials who participated in the study, 54% agreed that their work was emotionally distressing. Overall high percentages were reported as far as exposure to psycho-social risks is concerned. In relation to decision making, 41% of the participants reported that they never had any say regarding the work allocated to them. The same authors conclude that to decrease psychological pressures, the importance of ensuring an equal ratio between staffing levels and the combination of additional tasks and work pressures should be taken into consideration. Poor social support was also mentioned as a source of stress (Ghaddar et al

2008). Furthermore, Ghaddar et al (2008) concludes that a mental health related program should focus on work conditions that affect the psychological characteristics of the employee. Previous studies on correctional officials indicated a correlation between their health and psychosocial sources of stress in the workplace (Ghaddar et al 2008). Similarly Regan (2009) examined stress and coping with stress among correctional officials for male offenders in a medium security committal prison in Ireland. The following findings were identified as sources of stress, i.e. safety concerns, work overload, employee control, lack of support from management, lack of participatory management i.e. not being included in decision making. A lack of communication means was also noted among some participants who reported that resources such as communication tools were old fashioned. Furthermore, a poor work-life balance i.e. not having family time due to work commitments was cited as a stressor (Regan 2009). Ogoza, Imhode and Aluede (2010) conducted a study to examine stress among correctional officials in Nigeria. A sample of 150 (110 males and 40 females) correctional officials from Ogo and Benin Prisons in Edo State, Nigeria, participated in the study. The study revealed violence was the major cause of stress for correctional officials (96%), and the lowest cause of stress was poor infrastructure (50%). Results showed that female correctional officials report more stress than their male counterparts (Ogoza et al, 2010). The table below depicts the sources of stress for the correctional officials in the study.

Table 2.2: Sources of Stress among Nigerian Correctional Officials (Okoza, Imhode and Aluede 2010)

Description	Percentage of respondents
"Violent protest in prison	96%
Staff held hostage drama, other hostage drama	94%
Self –harm	92%
Body attacks	90%
Having control of firearm	88%
Having control of dangerous weapons	86%
Poor salaries	84%
Lack of career advancement	82%
Inflexible/Irregular shifts	80%
Absence of incentives for outstanding performance	78%
Inadequate wellness centers for employees and their families	76%
Inadequate supply of resources i.e. clothing and equipment	74%
Poor social status of correctional officials	72%
Overcrowding	70%
Lack of power supply	68%
Lack of punishment for unwanted behavior	56%
Poor sanitation	54%
Poorly constructed buildings	52%
Poor infrastructure"	50%

Botha and Pienaar, (2006) investigated the role of positive attributes that correctional officials have in coping with stress, the way employees view their work and the impact it has on the experiences of stress namely, lack of involvement in decision making and the negative impact it has in the experience of occupational stress among 157 South African correctional officials in the Free State Province Management area. The results showed that employee's behaviour due to outside factors and the impact it has on the organization that may be either positive or negative add stress to correctional officials.

Mambi (2005) conducted an exploratory study to investigate stressors among correctional officials at the Sevontein Medium Security Correctional Centre in Pietermaritzburg, South Africa. The correctional centre is a male correctional centre which accommodates both adult and juvenile offenders. The results of the study showed that 61% of the participants strongly agreed that being exposed to dangerous offenders causes stress, 78% felt that absence of rewards poses a lot of stress among correctional officials, and 73% complained about poor salaries. This study reflects that correctional officials (49%) were unsure whether poor public image causes stress for them. The results furthermore demonstrated that 30% of COs strongly agreed that shift work was stressful for them, 48% indicated that conditions under which

correctional officials were working were strenuous and stressful and 46% indicated that lack of support from supervisors caused stress. In addition the results also indicated that being excluded in decision-making processes caused stress among correctional officials. A high percentage (71%) of participants saw the threat of inmate violence as a big stressor and 63% agreed that a shortage of staff and overcrowding seemed to be a major problem for correctional officials. Fifty six percent (56%) agreed that work overload and working overtime was stressful and 52% agreed that there was a correlation between poor family relationships and work related stress. Work overload, low control of work and poor support from supervisors and colleagues were identified as causing the highest amount of psychological and/ or physical disorders among correctional officials (Mambi, 2005).

It is evident from the research by Mambi (2005) and Regan (2009) that the sources of stress of correctional officials relate to safety concerns, work overload, working overtime, lack of support from management and lack of participatory management which means not being included in decision making and working with potential violent inmates.

2.3 EFFECTS OF STRESS ON THE HEALTH AND WELL-BEING OF CORRECTIONAL OFFICIALS

According to Keinan and Malach-Pines (2007), reactions to different stressors among correctional officials can be divided into three categories, namely physiological, psychological and behavioural issues which all relate to a shorter lifespan, higher rates of alcohol abuse, self-inflicted deaths, cardiac arrests and high blood pressure.

The Canadian Centre for Occupational Health & Safety (CCOHS, 2014) states that another manifestation of stress among correctional officials is physical symptoms and is of the opinion that correctional officials can suffer from different types of discomfort such as headaches, being fidgety or tense, backaches, and stomach aches, lack of appetite, insomnia and bad dreams. Some of the physiological symptoms include hypertension, heart attacks and ulcers. In addition, the CCOHS (2014) notes that behavioural effects entail absenteeism, staff turn-over, sick leave, self- inflicted deaths and substance abuse. Substance abuse is one of the chief results of stress among correctional officials. Much of the research completed on alcohol and drug use among correctional officials has indicated that there is increasing alcohol and non-medical drug abuse among correctional officials (CCOHS, 2014).

Ghaddar, Mateo and Sanchez (2008) conclude that stress can have many negative effects on correctional officials as many studies have described an increase in stress related outcomes among them. Furthermore the same authors state that correctional officials have a higher potential for developing more stress related illnesses, as research has demonstrated that they are more prone to feelings of fear, increased blood pressure, diseases that affect the body and mind such as depression, and behavioural reactions such as substance abuse compared to workers in other professions. In addition, Ghaddar et al (2008) notes that correctional officials live for shorter periods of time as compared to workers in other professions due to occupational stress. Correctional officials' responses to stress can have a negative influence on the work environment of the organisation, the physical and psychological well-being of officials as well as on their influence on home and family life.

Morse, Dussetschleger, Warren, Mat and Cherniack (2011) conducted a study to describe the barriers to health among correctional officials in a North Eastern England state. The different methods approach combined results from four focus groups, 10 interviews, 335 surveys, and 197 physical assessments. The findings demonstrated that 43, 3% of workers were obese and 40.7% were overweight. Respondents also had blood pressure readings higher than the acceptable normal ranges of 31% of men and 25, 8% of women had elevated blood pressure levels in relation to 17.1% and 15.1% of the ideal ranges. Elevated blood pressure was due to high stress levels. Correctional Officials mentioned concerns about safety, lack of resources and work/family conflict as the causes of stress, Morse et al (2011) concluded that the results showed that correctional officials are prone to developing life-long diseases and that a healthy work environment is needed to reduce these risk factors.

In South Africa, Rampou (2006) performed research to investigate the work-related wellbeing of correctional officials. The main outcome of the study in the Department of Correctional Services was to create a screening tool to be used by all departments called ASSET. This tool was based on an interpretation of the Maslach Burnout Inventory general survey and the Utrecht Work Engagement (UWES) for correctional officials in South Africa. The purpose of the study was to explore intensity of stress among COs caused by their work; depression due to prolonged exposure to stress, work arrangements, organisational commitment and illnesses (based on their demographical characteristics), and to test the structural model of work wellness. A sample of 897 correctional officials from 48 Prisons in

South Africa participated in the study. Statistically significant differences also existed with regard to the experience of stress between correctional officials with different ranks as a result of job overload and work-life balance. No statistically significant differences were found among between the two genders. Rampou (2006) noted that this finding on gender is in contrast with most of the empirical research that has been done on gender. The results of a Nigerian study also showed that female correctional officials reported more stress than their male counterparts (Okoza, Imhonde and Aluede, 2010). Furthermore, Rampou (2006) revealed a difference in stress levels among language groups - English, Afrikaans and African languages - with the African correctional officials showing higher levels of exhaustion.

2.4 STRESS PREVENTION AND MANAGEMENT IN CORRECTIONAL SETTINGS

McCraty, Atkinson, Lipsenthal and Arguelles (2009, p1) "are of the opinion that stress management and health promotion programs are important in correctional settings, as correctional peace officers are exposed to stress caused by traumatic experiences." The same authors conducted a study that explored the results of a new stress management program on physiological and psychological stress and health risk factors among 75 correctional officials, in the state of California. The manipulated group was trained to control their emotions in order to decrease stress and causes of ill-health. Reinforcement of the technique was measured by pulse rate readings which helped participants practice and memorize the use of the self-control tool.

Physiological stress measures included Cortisol, DHEA, Cholesterol, triglycerides, fasting glucose levels, 10 minutes resting ECG (Electrocardiogram), heart rate variability and blood pressure. Psychological stress was assessed by three questionnaires to assess emotional stress and work related variables. Significant improvement in the experimental group were observed in relation to values of cholesterol/fatty acids, diabetes, pulse rate, hypertension/elevated blood pressure and reduced psychological distress with improved emotional well-being. In addition there was an improvement in performance, staff morale, clear goals and increased support from management. The interaction between organizational stress and participatory management showed that as employee participation increased, physical and occupational stress decreased.

Systems for health promotion in correctional centres should focus on psychological problems, substance abuse, depression and management of post-traumatic stress (WHO,

2007). The WHO (2007) is also of the opinion that health promotion in correctional institutions should take place over a period of time, be holistic and should involve different programs/activities with the focus on job satisfaction. It should be a continuous area of personnel development. In addition, WHO (2007) believes that in order to reduce the absenteeism rate and early retirement among correctional officials, management should ensure that the needs of employees are a priority and are taken into consideration so as to receive the needed assistance when the need arises. The WHO (2007) also mentioned that increased health in correctional officials results in a reduced personnel budget and improves the quality of work with offenders.

2.5 OCCUPATIONAL STRESS AS AN OCCUPATIONAL HEALTH CONCERN

2.5.1 Stress as a psycho-social hazard and risk

According to the WHO (2010) literature over the past 30 years has clearly indicated that different situations in the work place can be labelled as "psycho-social hazards" because they are sources of psychological and social stresses other than physical conditions - which can be detrimental to the mental and physical health of workers. These can also be referred to as 'work stressors' (WHO, 2010, p29).

Stress is seen as a psychological hazard/risk and therefore needs to be identified and managed in the same manner as physical hazards and risks in the workplace. A hazard is defined as a condition, object or agent that has the potential to cause harm to the worker (WHO, 2010, p104), and a risk is seen as the likelihood that an individual will contract a disease or receive an injury (Hattingh et al, 2009).

“Work-related stress is recognised globally as a major challenge to workers’ health, and the health of an organisation” (Regan, 2009, pg. 9). According to Leka and Cox (2008, p1) “work-related psycho-social risks concerning aspects of the design and management of work have been identified as one of the major contemporary challenges for occupational health and safety and are linked to such workplace problems as work-related stress”.

Psycho-social hazards can be identified in the workplace by means of observation, questionnaires and interviews.

The WHO (2010) identified the following psycho-social factors as having the greatest risk to workers health:

- **Job content:** Routine and repetitive work, tasks that have no sequence, poor application of on-the-job knowledge, performing jobs that they are unsure of.
- **Workload and work pace:** Work pressures of either too much or too little work, work speed controlled by machines, insufficient time allocated to complete a job.
- **Work schedule:** Involuntary shift work, working at night, inconsistent work schedules and irregular hours
- **Control:** Lack of participatory management, poor locus of control regarding working at a steady speed and changing work hours.
- **Environment and equipment:** Lack of resources, poor working conditions/unhygienic conditions, inadequate working areas, poor lighting and noise pollution.
- **Organizational culture and function:** lack of communication, lack of systems for effective problem-solving and personal/career advancement.
- **Personal relationships at work:** Alienation /feeling of loneliness or withdrawal, lack of good interpersonal relations, decreased interpersonal relationships with superiors and colleagues, poor/inadequate social support
- **Role in organization:** Lack of clarity about one's job profile, incompatibility of different tasks for the same role, support from supervisors.
- **Home and work interface:** work and family conflict, poor family support, conflicting roles (WHO 2010).

According to Encephale (2007), stress increases when there is lack of participatory management and poor relationships with or poor support from colleagues and supervisors.

2.5.2 The legal and ethical framework

Health and safety in the South African workplace is anchored in a number of acts and regulations. The Occupational Health and Safety Act no. 85 of 1993 as amended provide the legal framework for all health and safety aspects in all workplaces in the Republic of South Africa, except in the mining industry which has its own health and safety act. According to

the Occupational Health and Safety Act (OH&S) no. 85 of 1993 as amended, employers has the following responsibilities:

"To create and sustain a healthy and safe workplace environment, exercise good environmental hygiene practices, ensure employees do not perform work unless precautions for safety and health have been taken and to conduct training, awareness and induction programs. Furthermore employers must provide guidelines to address safety with a view to minimizing risk by recognition, evaluation, and control and provide continuous improvement in order to offer and maintain healthy working conditions."

The Occupational Health and Safety Act (OH&S) no. 85 of 1993 as amended also states the rights and responsibilities of employees, namely: it is within the legal framework that every employee is answerable and accountable for his own actions as far as identifying and managing the risks/hazards that may inflict any harm to other employees, and of ensuring that the presence of these risks/hazards are known to the employer by reporting them in time to prevent any adverse events. Employees must act according to the law and follow the health and safety rules and procedures developed by the employer or anyone appointed that responsibility by the employer, as required by the OHS Act 1993(Act No 85 of 1993 as amended)..

In addition, Chapter 2 of the Constitution of the Republic of South Africa, 1996 (Act No 108 of 1996) contains the Bill of Rights that sets out the fundamental rights of all South Africans, including the right to dignity and the right to equality. The Bill of Rights also states when rights may be limited. Every employee should be provided with a healthy environment free from any harm or danger/hazardous situation that may be detrimental to their own health and to the health of current and yet to be employed employees. This can be achieved by complying with rules and policy guidelines which help to combat any determinants of ill health caused by environmental factors due to distraction of natural resources.

The importance given to the psycho-social work environment is evident in the WHO/ILO Healthy Workplace Model (2010). The WHO Healthy Workplace Model (2010) addresses work-related physical and psychological risks, as well as social and environmental determinants. It is a comprehensive way of thinking, acting, promoting and supporting

healthy behaviours (WHO, 2010).

According to the WHO/ILO (2005) it is mandatory that every employer creates favourable working conditions for their employees by assessing and managing risks that may be detrimental to their health and ensuring that the workplace is always maintained by focusing on the following necessities:

"By removing any risks/hazards that may be caused by the work itself, assessing and managing any psycho-social factors such as poor ergonomics practices, organization, management style, and support from colleagues or supervisors that may affect the well-being of employees. In addition ensuring there are systems in place which can be used to distribute health promotion information to the workers and their families and encouraging community engagement."

Employers and workers and their representatives working in collaboration with each other can make a significant contribution. All this can be done by developing and implementing policies which address the physical and psycho-social working environment as well as promoting worker health and creating health-promoting work environments (WHO 2010).

South Africa is affiliated to WHO /ILO (2005) and, therefore, it should be the model on which to develop guidelines and health promotion programs which are in agreement with those used globally. It should follow the prescribed infrastructure. In order to protect and promote health at work it is necessary to have policy instruments regarding workers' health at the national and enterprise level, for workers to have access to occupational health service, and for all this to be backed by scientific evidence. In addition, worker health must be integrated into educational, trade, employment, economic development and other policies.

2.5.3 Manifestations and Effects of Occupational Stress

How stress manifests itself is different in every person and can differ according to the situation which that individual is exposed to at that time. The following are some of the common stress manifestations proven by scientific evidence.

According to Quinn (2013), stress can manifest in behaviour such as aggression, violence, strange mannerisms, apprehension, and inability to make decisions, dissatisfaction, short

temper, irritability, negativity and low self-esteem. Emotional manifestations include crying, bipolar behaviour, denial; nail biting, depression, anxiety, lack of interest and innovation, restlessness, isolation and lack of trust. Intellectual manifestations include amnesia or poor memory, being easily distracted lack of concentration and cluelessness. Physically, stress can manifest in longer lasting tiredness, indigestion/stomach aches, bowel disturbances, lack of sleep, sweaty hands, decreased food intake, regurgitation, bingeing, dry mouth and thirst, common colds, headaches, polyuria, cramps, increased pulse rate, stooped posture, tight muscles, fast breathing, and skin conditions (Quinn, 2013).

Scott (2011) states that psychological symptoms of stress can include emotional exhaustion and burnout. According to the same author, burn-out refers to the state of emotional imbalance in individuals in reaction to long lasting stress, as a result of prolonged exposure to pressures at work and work-life imbalance. These symptoms differ depending on the individual's coping skills (Scott, 2011). Finney, Stergiopoulos, Hensel, Bonato and Dewa. (2013) define burnout as a subjective experience characterized by feelings of exhaustion, cynicism, detachment, ineffectiveness and lack of accomplishment resulting from exposure to chronic stressors in the workplace.

The Canadian Centre for Occupational Health & Safety (2014) point out that psychological effects such as depression, emotional exhaustion, burn-out, anxiety, irritability, sadness, defensiveness, being easily hurt or offended, lack of creativity, uncontrollable thinking, vulnerability, inability to act, lack of improvement, social isolation and lack of energy. Behavioural effects entail absenteeism and a high staff turnover. Cognitive effects are reflected in decreased attention, narrowing of perception, forgetfulness, less effective thinking, less problem solving, reduced ability to learn and easily distraction (Canadian Centre for Occupational Health & Safety, 2014).

Finney et al (2013) are of the opinion that lifelong exposure to stressful situations in over 90% of the research conducted in relation to employee behaviour in the work situation, are linked to lack of satisfaction with ones work ,loneliness, emotional disorders ,illness that affect the mind and the manifestations of ill-health.

2.5.4 Approaches to Occupational Stress Prevention and Management

According to Leka and Cox (2008), work-related stress management interventions are identified in literature and are broadly classified into three main types, i.e. primary, secondary and tertiary interventions. Primary prevention of work-related stress may include changing elements in the way work is organised and managed. Secondary prevention to combat work-related stress may occur through training and developing individual skills regarding stress management. Tertiary prevention aims to develop appropriate rehabilitation and 'return to work' systems by reducing the impact of work-related stress on workers' health and enhancing occupational health provisions. In addition, Leka and Cox (2008) are of the opinion that the key components and interventions of work-related stress and management programmes include the following: The interventions should be designed to be implemented in a systematic and step-wise manner with the aims and objectives and implementation strategy clearly defined and outlined. The content (key elements of focus, tools and implementation of the intervention) should be derived from practice-based sound scientific evidence and theory, and they should be adapted and tailored to the given occupational sector, and they should meet the unique needs of the organization. Proper risk assessment should be conducted to identify psycho-social risks to the employees (Leka et al 2008). Environmental hygiene surveys should be conducted in order to exclude psycho-social dangers to employee's health and well-being in the work environment. The actions, components and resources should ensure that the requirements of the specific organisation are met. These actions should be planned and implemented in an orderly manner, step-by step, with a clear purpose of what it is willing to achieve, and with the action planning of the proposed actions clearly stated and displayed (Leka et al 2008).

The Canadian Centre for Occupational Health and Safety (2015) recommends that workplace health and wellness programmes which focus on the source or cause of stress should be provided, and they should and incorporate stress prevention or positive mental health promotion in policies/the organisation mission statement.

- The main areas of concern, resources and action regarding proposals/solutions applied should be taken from proven research, or from well substantiated aspects of the natural world based on the body of facts that have been repeatedly confirmed through observation or experiment.

- Identification of the source of stress is the first step to take to ensure the effectiveness of stress management training and counselling. It has been proven that stress management and counselling services are helpful when the sources of stress have been properly identified and managed in due course. Planners need to recognise the signs and symptoms of stress and provide employee assistance programmes to those who wish to attend.
- Managers and employees should be trained regarding stress management.
- Managers should ensure that all employees are treated equally and fairly and in a respectful manner, and individual skills and results should be valued and recognized and be understanding of staff under too much pressure.
- Employees must be involved in decision making and their inputs be allowed directly or through committees. Managers must also ensure that jobs are designed to allow for a balanced workload and they must be clear about job expectations. Job demands must be kept reasonable by providing manageable deadlines, and work hours should be designed to suit employee's needs.

International Labour Organisations' SOLVE (2012) programme, an integration of health promotion into OHS policies, aims to prevent the occurrence of risks/dangers that affect the psycho-social dimension of workers and to promote health and wellness in the workplace through policy formulation and implementation. SOLVE, as a mediator to ensure the implementation of the OSH Management system that deals with risk management, should include risk identification, finding measures to remove the psycho-social risks, and ensuring that they properly manage their effect in the same way as they do with other (hazards and risks), and that health promotion programmes are integrated into organisational policy. Health promotion and wellness programs aim to deal with workers' health as well as that of their families through (preventative) and stress management programs; prevention of bullying at work and substance abuse as well as developing tobacco-free policies in the workplace. In all these aspects, the ILO's comparative advantage lies in its expertise regarding the use of a social debate approach - with the involvement of employers, workers, governments, public services and NGOs in addressing these problems which result in the successful application of workplace and community resourcefulness/ input (<http://www.ilo.org>, retrieved 28.12.2017).

2.5.5 Occupational Health and Occupational Health Nursing

Occupational health nurse practitioners (OHNPs) are part of a team that identifies and manages hazards and risks in the workplace. Thus form an occupational health nursing perspective stress is a psychosocial hazard and risk and therefore needs to be identified and managed. Therefore a description of occupational health and occupational health nursing is given here in relation to occupational related stress. Occupational health nursing (OHN) is the specialty practice providing for and delivering health and safety programmes and services to employees, employee populations and community groups. OHN is part of the whole picture of occupational health services (OHS) and of the activities of the company (Rossi, 2000). OHN is defined as a nursing specialty that focuses on providing healthcare to workers and promoting and protecting from risks/hazards by providing a healthy environment (Hattingh and Acutt, 2009, p19).

Occupational health is focused on the interaction between the employee's occupation and his/her well-being. It was further explored in the 1950s by a combined committee of International Labour Organisation and the World Health Organisation (WHO), as being focused on the following:

- Supporting and sustaining quality comprehensive health care for occupants in all workplaces or place of employments.
- The combating of all risks/hazards that may be detrimental to the health of all employees due to unhealthy working environments.
- Effective assessment and management of risks/hazards in the workplace to prevent any danger to employees' well-being
- To exercise good ergonomics practices

An occupational health programme is based on the identified hazards and risks in a specific workplace setting. There is a global trend of integrating occupational health and workplace health promotion/wellness into an integrated programme. Workplace health promotion/wellness is defined as maintenance of health to the highest degree of physical, mental and social well-being, Hattingh and Acutt (2009). It includes protection of the health of the workers and the prevention of deterioration of health as a result of workplace exposure. It is also concerned with the prevention of disease and promotion of positive health (Hattingh

and Acutt, 2009). The Ottawa Charter (1986) defines health promotion as "the process of enabling people to increase control over and improve their own health". The Ottawa Charter (1986) on health promotion action includes building healthy public policy by ensuring that policy makers are aware of the consequences of their decisions for peoples' health; creating a supportive environment i.e. the physical, social, political and economic environment; strengthening community action by empowering and supporting them to take action of their own health; developing personal skills by enabling people to use their knowledge and skills to increase control over and improve their own health, and reorienting health services by putting emphasis on reducing individual risk to promote population health with an emphasis on the determinants of health (Hattingh and Acutt, 2009). Stress as a psycho-social hazard and risk should therefore be included and addressed in an occupational health and workplace health promotion programme.

Role refers to a set of prescriptions defining behaviour in terms of professional practice (Hattingh and Acutt, 2009). The occupational health nurse has the important role of maintaining the well-being of the company and its workers and community, care-giving, productivity, education and training, scientific investigations and answering for her actions at both personal and professional levels Hattingh and Acutt (2009).

According to Hattingh and Acutt (2009), the roles of the OHNP in creating and maintaining a healthy workplace are the following:

- **As a professional**, the OHNP complies with the set policies and guidelines of the employer and acts within the cultural values of the society he/she is serving. He/she should ensure that the privacy of clients' interests are maintained.
- **As a clinician**, the OHNP provides quality nursing care, assess, interviews, communicates with and counsel workers who are presenting with signs and symptoms of stress and refers employees for employee assistance programmes.
- The role of the **administrator** entails strategic planning, directing, putting plans into action, assessing the quality given and supervision by ensuring the smooth running of the occupational health programmes, e.g. stress management programmes.
- **As an administrator**, the OHNP is a policy maker who keeps records of all the workers who were seen with stress-related illnesses and writes a report to the employer about the number of employees who were seen with stress related- illnesses, on monthly basis.

- **As an educator,** the OHNP is a health promoter to the employer and employees, as she/he provides training to both employer and employees on the signs and symptoms of stress and how it manifests itself. She also give education on intervention measures regarding stress management.
- **As a consultant,** he/she coordinates programmes with local clinics or hospitals or general practitioners e.g. a psychologist to teach workers how to manage and cope with stress.

2.6 STRESS AND OCCUPATIONAL STRESS THEORIES AND MODELS

Although this study was not guided by any theory or model, a brief overview is given of some stress theories and models used to explain and examine stress, as it is reflected in the literature. In the discussion of the results of this study reference are made to some of the stress theories and models as applicable.

Lazarus and Folkman's transaction model of stress coping (1984) states that transaction which also means interaction occurs when there is a good relationship between a person and his/her environment. Stress is an outcome of the conflict between work pressures that are more than the coping capabilities of employees. According to Lazarus' (1984) transaction model of stress, stress is described as a mistake that occurs when the viewed pressures of work and the person's inability to meet and cope with the pressures of work.

Pioneering work by Karasek and Theorel, beginning in the 1970's, stated that work contents such as increased pressures and lack of participative management which means not being included in decision making, showed elevated causes of physical illnesses, signs of agitation and fearfulness, as well as signs of sadness or displaying low spirits or despair. They created the popular Demand-Control Support Theory of job strain, which means that the presence of work pressures and the person's ability to cope form a correlation where the person will react to psychosocial work conditions/ pressures. Karasek (1979) classified these work experiences into four types of jobs, namely, highly-strenuous jobs (increased pressures and inability to cope with the pressures), active jobs are viewed as highly demanding yet the person has control over tasks and freedom to do them. Karasek (1979) is of the viewpoint that low-straining jobs (low pressures and increased ability to cope with pressures) and passive jobs (with decreased pressures and decreased ability to cope with the job pressures) Karasek (1979).

The Job Demand-Resource Model (JD-R) is a newly developed approach which tries to use examples from many approaches which have been followed in other theories. It grouped into classes of work pressures and the availability of materials such as staff and equipment to determine how they can have an impact on illnesses and improved performance (Clorens, Baker, Schaufeli & Salanova (2006). Pressures are said to be how the person uses his or her physical strength to perform the job and the relationship the employee has with his job which requires full commitment, thus requiring more resources in terms of physical and mental costs in order to achieve set goals, decrease work pressures or influence productivity. Jobs that provide material and human resources and reduced work pressures improve job performance and reduce ill health. Employees who have reduced ability to perform their job and those who are eager to perform their job are in conflict which causes psychological disorders, hence leading to ill-health. Clorens et al (2006) noted that employees show reduced ability to perform their job due to increased stress which causes ill-health, may lead decreased productivity and reduced performance. The other element is personal resources that the employee brings with them, these consists of specific personality traits, self-efficacy and optimism. This type of resource is the powerful mediator of employee well-being (e.g. engagement).

Siegrist (1998) created a model called Effort/Reward Imbalance which means that lack of rewards for a job well done/ good performance in terms of promotions, appreciation, consideration and bonuses create stress and is associated with various physical and mental problems WHO (2010).

2.7 SUMMARY

This chapter has provided evidence from studies conducted internationally as well as from African and South African studies. The literature reveals similarities in results on the sources of stress among correctional officers worldwide. The sources or causes of stress such as workload, poor salaries, understaffing, poor relationships between employees and management and lack of decision latitude appears to be the main sources of stress among most correctional officers. From a legal and ethical perspective employers need to create and maintain as healthy and safe workplace as is reasonably practicable by managing all workplace stressors and having a dedicated occupational and health promotion programme.

In the following chapter the research design and method are describe

CHAPTER THREE

RESEARCH DESIGN AND METHOD

3.1 INTRODUCTION

In this chapter the research design and methods are discussed. A description of the research setting, study population, sampling and data collection and analysis is given. Ethical issues that were considered are also described.

3.2 RESEARCH DESIGN AND METHOD

This study adopted a cross-sectional design and a survey method to explore the sources of stress among correctional officials in a Gauteng correctional centre.

3.2.1 Selected research design

A research design is chosen by the researcher to guide and plan the study in a systematic and logical manner to achieve the aim and answer the research question. According to Polit and Beck (2012) "a research design is defined as a set of logical steps taken by the researcher to answer research questions or testing the research hypothesis" Polit and Beck (2012, pg 167).

This research was cross-sectional which means that the research was used to examine data at one point in time, over a 3 months period from October 2014 to December 2014. A cross sectional design was chosen because it is cost and time effective as a large number of respondents can be studied.

3.2.2 Research Method

The research method is described as a systematic approach to the actual research process and includes stages of planning, structuring, execution, population, sampling, data collection and analysis (Polit and Beck, 2012). The research method used in this study was the survey method. Survey research is used to gather information about the distribution of and relationships that exists between variables. It is a non-experimental approach that gathers events in a pre-determined population (Coughlan, Cronin and Ryan, 2009). In this research, the survey research method utilised self-administered questionnaires.

3.2.2.1 The motivation for the use of the survey method:

Surveys are useful when a researcher wants to collect data on phenomena which cannot be directly observed such as attitudes, behaviours and perception, and because surveys need less infrastructure and time they are an economical way of collecting information (Coughlan, Cronin and Ryan, 2009). A survey is uncomplicated as it usually only involves a single contact with the sample group being studied and it offers a snapshot of the phenomena being studied. With surveys, a researcher is able to reach a number of respondents which results in extensive information of a broader scope (Coughlan, Cronin and Ryan, 2009).

3.2.2.2 Disadvantages of Surveys

Survey research is ranked low in the hierarchy of research methodologies because they use self-reported data, and as such, data gathered through them is prone to the influence of social desirability (Keough and Tanabe, 2011) where respondents may typically want to portray themselves in the best light and may thus enhance responses in order to please the researcher and make themselves appear good.

3.3 Context and Setting of the Research

3.3.1 Context of research

The research was conducted in the Gauteng Correctional Centre because it was easily accessible to the researcher, and it is one of the biggest Maximum Security Centres in the country which houses offenders who have committed dangerous crimes and are serving sentences ranging from 10 years to life sentences.

3.3.2 Research setting

The research was conducted in a natural setting that is in a Gauteng maximum security correctional centre which houses sentenced and awaiting trial prisoners who have committed serious offences such as rape, robbery and murder. The selected correctional centre houses 3200 prisoners and employs 444 correctional officials.

3.4 POPULATION

Polit and Beck (2006, p 258) define a population as the total number of people or elements that fit the specific set specifications of the study. The aggregate of cases about which the researcher would like to make generalisations is the target population, and the aggregate of cases that are accessible as a pool of subjects for a study and that conform to the designated criteria is the accessible population (Polit and Beck, 2006).

The target population for this study consisted of all correctional officials in Gauteng correctional centres.

The accessible population consisted of all correctional officials in the selected correctional centre.

The criteria for inclusion in this study were the following:

- All correctional officials who were available at the correctional centre during data collection in 2014 and who voluntarily participated in the study.
- All correctional officials should have more than six (6) months' work experience.
- Correctional officials who were employed on a permanent basis.

3.5 SAMPLING

A description of the sample, the sampling method and sampling procedures of the research are provided in this section.

3.5.1 The Sample

A sample is a part or a fraction of a whole or a subset of a larger set selected by the researcher to participate in a research study (Brink et al, 2006).

3.5.2 Sample Size

Based on a population of 444 correctional officials employed in the selected prison and using the web based Raosoft computer sample size calculator at 90% level of confidence and allowing for fringe error of 5 %, a sample size of 169 was drawn.

(<http://www.raosoft.com/samplesize.html>). However a sample size of 169 was not achieved and only 150 questionnaires were handed out because of the slow uptake of respondents in completing the questionnaires and length of time already spent on data collection.

3.5.3 Sampling Method

Sampling refers to the researcher's process of obtaining information regarding a phenomenon from the sample selected from the population, in a way that it represents the population of interests. (Brink et al, 2006). The simple random sampling method was used in this study so that each member of the accessible population had an equal chance of being selected (Brink et al, 2006).

3.5.4 Sampling Procedure

The sampling procedure for this research involved the following three major tasks as identified by Burns and Grove (2005):

- The identification of the accessible sample population
- Confirming eligibility criteria and obtaining consent
- Recruiting the eligible participants to participate in the study.

The accessible population was identified in the following manner:

The researcher contacted the human resource department and obtained a list of names of the correctional officials and the sections that they are allocated in. This list served as a guideline for the distribution of the questionnaires as the participants were included according to their job description.

Using the list of names of 444 correctional officials who met the inclusion criteria, 169 potential research participants was selected beginning with the 2nd name/ family name drawn randomly using a table of random numbers and at intervals of 2 after that.

3.6 DATA COLLECTION

3.6.1 Data collection instrument

The data collection instrument that was used in this study was the Work Stress Scale for Correctional Officers (WSSCO) developed by Durak, Durak and Gencoz in (2006). This is a 5 point Likert scale type questionnaire. Likert scales generate statistical measurement of people's attitudes, and they are obvious, easy to construct, administer and score (Mcleod, 2008). Permission was granted by the developer of the scale to use the WSSCO and make changes (See annexure C).

3.6.2 Structure of the questionnaire

A section has been added by the researcher to the questionnaire regarding biographical and workplace data (Section A of the modified questionnaire).

Section A: Demographic and workplace information

According to Burns and Grove (2005) biographical details, also referred to as demographic variables, entail the characteristics or attributes of subjects that are collected to describe the sample. This section of the modified questionnaire included 9 demographic and work-related items and included the respondents' gender, age, marital status, level of education, years of experience, job title and rank, and number of hours worked by the group of correctional officials.

Section B: Domains of work stress

This section of WSSCO (Durak, Durak and Gencoz, 2006) consisted of 5 subscales with 35 items in the subscales. These areas are depicted in the following table.

Table 3.1 Number of Items in the Subscales

“Area/Subscale	Number of items in the create stress, subscale
Work load	7
Role conflict and Role ambiguity	8
Safety at work	9
Inadequacies in physical conditions of prison	3
General problems	8”

As adapted from WSSCO (2006)

The questionnaire was content validated by two experts in the field of occupational health nursing.

Changes made to the original questionnaire were:

The question ‘Night shift leading to additional workload’ was changed into ‘I work more than 48hrs per week.’ Questions were also changed because they were not constructed in clear enough English e.g. ‘threat perception’ changed to ‘safety at work’.

Respondents were requested to rate the degree of importance of each activity. Items were measured on a 5-point Likert scale ranging from strongly agree, agree, neutral, disagree and strongly disagree or never, seldom, sometimes, often and always.

3.6.3 Pre- testing of the questionnaire

The questionnaire was pre-tested on a group of five correctional officials in the same correctional facility, not included in the main sample/study to see to matters of appearance, formulation clarity, the length of the questionnaire/scope as well as whether the methodology, sampling and analysis are adequate and appropriate. The questionnaire was found to be easy to complete and was written in simple English which made it easy for correctional officials to understand.

3.6.4 Reliability and validity of the measuring instrument

Polit and Hungler (2005, p 416) "state that reliability is the degree of consistency with which an instrument measures the attributes it is designed to measure". At the completion of the data analysis of the main research, the Cronbach's Alpha Co-efficient demonstrated the internal consistency of the questionnaire. Cronbach's Alpha Co-efficient is a measure of internal consistency to test how closely related a group of items are. The test -retest reliability co-efficient was 0.77 for total scale, and test-retest reliability coefficients ranged between 0.68 and 0.78 for subscales. In conclusion it was revealed that this scale is a potentially useful tool for research on job stress in correctional officials.

Reliability and validity of the Work Stress Scale by Durak, Durak & Gengoz (2006) was done by analysing the total scale and subscales, internal consistency coefficients and item correlations were examined, the internal consistency of the total scale was found to be within normal ranges, in terms of reliability the total scale and its subscales were found to be internally consistent, and the item total correlations for the total scale were in acceptable ranges which are 0.94 and the item total correlations ranged from 0.31 to 0.75. The test -retest reliability coefficients were also examines by the administration of the scale to 71 correctional officials following a 21 day interval. For total scale, test-retest was found to be within normal ranges. In terms of validity the scale has good concurrent and criterion validity values of 0.77 (Durak, Durak & Gengoz, 2006).

The authenticity approval of the questionnaire was done by two occupational health nursing specialists by modifying the questionnaire and omitting some of the unclear statements. Lynn's content validity index (CVI) recommends that a questionnaire should be validated by two experts, and, according to the definition, both judges have to agree that any individual item is relevant in order for it to count towards the Content Validity Index. The Content

Validity Index for scales has been designed for two or more raters. The CVI for the entire scale is the proportion of total items judged content-valid, Lynn (1986, p 384). $CRV = 2 - 2/2$ divided by $2/2 = 1$ This indicates good results for the scale as it meets Lynn's criteria.

3.7 DATA COLLECTION METHOD

Any participant not exhibiting the inclusion criteria was excluded in the research and any completed questionnaires that indicated otherwise were excluded from the data analysis.

To gain the cooperation of the eligible participants, the researcher had to pre-notify them of the research and this was done through the following conventional survey modes:

The researcher used the opportunity when most correctional officials report for duty during a morning assembly at least once a week before they report for their respective duties, prior to the identified data collection dates, and detailed the objectives of the research, the importance of the research, sampling procedures, the research instrument that would be used and how it was going to be fielded, follow-up procedures, time commitments required of the participants. The researcher also informed the participants who will complete the data collection tool, what use will be made of the data, how confidentiality will be maintained and then requested the members' participation in process. Confidentiality was maintained because no names were disclosed in the research report. Participants can withdraw from the study at any time if they are no longer comfortable with the questions asked in the questionnaire.

The researcher took from home the questionnaires to the correctional centre at least once a week to the drop off point, which is the operational manager's office. The researcher also handed out, in an unmarked envelope, the package containing the questionnaires and information sheet to the eligible participants who were on the sample list, which they took home to complete. The researcher then arranged with the eligible participants for a drop-off point of completed questionnaires. The completed questionnaires were to be brought to the section unit managers where the researcher left a sealed drop box. Any completed questionnaires that indicated otherwise were excluded from data analysis.

The data collection period lasted for a period of 12 weeks, between October 2014 and December 2014. The researcher encountered problems due to irregular shifts in the correctional centre, and to solve the problem the researcher allocated four hours on a weekly basis to collect questionnaires from day staff and two hours for night staff, so as to

accommodate every participant equally. The main aim was to collect an average of 14 questionnaires on weekly basis over the twelve week period.

3.8 DATA ANALYSIS

According to Brink et al (2006), data analysis entails organising/classifying data according to groups, organising it in an orderly manner, editing the language and length as well as explaining terms in different words so as to clarify them to the reader. After the data collection was completed it was then entered on the computer, using electronical methods for the purpose of analysis.

The researcher established a data code sheet on which to encode and categorise data from completed surveys, for capture. A database was created using MS Excel SP and validated through double entry typing. Data were then entered into the Stata (Windows English Version 10.0, StataCorp, 2013) computer program for analysis. Analysis procedure included descriptive statistics.

The researcher received the assistance of a statistician from the University of Witwatersrand Postgraduate Study Support services regarding the entry and analysis of the captured data. Data were also summarized using graphic presentations for the interpretation of results. Statistics were based on frequencies and percentages.

Associations between variables were assessed using the Chi-square test of significance. The Chi-square test is a measure of association and determines if the observed frequencies in each category were significantly different from what would be expected, by chance (Burns and Grove, 2007). The significance level was set at $p < 0.05$ to reduce the risk of type 1 error.

Type1 error is the incorrect rejection of a false positive finding, Burns and Grove (2007).

3.9 ETHICAL CONSIDERATIONS

The following ethical requirements were taken into consideration:

- Ethical clearance and approval to conduct this study was obtained from the Human Research Ethics Committee (Medical) of the University of the Witwatersrand. Protocol number (M140702) (See Appendix A).

- Permission to conduct the study was also obtained from the Area Commissioner of the Management Area and the Department of Correctional Services Research Committee (See appendix C).
- Permission to use and modify the data collection instrument was obtained from the developer. (See Appendix E).
- Prior to administering the questionnaires, the purpose of the study was clearly explained to the participants. (See Appendix F).
- Confidentiality and anonymity were ensured throughout the execution of the study as participants were not required to disclose personal information on the questionnaire.
- Provisions were made to have participant concerns relating to the study addressed and misconceptions corrected.
- Participants were informed that participation in the study was voluntary and that they would be allowed to withdraw from the study at any time without explanation or penalty.
- The questionnaires were immediately captured on return and the electronic copy saved and secured. All completed questionnaires were kept under lock and key, and the raw data was only accessible to the researcher, supervisors and the statistician. The submissions of the questionnaires were sent directly to a password protected site.

3.10 SUMMARY

The objective of this chapter was to give an overview of the research design and methods used to answer the research questions. A description of the target/ accessible population and the sampling process used are given. The planning of the empirical research, design of the data collection instrument, the data collection procedure and methods to ensure reliability and validity of the instrument are discussed. The chapter also presented and discussed the ethical procedures followed to ensure protection of the human rights of the research participants.

The following chapter presents results and analysis of the results of the research which were received through the questionnaire method.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF RESULTS

4.1 INTRODUCTION

This chapter presents and discusses the research results. Results are presented in tables, graphs and descriptive forms, and the response rate is described.

A total of 150 questionnaires were distributed of which 75 were returned. Of these 75 questionnaires returned 3 were discarded due to incompleteness yielding a response rate of 48%.

4.2 RESULTS

The demographic, workplace information and domains of work stress are presented in this section.

4.2.1 SECTION A: DEMOGRAPHIC PROFILE AND WORKPLACE INFORMATION

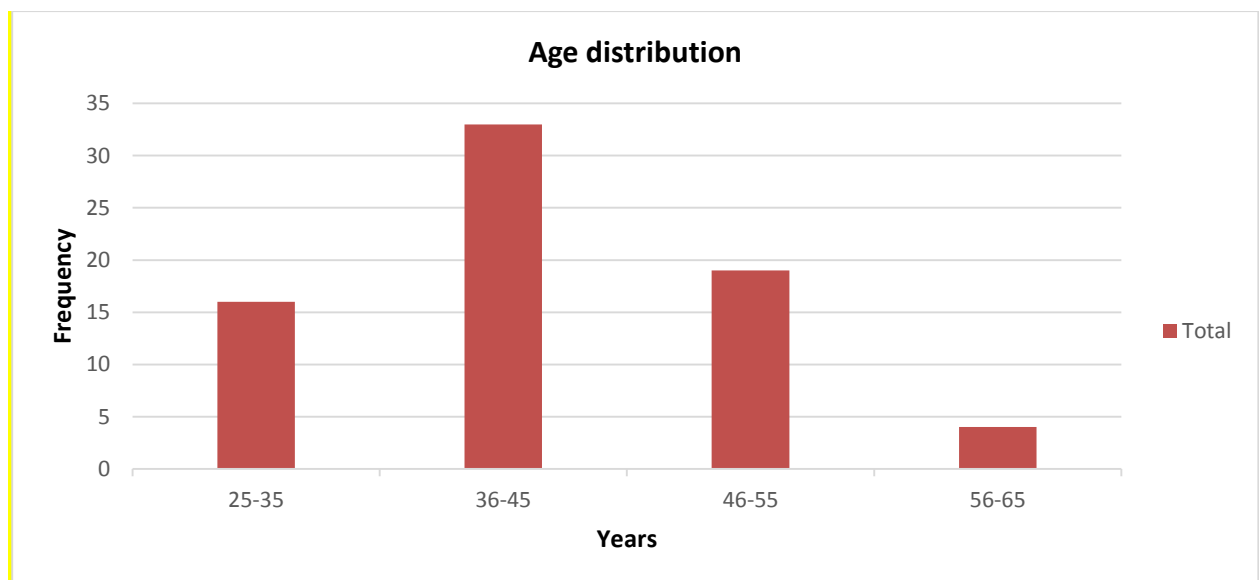


Figure 4.1: Age distribution of participants (n=72)

Figure 4.1 shows that 45.8% of the respondents were between the ages 36-45 followed by 26.3% in the age group of 46-55 years, 22.2% were in the age group of 25-35, and the lowest percentage (5.6%) were in the age group of 56-65 years. The mean/average age was 40 years.

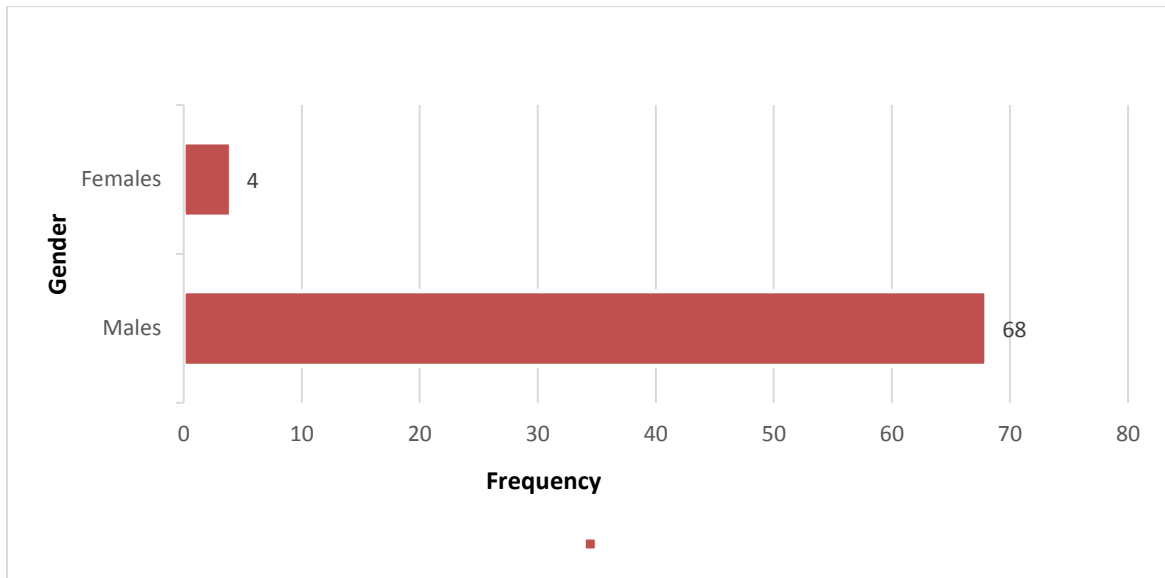


Figure 4.2(a): Gender (n=72)

Figure 4.2(a) reflects that 94.4% participants were males and 5.6% were females.

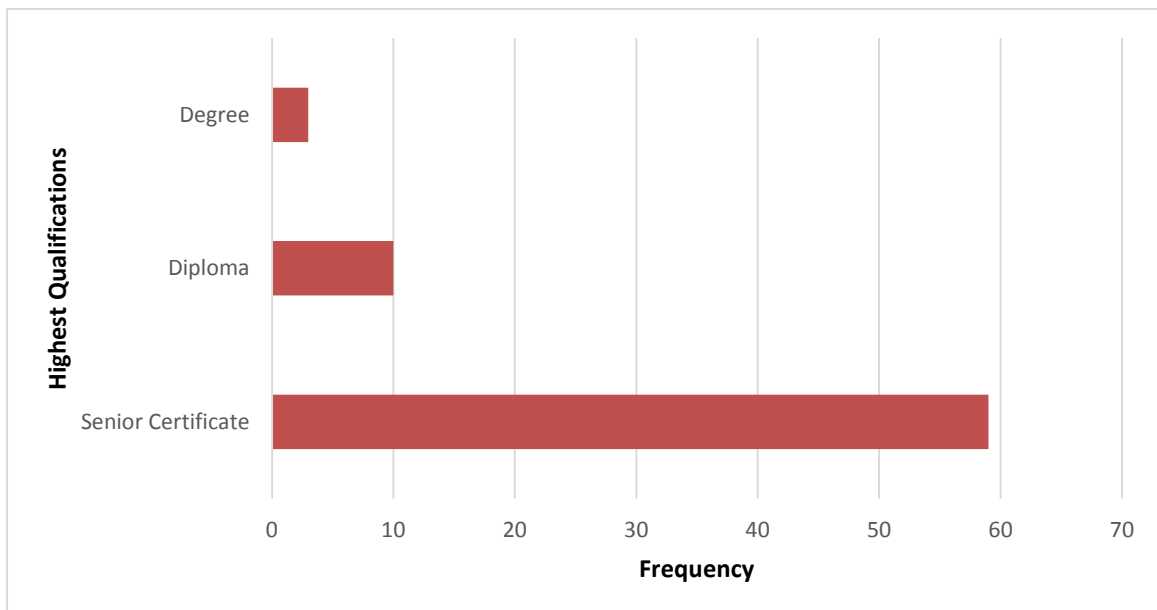


Figure 4.2(b): Highest qualification (n=72)

It is evident in **figure 4.2(b)** that the majority of correctional officials (81, 9% (n=59) were in possession of a senior certificate as their highest qualification whereas 13.8% (n=10) held a diploma and only 4.1% (n=3) had obtained a degree.

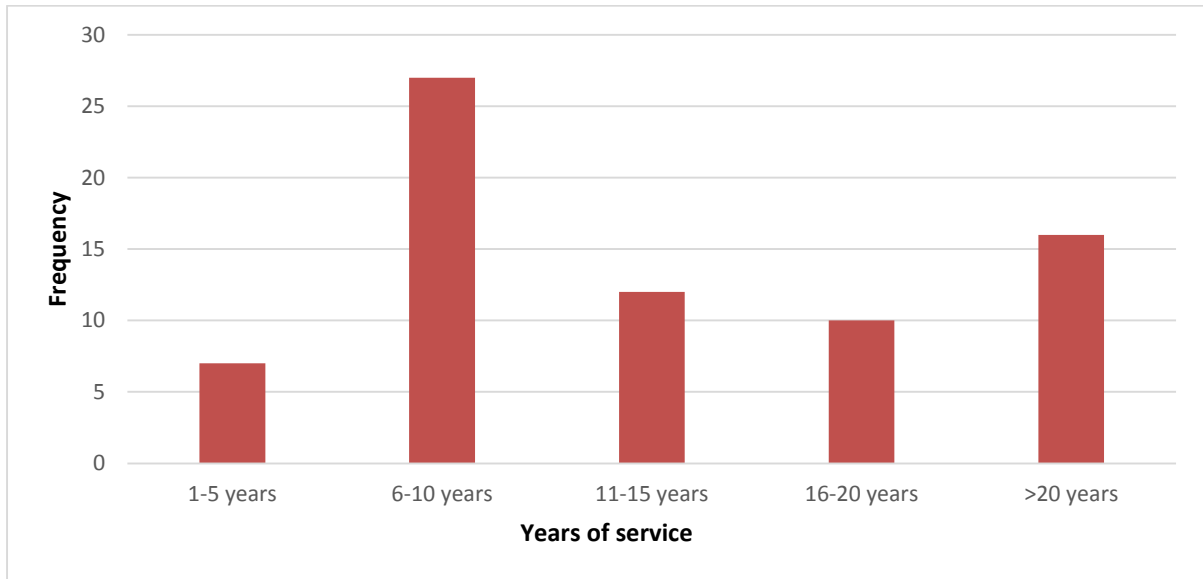


Figure 4.3: Length of service (n=72)

Figure 4.3 shows that of the respondents 37% (n=27) had 6-10 years, 17 % (n=12) had 11-15 years, with 14% (n=10) having a duration of 16-20 years and 22% (n=16) had a service duration of over 20 years, with at least 10% (n=7) had the shortest duration of 1-5 years.

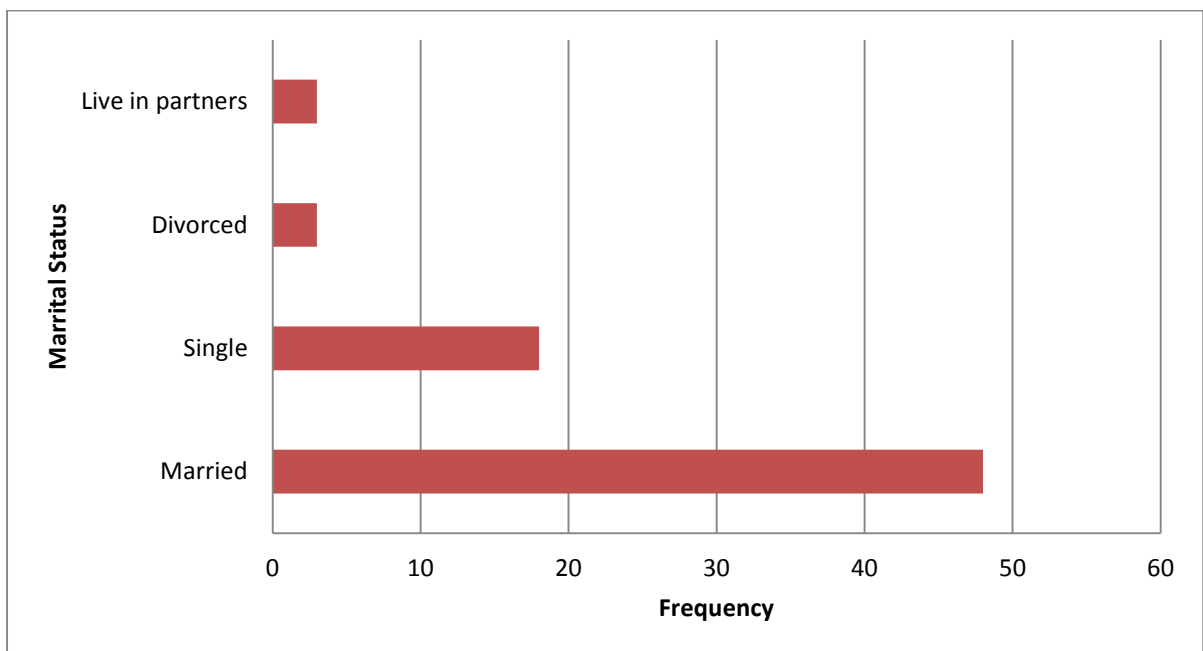
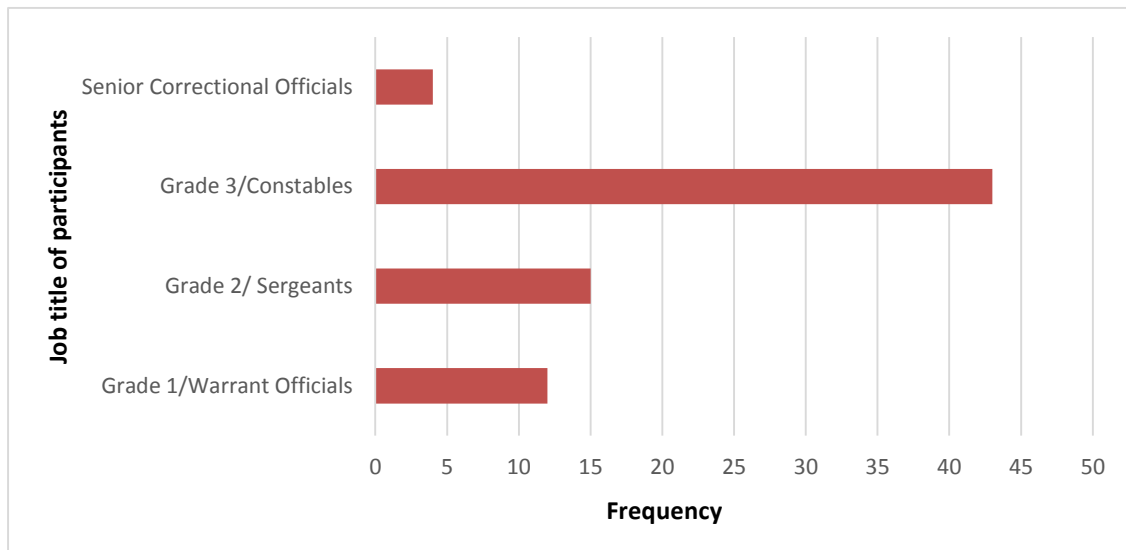


Figure 4.4: Marital Status (n=72)

Figure 4.4 shows that most of the COs 67 % (n=48) were married, 25% (n=18) were single and 4. % (n=3) were divorced, no respondents who participated in the study were widowed, 4 % (n=3) were live in partners.



Job title of participants (n=72)

Figure 4.5: Job title (n=72)

In **figure 4.5** above the majority, 60% (n=43) of the COs were in possession of a grade 3 (constables) job title, whereas 21% (n=15) were grade 2 (sergeants) as their current rank with 14% (n=12) were grade 1(warrant officers) and 5% (n=4) were senior correctional officials.



Figure 4.6: Number of hours worked per day (n=72)

Figure 4.6 depicts number of hours worked by all respondents.

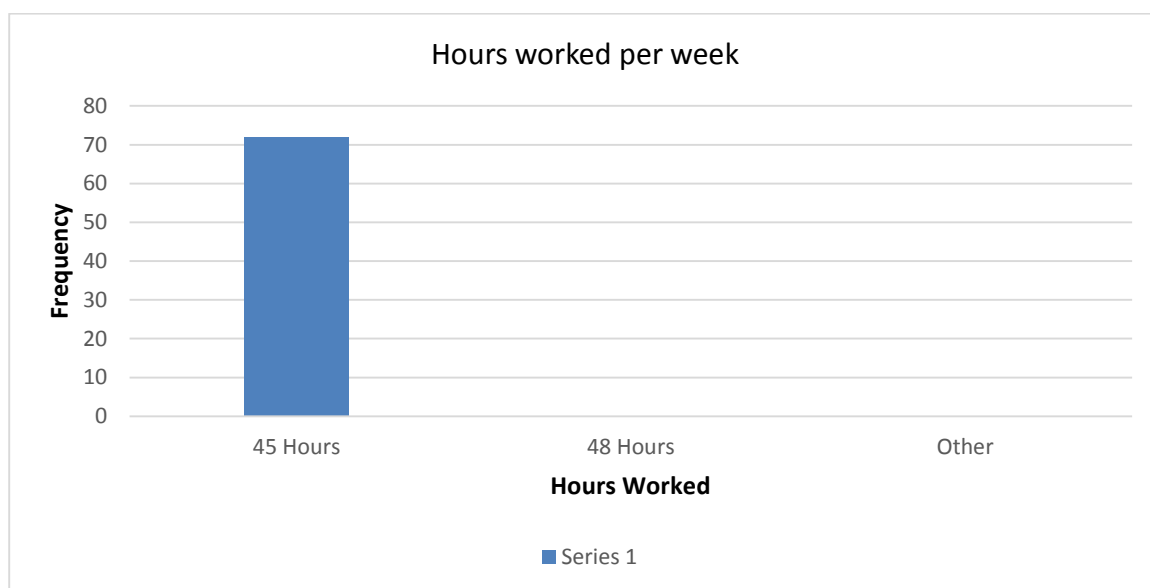


Figure 4.7 hours worked per week (n=72)

Figure 4.7 shows that all correctional officials who participated in the study worked 45hrs per week.

4.2.2 RESULTS OF SECTION B: DOMAINS OF WORK STRESS

Results are presented in this section pertaining to the different domains of work stress.

For ease of reporting the results of the Likert scale was collapsed from 5 points to 3, as in consultation with supervisor. Never and seldom (1 and 2) was linked together and 4 and 5, often /always likewise. Sometimes (3) remained unchanged. The collapse of the Likert scale did not affect the scoring of the results as all the numbers from different responses were added together to make one percentage.

4.2.2.1 Work overload (n=72)

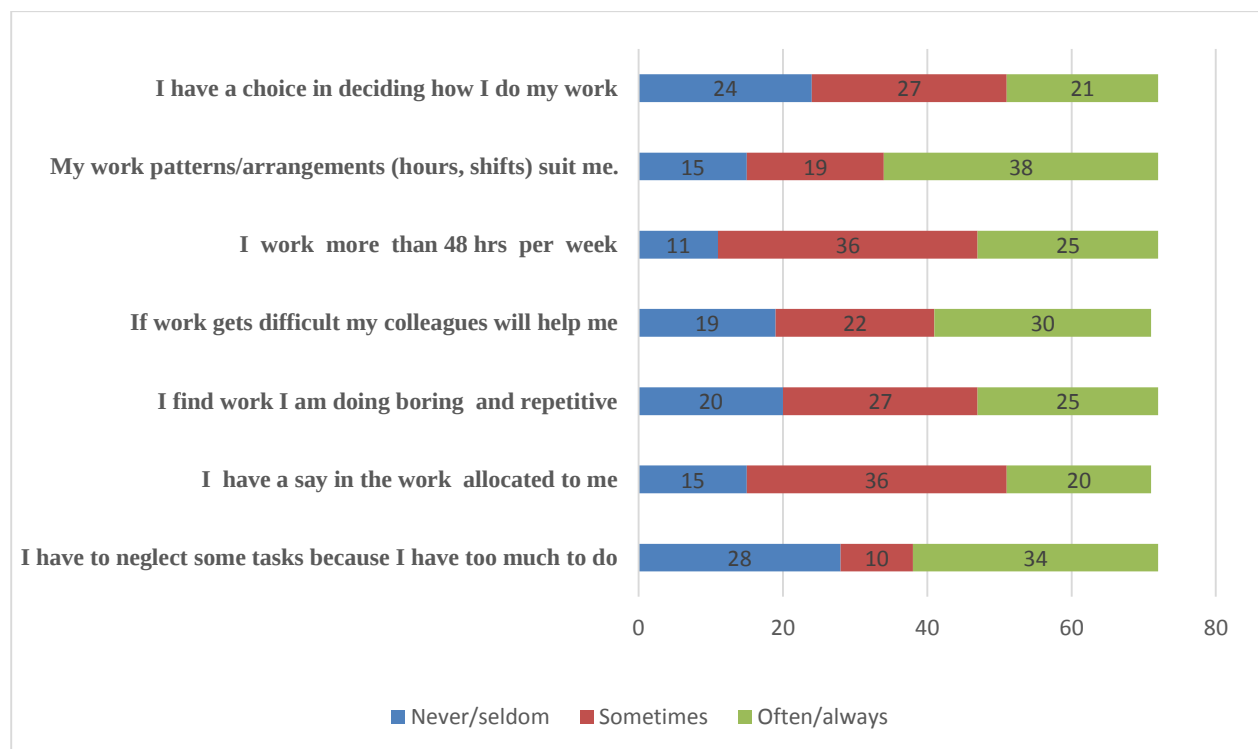


Figure 4.8: Work overload (n=72)

Figure 4.8 above indicates that 34 (47.1%) of respondents felt that they often “*neglected some tasks because they have too much to do*”. In addition 50% (n=36) of respondents felt that they sometimes have a say in the work allocated to them and 37.5% (n=27) were of the opinion that they sometimes “*find their work repetitive and boring*”. Furthermore, 31.9% (n=28) of the respondents reported that sometimes when their work gets difficult their colleagues help them. Half of the respondents (50% (n=36) stated that they sometimes work more than 48 hrs per week. Many of the COs, 52% (n=38) reported that often “*work patterns/arrangements (hours, shifts) suit*” them and 37.5% (n=27) felt that they sometimes “*have a choice in deciding how to do their work*”.

4.2.2.2 Role conflict and ambiguity

The questions asked in this section pertained to role conflict and role ambiguity.

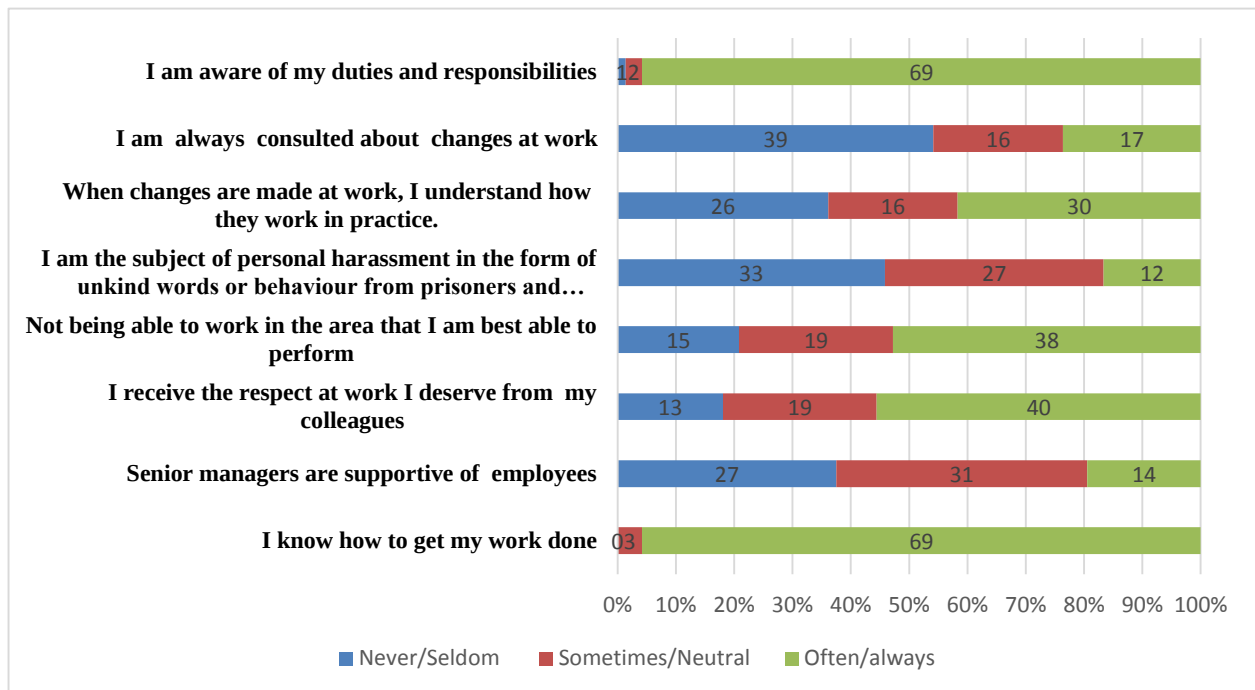


Figure 4.9: Role conflict and ambiguity (n=72)

Figure 4.9 reflects that 95.8 % (n=69) of the correctional officials always know how to get their work done, and 43 % (n=31) reported that managers are sometimes “*supportive of employees*”. Figure 4.9 reveals that 70.8% (n=40) agreed that they “*receive the respect they deserve from their colleagues*” and 52.7 % (n=38) agreed that “*not being able to work in the area that they are best able to perform causes*’ stress for them. Of the total number of respondents 37.5% (n=27) indicated that they sometimes become the “*subject of personal harassment in the form of unkind words from both prisoners and managers*”. Whereas 41.7% (n=30) agreed that when changes are made they understand how they work in practice, many of the correctional officials 54.2% (n=39) strongly disagreed that they are “*consulted about changes at work*”. In addition 95.8% (n=69) agreed that they are aware of their duties and responsibilities.

4.2.2.3 Inadequacies in the Physical Conditions of the Prison

The next section of the questionnaire dealt with the physical work environment of the correctional centres.

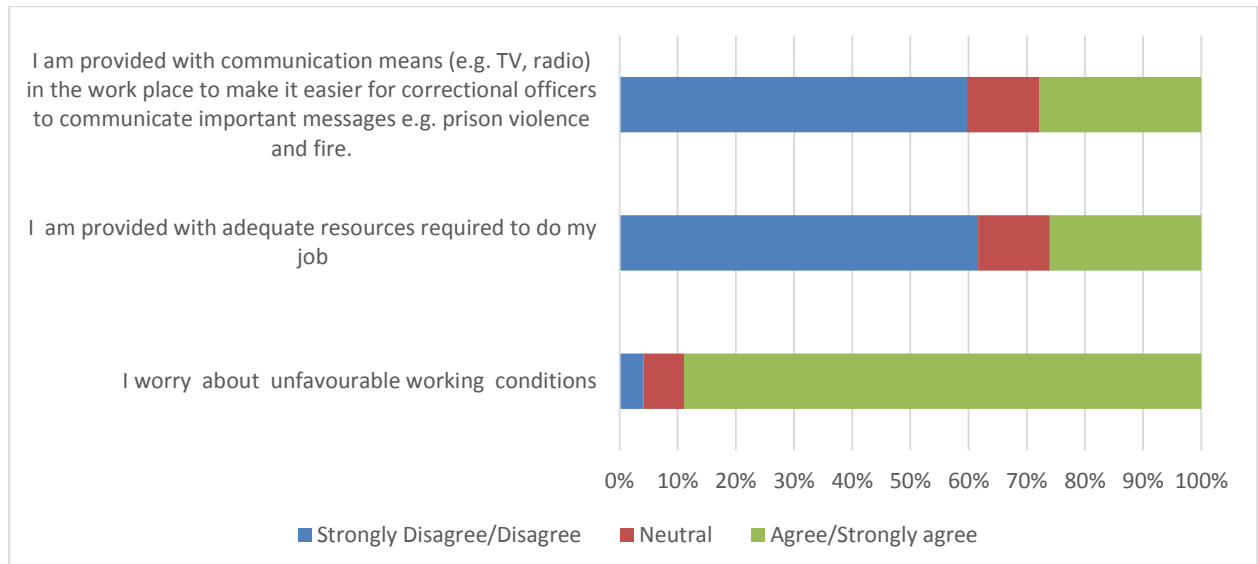


Figure 4.10: Inadequacies in the Physical Conditions of the Prison (n=72)

Figure 4.10 reveals that 88.9% (n =64) of respondents agreed/strongly agreed that they worry about unfavourable working conditions .The majority (62.5 %) (n=24) of the correctional officials disagreed that they were “*provided with adequate resources required to do their job*”, and 59% (n=43) also disagreed that they were provided with effective “*communication means*’.

4.2.2.4 Threat Perceptions/Safety at Work

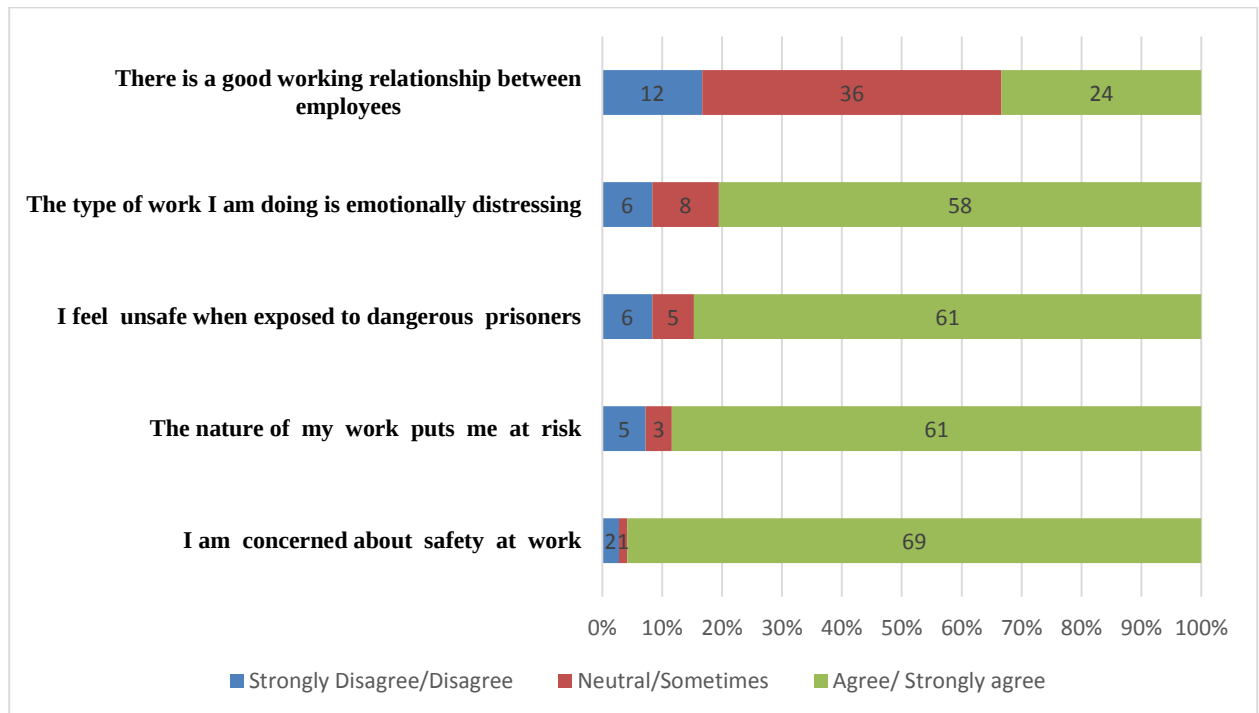


Figure 4.11: Threat perceptions/safety at work (n=72)

Figure 4.11 indicates that the majority 95.8% (n=69) of the correctional officials agreed that they were concerned about safety at work, whilst 87.5% (n=69) agreed that the “*nature of their work puts them at risk*”. In addition, 84.7% (n= 61) respondents also agreed that they “*feel unsafe when exposed to dangerous prisoners*” with 80.6% (n=58) of respondents were in agreement that the “*type of work they are doing is emotionally distressing*”. Furthermore, 50% (n=36) of the COs indicated that there are only sometimes “*good working relationships between employees*” whereas only 33% (n=24) agreed completely with the statement.

4.2.2.5 General Problems

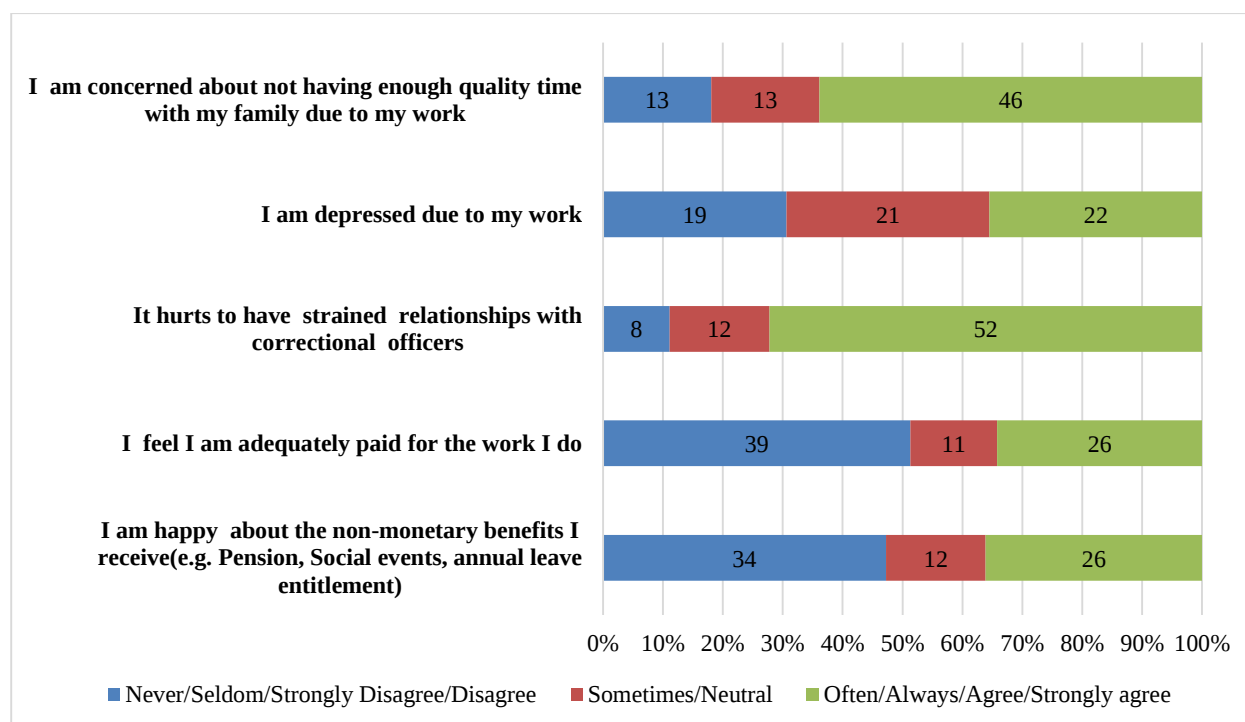


Figure 4.12: General problems (n=72)

Figure 4.12 depicts that only 45.9 % (n=26) of respondents agreed that they are satisfied with the “non- monetary benefits they receive at work” with 54.2% (n=39) participants disagreeing that they are adequately paid. Of the 72 respondents 72.2% (n=52) agreed that “it hurts to have strained relationships among correctional officials’ whereas 25% (8) disagreed with the statement. Forty point three percent 40.3% (n=19) of the correctional officials seldom felt “depressed due to their work” whilst 29.2 % (n=21) felt so occasionally and 30.5% (n=22) often felt depressed. The majority (63.9%) (n=46) agreed that they are “concerned about not having quality time with their families due to their work.”

Figure 4.12 General problems continued

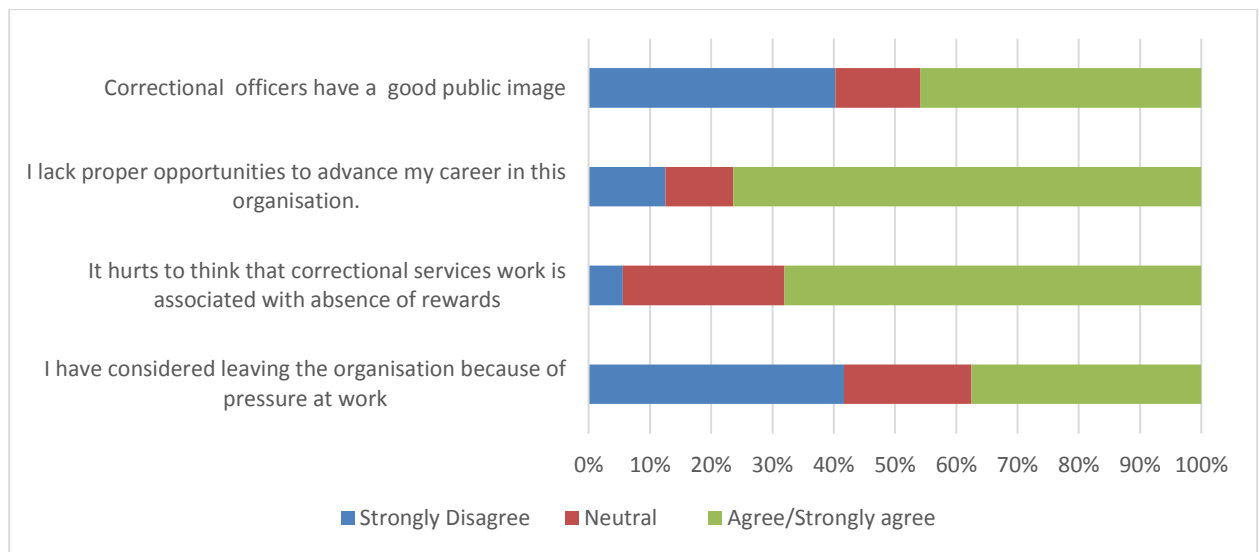


Figure 4.12 General problems continued (n=72)

Figure 4.12 indicates that the majority of respondents 68% (n=49) indicated that it always hurts to think that “*correctional service work is associated with absence of reward*”, whereas 26.4 % (n=19) sometimes felt hurt, the majority (76.4%) (n=55) of the respondents agreed that they “*lack proper opportunities to advance their career in this organisation*” and only 45.8% (n=33) agreed that “*correctional officials have good public image*” while 41.9.6% (n=30) disagreed that they “*have considered leaving the organisation due to pressure at work*”.

Table 4.1 Reflects the results of cross-tabulations that were done to explore statistically significant associations between the characteristics/variables, according to the chi-square (χ^2), a chi-square in a contingency table test for independence to compare two variables and to see if they are related (www.statisticshowto.com/chi-square retrieved 10.02.2018). Marked correlations are significant at $p < .05000$. Number of participants ($n = 72$).

Items	Characteristic/Variables	Correlations
Q39	It hurts to think that correctional services work is associated with absence of rewards	0.004188*
Q9	Longer years of service in the organisation	
*Statistical significance($P < .05000$)		

Associations between variables were conducted using Stata (windows English version 10.0, StataCorp, 2013).

Table 4.1 Shows that there was no statistical significance association between good relationships among correctional employees and the fact that it hurts to have strained relationships among correctional officials and the p value was established at 0.091350. No statistical significance association was found between concern about safety at work and feeling unsafe when exposed to dangerous prisoners and the fact that It hurts to think that correctional services work is associated with absence of rewards and the current rank. There was also no significant association between the fact that the type of work they are doing is emotionally distressing and the concerned about safety at work as well as the concern about not having enough quality time with family due to work and marital status of participants, especially those who are married. Statistical significance associations were found on the following items, it hurts to think that correctional services work is associated with absence of rewards and longer years of service in the organisation.

4.3 DISCUSSION OF THE MAIN RESULTS

4.3.1 Response rate

A fairly low response rate (48%) was obtained in this study similar to response rate of 43% that was obtained in a study done by Ghaddar, Mateo and Sanchez (2008) that investigated the occupational stress and mental health of Spanish correctional officers. In contrast, the study by Regan (2009) which examined stress and coping among Irish correctional officers yielded a 68% response rate. De Vos et al (2005) suggest that when working with a population of between 100 and 200, a percentage of between 32% and 45% should be sufficient for controlling sampling errors. Based on these author's observations, the results obtained by this research are representative of the participating population only and their generalisation and conclusions regarding their experiences of stress can only be tentative.

4.3.2 Demographical data

4.3.2.1 Gender

It is evident from the data that the majority of the participants were males and a smaller number were females. Similar results were found in the Ghaddar, Mateo and Sanchez (2008) study. This notable gender difference is largely due to the fact that the research setting is a Maximum security correctional centre which houses most of the dangerous offenders who have committed dangerous crimes and there is a small number of female offenders. Correctional services is a male dominated profession.

4.3.2.2 Highest education qualification

The majority of the respondents held a senior certificate with only 15 reporting a diploma or degree as their highest level of education. The entry qualification into the correctional officials' career is a senior certificate which would explain the high number of correctional officials holding as highest qualification. Mambi (2005) also reported the same results about correctional official's level of qualifications.

4.4 SECTION B: DOMAINS OF WORK STRESS

The most important results of **section B** of the questionnaire are discussed under the four sections that reflect the format of the questionnaire.

4.4.1 Workoverload

Results on the section work overload showed that half of the respondents reported that they often have to neglect some duties because they have too much to do. This correlates with studies done by Mambi (2005), Regan (2009), Fisher (2008), Lambert et al (2013), Gaddar et al (2008) and Bezerra et al (2016) reported workload as one of the main sources of occupational stress among correctional officials. According to Karasek's Job Demand Model (1979), too big a work load is a stress factor among employees. The same author also states that jobs with high demand and low control greatly increase the risk of a variety of physical and mental illnesses or disorders (Karasek 1979). The work of a CO is characterized by high demand and low control (Gaddar et al, 2008).

In this study some correctional officials indicated that they sometimes feel depressed, some stated that they often feel depressed and some indicated that they never or seldom feel depressed. Similar results were found in a study by Regan (2009), 36.8% (n=25) of the participants who participated in the study reported that they never felt depressed.

According to the results of this study, thirty point nine percent of the correctional officials who participated in this study reported that their work patterns/arrangements (hours and shifts) suited them, in contrast with some of the results from previous studies by Regan (2009) and Mambi (2005) which indicated that shifts work is one of the biggest sources of stress among correctional officials. Correctional officials work three shifts from 07h00-1700, from 14h00-22h00 and from 22h00-07h00 the following morning. Working three shifts can potentially allow COs to achieve a better work-life balance. Correctional officials are allowed to make requests in time of emergencies or family problems and work the shift that is best suited for their needs. Keinan and Pines (2007) say that working conditions for correctional officials involve working shifts, working overtime and working distances away from family. These often create problems with work-life balance as correctional officials are unable to concentrate on their families due to work commitments. Lambert, Hogan, Camp and Ventura (2006) argue that work-family conflict occurs when the work and family domains are incompatible with each other and this may contribute to stress.

4.4.2 Role conflict and role ambiguity

Role conflict refers to when a job demands a certain type of behaviour that is against the person's moral values (Akrani, 2011). Whereas role ambiguity occurs when the worker is not sure of what he/she is expected to do and tasks and responsibilities are not clear which creates confusion in the mind of the worker and results in stress (Akrani, 2011). According to the results from this study, it appears as if most correctional officials in this correctional centre know both how to get their work done and know their duties and responsibilities and, thus experience little or no role conflict or ambiguity. This result can possibly be attributed to the Department of Correctional Services' policy which stipulates that new recruits should undergo intensive training in departmental policy regarding procedures, management and rehabilitation of offenders, and different behaviours of offenders. Correctional officials are provided with their job descriptions before being allocated to their posts, with all the duties outlined in that document. Contrary to the results from the present study Misis et al (2013) concludes that there are conflicting roles because there are correctional officials in charge of custody/guarding offenders who support strategies of punishment when disciplining offenders and those who do not support rehabilitation as a correctional philosophy. On the other hand, there are professionals who believe in rehabilitation as the primary correction goal and regard their work as a form of counselling (Misis et al, 2013). Misis et al (2013) also indicated that officials who view their work as more oriented towards the treatment of offenders have decreased stress levels. Misis et al (2013) also reported that correctional officials in the Southern Prison system Mississippi in the United States who have the most negative perceptions of the personal characteristics of the offenders, as hostile, anti-social, or cold, present more increased stress levels, which are in contrast with the investigation about conflict of roles i.e. treatment vs punishment which indicate that when there is more conflict, there is more stress. Higher stress levels among correctional officials are experienced when they perceive offenders as being unfriendly, antisocial and cold while lower stress levels are experienced when they perceive offenders as being unthreatening, not arrogant and non-manipulative.

This current study revealed that a great majority of correctional officials find the type of work that they do as emotionally distressing. Similar results albeit not such a high percentage (54%) was obtained by Ghaddar et al (2008) among correctional officials in a Spanish

penitentiary centre, found their work emotionally tough. The results showed that psychological pressures were due increased stress ratings, low self esteem due to their positions in the hierarchy with lack of autonomy and lack of decision making power, moderate ratings were reported on social support from colleagues and supervisors, poor social support was also mentioned as a source of stress, exposure to dangerous situations as well concerns about safety at work also received moderate ratings and decreased ratings were reported on mental health. In relation to psychological pressures 52% reported that they don't have control over the workload allocated to them which led them to work faster in order to meet the deadlines and 41% reported lack of decision making power in the work allocated to them. Overall high percentage were reported as far as exposure to psycho-social risk is concerned. In conclusion the authors suggested that there should be equal ratio between staffing levels and the additional tasks to reduce work pressures. Ghaddar et al (2008) also concluded that a mental health related program should focus on work conditions that affect the psychological characteristics of the employee. Previous studies on correctional officials indicated a correlation between their health and psychosocial sources of stress in the workplace (Ghaddar et al 2008).

Many participants reported that managers are not always supportive. This result is similar to results from studies by Mambi (2005), Regan (2009), Gaddar et al (2008), Lambert et al (2013), Fisher (2008) and Bezerra et al, (2016) where the results showed that employees are stressed due to lack of support from supervisors and managers. A work environment where there is leadership support and participatory management whereby employees are included in decision-making on issues that affect them directly, have a positive impact on mental health and job performance of workers/employees (WHO, 2010). Jaime (2013) provided evidence-based information about social support as part of stress management amongst correctional officials. This means that having support in times of difficulty helps employees experience stressful events as less threatening and more controllable than if they had little or no support Jaime (2013).

Although the majority of COs indicated that they receive the respect at work they deserve from their colleagues, the results show that correctional officials are concerned about strained relationships with colleagues as it impacts on service delivery. Literature reviews by Bezerra et al (2016) indicate that poor relationships with managers and colleagues are the factors that most contribute to stress in prison work. In the Department of Correctional Services all duties

and responsibilities require team work. Escorting offenders to different institutions e.g. courts and external hospitals require a team of correctional officers. As maximum security prisoners are regarded as dangerous, they require team work and good interpersonal relations amongst employees according to Mambi (2005). The same author is also of the opinion that newly appointed staff or inexperienced staff members can benefit from team work as they always have support when experiencing problems or when they need help (Mambi, 2005). In addition Mambi (2005) notes that as prison population increase in South African correctional centres, teamwork is required to reduce work overload caused by overcrowding. Therefore introducing of team building activities help to improve interpersonal relationships, and improved staff communication helps with role clarity and increased job satisfaction (Mambi, 2005).

Literature reviews on the following studies Armstrong & Griffin, (2007) and Keinan-Malachi-Pines, (2007) indicated that the factors which most contribute to stress in prison work are relationship problems (with colleagues, supervisors, or prisoners); overburdened workload; low social status of the profession and lack of social support. “Conflicting roles” and few opportunities for promotion were also cited, which when interacting with individual factors like personality and family conflicts, can cause mental and physical health problems. Similar results were obtained in this study where correctional officials reported that they don't receive adequate support from managers and that they don't have any say on the workload allocated to them.

4.4.3 Inadequacies in Physical Conditions of Prison

A great majority of correctional officials in this study reported that they are always concerned about unfavourable working conditions such as inadequate resources required to perform their work. In addition many COs reported that they do not have adequate communication means, for example TV, radios and so on to make it easier for correctional officials to communicate important messages regarding prison violence and fire. Similar results were found in the study by Bezerra, Assis and Constatino (2016) where correctional officials reported lack of material and human resources as a stress factor. Bezerra, Assis and Constatino (2016) conducted a literature review on psychological distress and stress in correctional officials work from 2000 and 2014 based on a survey of national and international journals.

4.4.4 Threat perceptions/ safety at work.

According to the results from this section of the questionnaire, the majority correctional officials (95.8%) were concerned about their safety at work and the fact that they always feel unsafe when exposed to dangerous prisoners. This result is supported by the study results from Okoza, Imhonde and Aluede (2010) as well as Regan (2009) in which 41.2% COs were concerned about their safety at work. The results from the systematic review by Bezerra et al (2016) also reported level of contact with inmates, overcrowding, perceptions of fear or danger and the paradox of punish/re-educate as some of the risk factors encountered by COs. Millson 2(2016) conducted a study on the predictors of stress among correctional officials in Carleton University in Canada .The results showed that perceptions of personal security or danger were the best predictor of job stress for the overall sample. Misis et al (2013), identified danger as one of the most important determinants of stress among correctional officials. Perceptions of personal security were also the best predictor of job stress at each institutional security levels Millson 2(2016).

Gangsterism and overcrowding is rife in South African correctional centres, the term prison gang is used in the correctional centres to denote any gang activity, other members in the law enforcement or correctional officials use the term "security threat" group or STG (Stoner,1961,13&107) and (Nel, 2017).Gangs are existing organisations in correctional centres and they originated in the 19th century, they consist of living humans who responded to present social environment and they draw life from present culture in correctional centres (Nel,2017). Nel (2017) is of the opinion that lack of recreational facilities especially in maximum security correctional centres, lack of privacy and extreme overcrowding are the effects of the system. The same author states furthermore that gangs contribute to correctional officials feeling unsafe as they control the lives of all offenders management and correctional services personnel on daily basis ,they frequently attack fellow offenders, structures and facilities are damaged and in some other cases lives are lost and they also prevent the Department of correctional services from implementing its goals and objectives Nel (2017).

According to Jaime (2013), factors that contribute to correctional officials feeling unsafe are: **Inmate-related:** threat of violence/injury, inmate mental illness, substance abuse, suicide and so on. The research setting was a maximum security correctional centre which accommodates dangerous inmates

Occupational (inherent to the profession): closed work environment, where hyper-vigilance is required. The maximum security correctional centre is a closed environment.

Organizational/administrative: mismanagement, poor leadership, inadequate resources/ pay and understaffing. Since the results revealed that the Cos in this centre noted that they have inadequate resources, perceive their pay as

Psycho-social: work/family conflict, media scrutiny and so on (Jaime 2013). Work/family conflict is a source of stress for most Cos in this work setting

4.5 General problems

Half of the correctional officials who participated in the study feel that they are adequately paid and are satisfied with the monetary benefits they receive such as pension and annual leave entitlement. Some COs feels that they do not have enough quality time with their families due to work commitments.

In the current study some COs reported that they are experiencing the feelings of hurt at the idea that correctional service work is associated with absence of rewards. Absence of reward was also one of their main concerns as indicated in the study conducted by Mambi (2005) and Regan (2009). Regan (2009) reports that absence of rewards is a stress factor amongst correctional officials all over the globe. According to Siegrist (1998) a performance management system that rewards high productivity, regardless of how the results are achieved, will encourage employees to be dedicated to their work and performance will decrease, whereas a performance management system that has rules regarding code of conduct as well as set targets for productivity can encourage acceptable behaviour (Siegrist,1998),recognising people who showed positive behaviour and attitudes leads to a healthy workplace culture (WHO, 2010).

Half of the COs reported that they sometimes work more than 48hrs per week. This usually happens when the total head count of offenders does not tally, and this is a problem because one of their responsibilities is to ensure safe custody of offenders. This causes lot of stress because they have to ensure that all offenders are accounted for before knocking off (Mambi, 2005).

Most of the respondents in this study are not concerned about their public image with some agreeing that correctional officials have a good public image. This indicate that the public

appreciates the value of their work (Mambi, 2005) This is in contrast with studies by Regan (2009) and Bezerra et al (2016) which identified rejection by society or perception of a negative public image as a stress factor amongst members of correctional officials.

4.6 SUMMARY

This chapter presented the results of the research through use of tables, figures and description. A demographic profile of the respondents was presented and described. Associations between different variables were demonstrated by the Chi square test (χ^2).

The risk factors for stress, as indicated in the research, are various. The main results were discussed namely related to work overload; lack of material resources; perception of work as dangerous.

CHAPTER FIVE

SUMMARY, LIMITATIONS, RECOMMENDATIONS AND CONCLUSION OF THE STUDY

5.1 INTRODUCTION

This chapter concludes the research and its implications to OHN practice. The chapter also discusses the limitations of the research and highlights recommendations for future direction and research.

5.2 SUMMARY

The objective of the study was to describe the sources of occupational stress among correctional officials with the aim of providing a description of the sources of stress.

The aim and objective was reached by means of a cross-sectional study that was conducted in a Gauteng maximum security correctional centre using the WSSCO self-administered questionnaire to collect data. Correctional officials were selected by means simple random sampling and data were collected from October 2014 to December 2014.

A relatively low response rate was obtained in this study and the majority of respondents consisted of male correctional officials. The ages of COs ranged between 25 and 65 years of age and the majority held a senior certificate as highest level of education.

The results revealed that correctional officials in this correctional centre experienced stress related to all of the domains in varying degrees as measured in the WSSCO questionnaire.

5.3 LIMITATIONS OF THE RESEARCH

According to Burns and Grove (2005), limitations denote those theoretical or methodological restrictions of a study which may decrease the credibility as well as the generalizability of its findings.

- Firstly, because the data collection instrument was a self-reporting questionnaire, the opinions of the respondents were based upon their view points or their own feelings.

Sometimes respondents can over report their levels of stress to please the researcher and some of the findings may or may not be a true reflection of the correctional official's level of stress as over reporting could have happened.

- Secondly, there is the possibility that the stress experiences of the correctional officials who participated in the study are not the same as those of correctional officials who did not participate in the study.
- The results of the study may not be generalised to correctional officials in other correctional centres, as the different environment and circumstances prevailing in other correctional centres may have positive or negative effects on stress.
- The questionnaire might have different meaning for different people. Apart from this disadvantage a further problem arises with issues of social desirability. It is possible that some correctional officials in this study may have wanted to give the impression that they are coping and will not admit to experiencing any stress.
- Data were collected by means a self-administered questionnaire only. Data collected through focus groups or personal interviews could have added richer information to the collected quantitative data.
- A threat to internal validity of the research was posed by factors such as the use of self-report methods, a cross sectional design and systematic sampling.

5.4 FUTURE DIRECTIONS AND RECOMMENDATIONS

5.4.1 Recommendations for Correctional Services Executive Management and the Human Resources and Wellness Departments

- Consider the development and implementation of a comprehensive occupational health service integrated with the wellness/health promotion programme. The service and programme should be based on the physical and psychosocial hazards and risks of the unique workplace setting. An occupational health programme is a requirement in workplaces according to the Occupational Health and Safety Act (1993 as amended).

To this end the appointment of an occupational health nurse practitioner (OHNP), who can lead the way, is strongly recommended.

- Development and implementation of a stress management programme as part of a mental health promotion/wellness programme.
- Revisiting the safety programme so as to develop and implement a programme that meet the safety and security needs of COs.
- It is also recommended that correctional officials get more support from senior officials.

5.4.2 Recommendations for correctional officials employed in correctional centres

- Attend stress management programmes to identify stressors (work related and personal), and manage those stressors.
- Attend a work life balance programme so as to maximise leisure and family time.

5.4.3 Recommendations for future research.

- A study that measures the stress levels before and after a stress management intervention with correctional officials is recommended.
- Investigate the coping skills and health of correctional officials in this workplace setting.
- A research project to be undertaken that explores the psychosocial work environment of correctional officials.
- Since the correctional centre does not have an occupational health and safety service and programme no recommendations are made to OHN practice in this particular work setting. However it is recommended that professional organisation(s) such as POPCRU advocate for the implementation of an occupational health programme.

5.5 CONCLUSION

To conclude this study the research question is answered namely: What are the sources of stress experienced by correctional officials in the selected correctional centre?

The study results revealed that correctional officials experience sources of stress related to physical and psychological work environment. The majority of sources of stress for COs in this correctional facility are nested/linked in the threat perception domain entailing safety concerns at work, risk associated with the nature of the work, exposure to dangerous and work that is emotionally distressing.

Other sources of stress are: The level of support given by senior managers, not being able to work in the area that they are best able to perform and not always being consulted about changes at work are sources of stress, unfavourable working conditions, lack of adequate resources required to do their work and lack of communication means (e.g. TV, radio) in the work place to make it easier for correctional officials to communicate important messages e.g. prison, violence and fire.

Furthermore the nature of the relationship between employees, inadequate remuneration, not having enough quality time with family and the absence of rewards and lack of proper opportunities to advance their career in this organisation were reported as sources of stress. A source of stress related to work overload is that COs do not always have a choice in deciding how to do their work. In addition they stated that they do not have a say in the work allocated to them.

It can be concluded that correctional officials' sources of stress are principally located in the threat perceptions/ safety at work and inadequacies in the physical conditions of the prison.

Correctional officials are vital to the rehabilitation outcomes of offenders and therefore need to be supported and cared for in terms of the stressors they experience and thus to their holistic health. An integrated occupational health service and wellness programme can be beneficial to the organisation as a whole and the employer.

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