

The positive and negative impact of permanent night duty on officials in the Department of Correctional Services

Mini-dissertation

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MSW (Health Care)

by

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in the

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Declaration of originality

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The positive and negative impact of permanent night duty on officials in the Department of Correctional Services

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ABSTRACT

Title:	The positive and negative impact of permanent night duty on officials in the Department of Correctional Services
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Degree:	MSW (Health Care)
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The Department of Correctional Services is the South African Government Department that is responsible for the smooth running of the South African correctional system. Correctional facilities have to be staffed twenty four hours a day and therefore correctional officials have to work fixed or rotating shifts to ensure that the needs of offenders are taken care of. The number of staff members in many South African correctional centres is not sufficient to ensure proper care and management of offenders, but staff shortages during the night is even more chronic compared to staff shortages experienced during the day. It is vital that correctional officials be alert and vigilant at all times and therefore these staff shortages contribute to high levels of stress, lack of motivation and feelings of being overwhelmed by the work load.

Shift work is a phenomenon that is increasing worldwide. It is important to understand the impact of work schedules as more people seem to be working shifts that do not conform to the standard work week. Shift workers seem very healthy when their illnesses are compared to that of the general public. Many health problems have been detected in shift workers, including stress related conditions, as any work schedule can act as a stressor if the needs of the individual worker are not taken into consideration.

Sleeping patterns during the day differ from sleeping patterns at night. Shift work disrupts a person's circadian rhythms and therefore contributes to poorer physical and psychological health. It further causes poorer productivity and increases the possibility of becoming involved in accidents. Working night duty is very stressful to

the night shift worker who has to cope with challenges at work and at home. There is a variety of common stressors at work that affect shift workers physiologically (*cardiovascular, stroke, digestive problems, back pain and arthritis, headaches, increased blood pressure and hormonal*), psychologically (*burnout, depression, anxiety, family problems, sleep problems and job dissatisfaction*) and behaviourally (*absence, tardiness, substance abuse, accidents, sabotage / violence, poor decision making, poor job performance and a high personnel turnover*).

This study focused on understanding the positive and negative impact of working permanent night duty on correctional officials. The findings of this study will be helpful to correctional officials who work permanent night duty in addressing employee workplace support.

The goal of the study was

To explore the positive and negative impact of working permanent night duty on officials in the Department of Correctional Services.

The research question was

What is the positive and negative impact of working permanent night duty on officials in the Department of Correctional Services?

A ***qualitative research approach*** with a ***collective case study*** as the research design was used to conduct this study. The ***research population*** for this study included all the correctional officials who were permanently working night duty at all the correctional centres in Gauteng. Only a few correctional officials work permanent night duty and therefore ***non-probability volunteer sampling*** was used in this study. Ten (10) participants ***volunteered*** to partake in the study. ***Semi-structured one-on-one interviews and document studies*** were used to collect data after participants' written informed consent was obtained to conduct interviews and make audio recordings of the interviews which were afterwards transcribed verbatim by the researcher. Individual personnel records, including leave and sick leave records, were used to confirm data that was collected during the interviews, also with

participants' informed written consent. Seven themes with sub-themes were generated from the data that was collected. A general profile of the participants was provided in the discussion of the findings of the study, while the thematic analysis was done of the themes together with their sub-themes. Literature and verbatim quotes were used to report on the findings of the study. The themes in the study are: **theme 1**: Correctional official's views on the different shift patterns in the Department of Correctional Services; **theme 2**: Impact of permanent night duty on the health of correctional officials; **theme 3**: Impact of permanent night duty on social life / relationships; **theme 4**: Impact of permanent night duty on the correctional official's career in the Department of Correctional Services; **theme 5**: Challenges presented by working permanent night duty; **theme 6**: Correctional officials' coping strategies with working permanent night duty; **theme 7**: Recommendations to assist towards the betterment of working permanent night duty.

This study concluded that correctional officials working permanent night duty may feel isolated, misunderstood and unappreciated, which will impact negatively on their feelings towards management, their colleagues and the Department of Correctional Services in general. The decision to work permanent night duty must be an informed and a voluntary decision made in unison as a couple or family. Negative feelings can lead to low morale and can contribute to stress and feelings of depression, but not all permanent night duty officials experience working permanent night duty negatively. They are able to adjust better and still feel positive about a career in the Department of Correctional Services.

Recommendations in this study can assist management and employee assistant practitioners in improving understanding of the needs and experiences of correctional officials who work permanent night duty. It can further raise awareness concerning symptoms to look out for in order to be proactive and prevent fatal accidents that sometimes happen as a result of the inability of permanent night duty officials to cope with especially, the negative impact of working permanent night duty.

LIST OF KEY TERMS

NIGHT SHIFT

NIGHT DUTY

SHIFT WORK

WORK SCHEDULES

CORRECTIONAL OFFICIALS

DEPARTMENT OF CORRECTIONAL SERVICES

CIRCADIAN RHYTHMS

ECOSYSTEMS PERSPECTIVE

STRESS

STRESS RELATED ILLNESSES

SLEEPING DISORDERS

EMPLOYEE ASSISTANCE PRACTITIONERS

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Chapter 1

General introduction

1.1 Introduction

As much as thirty percent of the workforce works shifts that are different from traditional daytime working hours. Approximately twenty percent of shift workers are people who “select” themselves out of jobs or set themselves apart from other job applicants when they find it difficult to adapt. Shift workers are uniquely healthy when their afflictions are correlated to those experienced by the general public. Many health problems have, nevertheless, been detected in shift workers and these include stress related conditions (Kohler, 2006).

It is asserted that the world is facing a new epidemic, namely that related to stress. In Britain alone, an estimated 500,000 people claimed to be afflicted by work stress in 1995. On average five to six million working days were forfeited and it has cost the country in excess of an estimated £5 billion a year (Wainwright and Calnan, 2002:1). Cranwell-Ward and Abbey (2005:17) emphasize that results from a UK survey conducted by both *Personnel Today* and the *HSE* in 2003, indicated that a ratio of four out of five employers concluded that stress had a negative impact on productivity. It was also established that the larger the organization, the greater the impact on the work force. According to this survey 1,554,256 working days are forfeited due to stress, and due to the absence of employees, employers suffer losses of up to £1.24 billion a year. Eleven percent of the absenteeism was stress related, and eighty three percent of the participants were of the belief that stress adversely impacts on productivity. Sulsky and Smith (2005:99) claim shift work to be at a par with other work-related stressors but considers the impact on the work force to differ as a result of their coping mechanisms when faced with various obstacles.

Dr Arien van der Merwe (Carte Blanche, 2006) indicated that an estimated ninety five percent of all visits to primary health care facilities in South Africa are stress related. She cautioned that work-related stress levels in South Africa are reaching epidemic proportions. Health risk assessments for companies in South Africa

indicate that 46% of the work force suffers from high blood pressure and that, on average, this affects mostly 25 to 30 year old employees. Work itself does not constitute the problem, but the pressures and demands that employers exert on workers become excessive. Common stressors at work can be heat, cold, noise, and role related, directly correlated to work load, demands of pace and time limits, work schedules that include shift work, interpersonal demands and conflict, situational constraints, perceived control, emotional demands as well as traumatic work stressors such as violence on site (Landy and Conte, 2007:421).

The researcher is currently employed at Leeuwkop Medium C Correctional Centre, Department of Correctional Services as the supervisor for the social workers at the Centre. It was expected of the researcher to work overtime and as a result the researcher was exposed to working night duty. It came to the attention of the researcher that some correctional officials worked night shifts only. Not all of these correctional officials initially volunteered to work night shifts solely, but would also prefer to alternate these with working during the day. Following discussions with some of the permanent night duty officials and from personal experience of working night duty over weekends, it became clear that some of these correctional officials did not have healthy sleeping and eating patterns. At intervals some correctional officials reported late for work, did not report for work at all, or reported for work while under the influence of alcohol. Some correctional officials fell asleep at the designated tower posts. These actions or neglect by correctional officials consequently lead to disciplinary measures being instituted against them and in some instances these constitute dismissal. During June 2005 an incident occurred where an official committed suicide at the main entrance of the institution immediately following his night duty. Nobody at said institute had been aware of problems experienced by this correctional official at the time. Most of the correctional officials working night duty are expected to carry a fire arm and routinely they are working on their own at a specific tower post. These situations could prove both dangerous and stressful.

Experts consulted confirmed the necessity for this research to be undertaken. Makgatlo (2006), the Area Coordinator Corporate Services indicated that this study could be relevant and helpful to the Department of Correctional Services. Moeng (2006), a correctional officer working at the Management Area Personnel Office, also indicated that the study would be relevant to identify problem areas in the work environment that need to be addressed. Moloji (2006), a Social Worker, as well as Mostert (2006), a Psychologist, indicated that the study would be relevant, as they realised that some correctional officers are too withdrawn and timid to seek help when experiencing difficulties. According to both these experts, correctional officials work permanent night shifts for a variety of reasons, while some of them are experiencing serious financial problems.

The findings of this study will be helpful in assessing the positive and negative impact that working permanent night duty has on officials employed at the Department of Correctional Services. These findings can be utilised in order to address employee-workplace support for correctional employees working permanent night duty.

1.2 Literature review

Dane (1990:217) states that *reviewing literature* does not implicate overloading the reader with all the information that was received while searching for literature. It is of far greater importance to provide the reader with the essential information only. Reviewing literature entails providing the reader with information on existing research. Additionally this literature proves to be an attempt at providing some indication of causes for existing research proving insufficient and, in conclusion, it comprises an attempt at presenting specific information on the planned study. Delport and Fouché (2005c:263) agree but, in addition imply that the literature review demonstrates which assumptions are of consequence when researching the questions that need to be addressed through the study. Chapter 2 will discuss the literature review in greater detail.

Workplace stress constitutes one fraction of a person's overall stress levels. Kohler (2006) indicates that shift work, the lack of sleep and chronic fatigue form a significant part of the list of stress related sources complicating many people's lives. Weiten (1992:157) explains that the twenty four hour biological cycles found in human beings as well as in other animal species are referred to as the circadian rhythms. Wilson and Kneisl (1992:989) add that the twenty four hour cycle in humans control the diurnal fluctuations in sleep, body temperature, plasma concentration of cortisol as well as the influx of other hormones. When working shifts, these circadian rhythms are affected.

Josling (1999) states that conclusions drawn from studies conducted by the Circadian Learning Centre in the United States indicate that shift workers, especially those who work night duty, are exposed to several health problems. These health problems include sleep disorders, fatigue, heart disease, high blood pressure and gastrointestinal upsets. Shift work may also contribute to the rapid onset of ulcers. Harold Thomas (in Josling, 1999) additionally states that the rate of peptic ulcer disease is eight times higher in people who work night duty than in those who only work during the day. The rate of increased cardiovascular mortality, chronic fatigue, excessive sleepiness and difficulty sleeping are also higher risk factors when working night shifts. Night duty workers are also more prone to an increase in body weight resulting from their abnormal eating habits and lack of exercise. A greater number of night duty workers are getting divorced, abuse substances severely, are depressed and are also more likely to view their jobs as stressful.

Schell (1997:5) agrees that work related stress is costly to individuals as well as to the organization. The most frequently experienced stress-related disorders range from short-term depression, chronic fatigue, anxiety, insomnia, migraine headaches, stomach ulcers, asthma, arthritis and substance abuse as well as long-term disabilities and potentially terminal disorders such as cardiovascular disease, traumatic accidents, suicide and cancer. Guastello (1995:180) adds to these hypertension, kidney failure, impaired interpersonal relationships, impaired decision

making, burnout, errors, absenteeism, and a higher personnel turnover (Wainwright and Calnan, 2002:19). Deregulation is also a particular form of stress, which is characterized by a combination of changes in a person's eating and sleeping habits and therefore shift work deserves special attention.

This study focuses on shift workers and specifically on the impact of working night duty, whether it be positive or negative, on correctional officials. Shift work goes hand in hand with repetitive strain or injury of the body and the mind. The person has to constantly re-adapt to a different sleep/wake cycle which can cause stress and create health problems. Unusual sleeping patterns also impact on one's behaviour and contribute to psychological differences.

1.3 Theoretical framework

Dane (1990:63) highlights that any informal theory the researcher may support about a research idea will be related to a formal theory. The most productive way to start any literature review is therefore by embracing a formal theory. Delpont and Fouché (2005c:263) further elucidate that the form of qualitative design that will be employed during the study functions as an alternative to theory and literature in the research process. The place of theory in the case study depends on its function, whether in order "to make comparisons, build theory, or propose generalization" (Leedy in Delpont and Fouché, 2005c:263).

For the purpose of this study, the researcher decided on utilising the *Ecosystems Perspective*. This perspective is regarded as a conceptual framework rather than a theoretical framework and allows social workers to consider and assess the relationship between individuals and the environment they find themselves in. This perspective does not specify what the problem is or how to address the problem but rather views these interactions as constant, non-linear and without any simple cause-and-effect explanations as to the complexity of the human psyche and these conditions (Meyer in Besthorn, 2013:176). The focus of systems thinking is therefore to a greater extent on the roles that individuals play in trying to maintain the

equilibrium or balance in the system, while the focus of ecological thinking is broader and looks at unique settings where individuals tend to play out their roles and additionally focuses on how the specific setting tends to influence the person's functioning (Nacman, 1990:375 and Van Wormer and Besthorn in Besthorn, 2013:178).

Four (4) key ideas with regard to the ecosystems perspective that were mentioned by Besthorn (2013:178) include:

- that each of the perspectives related to the ecosystems perspective offers an expansive holistic framework in trying to explain how different parts fit in and function together as part of the bigger picture;
- the belief that systems try to find a balance and therefore strives for homeostasis or equilibrium;
- that systems are adaptive in nature; and
- that the environment in which individuals find themselves is a relatively static social setting and therefore the focus is on the person and his or her ability to negotiate and accommodate different environmental conditions.

Through exploring the positive and negative impact of working permanent night duty on correctional officials, the researcher wishes to establish whether the environment of working permanent night duty has an impact on those correctional officials. If there proves to be an impact or consequence, the ecosystems perspective therefore holds the belief that correctional officials will either try to find a balance in order to maintain the equilibrium, or strive to adapt to the impact of working permanent night duty.

1.4 Problem formulation and rationale

The term *problem formulation* might be misunderstood and can, for example, be utilized as *need for the study* or *the source of the problem* (Creswell in Fouché and De Vos, 2005a:89). Williams, Tutty and Grinnell (1995:50) indicate that the selection of a research problem is influenced by four factors:

- the problem needs to interest the researcher and must not be too difficult to solve,
- it needs be of great consequence to those who will receive, consume or facilitate the study,
- the study should take into account the current social and cultural values, and
- there can be a probability of an element of opportunity or of luck involved.

In order for the researcher to conduct this study, it was important to establish whether there was a need to determine what the positive and negative impact of working permanent night duty was on officials working in the Department of Correctional Services. The researcher was interested in determining how working permanent night duty impacted on officials in the Department of Correctional Services and, as a result of her employment in the Department of Correctional Services; it was not too difficult for the researcher to conduct the study. This study added value to the organization and it was possible for the researcher to consider the current social and cultural values in the Department of Correctional Services. Being employed by the Department of Correctional Services contributed to the probability of an element of opportunity or luck, as the researcher obtained permission to conduct the study during the night when all the relevant officials were available for interview.

Concerning working night duty, it is important to understand the way in which our bodies function and how and to what extent changing our normal routine affects us physically. Our bodies naturally react to light and darkness by being alert during the day and being asleep at night. Kaplan and Sadock (1991:469) mention that biological rhythms influence sleep. An adult habitually sleeps once and sometimes twice within a twenty four hour period. Sleep patterns are physiologically different when one sleeps during the day or sleeps when one's body is accustomed to being awake.

Weiten (1992:158) stresses that the quality of a worker's sleep suffers when he/she ignores his/her biological clock and goes to sleep at unusual times. Rotating shifts, where people are forced to change their sleeping schedule, causes chaos to the biological or circadian rhythms. Shift work is common practice when working as a nurse, pilot, police officer (correctional official) and in many other industrial occupations. Torsvall *et al.*, (in Weiten, 1992:159) highlight that, according to research, complaints of shift workers are well founded. Shift workers suffer from sleep deprivation and get poorer quality of sleep. Night duty also has a negative impact on the employee's productivity and employees are more prone to be involved in accidents. Working night duty also impacts on physical and mental health. Kohler (2006) adds that the severity of accidents in the workplace peaks during night duty more so than does the frequency of accidents. Josling (1999) postulates that shift workers experience enormous strain and stress in an attempt at coping with everyday life at the workplace and at home, as fewer opportunities to interact in social and family gatherings present themselves.

Daytime sleeping patterns differ from those at night. Working night duty can contribute to psychological differences and, at times, to behavioural problems. Shift work disturbs a person's circadian rhythms and therefore contributes to said employee's regressed physical and psychological health. It thus contributes to poorer productivity and increases proneness to being involved in an accident. In addition to all of these, working night duty also causes the night shift worker to great stress in coping with daily challenges at work and at home.

This study will thus explore the positive or negative impact on employees on working permanent night duty at correctional work places. This study contributes in filling the gap that exists in research in South Africa in this regard and will enable the researcher to make recommendations to the Department of Correctional Services in order to support these officers and provide them with improved working conditions where possible.

1.5 Goal and objectives of the research study

1.5.1 Goal of the study

The terms *purpose, goal and aim* are often used interchangeably in research (Fouché and De Vos, 2005b:104). These terms are used in order to describe the ideal that the researcher wishes to attain, and the objectives are the steps one has to take in order to accomplish this goal. The aim of professional research may be fundamental or may be applied while set objectives may involve exploration, description, and explanation, enabling the researcher to determine correlation, to achieve evaluation or intervention or participation in research (Dane, 1990:5).

Williams, Tutty and Grinnell (1995:16) explain that research is *a structured inquiry that utilizes acceptable scientific methodology to solve problems and create new knowledge that is generally applicable*. Dane (1990:4) defines research as *a critical process for asking and attempting to answer questions about the world*. One can therefore surmise that research has the purpose of elucidating situations or circumstances by applying structured, controlled and scientific methodology. In other words; the researcher wishes to explore, explain or describe a phenomenon such as that of the impact of permanently working night duty.

Fouché and De Vos (2005b:104) indicate that the goal of the study is to describe the standard of perfection that the researcher wants to attain. The *Oxford Advanced Learner's Dictionary* (2010:641) defines a goal as something that one hopes to achieve. For the purpose of this study the sole aim is regarded as the end result and standard of perfection that the researcher strives to attain on completion of the study.

The goal that was formulated and set for this study was:

To explore the positive and negative impact of working permanent night duty on officials in the Department of Correctional Services

1.5.2 Objectives of the study

The objectives of this study were **exploratory** by nature. Exploratory research is conducted in order to gain insight into a situation, phenomenon, and community or into individual behaviour (Bless and Higson-Smith in Fouché and De Vos, 2005b:106). Alston and Bowles (1998:34) expand by claiming that exploratory research is often the prelude to a more detailed study, but that it is also an important form of research in its own right. The researcher therefore wants to use this study in order to gain a better understanding of a situation and to gain more insight into the individual's personal experience of the situation.

Objectives for this study were:

- To explore night duty as a phenomenon.
- To explore the positive and negative impact of working permanent night duty on correctional officials at the Kgoši Mampuru II Management Area.
- To make recommendations regarding employee workplace support to correctional officials working permanent night duty based on the findings of the study.

1.6 Research question

For the purpose of this study the researcher decided to formulate a **research question**. Williams, Tutty and Grinnell (1995:78) intimate that reading and discussion around the general problem area enables the researcher to continually narrow the focus of interest, until specific research questions related to the problem can be formulated. The researcher usually asks different kinds of questions, and these are subject to the objective of the study. The Research Assistant (2002) defines the research question as *a statement that identifies the phenomenon to be studied*. One can therefore describe the research question as a question that is formulated by the researcher after having narrowed the identified focus of interest in order to identify the phenomenon that needs to be researched. This may be exploratory, explanatory or descriptive, depending on the purpose of the study.

The research question that was formulated for the purpose of this study was:

What are the positive and negative impacts of working permanent night duty on officials in the Department of Correctional Services?

Through finding answers to this question, the researcher intended to achieve an understanding of how being permanently employed on night duty impacted on correctional officials' general functioning. This understanding enabled the researcher to provide the organization with recommendations in order to establish a more effective work environment.

1.7 Research methodology

During this study the researcher employed ***applied research*** and the ***qualitative research approach***. Qualitative research mainly aims to achieve an understanding of social life and the importance that people attach to everyday life (McRoy in Fouché and Delport, 2005a:74). The focus is on non-statistical methods and small samples that are usually purposively selected. The researcher is therefore concerned with understanding rather than with elucidation. Greenhalgh and Taylor (1997:315) mention that researchers, who employ the qualitative research approach, are seeking to expose a more relevant truth. Their aim is to study a condition in its natural setting and then attempt to gain a perception, or interpret a phenomenon with regard to its impact on people. A holistic perception is achieved and this takes into consideration the complexities of human behaviour.

As a result, the researcher aimed to achieve the qualitative research approach in this study, as this would enable her to explore how working permanent night duty impacts on correctional officials in the Department of Correctional Services and then empower her to make recommendations which would support these officers and provide the work force with improved working conditions where achievable. The collective case study research design was singled out, and semi-structured individual one-on-one interviews according to an interview schedule conducted as method of data collection.

Chapter 3 of the mini-dissertation entails an in-depth discussion of the research methods employed by the researcher, as well as taking into consideration the ethical implications.

1.8 Definition of key concepts

The following key concepts were defined:

1.8.1 Impact

The *Longman Dictionary of Contemporary English* (2009:879) defines the term impact as the effect or influence of an event or situation on something or someone. This effect can be meaningful or noticeable.

Impact, as defined by the *Oxford Advanced Learner's Dictionary* (2010:751), is “the powerful effect that something has on somebody or something”.

For the purpose of this study, impact is defined as the important or noticeable effect that working permanent night duty exerts on officials in the Department of Correctional Services. This effect can be potentially positive or detrimental.

1.8.2 Night Duty

Article 17 of the Basic Conditions of Employment Amendment Act, No. 11 of 2002 describes night work as work that is performed after 18:00 in the evening and carried out before 06:00 the next the morning. It is further stipulated that an employee is to be regarded as a permanent night shift worker when he / she is on duty for longer than one hour after 23:00 in the evening or one hour before 06:00 in the following morning on a regular basis for a minimum of five times per month or fifty times per year. Akerstedt (1998:118) regards a night shift as the shift that is worked between 22:00 and 06:00, but mentions that there is room for considerable variation in this regard.

The researcher defines night duty as the shift that correctional officers work at night. For the purposes of this study, some correctional centres stipulated two (2) shifts during which correctional officials worked that were considered as night duty. The one shift started at 14:00 in the afternoon until 22:00 at night and the second shift started at 22:00 until 06:00 in the morning. Some officials rotated working these shifts, while others worked from 22:00 until 06:00 in the morning. Since the implementation of the seven day establishment in July 2009, correctional centres adopted a new shift pattern where there is only one night shift that starts at 18:00 in the evenings and ends at 06:00 in the morning.

1.8.3 Correctional Officials

The Correctional Services Act 111 of 1998 defines a correctional official as an employee of the Department of Correctional Services appointed under section 3(4) of the same act. This implies that the staffing component of the Department of Correctional Services includes the Commissioner of Correctional Services, who is appointed in terms of the Public Service Act, other correctional officials appointed by the Commissioner of Correctional Services in terms of the Correctional Services Act, as well as other employees of the Department of Correctional Services also appointed in terms of the Public Service Act.

The White Paper on Corrections in South Africa (2005:110) additionally states that the level of competence required of an ideal correctional official includes a unique combination of some specified personal qualities, experiences, expertise, professional ethics, personal development and multiple skills. The ideal correctional official must be skilled at relating to and identifying with the Code of Ethics and Conduct adopted by the Department of Correctional Services, and should be a role model of the values that the Department of Correctional Services hopes to instill in offenders. The attitude displayed by these correctional officials should be one of serving with excellence, relating to others in accordance with specific principles, including those of being caring and just. These principles embrace qualities such as acting with integrity and honesty and adhering to sound work practices, as well as

disassociating with any form of corruption and unethical behaviour. The Department of Correctional Services regards every correctional official as a rehabilitator and therefore correctional officials can be seen as creating an environment that is ideal for rehabilitation and correcting offence and criminal behaviour.

For the purpose of this study, a correctional official is regarded as an employee of the Department of Correctional Services and is responsible for creating an ideal environment for the rehabilitation of offenders and the correcting of offending behaviour. Upstanding correctional officials have subscribed to the Code of Ethics and Conduct that was adopted by the Department of Correctional Services and are therefore endeavouring to be positive role models influencing the lives of offenders and attempting to encourage offenders to reflect attitudes and principles of integrity, honesty and disassociation with corruption and unethical conduct.

1.8.4 Department of Correctional Services

The Department of Correctional Services constitutes a National Department established by section 7(2) of the Public Service Act and embodying part of the Public Service, established by section 197 of the Constitution of the Republic of South Africa (Correctional Services Act No. 111 of 1998; Public Service Act No. 103 of 1994; Constitution of the Republic of South Africa No. 108 of 1996). The Correctional Services Act No. 111 of 1998 further stipulates that the Department of Correctional Services has to fulfil the purpose of the correctional system in terms of the aforementioned act. The Department of Correctional Services also has to be self-sufficient and has to operate according to business principles as far as is practical. It is further required of the Department of Correctional Services to ensure that work that is performed assists in effective management as well as in the management of remanded detainees. Through fulfilling these functions, the Department of Correctional Services should be able to achieve this purpose of a correctional system responsible for securing and protecting a just, peaceful and safe society. This can be achieved by enforcing sentences given by courts, detaining

offenders in safe custody in a humane way and promoting the social responsibility and development of all sentenced offenders.

The researcher defines the Department of Correctional Services as the government department in South Africa that is responsible for the management of detainees awaiting trial as well as the management and rehabilitation of convicted offenders, probationers and parolees in a humane way in order to ensure a just, peaceful and safe society for everyone in South Africa.

1.9 Limitations to the study

The following were limitations identified during this study:

- The process of obtaining permission in order to conduct this study in correctional centres was a lengthy process. Both the Department of Correctional Services Research Committee and the Research Ethics Committee of the University of Pretoria, needed to sanction approval before approval for the study could be granted by either of the respective Research Ethics Committees. Both applications were then simultaneously submitted issuing written permission in letters stating that it issued ethical approval on behalf of the other institution. This was a time consuming and frustrating process that took up many months of valuable time, slowing down the researcher while performing this study.
- Initially a study leader was appointed by the Department of Correctional Services as is prescribed, but there was confusion and uncertainty on what the role of this Department of Correctional Services study leader had to entail. After twelve (12) months of waiting for this person to get back to the researcher and advise on the research, it was decided that the researcher should commence without such a Department of Correctional Services study leader. Not having a study leader appointed by the Department of Correctional Services, made it difficult for the researcher to understand and follow the correct channels in order to get access to the relevant correctional centres where the interviews had to be conducted. This was another time consuming matter that could easily be resolved if study leaders who are conversant with the research process, as well as with the

knowledge of what is expected of him/her in guiding researchers through the process at the Department of Correctional Services were appointed.

- After a period of approximately twelve (12) months, permission was finally granted by the Research Committee of the Department of Correctional Services, granting permission in order for the researcher to interview permanent night duty officials during the night at their workplaces so as not to inconvenience them while participating in the study. After having obtained the required permission, management at the correctional centre still claimed to be concerned that the presence of the researcher at night might pose a security risk. Some interviews were still conducted during the evening, but the researcher was only allowed to enter at the entrance gate of the centre where space was provided for officials to be interviewed.
- The space that was provided for conducting interviews during the evening was very noisy at times, especially when officials came to visit at the centre. There were also a few interruptions during some of the interviews when officials who were interviewed at the time were needed at their units. This could have affected the in-depth of the interview.
- There were no female participants who participated in the study, as female officials at the centre are not working permanent night duty because the centre only houses male offenders.
- Interviews were conducted with permanent night duty officials on an individual basis in order to avoid disturbing the programme at the centre at night. Conducting focus groups with permanent night duty officials could possibly have provided a greater wealth of information to the study, but the situation at the centre at night made it difficult for focus groups to be conducted as there were only a few officials on duty during the night shift.

1.10 Contents of the research report

The following outline applies to the contents of this research report:

Chapter one: The main focus of this chapter is to provide a **General introduction** to the research report. This chapter further

aims to formulate the research problem that the researcher intends to investigate, as well as to formulate goals and objectives for the study. The research question is also formulated; definitions of key concepts given and the limitations to the study mentioned.

Chapter two:

In chapter 2 the focus is on addressing the first objective of the study and this contains discussion on the theoretical framework on which the study is based as well as a **Literature study** on night duty as a phenomenon. It further discusses the importance of working night duty in the Department of Correctional Services as well as the models of shift work and the health related aspects related to working shifts. Additionally, the possible positive and negative impact of working permanent night duty on the shift worker's physical and mental health, social and family relationships as well as his/her career are set out. Advantages and disadvantages of working permanent night duty are also mentioned and possible coping strategies on how to cope with working permanent night duty are discussed.

Chapter three:

The aim of this chapter is to focus on how the second objective of the study has been achieved. It discusses the research methodology as well as the ethical considerations. **Empirical results** obtained from the study and the interpretation and discussion thereof is also provided in this chapter.

Chapter four: This chapter provides a **summary, conclusions and recommendations** based on the findings from the empirical study.

Chapter 2 will follow, discussing the literature study on night duty and the implications entailed.

Chapter 2

Night duty: Physiological, psychological, social and behavioural impact

2.1 Introduction

Working shifts and specifically night duty, can impact positively or negatively on the individual. It is a phenomenon that is increasing worldwide, as the demand on industries for increased production is constantly rising. More people seem to be working shifts that do not conform to the standard “9-5”, Monday to Friday work week and therefore it is important to understand the impact of work schedules. Shift work and working long hours seem to pose great problems for employees as well as employers (Totterdell, 2005:35). Landy and Conte (2007:421) further add that any schedule, including a standard work week, can act as a stressor if it does not conform to the needs of the individual worker. The consequences of these stressors can be physiological (*cardiovascular, stroke, digestive problems, back pain and arthritis, headaches, increased blood pressure and hormonal*), psychological (*burnout, depression, anxiety, family problems, sleep problems and job dissatisfaction*) and / or behavioural (*absence, tardiness, substance abuse, accidents, sabotage or violence, poor decision making, poor job performance as well as a high turnover of workers*).

Organisations are using a wide range of work schedules by varying the times of day and night at which employees start to work, the number of hours they work each day, the days of the week and the weeks of the year employees work. The speed of rotation (*number of consecutive shifts of one type before rotation*), direction of rotation (*forward or backwards – morning to evening to night / vice versa*), period of rest between shifts, as well as the regularity or flexibility of shifts (*fixed shift pattern compared to worker’s choice of shift pattern*) also play a role in work schedules of organisations (Saunders, 2010; Totterdell, 2005:35 and Williams, 2008:6).

This chapter will address the first objective of the study, namely to explore night duty as a phenomenon. It contains a literature study on night duty as a phenomenon and

the importance of working night duty in the Department of Correctional Services. It discusses the models of shift work, the health related aspects with regard to shift work and the possible positive and negative impact that working permanent night duty has on the physiological, psychological, social and behavioural aspects of the shift worker's life. Furthermore, it looks at the advantages and disadvantages of working shifts and the coping mechanisms used.

2.2 Definition of key concepts

2.2.1 Impact

The *Longman Dictionary of Contemporary English* (2009:879) defines the term *impact* as the effect or influence of an event or situation on something or someone. This effect can be important or noticeable.

Impact, as defined by the *Oxford Advanced Learner's Dictionary* (2010:751), is "the powerful effect that something has on somebody or something".

For the purpose of this study, *impact* is defined as the important or noticeable effect that working permanent night duty has on officials in the Department of Correctional Services. This effect can either be positive or negative.

2.2.2 Night duty

Article 17 of the Basic Conditions of Employment Amendment Act, No. 11 of 2002 describes night work as work that is performed after 18:00 in the evening and before 06:00 in the morning, the next day. It is further stated that an employee is regarded as a permanent night shift worker when he / she works longer than one hour after 23:00 in the evening or one hour before 06:00 in the morning the next day on a regular basis for at least five times per month or fifty times per year. Akerstedt (1998:118) regards a night shift as the shift that is worked between 22:00 and 06:00, but mentions that there is considerable variation in this regard.

The researcher defines night duty as the shift that correctional officers work at night. For the purposes of the study some correctional centres had two (2) shifts that correctional officials worked that were considered as night duty. The one shift started at 14:00 in the afternoon until 22:00 at night and the second shift started at 22:00 until 06:00 in the morning. Some officials rotated working these shifts, while others only worked from 22:00 until 06:00 in the morning. Since the implementation of the seven day establishment in July 2009, correctional centres have adopted a new shift pattern where there is only one night shift that starts at 18:00 in the evenings and ends at 06:00 in the morning.

2.2.3 Stress

Di Matteo (1991:289) describes stress as a physical construct, referring to the amount of force acting on a physical object. This term has been used in several fields (biology, medicine, and psychology) to be applied to the human organism. According to her, stress can be conceptualised in at least three ways: as a stimulus, as the physical and psychological response to stresses, and as a process that involves an interaction between the person and his or her environment. Barker (2003:420) defines stress as any influence that interferes with the normal functioning of an organism and produces some internal strain or tension. According to him “Human psychological stress” refers to environmental demands or internal conflicts that produce anxiety. Weiten (1992:473) adds that a person’s reaction to stress can be analysed on three levels namely emotional responses, physiological responses and behavioural responses.

Stress can therefore, in the context of this study, be seen as an influence or stimulus that a person is not used to and that is influencing his coping mechanisms in such a way that it causes several emotional, physiological and behavioural responses in the person.

2.2.4 Physiological impact

When explaining the term physiological impact, the term impact will refer to the effect that something has on something else, as previously explained in 2.2.1.

The *Longman Dictionary of Contemporary English* (2009:1304) defines that the physical or physiological refers to the body rather than to the mind or emotions. The *Oxford Advanced Learner's Dictionary* (2010:1102) further adds that it refers to the specific functioning of a living object.

The physiological impact of night duty in the context of this study, therefore describes the effect that working permanent night duty has on the normal functioning of the body of correctional officials who work permanent night duty.

2.2.5 Psychological impact

When explaining the term psychological impact, the term impact will refer to the effect that something has on something else, as already illustrated in 2.2.1.

The *Oxford Advanced Learner's Dictionary* (2010:1183) explains that the psychological refers to a person's mind and the way in which it functions. The *Longman Dictionary of Contemporary English* (2009:1400), adds that the term psychological refers to the way in which a person's mind works, as well as to its effects on behaviour.

In terms of this study, the psychological impact of working permanent night duty will focus the effect that working permanent night duty has on the minds and emotions of correctional officials.

2.2.6 Social impact

The term impact refers to the effect that something exerts on something else, as already explained in 2.2.1.

The *Longman Dictionary of Contemporary English* (2009:1669), as well as the *Oxford Advanced Learner's Dictionary* (2010:1413), refers to the social behaviour as the way in which human beings relate to society and its organisations. The term Social further relates to the quality of a person's life and the position that a person holds in society, when viewed according to that person's work, family and wealth.

Social can also refer to how a person relates to other people and how that person forms relationships with other people or spend time with others.

In terms of this study, the social impact of working permanent night duty therefore refers to how the way in which the worker experiences working night duty affects his / her ability to socialise with a group of people towards whom he is expected to be friendly or with whom he / she is to share companionship and “togetherness.” This will also depend on the effects of working night duty on the correctional officials’ positions at work, within their family units and amongst their friends.

2.2.7 Behavioural impact

Impact with regard to behavioural impact refers to the effect that something has on something else, as already explained in 2.2.1.

The *Longman Dictionary of Contemporary English* (2009:137) refers to behaviour as something that a person or an animal does. The *Oxford Advanced Learner’s Dictionary* (2010:120) further adds that behaviour refers to the way in which someone behaves, especially towards someone else. Behaviour also refers to the way in which a human, an animal, a plant or a chemical substance acts or functions in a specific situation.

Behavioural impact in, terms of this study, therefore refers to the positive or negative changes in a correctional official’s actions or responses towards working permanent night duty, or as a result of working permanent night duty.

2.3 Theoretical framework

Social work as a profession has difficulty identifying and organising a framework for practice that fully encapsulates what the profession is involved with (Friedman and Neuman, 2011:3). Besthorn (2013:173) explicated that social work tries to find a way according to which to distinguish itself from other assistance lending professions. Social work, as a profession, therefore relies on the ecological and

systems theory as well as on the central metaphor of person-in-environment. The ecosystems perspective therefore provides a framework that permits social workers to make use of theories from different disciplines with the aim of analysing the nature of complex interactions between individuals and the social environment that they find themselves in (Friedman and Neuman, 2011:3). Besthorn (2013:176) however highlights that individuals and the environment they find themselves in, never are in static relationships towards each other. For this reason the researcher chose this theoretical approach for this study, as it is ideal when looking at the correctional official working night duty and the impact this can have on him or her within the environment.

Carol Meyer introduced the ecosystems perspective, which is similar to Germain's ecological perspective (Besthorn, 2013:176). Thyer (1999:11) explained that theories attempt to explain in retrospect, as well as to predict future outcomes. Theoretically the social work profession therefore strives to explain and predict different aspects of human behaviour. Meyer (in Thyer, 1999:12) mentions that the ecosystems perspective is not a model that simply prescribes in order to address cases or specify the outcomes of treatments; it also does not draw from theories with regard to personality. The ecosystems perspective is rather a way of viewing a phenomenon. It mainly influences a person's way of looking at various complexities in cases. Meyer (in Besthorn, 2013:176) therefore highlighted that the ecosystems perspective must rather be regarded as a conceptual framework than as a theoretical framework.

Friedman and Neuman (2011:10) state that the systems theory of von Bertalanffy, in combination with the ecological environment of Bronfenbrenner, results in the ecological systems perspective where the transactional relationships between the different systems are examined. Nine (9) assumptions of the ecosystems perspective were made based on the nature of the transactional relationships between an individual and the environment that individual inhabits at a point in time. These nine (9) assumptions conclude that:

- There is a general order in the world;
- Social ordering is a constant and dynamic process;
- All social behaviour in humans has a purpose;
- Self-maintenance and development characteristics are seen in all forms of social organisations;
- Social organisations are greater than the sum of their parts;
- The natural condition of all humans and human social organisations are concerned with well-being;
- All forms of social organisations can be characterised and studied as social systems;
- Social relationship is at the core of all social systems;
- Being of assistance in social work is the formalisation of a natural social process (Dale in Friedman and Neuman, 2011:10).

Besthorn (2013:179) hence is of the opinion that the ecological systems perspective in social work is relevant, as it provides a comprehensive, multidisciplinary and holistic framework where complex, interrelated elements of an individual's life can be interconnected and understood. Friedman and Neuman (2011:11) add what Germain identified as important concepts in order to assist in understanding the nature of this interaction between the individual and his environment. These concepts include adaptation, life stress, coping and power.

- **Adaptation** refers to the cause-and-effect relationship between an individual and the environment. It is not always possible to prevent any change from taking place and therefore adaptation can be directed to changing oneself in order to meet with opportunities and demands in the environment, or it can be directed towards changing the environment in order to obtain more responsive physical and social settings with regard to human needs, rights, goals and capacities.
- **Life stress** can be seen as the normal tension that develops as a result of the interaction between the individual and the environment. There is a continuous need for systems to adapt in order to reach a state of homeostasis. For this reason two (2) people in a similar situation can experience the situation differently, based on

their different perceptions of a situation. One (1) person might feel stressed while another person might feel totally relaxed.

- **Coping** within an environment requires that the individual should have the ability to solve problems as well as the ability to regulate negative feelings. Individuals rely on their own abilities and strengths in order to be able to cope with stressful situations. It becomes more difficult to cope when individuals feel as though their resources were tapped. This may lead to maladapted defenses.
- **Power** is related to external sources in the individual's environment. This can relate to a position of power that an individual or group holds in an environment that enables this individual or group to influence subordinate individuals or groups through their interactions with these subordinates. The outcome of this power can involve the provision or withholding of resources. The abuse of power by an individual or group, can additionally contribute to creating tension between an individual and the environment.

These concepts are appropriate to this study, as performing night duty seems to require a certain amount of adaptation, dealing with stress and utilising coping mechanisms.

It is clear that the ecosystem perspective assists the social worker in viewing any system in relation to the environment it finds itself in, regardless of how big the system is and what the nature of the system is. The focus therefore is on the interaction between the individual and the environment and not on either the individual, or the environment (Friedman and Neuman, 2011:17). With regard to this study, the ecosystems perspective will therefore assist the researcher in viewing the interaction with any system, including the correctional official who works permanent night duty as seen in relation to the environment he finds himself in, and this can include his working environment, family environment, physical and / or psychological health as environment.

2.4 Shift work

Hossain and Shapiro (1999:293) regard shift work as the work schedule where approximately 50% of work has to be done outside of normal working hours, which normally indicates the period between 08:00 and 17:00, as experienced by about 25% of the work force. Saunders (2010); Totterdell (2005:35) and Williams (2008:6) further stress that shift work encompasses a variety of different work patterns where one group of workers replaces another during the work day so that the number of operating hours exceeds the work hours of any particular individual. Additional differentiation can be made between the different types of shift work:

- continuous shifts (*twenty four hours a day, seven days a week*),
- semi-continuous shifts (*weekend shifts*),
- discontinuous shifts (*shifts that end for a period during weekdays as well as over weekends*),
- rotating shifts (*workers periodically change from one shift – morning shift, to another – night shift*) and
- permanent shifts (*workers work only one type of shift; night or day shift*).

Shift work can therefore be regarded as the hours spent at work in addition to the normal working hours that an employee has to work, in order for an organisation to extend the number of operating hours.

The focus of this study will thus be directed at shift work as a work schedule. There are a number of additional differentiated shift patterns, but in this study the focus will specifically be on working permanent night shift.

2.4.1 Shift work in Correctional Services

The Department of Correctional Services is a South African Governmental Department that is responsible for the smooth running of the South African correctional system. Most of the South African correctional facilities were constructed with the main aim of jailing or incarcerating offenders and there were limited or no opportunities for rehabilitation. It is only in the new dispensation that

rehabilitation is regarded as the core business of the Department of Correctional Services, assisting and contributing towards a crime-free society (Public Servants Association, 2012 and White Paper on Corrections in South Africa, 2005:54).

The Department of Correctional Services Annual Report (2012:22) stated that the average offender population for the 2011/2012 financial year was approximately 158 790, which included the number of sentenced offenders, as well as awaiting trial detainees. In March 2012 the Department of Correctional Services was responsible for the administration of 243 correctional centres with an approved sleeping capacity of 118 441. During the financial year, some correctional centres had to be closed for different reasons, including renovations, and these caused a reduction in the available bed space to 118 154.

South Africa is one of the countries with the highest ratio in terms of the offender population as seen in relation to the actual total population. In 2004 it was estimated that 4 out of every 1000 South Africans were in correctional facilities (White Paper on Corrections in South Africa, 2005:103). The profile of the offender population has changed significantly since 1994, as mentioned by Muntingh (2009:203) and confirmed in the White Paper on Corrections in South Africa (2005:106). These changes include significant changes in the size of the offender population, as well as in that of the awaiting trial detainee population; the duration of sentences that offenders had to serve and the duration of awaiting trial detention. The nature of crimes committed also seemed to become more violent and serious.

Overcrowding in most correctional centres, countrywide, still seems to be a problem and service delivery is very dependent on the effective management of human resources. The vacancy rate at the end of March 2012, as stated in the Department of Correctional Services Annual Report (2012:27) was 3.3% with 1 256 posts still vacant. During the 2011/2012 financial year 1 476 vacant posts were filled, while the restructuring of posts took place in order to address the misalignment between posts. The Department of Correctional Services is also in the process of embarking

on introducing ideal shift models in order to enhance the implementation of the seven (7) day establishment. The Public Servants Association (2012), however stressed that the post establishment of the Department of Correctional Services was reduced from 47 336 to 41 500 funded posts during the 2011/2012 financial year. This is in contrast with the post establishment of 58 000 posts that are required in order to successfully implement the seven (7) day establishment with its newly identified shift patterns.

Based on their nature, correctional facilities always have to be staffed twenty four (24) hours a day. Correctional officials therefore have to work fixed or rotating shifts in order to ensure that there are always staff members on duty to take care of the needs of offenders (Forum on Corrections Research, 2012 and Swenson, Waseleski and Hartl, 2008:299). The Community Law Centre (2000) however highlights that the staff component in many South African correctional centres is below what is needed to ensure proper care and management of offenders, focusing specifically on children who are incarcerated. It is mentioned that in most cases staff shortages during the night can be regarded as even more chronic when compared to staff shortages that are experienced during the day. Very often only one (1) official is on duty, compared to the four (4) or five (5) per section available during the day. These staff shortages seem to contribute to high levels of stress, lack of motivation and feelings of being overwhelmed by the work load, especially as it is important that employees have to be alert and vigilant at all times.

Overcrowding in correctional facilities does not seem to be a new or unique concern and it is also not a new phenomenon for correctional officials to work longer shifts or longer working hours in order to ensure that correctional facilities are manned for twenty four (24) hours daily. It does, however, seem that the shortages of staff during the day, but mostly during the night, might contribute to higher levels of stress, poor work performance as well as possible health problems, as it is important for night shift workers to stay alert at all times especially, when they have to work on their own or with only skeleton staff.

2.5 Models of shift work and health

Shift work and long working hours are associated with a range of effects on the mental and physical health of the shift worker. There are different models or theories proposed with regard to shift work and its impact on the health of shift workers (Kundi, 2003:303 and Totterdell, 2005:39).

Totterdell (2005:38) stated that there are unique features to and theories incorporated in shift work models and these are an attempt at explaining the impact of shift work on the shift worker. There seem to be a possible correlation between disturbances in the biological rhythms, sleep patterns and social relationships of shift workers and the unique difficulties experienced by shift workers. Kundi (2003:303) categorised models or theories of shift work, tabulating these into three groups; susceptibility theories, desynchronisation theories and work-load or stress theories. More complex models on shift work rely to a greater extent on concepts related to stress theories, although these lack clarity. Taylor et al. (in Totterdell, 2005:39) add that a shift from simple models portraying linear relationships, to more complex models characterised by dynamic relationships based on multiple interrelationships between problems has taken place:

- **Nomothetic models** such as the stress-strain models characterise stress in terms of features of the shift worker's environment.
- **Idiographic models** such as coping models demonstrate stress in terms of the relationship between the shift worker and his or her environment.
- **Chronobiological models** focus on making predictions with regard to the level of fatigue, alertness and performance on different shift schedules based on the sleep routines of shift workers.

Totterdell (2005:39) demonstrates the following models on shift work and health.

2.5.1 Stress-strain Model

This model was introduced by Rutenfranz, Knaught and Angersbach in 1981 and was one of the first models on shift work. Totterdell (2005:39) gives prominence to

the fact that this model illustrates that the stress of altering work schedules and sleep routines (*e.g. working rotation shifts*) causes strain in the form of stress and diseases. Variables such as physiological adaptability, personality, relationships with family members and housing conditions play a role. There is therefore a lack of correlation between the shift worker's circadian system and the work schedule (night shift) that he or she has to work. The body therefore prepares itself for rest, while the worker has to work night shift and vice versa. Working a number of consecutive night shifts can therefore contribute to the shift worker's circadian system adjusting to this shift pattern. But the consequences vary from one individual to the next (Kundi, 2003:305).

2.5.2 Destabilisation Model of shift work

This model was proposed in 1981 by Haider, Kundi and Koller. It illustrates that shift work contributes to health problems, as it upsets the dynamic equilibrium that exists between working conditions, sleep and responsibilities towards the family. This happens in the case of a shift worker sacrificing sleep in order to spend time with family and consequently reduces the shift worker's ability to function effectively at work. The shift worker's personality, social environment and work situation also impact on the destabilisation process. It further seems as if the shift worker's destabilisation moves through stages of adaptation, sensitivity and stress accumulation which, in turn, contributes to major ailments that only manifest themselves during this final stage (Kundi, 2003:306 and Totterdell, 2005:39).

2.5.3 Coping Model

Totterdell (2005:40) additionally mentions that models by Monk (1988) as well as by Olsson, Kandolin and Kaupinnen-Toropainen (1990) are to a greater extent focused on the shift worker's ability to cope with shift work and examining the way in which the shift schedule can contribute to health problems that result from the impact on the shift worker's biological clock, sleep and social or domestic factors. Shift work can also be viewed as just one of a number of work stressors the impact of which depends on the adjustments made and coping strategies utilized by the shift worker.

2.5.4 Process Model of shift work

Totterdell (2005:39) highlights that this model is based on a framework originally proposed by Folkhard and colleagues in 1987. The model was refined in 1997 and validated by 1999 and focuses on the possible impact of shift system features which result in disturbed biological rhythms as well as disturbed sleep and disrupted family relationships or social life. At first these disturbances could result in devastating effects on mood and performance and can, eventually, contribute to chronic effects on the mental and physical health of the shift worker. Individual and situational changes, as well as coping strategies relied on, can modify the process. Research done by Smith et al. (in Totterdell, 2005:39) found that individual and situational factors such as inflexible sleep habits and work load contribute to insufficient sleep and social disturbances that trigger different types of attempts at coping which may result in acute and chronic outcomes such as fatigue and digestive or cardiovascular ailments.

2.5.5 The Three Process Model

The Three Stages Model is the most advanced of the chronobiological models and was first initiated by Folkhard and Akerstedt in 1987 (Totterdell, 2005:40). This model incorporates the following three processes:

- “C,” which indicates the circadian sinusoidal component,
- “S,” which is a homeostatic component that lowers during wakefulness and is reversed during the period of sleep and
- “W,” which indicates the brief wake-up process.

The model indicates that predicting stages of vigilance depends on the sum of the three components. In other words, the shift worker seems to be more alert on the first night shift than would be expected on the night shifts following it. The shift worker’s vigilance also decreases over the period of the shift that he or she works.

Shift work models therefore attempt at explaining the impact of shift work, while considering the correlation between disturbed biological rhythms, disturbed sleep

patterns, as well as disturbances in the family and social lives of shift workers. Different stress theories are also utilised in order to try and explain the impact of shift work on the shift worker.

2.6 Health related aspects with regard to shift work

Subsequently the physiological impact that shift work can exert on a worker will be discussed.

2.6.1 Circadian rhythms

The term Circadian originates from the Latin words ***circa***, which means “about,” and ***dies***, which indicates “a day” (Scott and Kittaning, 2001). These researchers agree with Landy and Conte (2007:430) who describe the circadian cycle as the twenty four hour physiological cycle during which humans tend to be active during day time and inactive during the night. Saunders (2010) as well as Scott and Kittaning (2001) further add that circadian rhythms include sleep-wake patterns, body temperatures and hormone levels as well as cardiovascular parameters, cognitive performance, therapeutic responses to medication and psychological variables of mood and anxiety.

Circadian Rhythms are therefore the physiological, psychological and cognitive programming of one’s body, which determines one’s levels of activity during the day and at night.

2.6.2 Circadian rhythms, shift work and health

Humans evolved as a diurnal species, whose lives and activities evolve mainly around daytime activities, while they are usually inactive during night time (Totterdell, 2005:38 as well as Swenson, Waseleski and Hartl, 2008:300). Scott and Kittaning (2001), as well as Folkard and Hill (in Totterdell, 2005:38) further illustrate that the circadian system presents at least 2 processes, including the strong endogenous body clock and a weaker exogenous process that is more susceptible to external influences. Sulsky and Smith (2005:99) add that the best known bodily

functions are physiological variables such as body temperature, alertness and some task performances that peak during day time. Most people do not always function well at night, as body functions are at their weakest levels during the night time. Totterdell (2005:38) mentions that circadian rhythms further involve melatonin synthesis, urinary electrolyte production, blood pressure, short-term memory performance and alertness which, he states, peaks at different times of the day, but are normally stronger during the day and lower during the night.

Where working night shift is concerned, it is important to understand the way in which our bodies function and how changing our normal routine affects us physically. Our bodies react on light and dark by wakefulness during the day and being asleep at night. Kaplan and Sadock (1991:469) mention that biological rhythms influence sleep patterns. An adult person usually sleeps once and sometimes twice within a twenty four hour period. Sleep patterns change physiologically when one sleeps during the day or sleeps when one's body is used to being in a wakeful state. Unusual sleeping patterns also impact on one's behaviour and contribute to psychological changes. Older workers seem to be less able to adjust to shift work, due to the cumulative effect of sleep deprivation and gradual circadian desynchronisation. Marquie and Foret as well as Smith and Mason (in Swensen, Waselenski and Hartl, 2008:303) indicate that shift workers between the ages of 20 and 30 usually adjust to shift work within a week or two, whereas shift workers older than 40, might find it more difficult to adjust and it might require four to six weeks for their biological clocks to adjust to the new shift pattern. It seems to be possible to change the circadian rhythm if the sleep-wake period is altered for a period ranging between 10 – 14 days; it seems, however, that it can be detrimental to a person when he / she adjusts to shift work, as shift work affects all aspects of a person's life. This is accentuated by Totterdell (2005:38) when he indicates that the sleep-wake cycle and the body clock is not necessarily strongly coupled to each other and may cause the sleep-wake cycle to disrupt the body clock. The integral dissociation between the rhythms can be caused by adjustment of the circadian system to the altered work schedule. Individual rhythms adjust at

different rates, depending on the extent to which they are controlled by the body clock. Only a minority of shift workers seem to adapt their circadian systems to the nocturnal activity pattern, and only after having worked night shifts over a long period of time. This results from night shift workers usually returning to their normal sleep routines when they are off duty for a few days (Swensen, Waselenski and Hartl, 2008:303 and Saunders, 2010).

Hossain and Shapiro (1999:294) as well as Scott and Kittaning (2001) state that circadian reactions to vigilance, hunger, an increased urination and some environmental influences such as noise, light and domestic factors, as well as switching shifts and the unpredictability of the shift schedule, might be factors that contribute to a lack of sleep. Sleep deprivation that results from working night shifts has an accumulative effect on a shift worker's level of tolerance. The impact of shift work seems to increase with exposure, which, in turn, may result in the shift worker reaching a tolerance limit beyond which shift work is not safe any more. The harmful effect of shift work therefore seem to manifest itself in the short term as sleep disturbances, shift-lag syndrome, fatigue, errors, accidents and psychosomatic irregularities. In the long term there is an increased risk of chronic fatigue, gastrointestinal problems, depression and cardiovascular diseases and also possible complications during pregnancies. Shift work can further contribute to behavioural patterns such as poorer quality of diets as well as increased smoking and / or alcohol consumption that adversely affect health (Saunders, 2010). Scott and Kittaning (2001) further illustrate that symptoms related to shift-lag correlate with symptoms related to jet-lag. Travellers suffering from jet-lag usually report sleepiness during the daytime, fatigue, difficulty in falling asleep at night, difficulty in concentrating, slower physical reflexes, irritability and depression. Symptoms related to shift work, however, are of greater significance as:

- shift worker's complaints may not be immediately attributed to the work schedule;
- jet-lag symptoms are limited to a few days following travel, while symptoms of shift work desynchronosis are often chronic; and

- the conflict between the shift worker's work schedule and the predominantly day oriented social / business schedule, is in contradiction being retrained to adapt to night shift.

Adler (1991:2) therefore concluded that the tempo of the heart and the digestive cycle together with other bodily functions are all rooted in a human evolution determined by the rising and setting of the sun. Working shifts is disruptive to this cycle and the consequences of this incompatibility are not merely lack of sleep, but also contribute to health and safety problems specific to the shift-working population. For these reasons Sulsky and Smith (2005:99) believe that shift work can be regarded as on the same level as other work-related stressors, although the impact on people differs due to their coping responses to situations. Landy and Conte (2007:430) agree when they mention that psychologists have found that, in general, disturbance of the circadian cycle has adverse consequences for health, performance and work satisfaction, while Culpepper (2010) is of the opinion that shift work has many negative effects on the health of shift workers, even if they don't suffer from Shift-Work Disorder. Sulsky and Smith (2005:102) indicate that, although it appears as though shift workers report fewer health problems than do day workers, it is possible that their health and wellbeing may suffer more than they realise at the time. Distressed workers more often leave shift work early and those who remain comprise a small selection.

2.6.3 Shift-Work Disorder

Culpepper (2010) describes Shift-Work Disorder (SWD) as a circadian rhythm sleep disorder that shift workers are at risk to develop. He explains that it is a clinically recognised condition that develops in some workers who work night shifts, early morning shifts or rotating shifts, and that this condition is more severe than sleep disturbances commonly associated with shift work. Shift-Work Disorder is indicated by the excessive sleepiness and / or insomnia over a period of a month or more than a month, while the person is doing shift work. The importance of the disorder is not

adequately recognised in the clinical setting and information on its epidemiology and etiology is not easily available in scientific literature.

Scott and Kittaning (2001) refer to this condition as Shift Work Intolerance or Shift Work Maladaptation Syndrome (SMS). They highlight that up to 20% of people who work shifts, may display a high prevalence of illnesses that are chronobiologically related; poorly planned shift schedules that usually include night work. In order to define intolerance to shift work clinically, there has to be a persistent and intense set of medical complaints which include altered patterns of sleep, continuous fatigue, behavioural changes, problems with the digestive system and a frequent use of sleeping tablets. These symptoms worsen with continued exposure to shift work and can consequently lead to a worker getting retrenched, workers resigning or being accident prone. In order for an employee to be diagnosed with SMS or SWD, he / she first has to undergo assessments that include a detailed history of employment and social detail, as well as an indication of the temporal relationship between the symptoms mentioned and the length of time that the employee has worked permanent night shifts.

Shift-Work Disorder or Shift Work Maladaptation Syndrome or Shift Work Intolerance can therefore be indicated by excessive sleeping disorders experienced by a shift worker who has worked night shifts for at least a month or longer. These symptoms are aggravated by the shift worker continuing working night shifts and can have detrimental effects on the shift worker's health or ability to cope in the working environment.

2.7 The impact of working night shift

The impact that working night shift can have on a person, physiologically, psychologically, socially and behaviourally, will be discussed subsequently.

2.7.1 Physiological impact

2.7.1.1 Gastrointestinal disorders

Digestive problems and gastrointestinal disorders are well known amongst shift workers. It is estimated that 20-75% of shift and night workers, compared to 10-25% day workers are experiencing digestive problems. Complaints include irregular bowel movements, constipation, heartburn, and gas as well as appetite disturbances. Shift workers and especially night shift workers experience abdominal pains and can suffer from peptic ulcers due to shift work. Complaints often eventually develop into chronic diseases, such as chronic gastritis (Culpepper, 2010; Scott and Kittaning, 2001; Sulsky and Smith, 2005:102; and Totterdell, 2005:38).

Many factors related to night shift work contribute to shift workers developing peptic ulcers and these include sleeplessness and sleep disruption, psychosocial stress, missing out on mealtimes and a delay in bowel movement. The length of the shift and the timing of the changeover from night shift to day shift are also contributing to health problems. (Scott and Kittaning, 2001 and Sulsky and Smith, 2005:102). Totterdell (2005:38) adds that changes to neuroendocrine functions due to altered sleep patterns, changes to meal times and changed food content can contribute to digestive problems.

Scott and Kittaning (2001) explain that gastrointestinal disorders in shift workers are resulting from different reasons, such as dietary and lifestyle changes, as well as circadian disruption. Adler (1991:60) believes that the principles of good nutrition should apply to all workers. Sulsky and Smith (2005:102) are also of the opinion that shift workers might have limited access to nutritious meals and that irregular meal times contribute to inconsistent dietary habits. Culpepper (2010) further adds that the increased intake of caffeine and alcohol by shift workers in order to cope with shift work, might contribute to gastrointestinal disorders. Mealtime changes can therefore act as circadian synchronisers and there also seems to be a higher carbohydrate intake by shift workers. Different parameters are required for

permanent night shift workers, as their biological rhythms, and more specifically the digestive system, does not adjust to changes imposed by the daily shift cycle. Due to different metabolic processes during the day and the night, food that is consumed at night tends to cause greater weight gain than meals eaten during the day.

Scott and Kittaning (2001) explain that many shift workers use gastritis or digestive disorder as a reason for being absent from work. These also, in many cases, contribute to shift workers stopping to work shifts and returning to frequent day shifts at work. Unfortunately symptoms experienced by shift workers might not be completely resolved after having started working normal day shifts again.

2.7.1.2 Cardiovascular diseases

There seems to be a correlation between shift work and cardiovascular disease. Shift work seems to be a stressor causing increased blood pressure and heart rate and high cholesterol levels over a period of time. It is estimated that male and female shift workers have a 40% increase in cardiovascular disease risk. Possible causes include circadian disruption, social disruption, lifestyle choices such as diet, smoking, alcohol consumption, and exercise as well as biochemical changes such as raised cholesterol levels (Scott and Kittaning, 2001; Sulsky and Smith, 2005:102 and Totterdell, 2005:49).

Culpepper (2010) explains that heart rate and blood pressure fluctuate during the course of the day as a result of circadian rhythms. When one works permanent night shifts, it limits or prevents the normal reduction in blood pressure and decreased heart rate that normally reasserts itself during the night. Night shift workers therefore are at risk of developing hypertension which can contribute to cardiovascular diseases as they do not experience normal circadian-driven fluctuations in blood pressure. Changes that occur in hormone secretion, autonomic and sympathetic cardiac control, metabolism and heart rate of shift workers while working at night, are also implicated in shift work related cardiovascular problems. Heightened levels

of stress due to poor work satisfaction and a lack of social support may also be contributing factors to these health problems.

2.7.1.3 Cancer

“Working at night might increase the risk of cancer” is a hypothesis that often appears in literature focusing on shift work (Saunders, 2010). It is estimated that there is a 50-60% higher risk for breast cancer in night shift workers and that the risk is influenced by the number of night shifts worked per week, as well as by the number of years that a worker is exposed to night work (Culpepper, 2010 and Totterdell, 2005:49).

A possible cause of the increased risk of cancer seems to be the disruption of melatonin levels which affects tumour growth. Secretion of melatonin is at a high at night, but exposure to short-wavelength light at night, reduces the production of the hormone. Reduced secretion of melatonin might therefore also increase the risk of developing breast cancer in female shift workers. A study by Travis et al. (in Saunders, 2010) however, to some extent, question previous research findings. Other factors also have to be considered when research is done, in order to explore the correlation between the secretion of melatonin and breast cancer in female night shift workers. Based on this study, researchers therefore conclude that “shift work that involves circadian disruption is probably carcinogenic to humans”.

Schernhammer et al. (in Totterdell, 2005:49 and in Saunders, 2010) and Culpepper (2010) link night work to an increased risk of colorectal cancer. Culpepper (2010) as well as Kubo et al. (in Saunders, 2010) indicate that shift work could contribute to prostate cancer in men. Studies done with male workers in Japan in the period between 1988 and 1990, found that there is a significantly higher risk for prostate cancer in men who work rotating shifts, when compared to day shift workers. There is no significant difference between night shift workers and those who work rotating shifts.

2.7.1.4 Reproductive health

Adler (1991:53) highlighted that there is a well-established emphasis on health and safety within the international literature. He is, however, of the opinion that not enough has been done to study the obvious health and safety considerations brought about by women working permanent night shift.

Women have different physiological features compared to men and therefore are affected differently by working shifts. Women have a specific “temporal structure,” which include the functions of the menstrual cycle in women. Higher rates of menstrual ailments are linked to shift work as it seems that the effect of a regular menstrual cycle and the attempt to change the circadian rhythm, results in reduced resistance to disease and greater levels of fatigue at particular times of the month (Adler, 1991:54; Culpepper, 2010; Hossain and Shapiro, 1999:294 and Totterdell, 2005:49).

Costa, Infante-Rivard, David, Gauthier and Rivard (in Totterdell, 2005:49) as well as Scott and Kittaning (2001) further linked shift work to result in adverse pregnancy outcomes such as premature birth, low birth weight and miscarriage. Culpepper (2010) further indicates that women who work rotating shifts might have greater difficulty conceiving, when compared to women who work permanent night shifts.

2.7.1.5 Sleeping disorders

Shift work disturbs the duration and quality of sleep and can lead to chronic sleep deprivation. Sleeping during the day usually results in disrupted sleep. Sleeping during the day also differs from night sleep as there is a deviation from normal REM and non-REM sleep patterns, which usually contribute to emotional fatigue, oversensitivity and irritability (Saunders, 2010; Scott and Kittaning, 2001; Swensen, Waselenski and Hartl, 2008:302 as well as Totterdell, 2005:48).

Adler (1991:82) indicates that the poor quality of sleep impacts negatively on the physical as well as psychological health of shift workers and is of the opinion that the

lack of sleep in shift workers is a major reason for employees' unwillingness to work night shifts. Akerstedt (in Saunders, 2010) adds that night shift workers have a greater tendency to fall asleep during their work shift, especially during the early morning hours, due to the decrease in the circadian pattern at that time of the day. This napping during the shift usually helps to restore the worker's vigilance. Swensen, Waselenski and Hartl (2008:302) explain that this "micro sleep" that shift workers sometimes experience is involuntary and shift workers are sometimes not even aware of the fact that they drifted off to sleep. "Micro sleep" only lasts for a few seconds and this normally occurs just before dawn and usually when the worker experiences accumulated sleep deprivation.

According to Culpepper (2010) chronic sleep deprivation in people suffering with insomnia is linked to reduced iron levels. This may result in other sleeping problems such as restless legs syndrome or periodic limb movement disorder. Fatigue that is often reported by shift workers, usually results from an underlying sleep disorder which disrupts the shift worker's quality of sleep. More severe fatigue can cause night shift paralysis, where the shift worker is aware of what happens around him, but is unable to respond to this. Sleep deprivation over a period of time, causes a deficient glucose metabolism, which causes fatigue in shift workers. Recovery times of shift workers during endurance activities are slow, which contributes to higher levels of cortisol. Higher cortisol levels contribute to impaired tissue repair from injuries, as well as to weight problems (Swensen, Waselenski and Hartl, 2008:303).

2.7.1.6 Stress-related illness

Loomis (2002) explains that chronic stress can have an impact on one's immune system. One can therefore develop serious and potentially life threatening illnesses such as heart disease, cancer, and diabetes. A.D.A.M (2004) adds that when low-level stress is experienced over long periods; the brain, heart, lungs, vessels and muscles become chronically over- or under activated. Physical and psychological damage can be experienced if this condition continues over a period of time.

Stress-related illnesses can therefore be described as those illnesses that develop when one is exposed to stressors over a period of time and one's body reacts on these stressors that he / she is not able to cope with any longer. The worker's body reacts in such a way that his / her immune system is affected and starts to present the system with physical symptoms of serious and sometimes less serious illnesses.

2.7.1.7 Other health impacts

Totterdell (2005:50) mentions that there seems to be a link between shift work and other health risks, such as musculoskeletal disorders which include back problems. Shift workers are also more prone to common infections such as colds and flu as a result of suppressed immune functioning caused by shift work.

Scott and Kittaning (2001) indicate that more than 60% of people suffering from **asthma** are sometimes awoken from sleep, as a result of night time symptoms of airway restriction, which seems to be related to "physiological circadian rhythms of circulating cortisol or epinephrine decreased dynamic lung compliance and airway patency, and increased bronchial reactivity to allergen triggers". It might, therefore, be possible to change treatment dosages for night shift workers due to the changed sleep-wake patterns. It might however be difficult to control the symptoms for rotating shift workers, and it might be preferable for unmanageable asthmatics to work irregular shifts as this might reduce bronchospastic episodes.

Culpepper (2010) and Suwazano et al. (in Saunders, 2010) mentioned that it is well documented that there is a correlation between shift work and **diabetes**. Meals at regular intervals as well as the use of anti-glycemic medications are playing a significant role in the clinical management of diabetes. The type and amount of food that diabetics eat, also has consequences. Shift work can impact on the intake and nutritional value of meals eaten by diabetic night shift workers. It therefore makes it difficult for diabetics to strictly comply with prescribed diets and makes it difficult to determine the best dosing schedule for diabetics who need to control their blood glucose levels with prescribed medication, as the circadian rhythm gets disrupted.

Culpepper (2010) highlights that sleep disturbances results in **obesity**, but mentions that this is a complex subject matter that needs to be well researched. There is an additional tendency for night shift workers to suffer from raised levels of **cholesterol**.

Scott and Kittaning (2001) add that patients are deprived of sleep in order to provoke typical **epileptic** electroencephalographic discharges when diagnostic evaluations for epilepsy are made. Many hours of sleep deprivation can therefore contribute to electroencephalogram (EEG) activation in epileptic workers. Based on this finding, sleep deprivation is regarded as a causative factor in seizure episodes. The onset of seizures is also related to changes in corticosteroid levels, which are, in turn, affected by phase inversions of the sleep-wake cycle. There is a common understanding that night work results in sleep deprivation and circadian rhythm disruption. Seizure events in epileptic people can be increased when the circadian rhythm is disrupted and, as a result of partial sleep deprivation, night workers have a higher tendency to suffer epileptic episodes.

Circadian rhythms in metabolic parameters and organ responses seem to affect the **effectiveness of many types of medication**. Scott and Kittaning (2001) emphasise that irregular shift patterns may interfere with “the application of chronopharmacological principles”. Shift workers, as result of irregular routines, sometimes forget to take their medication when they work rotation shifts. Some medical disorders related to circadian rhythm disruption, psychosocial stress and sleep deprivation can be aggravated by shift work. These conditions can therefore be regarded as contra-indications for shift work.

2.7.2 Psychological impact

2.7.2.1 Stress-related conditions

Stress-related conditions may include constant anxiety, which can result in an anxiety disorder; obsessive-compulsive disorder or even in depression. Being

constantly exposed to stressors over a period of time can result in a psychiatric condition, especially if the employee feels that he is unable to cope.

2.7.2.2 Psychological distress

Increased acute psychological and psychosomatic symptoms such as job strain and irritability exist amongst shift workers. Exhaustion and irritation levels increase rapidly which, in turn, severely impact on domestic and social relationships as well as the productivity of shift workers (Adler, 1991:82; Scott and Kittaning, 2001 as well as Totterdell, 2005:50). Swensen, Waselenski and Hartl (2008:302) add that this irritability in correctional officers can cause them to antagonise offenders, influence officials to not respond appropriately to offender needs, compromise personal boundaries and revert to using excessive force. Haines et al. (in Saunders, 2010) agree that work-to-family conflict contributes greatly to shift workers suffering from depression. They are also of the opinion that isolation related to shift work and time off from work, play a role in shift worker's feelings of depression. Culpepper (2010) explained that women usually suffer more from depression when they work permanent shifts. Depression can manifest as impairment in memory and concentration and can also contribute to apathy and lethargy. Patients, who appear to have symptoms related to depression, therefore need to monitor their sleeping habits in order to prevent misdiagnosis of a mood disorder.

A significant higher level of burn out, emotional exhaustion, work stress and psychosomatic health problems such as headaches, diarrhea and difficulty in falling asleep, is reported amongst night shift workers when compared to workers who work during the day. Shift workers may also have a higher risk for a number of chronic psychological problems such as chronic fatigue, persistent anxiety, neurotic disorders and depression. A possible cause might be the circadian disturbance, while it appears that a lack of exposure to bright light can exacerbate existing mood disorders in shift workers (Adler, 1991:82; Culpepper, 2010 and Saunders, 2010).

2.7.2.3 Effect of attitude, morale and commitment on job satisfaction

Stress caused by shift work can impact on the attitudes of shift workers towards their work. Negative attitudes might be attributed to personal problems associated with shift work, such as the disruption caused in the daily lives of shift workers' families and their personal activities. Health problems and work load also contributes to reducing the morale, job satisfaction and the commitment of shift workers. This is usually related to the number of sick days taken, as well as to the level of absenteeism among shift workers and the staff turnover ratio of shift workers (Sulsky and Smith, 2005:104 and Swensen, Waselenski and Hartl, 2008:302).

2.7.3 Social impact

Working shifts impact negatively on employees' opportunity to spend time with family members and friends. Saunders (2010) as well as Totterdell (2005:38) mentioned that shift work causes disruption in the shift worker's social and family life, as it causes the shift worker's daily pattern of work and rest not to be synchronised with that of the family, friends and the social life of the community. Swensen, Waselenski and Hartl (2008:302) add that the evening shift, usually between 15:00 and 23:00, disrupts time normally available to be spent with children and consequently prevent children from seeing the parent during the week or for the duration that the parent works shifts.

Landy and Conte (2007:412) further mention that most of the research and theory related to work / family balance, concentrate on the impact of a lack of balance. This is usually discussed in terms of the stress that is created by conflicting demands that exist between work related and non-work related activities. The level of satisfaction that employees experience in the work environment will have an impact on their level of security and satisfaction experienced at home and vice versa. The concern however, seems not to be the number of hours spent at work, but how time at work interferes and distracts from enjoyment of non-work related activities. This disruption, as indicated by Scott and Kittaning (2001) as well as Saunders (2010) therefore contributes to stress which later results in poor health.

A great number of problems are experienced in shift workers' personal lives, as shift work results in friction and stress. These result in greater marital strife, higher divorce rates, increased family conflict, various emotional problems as well as poorer achievements at school by children of shift workers, especially when shift work is scheduled over weekends or in the late afternoons or evenings (Scott and Kittaning, 2001; Sulsky and Smith, 2005:104; Swensen, Waselenski and Hartl, 2008:302 as well as Totterdell, 2005:51).

Sulsky and Smith (2005:104) together with Adler (1991:84) agree that shift work more often present a problem for women who work shifts, as they have to work shifts at night and during the day they still have to tend to child-rearing duties. Female shift workers, in addition, have to take care of shopping, cleaning at home and taking care of the needs of their husbands or partners. It therefore seems that women, who work night shifts, carry a large burden compared to women who only work during the day. This burden also seems to have physical as well as emotional implications, involving sexual as well as marital relationships which could contribute to a larger number of single parent families and men being reluctant to allow their wives to work night shifts.

Shift workers are therefore often unable to become involved in social, community and religious activities due to work schedules. Shift workers also seem to have fewer friends and tend to spend leisure time isolated from other people.

2.7.4 Behavioural impact

2.7.4.1 Work performance

Shift work disrupts sleeping patterns as well as cyclic physiological functioning and therefore it is expected that people working at night will perform poorer than workers working during daytime as it seems that a good night's sleep is a rarity for shift workers (Adler, 1991:1 and Sulsky and Smith, 2005:101). Totterdell (2005:48) stated that shift work and long working hours have been connected with a wide range and

significantly higher number of negative outcomes compared to that of standard work schedules, but they are not necessarily high in absolute terms. Some negative outcomes might require long term exposure to shift work and long hours before they materialise. Shift workers exposed to working rotating shifts, busy work weeks and irregular hours, therefore seem to suffer from a greater number of physical and psychological complaints.

There are conflicting views on whether rapidly rotating shifts are better to work compared to slowly rotating shifts, while there seems to be an agreement that fixed shift patterns are less likely to be associated with problems, irrespective whether these are related to permanent night shifts or day shifts. Another problem associated with rotating shift patterns, seems to be anti-clockwise rotation from day to night to evening shifts, compared to clockwise rotation from day to evening to night shifts. Clockwise rotation of shifts seem to improve sleep in shift workers, while rapidly rotating shifts seem more inclined to prompt sleep disturbances, which in turn can be associated with physical health problems as well as psychological problems (Landy and Conte, 2007:431; Saunders, 2010 and Sulsky and Smith, 2005:104). Knauth and Hornberger as well as Bamba et al. (in Saunders, 2010) are of the opinion that successive evening or night shifts should be limited to three shifts at a time as it can contribute to improved sleep and reduced levels of fatigue. Workers, who work night shifts for short periods at a time, tend to retain their day orientation whereas workers who work night shifts over long periods, for example a three day shift compared to a seven day shift, remain grounded. It is therefore important that there has to be sufficient recovery time between shifts and that weekend work for shift workers should be limited if possible.

Arousal levels in the body are parallel to the 24-hour temperature cycle and it seems that the mental and physical health of employees are determined by the tasks they perform at work, as well as by the time of the day they work and the work period. Sleep deprivation affects one's ability to memorise and learn as well as the level of alertness and performance severely, especially when this involves the period

between three o'clock and six o'clock in the morning. Speed and accuracy also decline, reaching a trough during the night. There seems to be a higher risk for accidents or injuries during night shifts when compared to morning, day or afternoon shifts. The risk for injuries and accidents is higher during the course of the shift, but is not as high after the first two hours of a shift. The risk for injuries and accidents seems to increase over consecutive working shifts, but increases during night shifts. The risk for injuries and accidents in addition seem to increase between rest breaks within a shift. More night shift workers also seem to be involved in accidents while travelling home, compared to day shift workers. When shift workers suffer from Shift-Work Disorder, the potential for accidents increases from as early as the first shift and productivity levels of these workers are also likely to be affected (Culpepper, 2010; Saunders, 2010; Sulsky and Smith, 2005:101; Swensen, Waselenski and Hartl, 2008:300 as well as Totterdell, 2005:35).

Fatigue is one of the primary factors impacting on shift work (Swensen, Waselenski and Hartl, 2008:301). Fatigue due to deprivation can reduce vigilance, attention, concentration as well as the quality of one's decision making by 50%, communication skills by 30% and the effectiveness of memory by 20%. The performance level of shift workers who experience fatigue seems to be comparable to the performance level of a person who has a blood alcohol level of 0.5%. Many of the shift workers usually spend 24 hours awake on their first night shift, which can lead to impairment of vigilance comparable to a blood alcohol level of 0.10%. Inadequate sleep further impacts negatively on the shift worker's ability to find solutions to problems, and the consequences in the correctional services context might include the escapes of offenders, as officers who try to stay awake while the brain tries to shut down at night, experience exhaustion. Finn (in Swensen, Waselenski and Hartl, 2008:300) stresses that: "You can tell when shift work is getting to officers...their work gets sloppy, their searches become careless, their units are filthy, and they stop following the rules".

Shift work and working long hours therefore seems to have a negative impact on the performance of shift workers. Working permanent night shifts over prolonged periods at a time, could result in sleep deprivation and fatigue in correctional officials and that will consequently negatively impact on their ability to stay alert, be vigilant and make appropriate decisions, which might give cause to high risk behaviour in the workplace and the inability to prevent possible escapes or dangerous incidents at night.

2.7.4.2 Absenteeism and grievances

Absenteeism might be an indicator of health outcomes, but Totterdell (2005:50) is of the opinion that workers on day shifts or morning shifts are more likely to be absent, resulting from difficulties experienced in waking up and because of socialising over weekends. Workers on rotating shifts, seem to take sick leave more regularly, but seem to be absent from work on fewer occasions. It also appears as though flexi time can reduce absenteeism. Landy and Conte (2007:431) as well as Saunders (2010) expostulate that the level of absenteeism will decrease, shift workers will suffer from fatigue on fewer shifts and productivity levels will rise when shift workers are allowed to work the shift they prefer to, which will best serve their needs for work-life balance.

During the 2011/2012 financial year, Temporary Incapacity Leave (TIL) in the Department of Correctional Services was benchmarked against the South African Police Service (SAPS), Department of Justice and Constitutional Development (DOJCD) as well as against the Department of Defense (DOD). It appears that correctional officials are more inclined to take sick leave than are officials working in the other governmental departments. Abnormal working conditions and staff shortages as well as abuse of sick leave seem to be responsible for this tendency (Department of Correctional Services Annual Report, 2012:36 and Public Servants Association, 2012).

It additionally appears as though the number of grievances registered by correctional officials, has almost doubled from 771 during the 2010/2011 financial year, to 1 382 in the 2011/2012 financial year (Public Servants Association, 2012). The Department of Correctional Services Annual Report (2012:198) adds that 4 171 cases of misconduct were documented and addressed at disciplinary hearings during the 2011/2012 financial year. Some of these cases involved absence or repeated absence from work without proper approval (1 298 cases), sleeping on duty (41 cases), being under the influence of intoxicating, illegal, unauthorized habit-forming substances including alcohol (119 cases), being in possession of alcohol in the workplace (3 cases), being in possession of illegal, habit-forming substances or drugs (32 cases), assault or attempted assault or intimidating or threatening to assault a colleague, visitor or convict while on duty (238 cases) and being disrespectful towards other people in the workplace (103 cases). No information was documented to indicate whether these offences were committed by officials who were working day shifts or night shifts, but it is clear that most offences involved absenteeism without permission.

A number of cases documented; 597 reported cases, involving injured on-duty officials. Basic medical attention was received in 311 cases. In 260 of these cases, the officials suffered temporary total disability, and in 20 cases, officials were permanently disabled while 6 fatalities were reported. Causes reported for 1 149 correctional officials to leave the Department of Correctional Services during the 2011/2012 financial year, included death (219 cases), resignation (315 cases), contracts expired (105 cases), transfers to other governmental departments (4 cases), medical reasons (78 cases), dismissal due to misconduct (119 cases), retirement (308 cases) and 1 person left on account of unlisted reasons. Once again it was not documented whether these officials were working day- or night shifts (Department of Correctional Services Annual Report, 2012:186).

Blakely and Bumphus, Brough, as well as Keinan and Malach-Pines (in Swensen, Waselenski and Hartl, 2008:300) highlighted that stress-related fatigue, frustration,

safety issues, health problems and stressful family life, can raise the level of personnel turnover. This seemed to be the case when 43% of correctional officers in the private sector in American Correctional Facilities left for other employment. At times some officers had to work overtime, then carry on with the next shift, due to a lack of manpower. It therefore seems that this is not a problem unique to the South African context.

2.8 Advantages and disadvantages of night shift

Many companies operate 24-hours per day and therefore require personnel for the graveyard shift. There are many advantages as well as disadvantages that one has to take note of when working night shift. Many workers enjoy the advantages of night work, either full time or part time (Waters, 2011 and Williams, 1999).

Financial gain can be one of the greatest motivators for employees to work night shifts. Shift workers earn extra allowances on their salaries, but they can also earn more money while working night shifts, especially if they have additional employment during the day. One should, however, ensure that there is time to sleep during the day, and a day or two to recover between shifts (Adler, 1991:87; Hossain and Shapiro, 1999:293; Rivera [sa] and Waters, 2011).

Adler (1991:87), Hossain and Shapiro (1999:293), Rivera [sa] as well as Williams (1999) concur that social disruption and sleep alteration are major consequences of working night shift. Shift workers' inability to cope with shift work schedules can cause a loss or impairment of physical, psychological and social wellbeing, impacting on the shift worker's physiological rhythms, sleep patterns, health, social interactions, family life, work performance and safety. Other health implications vary; a loss of appetite, weight gain, reduced levels of concentration, depression and anxiety experienced by shift workers. Altered sleeping patterns and graveyard shifts aggravate fatigue, and can also result in irregular heartbeats and heart attacks due to the high level of stress that workers experience.

Shift work can have advantages as well as disadvantages with regard to the social or family lives of shift workers. Williams (1999) emphasise that people who work night shifts have to alter their normal activities and adapt their time with family and friends. This contributes to a changed lifestyle as they have to sleep in the morning and work in the evening or at night. The advantage is that shift working, as mentioned by Hossain and Shapiro (1999:293), is an opportunity for shift workers and their families to facilitate flexibility in relationships with regard to child care and domestic life. It is a way of satisfying individual preferences as one has variation in lifestyle and individual preferences seem to be the major motivating factor in deciding to work permanent night shift.

Another advantage of working night shift is that one might enjoy the work environment to a greater extent, as it might be quieter and one can easily settle down into a productive work pace at night. Shift workers might look forward to go to work if there is a relaxed pace and environment which depends on the industry they work in. Fewer employees work during the night and if one prefers to work on one's own, this will be an ideal situation. Night shifts also present ideal working conditions for the "night owls" who prefer to be awake during the dark hours and who struggle to perform at work during the day (Rivera [sa] and Waters, 2011). While some employees might prefer to work on their own, others prefer to be in the company of co-workers (Williams, 1999). Being isolated from other co-workers can also contribute to higher stress levels in some night shift workers.

Working night shift might contribute to having fewer arguments with co-workers, clients and supervisors. Not many workers applying for a job realise the number of advantages there is to working night shifts and therefore not many people apply for such positions. There is consequently less competition when applying to get hired into a night shift occupation and less competition when qualifying for promotion to a higher position on the shift. A disadvantage is that night shift staff can have differences with staff who work day shifts, resulting from a possible lack of proper communication with regard to new developments in the workplace. This lack of

communication with day shift staff as well as with management might also impact negatively on future opportunities for promotions at work (Rivera [sa] and Waters, 2011). Williams (1999) further states that night shift workers are not always as competitive as are day workers. A lack of proper supervision at night can also have a negative impact on performance evaluation and consequently on promotions. This situation might therefore contribute to career stagnation rather than further career development opportunities.

Waters (2011) is of the opinion that traveling to work could be less stressful to night shift workers as there will be less traffic on the road at night. Williams (1999) communicates that security is rarely an issue, but indicates that there can be a problem when one travels late at night, depending on the area one lives in. The researcher is of the opinion that one can experience more stress working alone at night in a correctional facility. Furthermore, in the South African environment, driving to work at night can contribute to more stressful travelling due to the fear of being hijacked at night, as well as to the possible unavailability of public transport when one works the graveyard shift. Article 17 of the Basic Conditions of Employment Amendment Act, No. 11 of 2002, makes provision for the likelihood that an employer may only require or permit an employee to work night shift where there is transport available from the employee's place of residence to the workplace before and after the work shift.

It is clear that there are several advantages as well as disadvantages to working night shift. Personal preferences seem to influence shift workers' attitudes towards working night shift. Where the impact of working night shift can be regarded as an advantage to one person, another might regard it as a disadvantage.

2.9 Coping strategies for working night duty

Sulsky and Smith (2005:104) give prominence to the fact that it appears as though shift work only has negative consequences. These consequences include more

severe health problems, an increase in negative attitudes, decreased work performance and an increase in personal problems.

Sulsky and Smith (2005:104) as well as Swensen, Waselenski and Hartl (2008:306), agree with Scott and Kittaning (2001) that a possible coping mechanism as regards shift work include that shift workers keep to a set sleeping routine; set sleeping patterns as regards time and duration. Nourishing meals should also be taken at regular intervals, resulting in a set eating schedule where shift workers try to eat at the same time daily. A light snack can, if the need exists, be enjoyed before going to sleep. This might assist shift workers in maintaining a healthy body mass, whereas heavy meals or greasy and spicy meals should be avoided in order to prevent having an upset stomach or possible indigestion. Regular exercise, taken at least 4 hours before bedtime, can also be beneficial. Caffeine and alcohol intake should be limited and ideally, caffeine is not to be taken as late as 4-5 hours before bedtime. When sleeping during the day, the shift worker should try to choose the quietest room and dim the light and reduce the noise as much as is possible. It might be useful to buy ear plugs or eye shades in order to assist in reducing light and noise in the room. Family members should be encouraged to recognise and respect “quiet times”. It might assist workers in relaxing before going to bed, and the bedroom should only be regarded as a place to relax and sleep and try to focus on adaptation. Older employees, those exceeding the age of 40 or 50, experience more severe problems with regard to rotating shifts, irregular sleep patterns, as well as reduced wellbeing. Whether the employee is a circadian type, an early riser or a night owl are important factors to consider when placing a worker on rotating shift patterns. Extreme morning types have difficulty coping with night work and rotating shifts. Circadian cycles become more morning-orientated and therefore less flexible as people age (Landy and Conte, 2007:431 as well as Sulsky and Smith, 2005:106).

Scott and Kittaning (2001) stress the important role of medical evaluations prior to placing someone on shift work, especially when night shifts or rotation shifts are considered. Article 17 of the Basic Conditions of Employment Amendment Act, No.

11 of 2002, also makes provision for an employer to inform employees who will be expected to work permanent night shifts of any health and safety risks associated with the work that the employee will have to perform while working permanent night shift. Employers furthermore have to inform employees who work permanent night shifts of their right to undergo medical examinations prior to working permanent night shift or shortly after having started to work permanent night shift. Employees can also undergo medical examinations at appropriate intervals while working permanent night shift and in cases where employees suffer from ailments as a result of working permanent night shifts, the employer may transfer them back to day shifts. Scott and Kittaning (2001) are in agreement when they indicate that, in cases where potential shift workers might have a poor tolerance for shift work, medical advice might warn against shift work in order to prevent the aggravation of medical conditions linked to shift work intolerance. In some cases pre-placement examinations might also assist in ensuring proper medical supervision of shift workers susceptible to health problems related to shift work. Follow-up medical evaluations of day workers, who left night shifts as a result of consequences of ill health, might also be helpful. Medical evaluations of shift workers should include testing for symptoms related to shift work intolerance as well as monitor shift workers' sleeping habits, nutritional habits, and behavioural changes such as abuse of alcohol, cigarettes, caffeine and sleeping tablets. Diagnostic testing should include serum lipoprotein and triglyceride levels, blood pressure readings, as well as weight and body fat assessments.

Hossain and Shapiro (1999:295) are of the opinion that limitations to the proper management of shift-work disorder may include a lack of awareness and education among shift workers and management who schedule shift work. It also seems as if there is a lack of awareness of sleep and circadian disorders among general physicians. Providing education during basic training in the Department of Correctional Services and counseling with the Employee Assistant Practitioner (EAP) can assist shift workers in adapting and coping with shift work. The purpose of education in the field of shift work is to minimise physiological, psychological and social implications related to shift work on a permanent or temporary basis, in order

to improve individual tolerance of shift work. Information relating to the effects of changing sleep-wake cycles and coping with such lifestyles should be incorporated into existing employee orientation and development programmes, in order to assist shift workers to adapt to changes they need to make, for them to be able to cope with shift work. Shift workers can also benefit from receiving more information on sleep hygiene, stress management, physical activity, ambient temperature as well as nutrition. Scott and Kittaning (2001) as well as Swensen, Waselenski and Hartl (2008:305) further add that family members also need to be included in the awareness raising or education process in order for individual coping strategies of shift workers to be successful and to possibly reduce the turnover of shift workers. This can be done by providing shift workers with educational material that they can share with their family members.

Swensen, Waselenski and Hartl (2008:304) further believe that the organisation can play a role in assisting night shift workers by allowing them to do tasks that are not necessarily routine tasks, in order to avoid boredom which might contribute to sleeping on duty. This might be in the form of rotating to another post at a correctional centre during night shift. Although it is expected that working permanent night shift will allow the worker to adjust to the shift pattern, it is unlikely that all shift workers will completely adapt. Fast rotating shifts might help to prevent fatigue in shift workers, whereas slow rotating shifts causes shift workers to feel more exhausted. Frequent short breaks during a shift will also assist the worker to be more alert during a shift, rather than take a few long breaks. Napping of ten (10) to thirty (30) minutes during a shift is a sensitive issue, especially at a correctional centre where officials are expected to stay alert and vigilant at all times, but is indicated as a technique to assist in reducing fatigue experienced by shift workers. Napping might however be a problem when shift workers tend to drop off to sleep too quickly or to experience sleep inertia. Therefore shift workers can be advised to sleep for an hour or two prior to going to work as it might delay the onset of fatigue during the shift. Other techniques that might be helpful in order to enhance alertness during a shift, might include talking aloud, singing to oneself, listening to music,

walking around, being exposed to some cold air, slapping and pinching oneself, as well as splashing some cold water on one's face, but in the end sleeping is the best way to deal with fatigue.

2.10 Summary

This chapter addressed the first objective of the study, namely to explore night duty as a phenomenon. It contains a literature study on night duty as a phenomenon and it further discusses the possible positive and negative impact that working permanent night duty has on the shift worker's physical and mental health, social and family relationships as well as his/her career. The importance of working night duty in the Department of Correctional Services was also discussed.

Chapter 3 will be focusing on the research methodology as well as **empirical results** obtained from the study and the interpretation and discussion thereof.

Chapter 3

FINDINGS OF THE EMPIRICAL STUDY EXPLORING THE POSITIVE AND NEGATIVE IMPACT OF PERMANENT NIGHT DUTY ON OFFICIALS IN THE DEPARTMENT OF CORRECTIONAL SERVICES

3.1 Introduction

The previous chapter served as a theoretical basis for the researcher to formulate the Interview schedule that was resorted to during the empirical study investigating the positive and negative impact of permanent night duty on officials in the Department of Correctional Services. This chapter will reflect the research methodology utilised in this study, and the literature review of the previous chapter will be used to substantiate the findings of the study.

The second objective of this study, namely to explore the positive and negative impact of working permanent night duty on correctional officials at the Kgoši Mampuru II Management Area will be addressed in this chapter.

3.2 Research Methodology

3.2.1 Research approach

Qualitative research primarily aims at explicating social life and the significance that people attach to everyday life (McRoy in Fouché and Delport 2005a:74). The focus is on non-statistical methods and small samples that are routinely purposively selected. The researcher is therefore concerned with understanding rather than explanation. Greenhalgh and Taylor (1997:315) mention that researchers who make use of the qualitative research approach are seeking for a more profound actuality. Their aim is to study something in its natural setting and they are endeavouring to make sense of, or interpret a phenomenon with regard to the meaning that people bring to it. A holistic perspective that preserves the complexities of human behaviour is resorted to. Qualitative research is therefore conducted and the researcher aims at insight into the participant's experiences rather than at illustrating or describing a

situation or phenomenon. Smaller samples are used and participants are purposefully selected.

The researcher decided to employ the **qualitative research approach** in this study in order to explore the effects of working permanent night duty that impacts on correctional officials in the Department of Correctional Services.

3.2.2 Type of research

Alston and Bowles (1998:31) indicate that applied research is directly related to organisational or procedural goals and it is often seen as delivering quick results. Newman (in Fouché and De Vos 2005b:105) indicates that basic and applied research is relevant to the function of, or the use of the research that was done. Applied research normally refers to the “scientific planning of induced change in a troublesome situation”. Applied research consequently singles out an existing problem in order to come to a solution for said problem. The focus is on applying insight and enlightenment.

During this study the researcher made use of **applied research**. The findings of the study makes it feasible for the researcher to make recommendations on factors that need to be taken into account when a correctional official is required or considered to work permanent night duty. Recommendations based on the findings of the study can, additionally simplify addressing problems that correctional officials experience as a result of working permanent night duty. Proactive measures can thus be taken in order to try and prevent or forestall the occurrence of traumatic incidents similar to the one that took place at Leeuwkop Management Area in June 2005 where one of the officials committed suicide at the end of his night shift. The implementation of recommendations based on the findings of the study can thus contribute to having a more secure and productive work environment.

3.2.3 Research design

The terms of design or strategy refers to all the decisions that a researcher makes in planning the study (Fouché, 2005b:268). Williams, Tutty and Grinnell (1995:339) agree that a research design or strategy refers to the planned procedures that will be used to assemble and analyse data in order to investigate a research question. One can therefore define a research design or strategy as the plan of action that will be implemented when collecting data and analysing it in order to obtain answers to the research question.

Creswell (in Fouché 2005b:272) indicates that a case study can be seen as a method of exploration, or as an in-depth analysis of an isolated case or of multiple cases, over a period of time. Mark (in Fouché 2005b:272) states that a collective case study adds to the researcher's understanding of the phenomenon he studies. The researcher identifies and selects cases in order to simplify comparison with similar cases and to expand on and validate theories. Burns (2000:460) defines a case study as the observation and study of a separate and isolated case unit and accentuates the fact that, in order for the study to qualify as a case study, it has to be a bounded system. It is an in-depth understanding of the significance that something has for the subject and emphasises the process rather than the outcome. Burns (2000:469) furthermore indicates that the use of multiple sources contributes to the efficacy of the case study. It contributes to the validity and reliability of the data and the findings. Discovery is of greater importance than confirmation of the desired outcome. Multiple case studies comprise a collection of case studies which serve as a form of replication. This replication might be advantageous to the researcher as the outcome could be conclusive.

For the purpose of this study, the researcher used a **collective case study**. Only a small number of correctional officials work permanent night duty. By resorting to a collective case study, the researcher wished to include as many correctional officials permanently working night duty as were available so as to gain insight into their experiences of working permanent night duty.

3.2.4 Description of the research population, boundary of the sample and sampling method

- **Research population**

The research population involves all the possible elements that could be included in the research (Dane, 1990:336). Williams, Tutty and Grinnell (1995:337) describe a population as an entire set of people, objects, or events of relevance to a research study and from this population a sample is selected.

The research population involves all potential subjects to participate in the study. The findings of the study must also be disseminated to the population at large. For purposes of this study, the **research population** comprised all the correctional officials who were permanently working night duty at all the Correctional Centres in Gauteng.

- **Boundary of the sample**

Dane (1990:336) describes a **sample** as a portion of the elements in a research population and defines **sampling** as the process of selecting the participants for the research project, while Williams, Tutty and Grinnell (1995:337) likewise view a sample as a subset of a population of individuals, objects, or events chosen to participate in or to be considered as relevant to a study. Unbiased sample selection enables a researcher to draw inferences about the entire population of people, objects, or events.

The boundary of the sample therefore constitutes that portion of the research population which has the potential of being selected as the sample for the study and this is achieved through a selection process called sampling. For the purposes of this study, it was decided to include all correctional officials who were permanently working night duty at Kgoši Mampuru II Management Area. This selection was to define the boundary of the sample and permission was granted to use this management area for purposes of research.

- **Sampling method**

As this was a qualitative study, **non-probability sampling** was used. Strydom and Delpont (2005b:327-328) refer to this method of sampling as being less structured and less strictly applied than in quantitative research and as used in almost all studies without exception. The sampling technique was **voluntary sampling**, which Strydom and Delpont (2005b:330) indicate, is utilised in qualitative research and involves persons coming forward voluntarily to participate in the study and accelerate the process. Mark in Strydom and Delpont (2005b:330), verify that participants who volunteer to participate in a study are motivated to a greater extent than those who do not volunteer.

The sample for this study included ten (10) participants who volunteered to participate in the study. Possible participants were identified by the Centre Coordinator Staff Support Services at the centre. These participants were identified based on the requirements that were set out for participation in the study. All participants who were informed about the study and who indicated interest in participating in the study were very positive about the input they could give. Some of the permanent night duty officials at the centre enquired about the presence and personal availability of the researcher at the centre during the evening and as a consequence also volunteered to participate in the study. They were timeously informed of the purpose of the study as well as of the criteria for participation in the study. All participants presented the researcher with their voluntary informed consent after having volunteered to contribute to the study.

3.2.5 Data collection methods

Creswell (in Fouché, 2005b:272) explains that, in a collective case study, in-depth data collection methods are used and that these involve multiple sources of information, such as interviews, documents, observation or archival records that are rich in context and which are used to explore and illustrate the cases involved in the study. The researcher, however, has to be able to carry out a range of data collection methods, such as interviewing, observation, analysing records and

compiling interview schedules. The researcher must maintain the sequence of evidence in a way conducive to good outcome of the research subject, as the reader of the report should be able to keep track either from the research question to the conclusion, or the other way round. The evidence should thus be stated and specific observations, documents or interviews are to be cited. Of equal importance is recording data which can be assembled on-site by means of notes detailing information encoded on video or by means of audio recordings. The actual content of the observations needs to include verbal descriptions of the setting, people and activities as well as recordings of the feedback by interviewees. The observers' and participants' comments, feelings, reactions, as well as interpretations of what was observed, also need to be recorded.

Greeff (2005:287) regards interviewing as the predominant method of data collection in qualitative research. Semi-structured one-on-one interviews are insightful when these serve to gain an extensive perception of a participant's beliefs on, or perceptions or accounts on a particular topic. Williams, Tutty and Grinnell (1995:256) describe the interview as presenting the researcher with direct contact, allowing for objectivity and control exerted by the interviewer who aims to obtain data that is relevant to the research study. Semi-structured personal interviews are therefore conducted with the aim of gaining information on the participant's personal experiences of a situation. The researcher has a set of pre-determined questions on an interview schedule, not of a necessity to dictate the interview, but in order to guide it. Questions set, are usually open-ended. In this study, **semi-structured one-on-one interviews** are conducted and each participant is in a position enabling him/her to collect data.

Participants were informed that a research study would be conducted and therefore their written informed consent was obtained for their voluntary participation in the study and the audio recording of the interview. Some interviews were conducted in the evening while participants were at work and this was arranged in order to prevent inconveniencing them during their off days or when they needed to sleep

between their shifts. These interviews were conducted in a secluded area away from the main entrance to the centre in order not to pose a security risk at the centre. A few officials who used to work permanent night duty up to this point, started working rotating shifts, and were also included into the study and were interviewed in the vacant office of the Head of the Correctional Centre while working day shift at the time. Three (3) of the officials who were interviewed during the study, worked permanent night duty over a protracted period but then changed to day shifts on a permanent basis and were also interviewed during the day in the vacant office of the Head of the Correctional Centre. An interview schedule with predetermined themes and questions was used to guide, but not to dictate the interview. Questions were formulated to mainly focus on the purpose of the study and were open-ended in order to obtain more information from the participants on their experiences and perspectives on working night duty permanently. They also discussed the impact that rotating to night duty exerted on different aspects of their lives. The researcher recorded these interviews in order to enhance the continuity and impact of the interviews, as well as to ensure that valuable information did not get lost during a process of making field notes. It was crucial to be sensitive in choosing the most appropriate way to record the data, as personal information could not be allowed to interfere with the participants' employment and work place. The recorded interviews were afterwards transcribed by the researcher.

Strydom and Delport (2005a:314) give prominence to the fact that, resorting to a combination of data accumulation methods such as documented study, secondary analysis, observation and interviewing, can benefit the researcher in validating and cross-checking findings. The researcher is able to investigate people, events and systems intensively by means of analysis of authentic written material. Documented studies are existing records that often provide insight into conditions influencing a setting or group of people that cannot be observed or communicated with in any other way. Two categories of documents are available to the researcher. Personal documents are "first-person accounts" of events and experiences. These include those documents that assist the reader in achieving an understanding of the

character of the person that the document is on; such as diaries, portfolios, photographs and letters. Public records are documents created and kept for the purpose of attesting to an event or providing an account of said event. These documents mainly contain information with regard to meetings, inter-office memos, financial records, statistics, newspaper clippings, student transcripts, leave- and annual reports. Marriage certificates, driver's licenses and bank statements are also included in this category. Existing records can therefore be of great value when one wants to make comparisons concerning collective data.

Documented studies were also used to assemble data. In this study the focus was on public records, and more specifically on the personnel file on each participant at the Human Resources Division of the indicated Management area of the Department of Correctional Services where the study was conducted. Permission was granted by the Department of Correctional Services in order for these files to be made accessible to the researcher. The participants were informed of this intent to make available this information to the researcher and reacted via a letter of informed consent and obliged by giving written consent. The documentary analysis of the personnel file of each participant only focused on: records regarding sick leave, vacation leave, absenteeism, arriving late for work and grievances. Leave and sick leave records assisted in determining if there was a tendency among participants to absent themselves from work, with or without reporting so. If participants reported sick when they were supposed to report for duty; or where there was a prevalence of disciplinary steps taken against the absentees, this could give an indication of how they view their career in the Department of Correctional Services, as well as of how working permanent night duty impact on their loyalty. This information obtained from the personnel files was analysed in order to identify trends.

3.2.6 Data analysis

Data analysis for qualitative research, according to Dane (1990:235) represents non-numerical analysis that concerns quality rather than quantity. The researcher therefore has to focus on general tendencies or averages. De Vos (2005b:333)

further indicates that the analysis of qualitative data entails research on widespread statements regarding relationships linking categorical data. The following steps are recommended as guidelines when analysing qualitative data:

- ***Planning for recording of data***

The researcher has to plan the recording of data in a systematic manner appropriate to the setting as well as to the participants. Techniques or devices recording observations, interactions and interviews should not intrude on the flow of daily activities and have to be communicated in the research proposal. It is important that the participant's written informed consent be obtained first. The researcher should also plan on how to simplify retrieval of data for analysis. Planning should also include additional data collection and formatting the final research report at the end of the study (Marshall and Rossman in De Vos, 2005b:335).

The researcher has to ensure that all the necessary preparations are made in order to collect and analyse data according to plan.

- ***Data collection and preliminary analyses***

Data collection and data analysis are conventionally regarded as two separate processes, but these processes are inseparable entities as concerns a qualitative study (De Vos, 2005b:335). The initial concepts guide the researcher in obtaining insight or understanding of the subject or subject matter to be studied. Continuous data collection and data analysis assist the researcher in developing a better understanding of subject matter during the course of the study.

The written informed consent from the participants in the study allowed the researcher to make audio recordings of the interviews and to obtain information from their personnel files in order to assemble data. Permission was obtained from the Department of Correctional Services and arrangements made to source information from the personnel files of the participants. Audio recordings enabled the researcher to listen to participants' responses, giving those her undivided attention and

identifying issues that needed to be clarified. Supplementary data could be collected and some information obtained from the interviews could be clarified or confirmed through the use of work records. Some information was reiterated in more than one interview and this assisted the researcher in identifying common themes and sub-themes and confirmed that the data collection process was saturated.

- ***Managing or organizing the data***

Organising the data collected is the first step in analysing data when away from the site. Creswell (in De Vos, 2005b:336) further adds that, in addition to organising files, researchers should also start converting the files into the appropriate text units.

After interviews with the participants in the study, all interviews were copied into files that were newly created and marked as Participant 1, Participant 2, etc. on the researcher's computer. Backup copies of the interviews were made and stored safely in order to prevent any data from getting lost. The researcher transcribed the audio recorded interviews verbatim into two script books and added the handwritten field notes to the transcribed interviews in the books. During this process, the researcher managed to identify areas that required being studied in detail or needed to be clarified. This process enabled the researcher to start identifying more isolated subject matter and sub-themes as well as areas that still needed to be surveyed.

- ***Reading and writing memos***

Creswell (in De Vos, 2005b:337) mentions that writing memos in the margins of field notes or transcripts or under photographs, can promote the initial process of exploring the database. The memos need only to consist of short sentences or phrases, ideas or key concepts that are of interest to the researcher.

Short notes were written on the researcher's experiences and observations of the participants and on the setting during the interview. These field notes were copied on a note pad, between the interviews and after the researcher had left the correctional centre. The researcher transcribed the interviews verbatim. The relevant

field notes and information obtained from their files were written into the margins of the transcribed interview in order to neatly classify information on each participant.

- ***Generating categories, themes and patterns***

This is the most exciting but taxing part of the research. The researcher has to disassemble the text or qualitative data and identify categories, themes or dimensions of information in order to try and make sense of the data that was obtained throughout the study (Creswell and Marshall and Rossman, in De Vos 2005b:338). Burns (2000:430) adds that data has to be organised in order for the researcher to be able to make comparisons and identify similarities, contrasts, and gain insights. The analysed data need not only account for information assembled, but also needs to be categorised in order to permit analysis and comparison of significant facts within a category.

The researcher reads through the field notes, as well as studies the transcribed interviews, noted observations and notes made in the margins of the personnel files of participants, in order to be able to identify themes and categories. The researcher also repeatedly listens to the audio recordings of the interviews in order to ensure that they were transcribed accurately.

- ***Coding the data***

Coding encompasses the most formal way of analytical thinking in the research process and assists the researcher in identifying themes and categories (Marshall and Rossman in De Vos, 2005b:338). Burns (2000:432) gives prominence to the importance of revising information obtained during the interviews and asserts that summarising and tabulating should start from the onset of the data collection process. Initial codifying, even if done ahead of schedule, enables the researcher to identify high-priority areas where these areas need to be pinpointed and targeted and this is not a course of action that can be taken when hoping to achieve overnight success. Colour-coding may prove very effective during data analysis and when

writing the final report on the findings of the study (Marshall and Rossman in De Vos, 2005b:335).

The researcher resorted to the use of different colours and symbols in order to identify specific themes and sub-themes.

- ***Testing the emergent understandings***

The researcher has to evaluate the data in order to determine its usefulness and centrality (Marshall and Rossman, in De Vos 2005b:338). The plausibility of the researcher's insight into the collected data has to be evaluated, which entails the researcher challenging his understanding of the collective data and trying to identify irregular patterns. These systems are then incorporated into the larger constructs.

During this procedure the researcher therefore evaluates the usefulness of the data obtained during the interviews and compares this to the points at issue that were explored.

- ***Searching for alternative explanations***

Marshall and Rossman (in De Vos, 2005b:339) are of the opinion that alternative interpretations regarding situations always exist. It is the researcher's duty to search for, identify and illustrate the alternatives and then to demonstrate why the interpretation decided on is most relevant.

The researcher strived towards finding alternative explanations.

- ***Representing, visualizing.***

During this stage, the researcher has to report on the findings that were made throughout the study. Reporting back on the qualitative data obtained was done in the form of text. Different levels of abstraction can be displayed through the use of a hierarchical tree diagram, or through the use of tables that compare issues in terms of themes or categories (De Vos, 2005b:339).

The themes and sub-themes were supported by direct quotes from the interviews and were then substantiated with literary resources.

3.2.7 Trustworthiness of the research

In order to strive towards trustworthiness of the research, the following should be taken into consideration:

- ***Credibility***

Lincoln and Guba (in De Vos, 2005b:346) explain that the credibility of a study can be seen as an alternative to the intrinsic validity of the study. The researcher therefore has to clearly state the parameters of the study by setting conspicuous boundaries for the study in order to ensure the repetition of certain features such as patterns, themes and values.

Only officials of the Department of Correctional Services who have experience in working permanent night duty over a period of at least two (2) years or more are included in the study. Some of these officials are still working permanent night duty only, while some officials have worked permanent night duty until recently, then started working rotation shifts in between day and night shifts and some officials recently started working day duty permanently. Participants in the study represent different racial groups, but only males between the ages of 25 and 45 were made available to be interviewed.

- ***Transferability***

Transferability can be regarded as the alternative to external validity of the study (Lincoln and Guba in De Vos, 2005b:346). It therefore is concerned with the extent to which findings in the study can be generalised to refer to other populations, settings and treatment arrangements. In order to be able to apply the findings of a study to these, it is recommended that data from different sources be used. This involves the use of multiple case studies, various informants or the use of more than one data-stockpiling method. During the pilot study, two participants from a

correctional centre at Leeuwkop Management Area were interviewed in order to ensure transferability through testing and to ensure that the interview schedule served its purpose in appropriately guiding the interview for this study.

Ten (10) correctional officials who work permanent night duty at one (1) correctional centre were included in the study. Information received from participants differed, but there were also many similarities in what participants reported during the study. Data collected during the study was also compared to information received from other sources such as official documents which included personnel files as well as leave and sick leave records. Information obtained from literature was also compared with data gathered during the study in an attempt at comparison with other populations, settings and treatment arrangements. These findings cannot be transferred to the general population as it presents a qualitative study, but they can be transferred to similar populations and settings.

- ***Dependability***

Lincoln and Guba (in De Vos, 2005b:346) refer to dependability as synonymous to the reliability of the study. It is therefore important to indicate how one can, beyond reasonable measure of doubt, conclude that the same outcomes will be reached, should the study be repeated with the same participants in the same context.

The researcher clearly explained which methods were used to gather information during the study and indicated which steps had been followed during the analysis of information obtained during the study. All participants in the study are working permanent night duty or have done so until recently at one (1) correctional centre over a period of two (2) years or longer. Some of the information received from the participants during the interviewing process, was later compared to information obtained from official documents such as leave and sick leave records, as well as information on personnel files of participants in the study.

- **Conformability**

Conformability relates to the objectivity of the study. The focus is to confirm that another researcher would arrive at similar conclusions as did the original researcher and whether the exact conclusions might be arrived at (Lincoln and Guba in De Vos, 2005b:347).

Different methods of data collection, including interviewing as well as analysing public documents of participants, were used in order to promote conformability of the study. All unprocessed data including audio recordings, transcribed interviews as well as the letters of informed consent, is to be kept safely as prescribed by the University of Pretoria and the Department of Social Work and Criminology over a fifteen year period.

- **Reflexivity**

Krefting (1991:218) explains that when looking at reflexivity in qualitative research, the focus is on the researcher's own background, perceptions and interest in the study and as abovementioned factors might have an impact on the outcome of the study.

The researcher is a social worker employed by the Department of Correctional Services and is currently also a postgraduate student in social work at the University of Pretoria. She used to work night duty over weekends, but had to stop in July 2009, when the Department of Correctional Services embarked on the seven day stipulation. Interviews were conducted with officials from a correctional centre at a Management Area separate from the one where the researcher is currently employed. Participants were therefore not familiar with the researcher and the researcher had no personal knowledge of the participants. The researcher strived towards not being biased by trying to remain objective during the interviews. In order to prevent the researcher from being biased in her interpretation of the data obtained during the interviews, she also compared information obtained during the interviews

with information obtained from participant', personnel files and leave and sick leave records.

3.2.8 Pilot study

Dane (1990:336) describes the pilot study as a shortened version of the study in which the researcher applies or tests the procedures that are planned to be used in the subsequential full-scale project. Sarantakos (in Strydom, 2005d:205) is of the opinion that the researcher should never start with a research study unless he/she is convinced that the procedures that will be used are suitable, valid, reliable, effective and free from setbacks and errors. The researcher must therefore ensure that everything is done in order to avoid any problems that may be encountered during the study. Aspects that will be focused on during the pilot study are; the feasibility of the study as well as a pilot test of the interview schedule. This is done in order to ensure the researcher of some practical aspects such as establishing access, making contact and conducting the interviews, as well as growing familiar with the researcher's own level of interviewing skills as a researcher and not as a therapist.

- ***Feasibility of the study***

The researcher has to obtain an overview of the practical situation where the prospective investigation will be executed (Strydom, 2005d:208). Simon (2007) adds that the researcher needs to conduct a pilot study in order to identify areas where Murphy's Law will become applicable. The feasibility of the study therefore centers on the practical planning of the research project and enables the researcher to identify possible problem areas that may show up during the study. This planning will include aspects such as transport, finance, time factors, availability of the participants to be interviewed as well as obtaining permission from authorities to conduct the study.

The researcher obtained approval for the research proposal from the Research Panel of the Department of Social Work and Criminology and also obtained ethical clearance from the Postgraduate and Ethics Committees of the Faculty of

Humanities, UP. Permission was also granted by the Department of Correctional Services to conduct the pilot study at a correctional centre at Leeuwkop Management Area and to conduct the main study at a correctional centre at Kgoši Mampuru II Management Area at night, when correctional officials who worked permanent night duty would be available. The researcher was able to take leave for the duration of the study and the study was conducted at a Management Area close to the researcher's home which limited the risk of extra travelling costs. All participants in the study were informed that participation in the study was voluntary.

- ***Pilot test of the measuring instrument***

The *New Dictionary of Social Work* (1995:45) indicates that the pilot study is the procedure used to test the research design for a prospective survey. Seidman (in Greeff 2005:294) agrees on the importance of pilot testing the interview schedule with a small number of participants. Williams, Tutty and Grinnell (1995:244) add that once the interview schedule is formulated, it can be tested for phrasing and relevance on a small sample of the population for whom it is intended.

A sample of two correctional officials, who worked permanent night duty at Leeuwkop Management Area, was selected to ensure that the questions in the interview schedule were relevant and correctly phrased. The officials who participated in the pilot study were representative of the bigger group with regard to race, age and gender and did not partake in the main study. They included a male and a female official, both between the ages of 25 and 45, who volunteered to participate in the pilot study. The interview schedule and voice recorder were tested with their permission and they assisted as planned. The researcher could also plan the length of an interview.

3.2.9 Ethical aspects

The following were relevant ethical issues as indicated by Strydom (2005a:56), and had to be considered during research.

- ***Harm to experimental subjects and / or participants***

Dane (1990:44) holds the opinion that a researcher cannot protect participants from all possible physical harms while the study is conducted. The researcher should, however, counterbalance the dangers of physical harm with the benefits of knowledge to be gained from the study. Williams, Tutty and Grinnell (1995:30) agree that a fundamental principle of conducting research is to safeguard the physical and psychological safety of participants, as most social work research focuses on human beings. The ability to predict potential psychological harm involves the researcher's ability to identify himself with the participant's frame of mind. The focus is on securing the physical and emotional safety of participants.

The researcher comprehensively informed the participants of the potential impact of the study before they became involved in the study. Participants were informed that they could, at any stage, withdraw from the research and that they would be referred for counseling within the Department of Correctional Services should they experience any emotional discomfort during their participation in the study.

- ***Informed consent***

Dane (1990:40) indicates that potential research participants have to be provided with all the information necessary to make an informed decision with regard to their participation. Williams, Tutty and Grinnell (1995:30) additionally explain that future participants have to fully understand exposure and risk factors entailed by the study, why this study is to be undertaken and how this participation will impact on him/her.

The researcher informed the participants in detail on what the study entails in order for them to fully understand what the study was about and to assist them in making an informed decision with regard to participating in the study. Participants were informed that the interview would be voice recorded and that the researcher would access their personnel files to get relevant information for the study on sick leave, absenteeism and grievances. The test subjects were requested to read and sign the

letter of informed consent before the interview commenced. They were furthermore informed that they could withdraw from the study at any time.

- ***Deception of subjects and/or participants***

Williams, Tutty and Grinnell (1995:30) emphasise that no potential participant may be bribed, threatened, deceived or in any way coerced to participate. Dane (1990:43) agrees that no false information about the project must be provided to potential participants.

The researcher did not withhold any information from the participants with regard to the aim of the study and did not conceal information on the experiences that the subjects would be exposed to during the interviews. The researcher was open and honest with regard to the study at all times in order to prevent any likelihood of misinterpretation.

- ***Violation of privacy/anonymity/confidentiality***

The researcher has to ensure that information pertaining to the study cannot be linked to particular participants in the study (Dane, 1990: 51). The researcher also has to ensure that the participants remain anonymous during and after conducting the study. Williams, Tutty and Grinnell (1995:31) also indicate the importance of not even the researcher being able to link information obtained during the study to any particular participant.

Anonymity could not be guaranteed, as the researcher conducted the research interviews. In the research record, anonymity was ensured by numbering each participant and by revealing no identifying particulars. The group of participants was small, but confidentiality was guaranteed at all times to all the participants to the study. Some interviews were conducted in privacy and isolation near the main entrance gate to the centre while the participants were on duty. Some of the interviews were conducted in the vacant office of the Head of the Correctional Centre during the day, while one (1) interview was conducted in the control room of

the centre where the official was working on his own. This ensured the privacy of the participants during the course of the interviews. Not all correctional officials who were working permanent night duty, volunteered to participate in the study, and this safeguarded the anonymity of those who participated. Confidentiality was further ensured by giving each participant a pseudonym, in this case a number, so that they could not be linked to the findings.

- ***Actions and competence of researchers***

The researchers are obliged to carry themselves with integrity and lack of guile (Dane, 1990:46). The identity, conduct and affiliations of the researcher might influence the participant's decision to participate. Williams, Tutty and Grinnell (1995:30) highlight that the researcher should be familiar with ethical principles so that the client's trust will never be betrayed.

The researcher conveyed a more intrusive literature study in order to ensure that she had the competence to undertake this research. She also used her skills as a social worker to gain the participants' trust with regard to participating in the study. Skills that were developed during previous research in the researcher's BA (SW) fourth year mini dissertation were also applied to conduct this study. The researcher received guidance from her supervisor while conducting the research and utilised the knowledge gained in the module Research Methodology (MWT 864), a methodology that she had successfully passed, in order to undertake her research.

- ***Release or publication of the findings***

Williams, Tutty and Grinnell (1995:40) state the importance of the researcher giving a true reflection of the findings of the study, and in doing so not to withhold or alter information in order to influence the outcome. Dane (1990:60) adds that the participants also have to be informed with regard to the findings of the study.

The researcher compiled a research report after completing the study. Information was recorded clearly, resulting in confidentiality, anonymity and accuracy. The

dissertation mentions the shortcomings of the investigation. The researcher also informed the participants in the study, of the findings in a clear and objective manner. The dissertation was made available on a CD format at the University's Academic Information Centre and an article based on the study and its findings co-authored with the researcher's supervisor will be submitted to an accredited journal.

- ***Debriefing of participants***

Participants' misconceptions have to be corrected by informing them about all information that was withheld or misrepresented (Dane, 1990:49). Strydom (2005a:66) adds that debriefing sessions following the study allow participants the opportunity to work through their experience and the aftermath in order to prevent harm.

The researcher debriefed participants after the interview had been conducted in order to restore participants' emotional equilibrium. No participants requested further counseling with an employee assistant practitioner within the Department of Correctional Services, but they were informed that they could still have access to the researcher who would then undertake to assist them in making an appointment with the employee assistant practitioner if they later feel a need for counseling. This opportunity was not utilised.

3.3 Findings of the empirical study

3.3.1 Section A: Profiling of the participants

There were only ten (10) participants from one (1) correctional centre who participated in the study. In an attempt to protect the anonymity of the participants, the researcher decided to describe the profiles of the participants collectively as a group, focusing on aspects such as gender, race, age, marital status, children and qualifications of participants. The numbers of years of work experience at the Department of Correctional Services (DCS), the number of years working permanent night duty, as well as the current rotational shifts that participants are working were also catalogued.

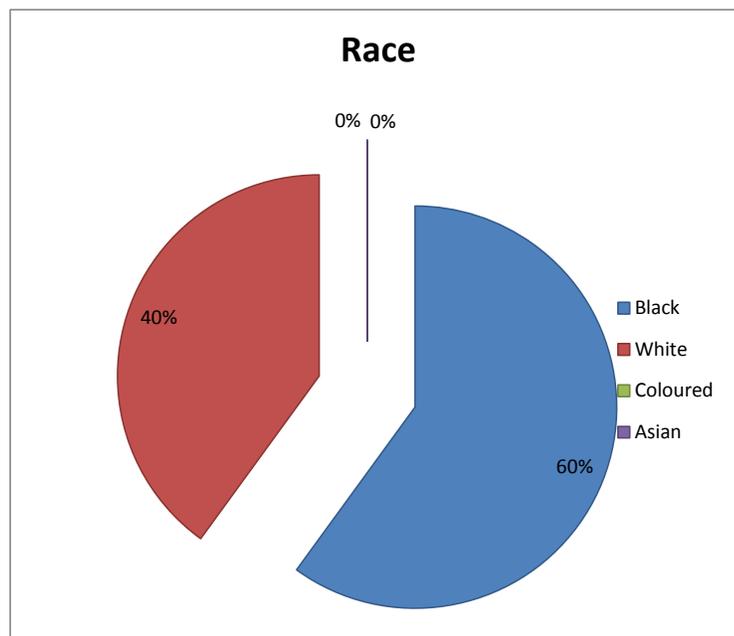
- **Gender**

All participants in the study were male officials, as female officials at the centre were not allowed to work permanent night duty. The centre mainly houses male offenders and therefore female officials who work night duty only work on a rotation basis for shorter shifts.

- **Race**

Figure 1 shows the races represented by the participants.

FIGURE 1: RACE



N = 10

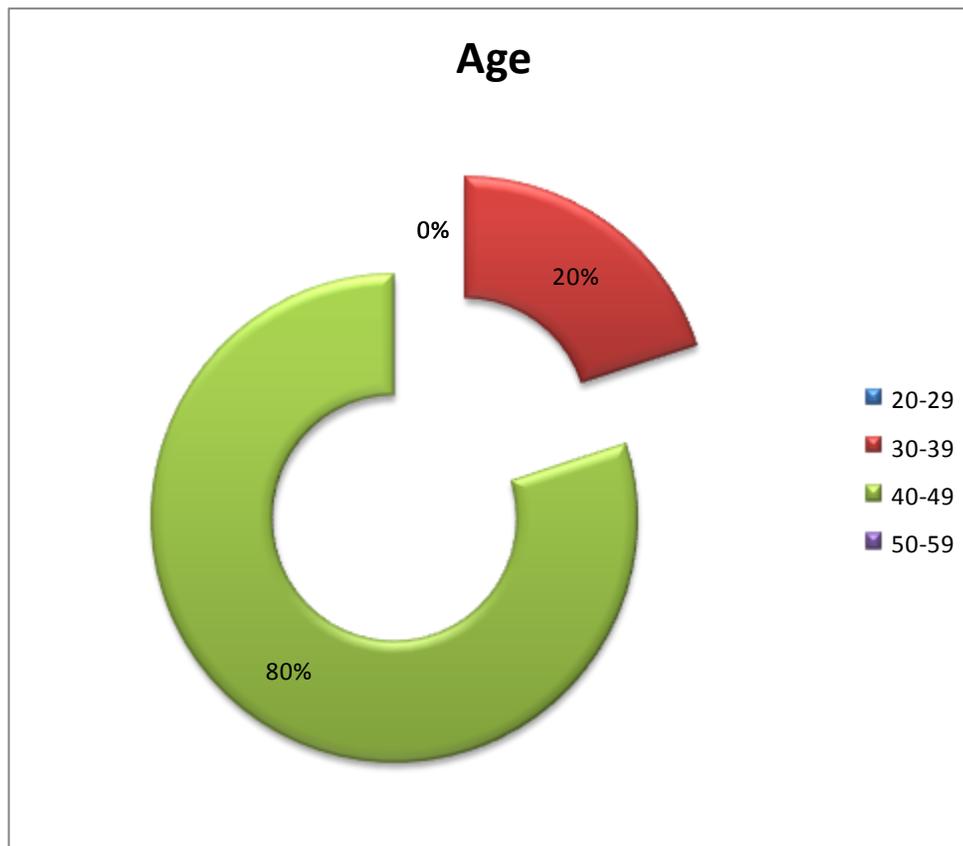
Figure 1 indicates that no Coloured or Asian participants were interviewed during the study. No Coloured or Asian officials were at the centre's disposal to work permanent night duty at the time when the researcher conducted the interviews at the centre. This could result from the fact that mainly White and Black officials are

working night duty at the specific centre or could be ascribed to the possibility of the majority of coloured and Asian officials working permanent night duty at the centre having been on leave or having their days off at the time that the interviews were conducted. Participants in this study therefore comprised 60% Black officials and 40% White officials.

- **Age**

The following figure tabulates the age of participants.

FIGURE 2: AGE



N=10

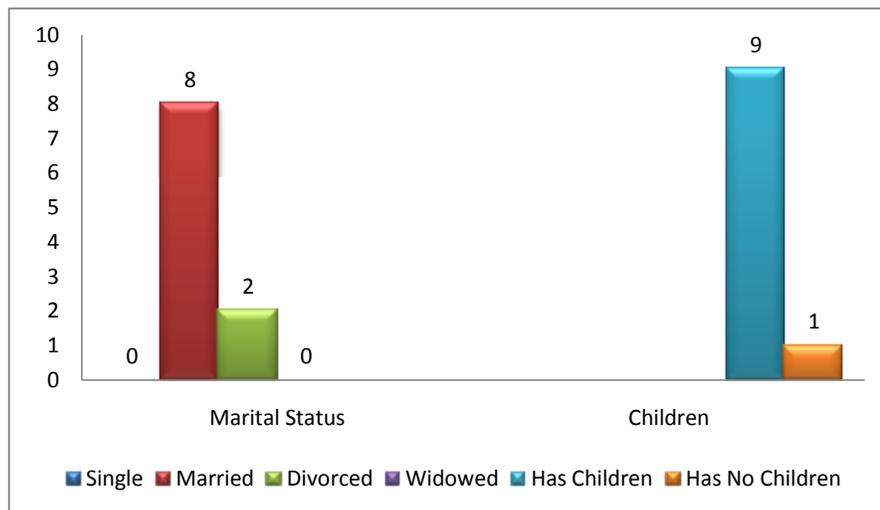
Figure 2 depicts the ages of the participants included in the study. Of the participants in the study, 20% were between the ages of 30 and 39 years old, while 80% of the

participants were between 40 and 49 years old. None of the participants in the study were younger than 30 years or older than 50 years.

- **Marital status and offspring of participants**

The subsequent figure gives an indication of the marital status and offspring of participants.

FIGURE 3: MARITAL STATUS AND OFFSPRING OF PARTICIPANTS



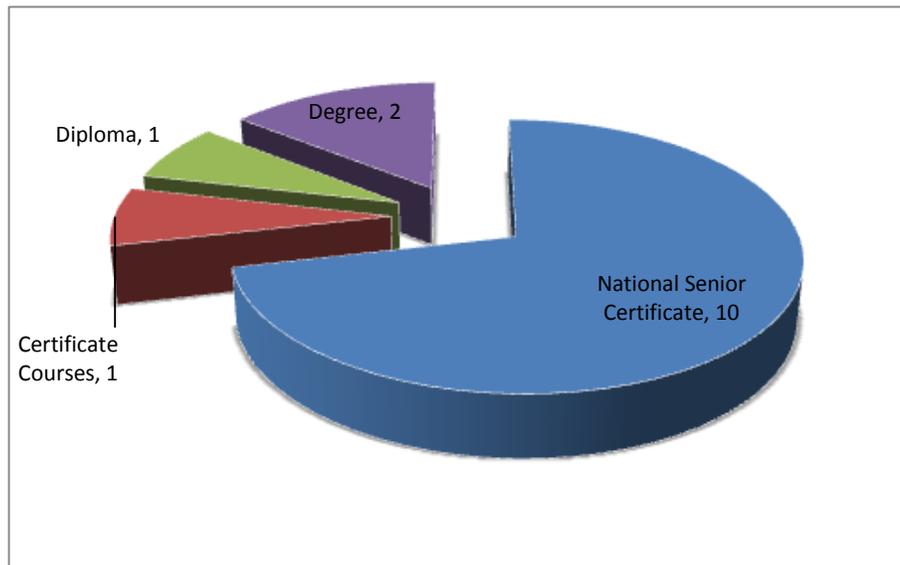
N=10

From figure 3 it is clear that 80% of the participants in the study were married, while 20% were divorced. None of the participants were still single or were widowed at the time of the interviews. In 90% of the cases participants had children and only 10% were childless.

- **Qualifications**

Figure 4 shows the qualifications of the participants in the study.

FIGURE 4: QUALIFICATIONS OF PARTICIPANTS



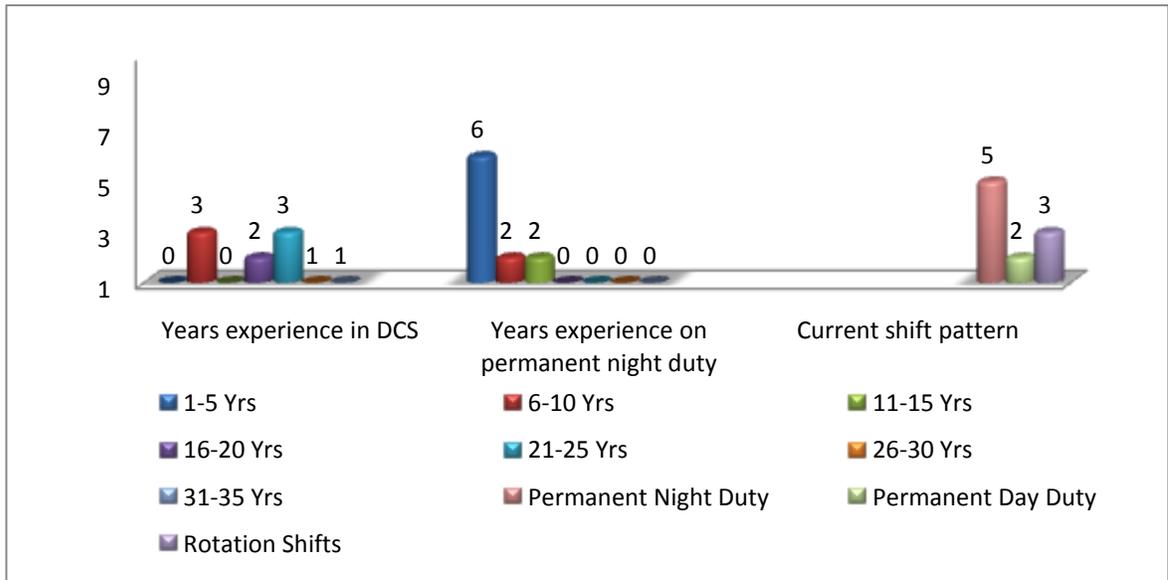
N=10

The figure illustrates that all the participants have passed their National Senior Certificate. Only 20% of the participants in the study managed to obtain a degree and 10% of the participants obtained a diploma. Although many participants might have passed courses where certificates were awarded, there was only proof of 10% of participants having passed these courses according to the information obtained from personnel files.

- ***Years of experience in the Department of Correctional Services and working permanent night duty***

Figure 5 shows the number of years in working experience of the participants in DCS at the time of the study, as well as experience of working night duty.

FIGURE 5: EXPERIENCE IN THE DEPARTMENT OF CORRECTIONAL SERVICES



N=10

According to the information in Figure 5, 30% of the participants had between 6 to 10 years or between 21 to 25 years working experience in DCS, while 20% had between 16 to 20 years and only 10% had between 26 to 30 years or between 31 to 35 years working experience in DCS.

Figure 5 further indicates that 60% of the participants worked an average of between 1 to 5 years permanent night duty while 20% of the participants worked between 6 to 10 years permanent night duty. Another 20% worked between 11 and 15 years permanent night duty. None of the participants had worked over a period longer than 15 years on permanent night duty.

During the time the study was conducted, 50% of the participants still worked permanent night duty, while 30% were working rotation shifts. This indicates that they alternate between day and night shifts. Only 20% of the participants recently started to work permanent day duty.

3.3.2 Section B: Themes emerging from the study

Reporting back on qualitative data obtained is done in the form of a text. Different levels of abstraction can be displayed through the use of a hierarchical tree diagram, or through the use of tables that compare issues in terms of themes or categories (De Vos, 2005b:339).

Findings made and conclusions drawn during this study will be presented in a descriptive manner, as this is a qualitative study. A thematic analysis of the themes and sub-themes which were identified during the data analysis will be provided and these themes will be presented and supported with direct verbatim quotes from the interviews with participants in the study. In some cases participants spoke Afrikaans. These quotes have been translated into English for the sake of the reader and for uniformity of the study, which has increased the length of this chapter. These quotes are also substantiated with literature.

TABLE 3.1: THEMES AND SUB-THEMES

The following themes and sub-themes were identified during the data analysis:

THEMES	SUB-THEMES
<p>Theme 1: Correctional official's views on the different shift patterns in the Department of Correctional Services.</p>	<ul style="list-style-type: none"> ❖ Old shift patterns (14:00-22:00 & 22:00-06:00) <i>versus</i> new shift patterns (18:00-06:00). ❖ Permanent night or day duty <i>versus</i> rotation shifts (Day – Night). ❖ Reasons for working permanent night duty. ❖ Period working permanent night duty. ❖ Recommending working permanent night duty to other correctional officials.
<p>Theme 2: Impact of permanent night duty on</p>	<ul style="list-style-type: none"> ❖ Sleeping patterns. ❖ Diet / Eating routines.

<p>the health of correctional officials.</p>	<ul style="list-style-type: none"> ❖ Physical health. ❖ Mental health. ❖ Use of medication / treatment.
<p>Theme 3: Impact of permanent night duty on social life / relationships.</p>	<ul style="list-style-type: none"> ❖ Impact on interaction in the immediate family. ❖ Relationship with wife (Marital partner) / partner. ❖ Relationship with children. ❖ Relationship with extended family members. ❖ Relationship with friends. ❖ Relationship with colleagues.
<p>Theme 4: Impact of permanent night duty on correctional official's career in the Department of Correctional Services.</p>	<ul style="list-style-type: none"> ❖ Correctional official's feelings about their career. ❖ Promotions in the Department of Correctional Services. ❖ Performance Bonuses.
<p>Theme 5: Challenges presented by working permanent night duty.</p>	<ul style="list-style-type: none"> ❖ Working environment. ❖ Nature of work.
<p>Theme 6: Correctional officials' coping strategies with working permanent night duty.</p>	<ul style="list-style-type: none"> ❖ The use of substances. ❖ Taking leave and sick leave. ❖ Doing research and receiving education while working permanent night duty. ❖ Other coping strategies.
<p>Theme 7: Recommendations to assist towards the betterment of working permanent night duty.</p>	<ul style="list-style-type: none"> ❖ Management's role. ❖ The role of other officials.

3.3.2.1 Theme 1: Correctional officials' views on the different shift patterns in the Department of Correctional Services.

Correctional facilities have to be staffed twenty four (24) hours per day and therefore correctional officials have to work fixed or rotating shifts in order to ensure that there are always staff members on duty to take care of offenders' needs (Forum on Corrections Research, 2012 and Swenson, Waseleski and Hartl, 2008:299). Totterdell (2005:35) mentions that shift work and working long hours seem to pose great problems for employees as well as employers. Any schedule, including a standard work week can act as a stressor if it does not conform to the needs of the individual worker (Landy and Conte, 2007:421). Under ideal working circumstances levels of absenteeism will decrease, shift workers will suffer less from fatigue and productivity levels will rise when shift workers can choose the shift they prefer to work and that will best satisfy their needs for work-life balance (Landy and Conte, 2007:431 as well as Saunders, 2010).

The following sub-themes indicate participants' views concerning the outdated shift patterns (eight hours) that they used to work compared to the new shift pattern (twelve hours) that they are currently working since July 2009. Participant's feelings about working permanent night or day duty or rotation shifts will also be shared, as well as their reasons for working permanent night duty. Sub-themes direct discussions to participant's opinions on how long they believe they can still continue to work permanent night duty and whether they feel they can recommend working permanent night duty to other Correctional Officials in DCS.

❖ Sub-theme 1.1: Old shift patterns (14:00-22:00 & 22:00-06:00) versus new shift patterns (18:00-06:00)

The Department of Correctional Services is in the process of embarking on standards of perfection for shift models in order to enhance the implementation of the seven (7) day establishment (Public Servants Association, 2012). Participants in the study seem to have conflicting ideas or preferences on working the old eight hour shift patterns to currently working the new twelve hour shift patterns.

Three participants in the study prefer to work the old shift patterns, especially the 22:00-06:00 shift, as they feel that it used to give them enough time to be with family members in the evening before work and they consider periods of rest between shifts to be adequate. Two participants agree that the number of consecutive days that one had to work according to the obsolete shift pattern were excessive, while one participant considers it to have been ideal, as the daily shift ended soon enough to ensure good rest. It proved, however, a problem when the next official who was supposed to start working at 22:00, did not turn up for the shift. No provision was made for officials from the first shift to find alternative transport to their homes or to sleep in a room on the premises until they could go home the next morning.

- ✓ Deelnemer 1: “Dan’t ons gewerk, was tien dae aan en twee dae af. Dit is ‘n lang stretch.”

Participant 1: "Then we'd worked, was ten days on and two days off. It's a long stretch."

- ✓ Deelnemer 3: “As dit suiwer gaan om jou skof klaar te kry, met ander woorde om net die nagdiens klaar te kry, is die ou skof vir my ‘n baie meer hanteerbare skof.”

Participant 3: "If it's purely about finishing your shift, in other words to just finish the night shift, the old shift is a lot more manageable for me."

- ✓ Deelnemer 4: “Vir my is die 22:00 tot 06:00 skof, baie beter.”

Participant 4: "For me, the 22:00 to 06:00 shift is much better."

- ✓ Participant 6: “I think I wasn’t having a problem to work second watch, first watch and then second watch, but I think that was, yah, actually that was good hours. That was enough hours for our body to rest.”

- ✓ Deelnemer 8: “Ek het 22:00 begin op die 22:00 tot 06:00 skof, dan’t ek nog ‘n rukkie tyd saam met die gesin. Jy kan lekker gesels, kuier en dan kom jy werk tot more oggend 06:00. Ek persoonlik hou van daai ou skof.”

Participant 8: "I started 22:00 on the 22:00 to 06:00 shift then I still had a little time with the family. You can enjoy chatting, socializing and then you go to work until 06:00 tomorrow morning. I personally love that old shift."

- ✓ Participant 9: “...previously they start with 14:00 to 22:00. It’s difficult, if there’s no reliever some officials would be reached at home at around 02:00 or 03:00 in

the morning. That is because of lack of transport or facilities where officials could sleep to go home in the morning. Working eight hours for twelve days in a row is too long, you get tired, the rest time is very short.”

Five of the participants prefer the new shift patterns and are happy to work for a few days and then be off for a few days. These participants further appreciate being off for half of the month, as it only seemed like working half of the month. When they take their leave they easily combine a few days on leave with their off days in order to be off for longer periods. Two participants feel that the twelve hour shift does not allow enough time for them to adjust or to spend time with their loved ones on a daily basis, while three participants feel that the shift itself is too long and that it sometimes becomes difficult to stay alert.

- ✓ Deelnemer 1: “Dit is vir my amper ‘n beter skof, alhoewel dit tog maar ook ‘n impak het op ‘n mens se lewe. Maar ek sou sê dan’t jy darem twee aande weer by jou huis saam met jou gesin, as wat jy tien dae aanmekaar nagdiens werk...maar nou het jy twee dae nagdiens dan’s jy vir twee dae af.”

Participant 1: "It's almost a better shift pattern to me, although it has an impact on a person's life. But I would say then you'd at least have two nights at your home with your family, compared to when you have to work ten days night shift consecutively ... but now you have two days night shift and then you are off for two days."

- ✓ Participant 2: “...you can’t concentrate for twelve hours and then, you will sometimes fall asleep, then it’s not safe to sleep here.”
- ✓ Deelnemer 3: “As jy ‘n twaalf uur skof nagdiens doen, joe dit is, ek vind dit baie veeleisend. Dit is ‘n uitmergelende skof en die probleem wat ek daarmee het, ek dink dit sal nie so erg wees nie, maar as jy dit op ‘n rotasie basis doen ...ek wil half sê, daai tydperk is nie voldoende nie, maar waar as dit ‘n meer ‘n konstante, as jy konstant ...dan’s die twaalf uur skofte heel oraait.”

Participant 3: "If you have a twelve hour shift night duty, wow, I find it very demanding. It is a grueling shift and the problem I have with it, I think it will not be so bad, but if you do it on a rotational basis... I want to say, that period is not sufficient, but where if it's more consistent, if you constantly, then ... the twelve hour shifts are quite all right."

- ✓ Deelnemer 4: “...twaalf ure is rêrig, dis lank uhm, dit raak lank. As jy nie iets het om jou mee besig te hou of genoeg rus gehad het nie, gaan jy sukkel. Dit raak rêrig lank.”

Participant 4: "... twelve hours is really, it's long erm, it gets long. If you do not have something to keep you busy, or had enough rest, you will struggle. It gets really long."

- ✓ Participant 5: "I was normally to private companies. I was used to work plus-minus 26 days without rest, so when I came here, only find that you work for seven days, you go for rest, working two days, three days go to rest, for me it's like bonus."
- ✓ Participant 6: "The only problem with this twelve hour shift yah, that one is a stress, it's a bit long."
- ✓ Participant 7: "We are working two days in, three days out, three days in, two days out ...in a month, we are working fifteen days, we are off fifteen days. I think it's, you've got more time to rest, to stay with family, to do sports."
- ✓ Deelnemer 8: "Nou's dit 'n gejagery ... daar is nie veel tyd jy weet, veral as ek af is om tyd saam te spandeer nie. Kyk, 'n mens voel na drie dae se twaalf ure skof, jy kan dit voel aan jou lyf. Dan vat 'n mens maar vir so paar dae af, dan rus jy so sewe dae. Dis al voordeel, ja."

Participant 8: "Now everything is hurried ... there is not much time you know, especially if I'm off to have time to spend together. See, a man feels after three days' twelve hours shift, you can feel it in your body. Then you take a few days off then you rest for seven days. It's all benefit, yes."

- ✓ Participant 9: "So the twelve hour shift is better because if you enter at 18:00 during the night you leave 06:00, so you're off during the day. You are working two days then three days you would be off, it's easier to adjust."
- ✓ Participant 10: "The twelve hour shift is better. I must say since this shift has started, this twelve hour shift has started, since then there is more time to see our family, to see our friends."

Knauth and Hornberger as well as Bambra et al. (in Saunders, 2010) believe that successive evening or night shifts should be limited to three shifts at a time as this could contribute to improved sleep and reduced levels of fatigue. Workers, who work night shifts for short periods at a time, tend to retain their day orientation when compared to workers who work night shifts for long periods; for example a three day shift compared to a seven day shift. It is therefore important that there be adequate time to rest between shifts and that weekend work for shift workers should be limited if possible.

❖ Sub-theme 1.2: Permanent night or day duty *versus* rotation shifts (Day – Night)

Conflicting views exist on whether rapidly rotating shifts are better to work compared to slowly rotating shifts, while there seems to be an agreement that fixed shift patterns are less likely to be associated with problems irrespective if they are permanent night shifts or day shifts. Another problem associated with rotating shift patterns seems to be anti-clockwise rotation from day to night to evening shifts compared to clockwise rotation from day to evening to night shifts. Clockwise rotation of shifts seem to improve sleep in shift workers while rapidly rotating shifts seem more inclined to lead to sleep disturbances, which in turn can be associated with physical health problems as well as psychological problems (Landy and Conte, 2007:431; Saunders, 2010 and Sulsky and Smith, 2005:104).

Participants in the study had different preferences with regard to the old and new shift patterns and were also having different perspectives on working fixed day or night shifts or working rotation shifts. Five participants prefer to work permanent night shifts while one participant feels that it is unhealthy to work night shift on a permanent basis.

✓ Participant 2: “Yah, I think working night shift is not healthy ... you will sometimes fall asleep, then it’s not safe to sleep here. You are not allowed to sleep, but you are working, so it is a problem. So people who are working permanent night shift, I think it’s not good.”

✓ Deelnemer 3: “Met die permanente nagdiens het jy baie beter ‘n vaste patroon.”

Participant 3: "With the permanent night shift you have a better set pattern."

✓ Deelnemer 4: “Ek het dit geniet, dit was maar, dit het ook partymaal... jy raak naderhand, jy raak moeg daarvoor. Rêrig waar, jy raak moeg, maar ek sou nog kon aangegaan het. Nagdiens, soos ons maar altyd gesê het, nagdiens is nie vir ‘sissies’ nie. Uhm, mense dink miskien jy doen niks op die nag en daar gebeur niks, maar dit het nogal ‘n impak, alles word omgedraai...die stilte, ek weet nie. Kyk ek hengel baie en doen sulke, ek hou van stil en ek dink miskien die stilte jy weet ... die eenkantgeid, die hoe kan ‘n mens dit noem, ...dis die, net die rustigheid daarvan.”

Participant 4: "I enjoyed it, it was, but it also sometimes, you later become, you get tired. Really, you get tired, but I could still continue. Night shift, as we always said, night shift is not for 'sissies'. Uhm, people may think you're doing nothing on the night and nothing happens, but it has quite an impact, everything is turned around... the silence, I do not know. Look I fish a lot and such, I like quiet and I think perhaps you know the silence ...to be separate, how can one call it... it's just the tranquility of it."

- ✓ Participant 5: "I can prefer to work night shift because you avoid a lot of things when you working...for studying it's good, for carrying your own responsibility – I mean to carry responsibility for you alone so that you can know exactly 'whatever happens is my responsibility."
- ✓ Participant 6: "Yah, at night is better 'cause I'm waking up at my own time, relaxing, preparing my own stuff, actually I'm not in a hurry to get to the work."
- ✓ Participant 10: "I just fell in love with night shift then if it, this is me, I'm fine with it. As it is, during the day you have more time to see your friends also to, to have more time actually 'cause many things are happening during the day."

Participants have difficulty returning to day shifts after working permanent night shifts for a long period. Although these participants loved working permanent night duty, it then becomes difficult to return to permanent night duty once they changed back to permanent day duty.

- ✓ Deelnemer 1: "...ek was so gewoond aan die nagdiens werkery dat ek nie wou teruggaan dagdiens toe nie, of wil terug gaan dagdiens toe nie..."

Participant 1: "I was so used to working night shift, I did not want to go back to the day shift, or do not want to go back to day shift ..."

- ✓ Deelnemer 4: "Na so lang ruk weer terugkom op dagdiens, in alle eerlikheid ... nee ek glo nie ek sal gou weer teruggaan permanent nagdiens toe nie."

Participant 4: "After such a long time to return to day shift, in all honesty ... no I do not believe I will soon go back permanently to night shift."

One participant in the study explained that they could get better exposure to different fields in DCS if they should work permanent day duty. Although it seems to be the ideal shift pattern for some participants, is it not without its own challenges.

- ✓ Deelnemer 3: "As jy my vra, maar ek dink nie dit gaan gebeur nie, die ideaal sal wees dat jy permanente lede het, net permanente lede het, permanente dagdiens lede het."

Participant 3: "If you ask me, but I do not think it's going to happen, it would be the ideal that you have permanent members, only permanent members; permanent day shift members."

- ✓ Participant 5: "...some other things is not happening during the night, it's happening especially during the day, like visitors, like meetings, all the sort of stuff for learning to know exactly how to grow up in the field, the Department...many challenges are during the day, it's whereby you can learn a lot."
- ✓ Participant 9: "Sometimes you work eight to nine hours where the totals don't correspond. When the totals don't correspond you have to change then re-count and change the units and make sure that you get it right before you leave home. By the time you left, it would be late. You have worked more than eight hours."

Working rotation shifts can have its own pros and cons. Only two participants gave feedback clearly and with insight on their feelings about working rotation shifts, although they are not the only participants who are currently working rotation shifts.

- ✓ Deelnemer 1: "Ek sou dit voorstel, veral as ek kyk, okay en soos ek sê in my geval, ek moes miskien vakansies in skoolvakansie tye oorgegaan het dagdiens toe dat ek meer tyd in die aande met my vrou spandeer en saam met haar wees."

Participant 1: "I would suggest, especially when I look, okay and as I say in my case, I could perhaps holidays, during school holidays time changed to day shift when I could have more time in the evenings with my wife to spend with her."

- ✓ Deelnemer 3: "Tussen my en jou, die rotasie, ek hoop eintlik dit was verby. Die rotasie is vir my slegter as wat die permanente nagdiens is...veral jou slaappatrone is vir my, as ek dit kon gekies het sou ek dit vermy, maar die rotasie, ek het nie 'n opsie daar nie, dit is verpligtend. As dit 'n wisselende ding is, is dit vir my 'n deurmekaarspul. Met ander woorde, ek dink dit is moeiliker vir 'n mens om aan-af, aan-af, aan-af te hê as wat dit, as wat dit 'n konstante - ek werk so lank, ek is af, ek werk dan, okay, laat ek so sê, ek werk nou nagdiens—ek is af—ek werk weer nagdiens—ek is af, dit is baie beter en makliker tussen my en jou. Ek dink ook 'n mens se produktiwiteit in die werk is beter dan, as wat jy 'n wisselende roetine, ag op 'n wisselende basis dit doen. My groot probleem is, ek dink nie mens se liggaam pas so maklik aan in daai kort twee dae of so nie."

Participant 3: "Between you and me, the rotation, I really hope it was over. The rotation is worse for me than the permanent night duty...especially your sleep patterns for me, if I could choose I would avoid it, but the rotation, I do not have an option, it is compulsory. When it is a variable

thing, I find it a mess. In other words, I think it's harder for you to on-off, on-off, on-off to have it, as compared to it being constant. I work so long, I'm off, I'm working okay, let me say so, I work night shift now - I'm off - I work night shift - I'm off, it's much better and easier between you and me. I also think a person's productivity in the work is better than if you consider a varying routine on an alternating basis. My big problem is; I do not think one's body adjusts so easily in that short two days or so."

Older workers seem to be less able to adjust to shift work due to the cumulative effect of sleep deprivation and gradual circadian desynchronisation. Shift workers between the ages of 20 and 30 usually adjust to shift work within a week or two, while shift workers older than 40 might find it more difficult and might need four to six weeks for their biological clocks to adjust to the new shift pattern (Marquie and Foret as well as Smith and Mason in Swensen, Waselenski and Hartl, 2008:303). Altering the sleep-wake cycle for a period of between 10 to 14 days can cause the circadian rhythm to alter, but it seems that it can be costly to a person to fully adjust to shift work as shift work affects all aspects of a person's life. Totterdell (2005:38) therefore stressed that frequent internal dissociation between the rhythms can be caused by adjustment of the circadian system to the altered work schedule, but that individual rhythms adjust at different rates, depending on the extent to which they are controlled by the body clock. Only a minority of shift workers seem to adapt their circadian systems to the nocturnal activity pattern after working night shifts over a long period of time, as night shift workers usually adapt to their normal sleeping routines when they are off for a few days (Swensen, Waselenski and Hartl, 2008:303 and Saunders, 2010).

❖ **Sub-theme 1.3: Reasons for working permanent night duty**

There are many advantages as well as disadvantages that one has to take note of when working night shift. Many workers benefit from the advantages of night work, either full time or part time (Waters, 2011 and Williams, 1999).

Participants in the study had different reasons for working permanent night duty. In some cases they had similar reasons, despite the fact that individual circumstances

differed. All the participants in the study volunteered or requested to work permanent night shift. Reasons for participants to work permanent night duty varied from family responsibilities, financial problems, studies, transport arrangements and offering to assist in addressing the shortage of officials available for night duty.

- ✓ Deelnemer 1: “Die kinders was klein en my vrou het gewerk en uhm, om haar en die kinders by die skole en by die werke te bring, ons het net een voertuig gehad. En dan die kinders in die middag by die skool te kry en weet, dit het ons gepas as gesin dat ek nagdiens werk, dan kan ek deur die dag hulle uithelp en by die kinders sit en dan in die aand is sy by die kinders en ek is by die werk.”

Participant 1: "The children were small and my wife worked and uhm, to take her and the children to the schools and to the work we had only one vehicle. And then to get the children to school in the afternoons and know, that worked for us as a family that I worked night shift, then I can help them out during the day and be with the children, and then in the evening she is with the children and I'm at work. "

- ✓ Participant 2: “I wanted to study, so that is why I’ve been working night shift.”
- ✓ Deelnemer 3: “Ja, ek het nagdiens gewerk omdat ek op daai stadium gestudeer het en jy weet, ek het op nagdiens bietjie meer kans gekry om by die boeke uit te kom.”

Participant 3: "Yes, I worked night shift because I studied at that point and you know; I had little more chance to get to the books while on night duty."

- ✓ Deelnemer 4: “Ek het so klein, net so probeer besigheidjies doen, traliehekke en sulke goeters maak vir ‘n ekstra inkomste...toe begin die tyd nou bietjie min raak en toe begin ek so stadiggaan uitruil met die mense van nagdiens en op die ou end toe kom ek agter ‘maar hoor hier daar’s nou eintlik baie tyd’ en toe van daar af toe kom ek nou permanent in die nagdiens ding in.”

Participant 4: "I had a little, just tried to do small jobs, gates and such things for an extra income... there was not enough time and then I started slowly to exchange with the night shift guys and at the end, I realised I actually had a lot of time and then from there I started with the permanent night shift thing."

- ✓ Participant 5: “... the other members did not like to work for night shift. They do have some reasons. So I was not committed so much to work for night shift, I didn’t see any reason why I’m not working for night shift. So I started volunteering, it started with volunteering for working permanent night shift to the sections.”

- ✓ Participant 6: “I was struggling with the transport because I was staying far away from my work. So I thought maybe it’s better for me to work night shift so that I can be at work at the time.”
- ✓ Participant 7: “Two years ago I applied for a house loan so I’ve talked to my wife because the budget was not uh, when they start taking my money for the house, so we started to struggle with the money. So I decided to work night duty so that even when I go home, I must fetch my two children and my wife to work and to school and later in the day I fetch them again so I don’t pay extra money for transport the children, so we are using one car.”
- ✓ Deelnemer 8: “Man as jy dagdiens werk moet jy altyd vra ‘ek wil gou my vrou werk toe vat, die kind skool toe vat en gaan haal’. Dis altyd ‘n probleem. Nou, as jy nagdiens werk is jy vry.”

Participant 8: "Man working day shift you should always ask 'I want to take my wife to work, take the child to school and fetch them'. It's always a problem. Now, if you work night shift you are free."
- ✓ Participant 9: “I started because I wanted to study.”
- ✓ Participant 10: “I just feel that I’m loving it to work night shift.”

Financial gain can be a great motivator for employees to work night shifts. Shift workers earn extra allowances on their salaries, but they can also earn more money while working night shifts, especially if they have additional employment during the day (Adler, 1991:87; Hossain and Shapiro, 1999:293; Rivera [sa] and Waters, 2011). Shift workers might look forward to go to work at a calmer pace and more relaxed atmosphere, depending on the industry they work in. Fewer employees work during the night compared to during the day. Night shifts are ideal for shift workers who prefer to work on their own as well as for the “night owls” who prefer to be awake during the dark hours and who struggle to perform at work during the day (Rivera [sa] and Waters, 2011).

❖ **Sub-theme 1.4: Period working permanent night duty**

As previously mentioned, some participants stopped working permanent night duty recently. Some participants are still prepared to continue working permanent night duty, but they only plan to continue working permanent night duty until they have

finished studying or until such time as their personal situations at home have improved. Those participants who indicated that they loved working permanent night duty, frequently plan to take a break from permanent night duty for a while, but would like to consider returning to permanent night duty some time in future.

- ✓ Deelnemer 1: “ Ek sal nie veel langer kan aangaan so nie, uhm dit affekteer tog op die einde van die dag mens se familiebande...om die waarheid te sê, dit het alreeds my huwelik gekos. So op die einde van die dag, vir my as persoon is dit nie ‘n goeie ding om vir so lang tydperk permanente nagdiens te werk nie”.

Participant 1: "I will not be able to continue much longer like this, uhm it affects at the end of the day one's family relationships. In fact, it has already cost me my marriage. So at the end of the day, for me personally it is not a good thing for such a long period to work permanent night duty."

- ✓ Participant 2: “I don't think I'll be able to work night shift again because it is stressful. I'm no longer working permanently. So I only work night shift once maybe in 6 months.”

- ✓ Deelnemer 4: “Ek sou was dit nie vir omstandighede nie, sou ek aangegaan het.”

Participant 4: "I would were it not for the circumstances, I would have continued."

- ✓ Participant 5: “I can't say exactly for how long but it is not giving me a lot of pressure to work for night shift, even now.”

- ✓ Participant 6: “...I was thinking of studying this year so I think it's going to be better for me to continue to work with this night shift and then I'm not exactly sure what I can say, how long am I gonna work this night shift.”

- ✓ Participant 7: “... I borrowed the money only to, for the house. I'm almost finished to pay so I think that money can come again back to me, so I think next year I will start day duty.”

- ✓ Deelnemer 8: “Sodra my kind klaar is met skool dan gaan ek stop, nog so ‘n jaar.”

Participant 8: "As soon as my child finishes school I'm going to stop, only a year."

- ✓ Participant 9: “I think a year or two; this is my final year (*studies*).”

- ✓ Participant 10: “I think I can continue only for a year from now on then I quit. But it’s not a permanent quit. I’ll start again and I’ll work night shift again. I just pause it for now.”

Sulsky and Smith (2005:102) indicated that stressed workers more frequently leave shift work early and those who remain comprise a selected group. Blakely and Bumphus, Brough, as well as Keinan and Malach-Pines (in Swensen, Waselenski and Hartl, 2008:300) highlighted that stress-related fatigue, frustration, safety risks, health problems and family life complications, can raise the level of personnel turnover.

❖ **Sub-theme 1.5: Recommending working permanent night duty to other correctional officials**

Correctional facilities, as alluded previously, always have to be staffed twenty four (24) hours a day and therefore correctional officials have to work fixed or rotating shifts in order to ensure that there are always staff members on duty in order to can take care of the needs of offenders (Forum on Corrections Research, 2012 and Swenson, Waseleski and Hartl, 2008:299).

The general attitude amongst participants in the study was that they would only recommend working permanent night duty to young officials who were planning to further their studies. It was also the attitude of participants in the study that working permanent night duty had to come to an end at some stage and that ‘permanence’ should actually not indicate a long period of time, but should preferably refer to a period of approximately three to four years.

- ✓ Deelnemer 1: “Uhm nee, nee ek sal dit nie sommer aanbeveel, nie permanent nie. Uhm ja miskien as jy jonk is, studente...ek sal dit net vir iemand wat studeer aanbeveel maar nie vir permanent nie, want dit het groot skade en ‘n impak op my lewe gemaak; ek het baie verloor daardeur.”

Participant 1: "Uhm no, no I will not recommend, not permanent. Uhm yes maybe if you are young, students... I would only recommend for anyone studying but not permanently, because it caused great damage and impacted on my life; I lost too much. "

- ✓ Participant 2: “No, I won’t recommend anyone to work permanent night shift, because I feel it’s unhealthy to work night shift permanently because it affects your family.”
- ✓ Deelnemer 3: “Vir baie min, ‘n baie klein persentasie. En ek sal dit sê, baie jong lede, jy weet, wat nog, ek wil half sê, die vermoë het om makliker aan te pas. Uhm, ek wil ook sê ek sal in die geval van mense wat nog studeer, sal ek dit aanbeveel, ja. As dit op ‘n vrywillige basis is en uhm, soos wat ek sê, ek wil half daarby sit, ek beskou dit as vir mense wat nog jongerig is en in hulle twintigs is. Nie ouer as dit nie om die eenvoudige rede, ek dink soos wat mens ouer word, jy moeiliker aanpas by sulke omstandighede.”

Participant 3: "Very few, a very small percentage. And I would say younger members, know, I want to add, that have the ability to easily adapt. Uhm I also want to add I will in the case of people who are still studying I'll recommend it yes. If it is on a voluntary basis and uhm, like I said, I want to add to it, I consider it for people still very young and in their twenties. Not older than that for the simple reason, I think as you get older, you find it difficult to adapt to these conditions."

- ✓ Deelnemer 4: “Nee, nie rêrig nie...jy moet rêrig, uhm jy moet, jy moet rêrig ‘n sterk persoonlikheid hê as ek dit so kan noem. Nee, ek sal dit nie aanbeveel nie, rêrig nie aanbeveel nie, maar as jy ietsie nou wil doen, ja maar nie permanent nie. Nie permanent nie, nee ek sal dit nie aanbeveel nie.”

Participant 4: “No, not really... you should really, uhm you must you must really have a strong personality, if I can call it that. No, I would not recommend it, really not recommend it, but if you want to do something now, yes, but not permanent. Not permanent, no I would not recommend it.”

- ✓ Participant 5: “Yes, I do. I won’t have any problem.”
- ✓ Participant 6: “Yah, for someone who’s having plans actually. I mean, plans like me, plans when you want to further your studies...it must be an agreement for him, actually from his family or her family actually ‘cause most of the times you might find that people are not; your wife or your husband is not satisfied about you working night shift.”
- ✓ Participant 7: “Yes, I will recommend to other officials. Like if you want to achieve something, or if you want to do something, you must sacrifice. You’ll never sacrifice for twenty years, just sacrifice for two years like for example if you want to study and you attend classes... you’re going to only sacrifice three to four years, after that you get your degree. When you are finished then you are going back to day duty.”
- ✓ Deelnemer 8: “Nee ek sal nie, dis elke ou se eie besluit. Hang van jousef af.”

Participant 8: “No I will not, it’s every guy’s own decision. It depends on one self.”

- ✓ Participant 9: “Yes, I would recommend night shift because it can be easy for them to study, rather than day duty at the unit where they’ll work during the day and have no time to study. By the time you reach home, you’re tired and have no time to rest and look after the family, you see?”
- ✓ Participant 10: “I can’t say about recommending it to them because anyone who is working here, anyone can get used to what shift he’s working and recommend it too. I don’t think I can encourage or discourage them to.”

Key findings in theme 1:

Participants in the study hold conflicting views on the shift patterns as well on as the type of shift they prefer to work. Participants who preferred the old shift pattern, preferred to work from 22:00-06:00, as it allowed them time to spend with their family members before going to work. The new shift pattern (18:00 – 06:00) is too long and makes it challenging for correctional officials to stay alert. Correctional officials are, however, enjoying the number of off days on the new shift pattern compared to the number of hours’ rest at their disposal between consecutive shifts on the old shift pattern. One participant who works rotating shifts experiences problems adjusting his sleeping patterns, especially when the rotation between shifts takes place over a short period of time. All participants agree that it is not ideal to work permanent night shift over a long period. Two participants indicated that it is difficult to return to permanent day shift after having worked permanent night shift over an extended period and that it becomes challenging to return to permanent night duty after having worked permanent day duty again. Participants feel that permanent night duty is advisable for younger correctional officials who plan to study or to those correctional officials who have personal problems they need to address. Working permanent night duty should, however, be voluntary and not forced upon employees.

Besthorn (2013:178) explained that the third indispensable idea of the ecological systems thinking emphasises the adoptive nature in systems. Systems therefore have built-in mechanisms allowing them to cope with and adjust to constantly changing environmental circumstances. The aim therefore is to maintain stability and

the system will, as a consequence, rely on processes and mechanisms restoring the level of consistency when disturbances are experienced.

3.3.2.2 Theme 2: Impact of permanent night duty on the health of correctional officers

It is a distinct possibility that shift workers might perceive their health and wellbeing as being worse than they had recognised at the time, although they appear to report fewer health problems than do day workers (Sulsky and Smith, 2005:102). Shift work can additionally contribute to behavioural patterns that include less nutritious diets and increased smoking and/or alcohol consumption that have damaging health effects (Saunders, 2010). Adler (1991:2) therefore concluded that the rhythm of the heart and functioning of the digestive cycle together with other body functions, are all deep-seated in human evolution, which is determined by the rising and setting of the sun. Working shifts are disruptive to this cycle and the consequences involve not merely a lack of sleep, but also contribute to health and safety problems specific to the shift-working population.

In the discussion of theme 2, the focus will be on the impact of working permanent night duty on the health of the participants in the study. Sub-themes that will be discussed include the impact of working permanent night duty on participants' sleeping patterns, diet or nutritional programmes, physical health, mental health and the consequence of working permanent night duty on medication or treatment.

❖ Sub-theme 2.1: Sleeping patterns

Shift work may encourage fitful sleep, disturb the duration and quality of sleep and may lead to chronic sleep deprivation. Sleeping during the day is usually challenged by disruptions and frequent awakenings. It also differs from night sleep as there is a deviation from normal REM and non-REM sleep patterns which usually contribute to emotional fatigue, oversensitivity and irritability (Saunders, 2010; Scott and Kittaning, 2001; Swensen, Waselenski and Hartl, 2008:302 as well as Totterdell, 2005:48). Only a minority of shift workers seem to adapt their circadian systems to

the nocturnal activity pattern after having worked night shifts over an extensive period of time. This is caused by night shift workers usually reverting to their normal sleeping routines when they are off duty for a few days (Swensen, Waselenski and Hartl, 2008:303 and Saunders, 2010).

All participants in the study indicated that they do not sleep much since having started working permanent night duty. On average, most of the participants sleep for approximately four hours in the mornings, depending on the temperature. Sleep deprivation was also experienced on off days as subjects tended to struggle to fall asleep at night, only to wake up very early the next morning. This sleep also seems to be disturbed as some of the participants mentioned that sleep was disrupted as they woke up during the night. Participants however, firmly believed that one could adjust even when experiencing lack of sleep.

- ✓ Deelnemer 1: "...ek het baie min slaap ingekry. In die oggende as ek by die huis gekom het dan moes ek eers almal weg vat skole toe en werke toe en by die huis gekom dan het ek 'n paar ure geslaap dan moet ek weer opstaan, kinders gaan haal by die skole. Maar soos ek sê, dit is 'n periode van drie tot vier ure, maar ek het gewoon geraak want dit is my patroon wat ek ingestel het."

Participant1: "I got very little sleep. In the mornings when I came home I had to take everyone to school and work and then came home. I slept a few hours then I woke up, fetched children from the schools. But like I said, this is a period of three to four hours, but I got used to the sleeping pattern I created for myself."

- ✓ Participant 2: "...it affected my sleeping patterns because I have to sleep during the day, then 12:00 I have to wake up again, you understand."
- ✓ Deelnemer 3: "Wel, ek probeer so bietjie in die oggend en 'n bietjie net voor jy gaan werk inkry. Ek skat so omtrent vyf, net so oor die vyf ure. Dis nie aaneen nie om die eenvoudige rede dit word te warm in die dag. So dit sal opgebreek word gewoonlik in, sê drie ure en twee ure en ons weet almal, ek weet dit myself ook, maar dit is nie die aanbevele maniere nie. Die menslike liggaam is veronderstel om eerder 'n langer termyn, sê ses of sewe ure eintlik die ideaal agt ure slaap in te kry, weet, aaneen en nie dit in stukies te kry nie, maar vir praktiese doeleindes is dit moeilik. Dit krap dit om veral die eerste, ek wil half sê, kom ons sê veral die eerste vier dae, dalk nog langer. Ten minste vier tot sewe dae...jy skakel nie af nie...jy raak nie aan die slaap nie...jy kom nie in jou regte slaap patrone nie. Soos wat die dae nou aangaan verminder daai effek darem, dat jy darem kom ons sê, ses of sewe ure goeie slaap kan inkry, maar eers weet,

lank nadat die, ek wil half sê, daai effek verdwyn eers vir my so na sewe dae nadat ek die nagdiens gedoen het en dan hang af nou van verskillende omstandighede, maar nie te lank daarna nie dan begin jy weer op nag diens. So ek is, van daai effek hou ek glad nie.”

Participant 3: *"Well, I tried a bit in the morning and getting a little just before you go to work. I guess about five, about five hours. It's not at one time for the simple reason it is too hot in the day. So it will usually be broken up in, say three hours and two hours and we all know, I do it myself, but it is not the recommended way. The human body is supposed to be more of a longer term, say six or seven hours, actually the ideal eight hours of sleep; to get to, know, at one time and not get it in shorter periods, but for practical purposes, it is difficult. This is disturbing, especially the first, I want to say, let's say, especially during the first four days, maybe even longer. At least four to seven days... you do not switch off... you do not fall asleep you are not in your right sleep patterns. As the days now pass that effect reduces at least, that you at least we could say, have six or seven hours of good sleep, but first, know, long after I'd say, that effect disappeared to me, only after seven days after I worked the night shift and it depends on different circumstances now, but not long after you start working night shift again. So I dislike that effect."*

- ✓ Deelnemer 4: "...jy's so in jou roetine in. Ek bedoel, jy gaan nou jy's nou die dag af, daai eerste aand is jy nou klaar jy's uhm, nou want jy kom die oggend by die huis, jy's so in jou roetine, jy gaan slaap, jy staan op, vanaand moet jy nou 20:00, 21:00 moet jy gaan slaap. Jy kan nie, dit is nie so maklik nie. Jy kan nie sommer net sê 'ag nou sluit ek af nou gaan ek slaap nie'. Daar't party dae gekom dat ek op my af dae ook maar tot 02:00, 03:00, 04:00 in die oggend wakker was...as jy weer by die werk kom, dan's jy hier half aan die slaap, jy's nie wakker nie, jy's nie, jy sien dit is ook nie so lekker nie. Ek was gelukkig my plek is stil ek het nogal redelik slaap ingekry deur die dag. Ek het lekker gerus, maar ek kan mos, soos hulle sê, jy kan die hele dag slaap, maar kom 03:00 of 02:00 die oggend, veral met die twaalf uur skofte, enige man enige iemand, jy raak maar moeg, jy begin dut, jy kan nie meer nie."

Participant 4: *"... you're so into your routine. I mean, you go now you're the day off, that first night you finished you're, uhm now, because you come in the morning at home, you're so into your routine, you go to sleep, you wake up, tonight at 20:00, 21:00 you must go to sleep. You cannot, it's not so easy. You cannot just say 'oh I will just go to sleep. There were some days that I was on my off days but to 02:00, 03:00, 04:00 in the morning I was still awake if you return to work, then you're here half asleep, you're not awake, you're not, you see it is not so nice. I was lucky my place is quiet I got quite sufficient sleep during the day. I had a good rest, but I can as they say, you can sleep all day, but come 03:00 or 02:00 in the morning,*

especially with the twelve hour shifts, any man anyone, you get tired you start dozing."

- ✓ Participant 5: "...at the first time, it was like affecting my sleeping time. But since well I adapted, I can sleep during the day. Almost it can be less hours because when I'm sleeping during the day, because of air condition or temperature or weather itself, I should have to sleep less hours. So it's like normally for me to sleep almost five to six hours."
- ✓ Participant 6: "...you might find you're no longer sleeping at the night and your night is gonna, you're just gonna sleep during the day only and your body is getting used to it, simple as that. You are off, you are on leave, it's something like that, as long as you during the night you're not gonna be able to sleep peacefully actually... during the day, it's where now you sleep it doesn't matter whether you are off or you are on leave. I'm sleeping like something like around 02:00 a.m. in the morning even whether I'm off or what or I'm on leave... or I'll wake up maybe around 04:00 and then 06:00 a.m. you might find that you are still sleeping and then I'll be wake up maybe around 10:00, 11:00 o'clock, something like that."
- ✓ Participant 7: "... in the morning I can sleep maybe two hours to three hours. After that I'm going to train, after training maybe I get two hours to three hours again, I would come back to work."
- ✓ Deelnemer 8: "Ja, dit was 'n aanpassing maar ek het gewoon geraak. Soos ek sê, ek doen dit al twaalf jaar. Mens raak gewoon."

Participant 8: "Yes, it was an adjustment but I've become accustomed. Like I said, I have been doing this for twelve years. You get used to it. "

- ✓ Participant 9: "...most of the time, during the day it's not possible to sleep. You only sleep for an hour or two then you're awake. When you are off, the sleeping, you will sleep during the night with the other people but very early in the morning, round about five o'clock you are waking up because you are not used to sleep until the sun is up. In general, the hours that I sleep is two and a half. When I work night duty, I sleep two and a half hours during the day."
- ✓ Participant 10: "...it does affect your sleeping because during the day you cannot sleep for nine hours as you used to sleep during night. You can't, sometimes it's very hot you see. You basically sleep for four hours during the day then after that you are fine. You sleep maybe for four hours then after that you wake up then you get ready to go to work because you cannot sleep from 12:00. If you can try to sleep at least from 08:00 to 12:00, after 12:00 if you can try to sleep you'll be late. Then if you sleep from 08:00 to 12:00 then after that you do other things like shopping and your stuff then you come back and get ready for your duty that's calling you."

Biological rhythms influence sleep (Kaplan and Sadock, 1991:469). An adult person usually sleeps once and sometimes twice within a twenty four hour period. Sleep patterns are physiologically different when one sleeps during the day or sleeps when one's body is used to being awake. Older workers seem to struggle to adjust to shift work due to the cumulative effect of sleep deprivation and gradual circadian desynchronisation. Culpepper (2010) adds that chronic sleep deprivation in people with insomnia is linked to reduced serum iron levels, which can give cause to other sleeping disorders such as restless legs syndrome or periodic limb movement disorder. Fatigue that is often reported by shift workers, usually results from an underlying sleep disorder which disrupts the shift worker's quality of sleep. Severe exhaustion may cause night shift paralysis, where the shift worker is aware of what happens in his immediate surrounds, but is incapable of responding to this. Recovery times of shift workers during recovery and reactions decelerate, which contributes to higher levels of cortisol. Higher cortisol levels contribute to a slow down of tissue repair from injuries, as well as to anorexia or obesity (Swensen, Waselenski and Hartl, 2008:303).

❖ **Sub-theme 2.2: Diet / Eating routines**

Digestive problems experienced by night shift workers include complaints such as irregular bowel movements, constipation, heartburn and gas, as well as lack of appetite or anorexia. Shift workers and more specifically night shift workers, experience abdominal pains and can suffer from peptic ulcers due to shift work. Complainants eventually experience setbacks, developing chronic diseases, such as chronic gastritis (Culpepper, 2010; Scott and Kittaning, 2001; Sulsky and Smith, 2005:102; and Totterdell, 2005:38). Many factors directly related to night shift work, contribute to shift workers developing peptic ulcers, which in turn, promote sleep loss and sleep disruption, psychosocial stress, missing out on mealtimes and a delay in relief of gastric gases. The length of the shift and the timing of the changeover from night shift to day shift also promote poor health (Scott and Kittaning, 2001 and Sulsky and Smith, 2005:102). Totterdell (2005:38) further adds

that changes in the nutritional value of meals can also contribute to digestive problems.

Three participants in the study were of the opinion that their eating patterns and diets were not affected excessively as a result of working permanent night duty, while one participant believed that participants could adapt to new eating habits. In most cases, the remainder of the participants reported that they had to adapt to taking meals at a later hour than used to be the habit, and in some of the cases participants mentioned that they now tended to eat meals that were convenient and quick to prepare, or ordered take-away meals from restaurants. Two participants mentioned that they tended to eat more during night duty, when compared to their intake during day shift, while one participant believed that one's eating routine need not deviate in health requirements whether working permanent night duty or working rotation shifts. One participant mentioned that at times he suffers from a lack of appetite.

- ✓ Deelnemer 1: "Nee dit het my nie daar te veel geaffekteer nie, want ek is gewoon min eet."

Participant 1: "No it has not affected me too much, because I'm used to not eating much."

- ✓ Participant 2: "It didn't affect my eating pattern."
- ✓ Participant 7: "Still eat normal times, yah like today I have 'skafting' so I'm going to eat at round about 19:00 or 20:00."
- ✓ Deelnemer 8: "Jy eet, jy begin gewoon raak aan laat etery."

Participant 8: "You eat, you get used to eating late."

- ✓ Deelnemer 3: "Veral die, okay, op die konstante nag skof vind 'n mens, veral as jou omstandighede toelaat, dat jy 'n inversie kry. Met ander woorde, waar jou, jy weet, waar jy nou baie meer deur die dag sou geëet het as jy in die aand sou geslaap het, sal jy die omgekeerde doen, met ander woorde jou nag diens sal amper soos 'n dag diens wees...jy sal kan eet, veral met die nagdiens is dit nie so erg om kos saam te bring nie om te kan eet dan nie, maar weereens, dit moet op 'n permanente basis wees. As jy dit omruil, weet, as jy nou nagdiens dan dagdiens, weet op daai wissel basis – ek dink dit hang van persoon tot persoon af, maar in my geval is dit, ek weet nie, daar's nie 'n vaste roetine vir my nie. Dit

help by dat dit 'n mens se liggaam omkrap Jy weet nie wanneer jy moet eet nie en natuurlik ons weet almal eet patrone affekteer jou bloedsuiker en sulke goed. So tussen jou en my, ek dink dit krap die hele balans uit, die hele roetine skommel dit om."

Participant 3: "Especially, okay, the constant night shift one finds, especially if your circumstances allow, you get an inversion. In other words, where you, you know, where you're much more prone to have eaten during the day because at night you would have slept, you do the reverse, i.e. your night shift will be almost like a day shift...you will be able to eat, especially with the night shift it is not so difficult to bring food to eat, but again, it must be on a permanent basis. If you alternate them, know, if you're working night shift then day shift, know on that exchange basis - I think it depends from person to person, but in my case it is I do not know, there's not a fixed routine for me. It contributes to upsetting a man's body. You do not know when you should eat, and of course we all know that eating patterns affect your blood sugar and stuff like that. Between you and me, I think it upsets the whole balance, it affects the whole routine."

- ✓ Deelnemer 4: "...jy eet net daai twee of drie dae saam met jou kinders, oor 'n naweek af want jy jy's nie meer gewoon om in daai tyd te eet nie. Jy en aag, jy eet koue kos en dit, dit is heeltemal, die eet patrone is heeltemal weg. Ek wil nou maar vir jou sê ons, ek, as jy nagdiens werk het jy nie 'n eet patroon nie. Dit is, aag sommer net gou-gou klomp toebroodjies...jy eet maar toebroodjies of jy eet 'n pappie of uhm, weet sulke goedjies, maar 'n warm bord kos sal jy nou maar kry op jou Sondag as jy af is of as jy, anderste is dit nou maar, dan eet jy maar wat jy kry, 'n vinnige ding, koue kos. Hier's jy so besig in die aande voor jy, jy kan eers rêrig hier by 21:00 as al die besoeke klaar is, dan gaan, dan eet jy eers. Dan en ek bedoel, vars kos is ook nie dieselfde as jy hom, dit koud is en jy sit hom in die mikrogolfoond nie. So ek noem dit maar koue kos, dit raak jy maar gewoon."

Participant 4: "... you only eat those two or three days with your children on a weekend when you're off because you you're not used to eat at that time. You and Oh, you eat cold food and it, it's totally eating patterns are completely gone. I want to tell you we, I, when you work night shift you do not have an eating pattern. Oh just quickly lot of sandwiches... you eat sandwiches or you eat a porridge or uhm know these things, but a hot plate of food you will only get when you're off on Sunday or if you are, or otherwise, then you eat what you get, a quick thing, cold food. Here you are so busy at night before you, you can only really at about 21:00, as all visits are done then you will eat. I mean, fresh food is not the same if you give, it's cold and you put it in the microwave. So I call it cold food, you get used to it."

- ✓ Participant 5: "...since I started to work night shift I even take my supper late at about 23:00 to 00:00, before midnight.... when I'm off or when I'm on leave I won't wake up during the night say 'I'm hungry' ... I can eat at around 19:00, 18:30 to 19:00 in the evening and going to sleep at around 22:00. It does not affect me with anything. I can say it is the same kind of food. ...That's it, it doesn't change; it didn't change at all."
- ✓ Participant 6: "...during the night you might find that around 22:00 you are eating. I don't know, whether should I say it's your dinner or your breakfast or what. So see it's obvious that you no longer gonna eat around the time that you used to eat and then that's why I say it's gonna change a lot ...sometimes you don't feel like eating at all..."
- ✓ Participant 9: "In most time if you are working night duty you have to eat now and then rather than day duty where you have to eat your three meals ...during the night you have to eat there throughout the night or keep on going up and down so that you don't sleep. You tend to eat more if you're working night duty. The very same food that you are supposed to eat at home. You gain a bit of weight because it's not like during the day."
- ✓ Participant 10: "...time didn't change because where we are working we've got our time when we eat... even if I'm off I will still be using that time to eat because I'm now working, I'm working three days in, three days out then I can't change much of the time. Type of food, yah I would say it's different because at work we normally don't take lunch boxes. It would be the same food if we had lunch boxes, but we tend to buy take-aways at restaurants then it will differ by every other day."

Limited access to healthy food and irregular meal times seem to contribute to shift workers having inconsistent dietary habits. Due to different metabolic processes during the day and the night, food that is eaten at night tends to cause greater weight gain than when it was eaten during the day (Sulsky and Smith, 2005:102).

❖ **Sub-theme 2.3: Physical health**

Shift work exerts many negative effects on the health of shift workers even if they don't suffer from Shift-Work Disorder (Culpepper, 2010). Shift work seems to be a stressor causing elevated blood pressure, erratic heart rate and a higher cholesterol reading over a period of time. Possible causes include circadian disruption, social disruption, unhealthy behaviour where diet, smoking, alcohol consumption, and

exercise are concerned, as well as biochemical changes such as high cholesterol (Scott and Kittaning, 2001; Sulsky and Smith, 2005:102 and Totterdell, 2005:49).

Four participants in the study denied experiencing any health problems resulting from working permanent night duty, while the general health problems that were reported by the other six participants in the study included fatigue, lack of energy, headaches, irritability, eye problems, high blood pressure and gastrointestinal or stomach problems.

- ✓ Deelnemer 1: "Nee dit het my nie daar te veel geaffekteer nie."

Participant 1: "No it has not affected me too much."

- ✓ Participant 2: "No, I don't experience any changes."
- ✓ Participant 7: "No, I didn't experience anything."
- ✓ Deelnemer 8: "Nee, niks nie."

Participant 8: "No, nothing."

- ✓ Deelnemer 3: "Permanent as sodanig, nie so erg nie...ek dink die ou wat daarby aanpas, daai ou moet kies om dit te doen, dit moet op 'n vrywillige basis wees en dan as jy dan aanmekaar dit werk, dan's dit vir my oraait. Maar as jy wissel van dagdiens– op nagdiens is, weet, ek kry nie omdat jy nou nie slaap nie, weet, het hy minder energie, baie meer geïrriteerd, wat ek myself kry is kopseer, weet, 'n langdurige vreeslike hoofpyn wat jy, en soos wat ek sê, ek is nie baie lief om pille te drink nie so ek wil nie baie medikasie gebruik daarvoor nie en dan sit jy met 'n, met daai moegheid, nie energievlakke nie en dan is dit nog 'n irriterende kopseer ook daarby. Soos wat ons almal ken, weet dan veroorsaak dit gewoonlik baie ander, kom ons sê irritasies, moeilikhede in jou menseverhoudings met ander woorde jou gesin, mense wat naby jou is."

Participant 3: "Permanent as such, not so bad.... I think the guy who adapt, that guy should choose to do so, it must be on a voluntary basis and if you work it consecutively then it's okay for me. But if you vary from day shift to night shift, know, I do not get, because you do not sleep, know, he has less energy, is much more irritable, I myself suffer from headaches, know, a long terrible headache you, and as I say, I'm not very fond of pills so I do not want much medication for it and then you're with, with that fatigue, no energy levels, and it is still an annoying headache too. As we all know, know it usually causes many others, let's say irritations, problems with

your people skills, in other words, your family, people who are close to you."

- ✓ Deelnemer 4: "Nee, nee ek is nee ek het geen. Dis nou net die familie ding wat nou met die bloeddruk en die kom maar so met die familie deur. Verder is ek, nee heel gesond, speel pluimbal."

Participant 4: "No, no I'm no I did not. Now it's just the family thing with the blood pressure, but that is hereditary. And I am still very healthy, playing badminton."

- ✓ Participant 5: "What I realised that's affecting my health is my eyes. I'm coping because I see, it's just only if I'm taking long hours' driving where my eyes is really showed that it's affected or a long hour in a daylight sun, it's where it is affected. Stomach, I started experiencing stomach problems and headache. That affects me quite badly, but I went to the doctor then he give me some different medication then I become all right. Up to, up to now I'm still all right."
- ✓ Participant 6: "All over, I'm getting tired, laziness, at the end of the day that's your experience."
- ✓ Participant 9: "A year ago, high blood pressure, but I'm taking treatment every day in the morning. It's from the family"
- ✓ Participant 10: "Just resting, only resting, sometimes you feel like you are tired and you are tired, serious tired, then those tablets at least, you get well. You refresh yourself with those tablets, they just refresh you."

Totterdell (2005:38) mentions that circadian rhythms further involve melatonin synthesis, urinary electrolyte production, blood pressure, short-term memory performance and alertness, which he acknowledges as peaking at different times of the day, but are normally higher during the day and lower during the night. Altered sleeping patterns and graveyard shifts additionally cause fatigue, and can also lead to irregular heartbeats and heart attacks due to the high level of stress that workers experience. It further seems to be a link between shift work and other health problems, such as musculoskeletal disorders which include back problems. Shift workers are also more prone to common infections such as colds and flu due to suppressed immune functioning caused by shift work (Totterdell, 2005:50).

❖ **Sub-theme 2.4: Mental health**

There is an increase in acute psychological and psychosomatic symptoms such as job strain and irritability among shift workers. Exhaustion and irritation levels increase rapidly, which severely impact on domestic and social relationships as well as on the productivity of shift workers (Adler, 1991:82; Scott and Kittaning, 2001 as well as Totterdell, 2005:50). Swensen, Waselenski and Hartl (2008:302) add that this irritability that presents itself among correctional officers can cause them to antagonise offenders, resulting in officials not responding appropriately to offender needs, personal boundaries being compromised, and the use of excessive force. Shift workers may also have a higher risk for a number of chronic psychological problems such as chronic fatigue, persistent anxiety, neurotic disorders and depression. A possible cause might be the circadian disturbance, while it appears that lack of exposure to sunlight can worsen existing mood disorders in shift workers (Adler, 1991:82; Culpepper, 2010 and Saunders, 2010).

Four participants in the study indicated that working permanent night duty had no impact on their mental health, especially as regards moods changes. This, according to one participant, might result from his positive attitude. Another participant believed that enjoying the specific shift pattern played a role in safeguarding his mental health. Two other participants in the study believe that one's personality plays a significant role in the impact that permanent night duty exerts on one's state of mental health, especially with regard to the moods one experiences. Three participants indicated that their level of fatigue, resulting from working permanent night duty, contributed to them regularly withdrawing from others. One participant indicated that he might have experienced undiagnosed depression at some stage.

- ✓ Participant 2: "No, it didn't affect me. It didn't affect me at all."
- ✓ Participant 5: "Not at all, maybe it's just because I told myself that for me whatever DCS gives me it's like I will accept it."
- ✓ Deelnemer 8: "Nee, niks."
- ✓ *Participant 8: "No, nothing."*
- ✓ Participant 9: "No, I'm not so irritated."

- ✓ Participant 10: "I just fell in love with night shift then if it, this is me, I'm fine with it. It won't change my mood, I like it."
- ✓ Deelnemer 3: "Ek myself nie as sodanig, weet ervaar nie uhm, maar ek dink dit is baie te doen met persoonlikheid ook. Ek as persoonlik, weet ek is nou nie, ek glo nie ek is 'n groot voorstaander van vreeslike geweld en aggressie en sulke goed nie, maar ek het dit al met kollegas gesien, ja."

Participant 3: "I myself as such know, does not experience uhm, but I think it's a lot to do with personality. I personally know, is not now, I believe I am not a big proponent of terrible violence and aggression and stuff, but I saw it before with colleagues yes."

- ✓ Participant 7: "I think also it depends on an individual. If you have a reason to do something you will never have moods, but if they have to force you to do something on night duty, you'll have a mood or something."
- ✓ Deelnemer 1: "Ek sal nie sê dit het my regtig moody gemaak nie, maar daar kom tog dae dat 'n mens moeg is en dat jy voel jy wil net bietjie rus en jy wil bietjie alleen wees en so aan. Ja, dan sal ek miskien sê dat 'n ou moody raak".

Participant 1: "I would not say it made me really moody, but there come days that you are tired and you feel you just want to rest and you want to be alone and so on. Yes, then I might say that a guy becomes moody."

- ✓ Deelnemer 4: "...soos 'n fisiese siekte, nee, maar psigies 'ek is nie lus nie' psigies is jy nie lus vir iets nie. In alle eerlikheid ek het seker al bietjie depressief gewees want die groot rede, veral hier in ons omstandighede, jy word toegesluit in 'n seksie uhm weet, iemand kom besoek jou miskien maar die res van die tyd, okay so deur die aand tot en met 22:00 in die aande dan's dit nou, dan maak die bandiete nog maar lawaai of die gevangenisse maak nog lawaai, maar daarna slaap hulle. Dan's jy alleen in die unit weet, jy't niks geselskap nie, jy't nie 'n radio nie, jy't nie 'n TV nie, jy't nie koerante nie."

Participant 4: "... as a physical illness, no, but mentally 'I do not feel like' mentally you're not in the mood for anything. In all honesty, I may have been little depressed for the reason, especially here in our circumstances, you are locked in a section uhm know, someone visits you maybe but the rest of the time, okay so during the evening until 22:00 at night then it's now, then the offenders still make noise or the inmates still make noise, but then they go to sleep. Then you're alone in the unit you know, you've got no company, you do not have a radio, you do not have a TV, you don't have newspapers."

- ✓ Participant 6: "You just grow tired... you don't feel like talking to anyone, yah, you just wanna to be on your own."

Haines et al. (in Saunders, 2010) agree that work-to-family conflict contribute considerably to shift workers' suffering from depression. Isolation related to shift work and time off from work further contributes to shift worker's feelings of inadequacy and depression. Culpepper (2010) explained that depression can manifest as impairment of memory and loss of concentration and can also contribute to apathy and lethargy. Patients, who appear to have symptoms related to depression, therefore need to be interrogated about their sleeping habits in order to prevent misdiagnosis of a mood disorder.

❖ **Sub-theme 2.5: Use of medication / treatment**

Circadian rhythms in metabolic parameters and organ responsiveness seem to play a role in the efficacy of many types of medication (Scott and Kittaning, 2001).

Participants in the study supported conflicting views with regard to the use of medication in the treatment of chronic or acute medical conditions. One participant made a conscious decision not to take medication unnecessarily, but to do so as a last resort, while two participants are suffering from high blood pressure. One of the two participants was diagnosed before starting to work permanent night duty, while the other participant was diagnosed a year ago. This participant has been neglecting taking medication to treat his condition over a long period of time and is taking his treatment in the mornings after completing his shift. The other participant was advised to change the time of day at which he takes his medication in order to improve its efficacy.

- ✓ Deelnemer 3: "...ek het uit beginsel besluit daarteen. Nie net teen slaap medikasie nie, teen, ek gebruik medikasie...uhm...ek moet verby forseer, ek moet omtrent geketting word om, ek het 'n persoonlike, ek probeer so min as moontlik dit doen."

Participant 3: "... I have decided against it in principal. Not only against sleeping medication, I use medication ...uhm... I must be forced, I almost have to be chained to, I have a personal, I try as much as possible not to do it. "

- ✓ Deelnemer 4: "...toe gaan ek dokter toe, toe sê ek vir hom 'Jong ek weet nie, die medikasie werk nou nie meer soos dit altyd gewerk het nie. Dit is ek kry nou

kopsere in die tyd en dis, ek weet nie wat ek nou moet doen nie.’ Toe vra hy my nou weet, toe kom ons nou op die werk patroon uit ...toe sê hy nee maar dit is nou die probleem, want my hele siklus het nou weer verander. Ek slaap nou nie in die aand nie. Waar ek nou weer altyd in die oggende my bloeddruk pil moes gedrink het moet ek dit nou in die aand drink omdat ek die hele 24-uur wakker is en dan more oggend gaan slaap. Hy sê teen die tyd wat ek nou, die pil moet werk dan slaap ek plaas van as ek aktief is moet die pil werk, weet sulke, toe’t ons nou die hele ding omgeswaai. Van daar af toe gaan dit nou weer baie beter ... maar sover het die bloeddruk nog nie weer op en af gegaan nie, hy’s nog reg so.”

Participant 4: "... when I went to the doctor, I told him 'Man, I do not know, the medication is not working as it always used to. I started getting headaches and I do not know what I should do now. Then he asked me that's when we spoke about the work pattern... then he said no but that is the problem, because my whole cycle has changed. I'm not sleeping at night. As I always used to drink my blood pressure tablet in the morning I should drink it at night because I was awake all 24 hours and then go to bed in the morning. He says at the time I am now, the pill should work then I sleep instead of when I am active then the pill should work, then we turned the whole thing around. From there it's a big improvement... up to this far the blood pressure has not been up and down again, it's still fine.

- ✓ Participant 9: “My medication is only taken in the morning with my breakfast and then each and every day in the morning, so that don’t affect me.”

Scott and Kittaning (2001) added that irregular shift patterns may interfere with “the application of chronopharmacological principles”. Shift workers sometimes forget to take their medication due to the irregular routines they follow when they work rotation shifts. Some medical disorders related to circadian rhythm disruption, psychosocial stress and sleep deprivation can be aggravated by shift work. These conditions can therefore be regarded as contra-indications for shift work.

Key findings in theme 2:

In most cases there was a definite impact on sleeping patterns of participants in the study which impacts significantly on the energy levels of these participants. Participants sleep approximately two and a half hours to four hours per day and believe that it is possible to adjust to the little time they manage to sleep. Some participants eat fast food or meals that are quicker and easier to prepare when

working permanent night duty, while, in most cases, they also have to adjust to eating later at night. Participants tend to eat more during night shifts in order to help them stay alert, while others claim to lose their appetite while working night duty. Many participants in the study are of the opinion that their physical or mental health is not really affected. Problems that were mentioned by participants included fatigue, irritability, headaches, poor eyesight, gastrointestinal problems as well as high blood pressure. Only in one case was it necessary for the participant to adjust the time of administering his chronic medication for high blood pressure in order for his treatment to be effective.

Friedman and Neuwman (2011:11) highlight that person-in-environment interaction normally leads to tension or life stress. Systems that interact continuously have to be adapted in order to achieve a state of homeostasis or balance. This interaction in itself is a source of stress. It is, however, also true that what is stressful to one person might not prove stressful to another. This perception varies across boundaries such as age, gender, culture, physical and emotional conditions, past experiences, as well as the actual state of the environment and working conditions and relies on how the person experiences his interaction in this environment.

3.3.2.3 Theme 3: Impact of permanent night duty on social life / relationships

Saunders (2010) as well as Totterdell (2005:38) mentioned that shift work causes disruption in the shift worker's social and family life as it causes the shift worker's daily pattern of work and rest to be out of sync with that of the family, friends and the social life of the community. More problems are experienced in shift workers' personal lives, as shift work relates to more adverse effects. These effects include; greater marital dissatisfaction, higher divorce rates, more family conflict, greater emotional problems as well as poorer achievement at school in children, especially in instances where a parent's shift work occurs over weekends or in the late afternoons or evenings (Scott and Kittaning, 2001; Sulsky and Smith, 2005:104; Swensen, Waselenski and Hartl, 2008:302 as well as Totterdell, 2005:51).

During the discussion of theme 3, the focus will be on the impact of permanently working night duty on the social life and relationships of participants in the study. Sub-themes on relationships that will be looked at, include discussions on how working permanent night duty impacts on interaction in the immediate family, embracing the impact of working permanent night duty on relationships with participant's wives or partners, relationships with their children as well as relationships with extended family members, friends and colleagues.

❖ **Sub-theme 3.1: Impact on interaction in the immediate family**

Landy and Conte (2007:412) explain that most of the research and theory comprising work-family balance, concentrates on the impact of imbalance. In other words, the level of satisfaction one experiences in the work environment will have an impact on one's level of satisfaction and harmony at home and vice versa. The main cause for concern, however, seems not to be the number of hours spent at work, but how time at work interferes and distracts from one's enjoyment of non-work-related activities.

The general feeling amongst all participants in the study was that the decision to work permanent night duty must be a collective and well-considered decision made by all family members. Although everyone might initially agree to this arrangement, a time might arrive when one has to reconsider the arrangement. Three participants felt that the impact of working permanent night duty can be irreversible and therefore it is important for someone who works permanent night duty to make an effort to spend time with his or her family. This can either be achieved in the afternoon before going to work, or in the mornings when one returns home from work.

- ✓ Deelnemer 1: "Aan die begin was dit nog oraaait, en dit het almal gepas...veral toe die kinders nog kleiner was, maar uhm, tog ja in 'n latere stadium begin dit die lewens van ons almal beïnvloed, want ek is nooit in die aande by die huis nie. Mens kan nie daai tyd terug kry nie, dis te laat, 'n mens besef dit nie...Ek meen om in die dag te werk, almal is weg, vanaand is almal bymekaar, almal gesels saam, almal sit saam, almal gaan slaap saam, maar ek meen 18:00 in die aand is jy weg werk toe, hulle het net by die huis gekom of jou vrou het net van die werk af gekom, met ander woorde daar's geen interaksie tussen in nie en dit

beïnvloed tog mens se lewenswyse daar...Alles het uit mekaar uit geval op die einde van die dag. Ons het uit mekaar begin lewe.”

Participant 1: "At the beginning it was all right, and that suited everyone... especially when the children were smaller but uhm, at a later stage it started to affect the lives of all of us, because I was never at home in the evenings. You cannot get that time back, it is too late, you do not realise it... I mean to work during the day, everyone is gone, tonight everyone is together, everyone is talking together, everyone sits together, everyone goes to bed together, but I mean 18:00 in the evening you are gone to work, they just arrived home or your wife just came home from work, in other words, there was no interaction in the family yet it influences a person's lifestyle... everything fell apart at the end of the day. We began to live apart".

- ✓ Participant 2: "It affected my family a lot because, you know, as a family man you must spend quality time with your family. Then at times I wasn't there for them. It created a problem in the family."
- ✓ Deelnemer 3: "Ja dit het, soos wat ek reeds gesê het jy weet, 'n ou is op laer energie vlakke, meer geïrriteerdheid. Ja en ek wil half sê dis hoekom ek sê, dit moet vrywilliglik wees. As so persoon dit nie met sy gesin en sy familie kan uitsorteer nie, is dit 'n goeie resep vir lekker huismoles. Jy moet 'n manier vind om dit te maak werk. Wat lekker gewerk het, weet dan was ek in die oggende beskikbaar om hulle byvoorbeeld skool toe te kan vat. Weet waar normaalweg 'n pa dit nie doen nie...Ja, waar ek byvoorbeeld meer met hulle in die oggend kon gewees het, want ek kon help daar, vrou help met sê skool, kos pak vir die skool en sulke goeters."

Participant 3: "Yes, as I have already said you know; a guy is at lower energy levels, more irritability. Yes and I want to say it's why I say, it must be voluntary. If such person is not able to sort it out with his family, it's a good recipe for nice family problems. You have to find a way to make it work. What worked great know, I was available to them in the mornings, for example, to take them to school, a dad does not normally... Yes, for example, I could be more with them in the morning because I could help my wife, help packing lunch boxes for school and such things."

- ✓ Deelnemer 4: "...dit het baie gepla. As jy nie op die telefoon is hier by 20:00 die aand of 19:00, 20:00 nie, dan is daar nie rêrig kommunikasie nie, amper niks."

Participant 4: "... it was very difficult. If you are not on the phone at 20:00 in the evening, at 19:00, 20:00, then there is not really communication, almost nothing."

- ✓ Participant 5: “I’m not living with them ... they’re at Mpumalanga for some reasons, my wife and the children. In fact we are accommodating the situation. They don’t have as much problems up to so far. At first it’s like difficult but currently they do understand my shift and they give me support. Most of the time they don’t have any problem, they do understand that I should have to go to work or I’m at off or I’m on leave with them now. So they enjoy the moment with them.”
- ✓ Participant 6: “...actually it must be an agreement between the two persons of which it’s me and my wife. Yah, as long as both of us are not having a problem, I think you can do it... but if someone is not interested, then the best way for you is to wait or to work according to your duty list, simple as that.”
- ✓ Participant 7: “I think that maybe they don’t feel anything because of, they know the reason why I’m working night shift. You see they know the reason that, they know that I must sacrifice to work night duty until I’m finished with my loan, yes. It was a decision that we took together as a family. They have changed the shifts... so I get a chance to stay with my family, with them when I’m off.”
- ✓ Deelnemer 8: “Nee, hulle het geen probleem nie. Hulle verstaan, ek het dit aan hulle verduidelik. Dis eintlik vir hulle onthalwe wat ek werk permanent. Maar hulle ondersteun my so dis nie ‘n probleem nie.”

Participant 8: "No, they have no problem. They understand, I explained it to them. It is for their sake that I actually work permanently. But they support me so it's not a problem."
- ✓ Participant 9: “In most of the time they see that my presence at home during the day is mostly wanted, because during the night they are asleep.”

The converse is that working shifts is an opportunity for shift workers and their families to facilitate flexibility in relationships with regard to child care and domestic life (Hossain and Shapiro, 1999:293).

❖ **Sub-theme 3.2: Relationship with wife (Marriage) / partner**

Harold Thomas (in Josling, 1999) mentions that more night duty workers are getting divorced, abuse substances severely, are depressed and they are also more likely to view their jobs as stressful. Shift workers are therefore experiencing more problems in their personal lives as shift work exposes relationships to risk (Scott and Kittaning, 2001; Sulsky and Smith, 2005:104; Swensen, Waselenski and Hartl, 2008:302 and Totterdell, 2005:51).

Participants explained that working permanent night duty definitely affected their marriages or relationships with their partners. Although communication between husband and wife was affected, two participants felt that they were living further apart from their partners or wives. Three participants, however, were of a different opinion. They believed that their wives or partners were not having problems with them working permanent night duty as they had not heard them complain about it before. It was clear that every participant had very unique experiences with regard to the impact of working permanent night duty on their marriage or relationships with partners, although they also had very similar experiences.

- ✓ Deelnemer 1: “As ek nagdiens gewerk het, ek meen, daar’s nie daai band tussen man en vrou. Wanneer dit slaptyd is, dan’s ek weg werk toe en in die dag is ek by die huis dan is sy by die werk. So ons het nie juis veel met mekaar te doen gehad nie en ek dink dit het ‘n groot impak gehad op my huwelik...dit was meer ‘n bakleiery, ons stry die bietjie tyd wat jy bymekaar het, alles ontaard in ‘n bakleiery Sy was nie in die laaste tye, kan ek sê, gelukkig met die nagdiens werkery nie. Wat ek kan sê, as ‘n mens getroud is, definitief nie nagdiens werk nie. Dit werk nie, dit het nie vir my nie in elk geval nie, dit het nie vir my gewerk nie en ek glo die nagdiens werkery het ‘n impak op baie van die lede wat skei, ‘n probleem of ‘n impak op hulle huwelike. Dit moet een of ander tyd ‘n impak hê op jou huwelik.”

Participant 1: "When I worked night shift, I mean, there wasn't that bond between husband and wife. When it's bedtime, then I'd gone to work and during the day when I was home she was at work. So we have not really had much to do with each other and I think it had a great impact on my marriage. It was more often a fight, we fought the little time we had together, everything ended in a fight. She was not in the end, I can say, happy with the night shifts I worked. What I can say, when a person is married, definitely not night shift. It does not work, it did not for me anyway, it did not work for me and I believe working night shift has an impact on many of the members who divorce, a problem or have an impact on their marriages. It must impact on your marriage some time."

- ✓ Participant 2: “My wife wasn’t happy at all, but I have to, yah, she wasn’t happy but she wanted me to work during the day, but I wanted to study so it was a problem.”
- ✓ Deelnemer 3: “...toe ek getroud was met my vrou...die permanente gedeelte, probeer dit, weet dit is ‘n tydperk wat ‘n ou gaan hê, dis ‘n vasbyt fase en uhm, ek dink ek weet, ‘n ou moet in geval met my...Dit het nou maar probleme veroorsaak en goed, maar uh, die ooreenkoms was, weet dat ons probeer, weet daai fase deurdruk en hopelik daarby verby kom.”

Participant 3: "... when I was married to my wife the permanent part, try it, know it is a period that a guy will have, that's a hanging stage and uhm, I do know in the case with me it caused problems and things, but uh, the agreement was know, that we tried, know to push through that phase and hopefully get around."

- ✓ Deelnemer 4: "...nee dit verander heeltemal, veral in die huwelik, dit voel of jy trek uit mekaar uit. Jy's nie uhm, gelukkig my vrou, waar ek miskien gelukkig was, sy werk van die huis af so ek het haar in die dag het ek haar gesien. Maar uhm, die dae wat sy nou nie daar was nie en dan lê ek nou by die huis en slaap dan sien ek haar nou nie en dan kom sy by die huis, dan maak ek klaar, dan sien ons mekaar vir so twee tot drie ure vir die dag. Jy kan voel hoe trek jy jou huwelik uit. Dit werk net nie, dit, dis nie gemaak nie, dis nie, dit kan nie so werk nie."

Participant 4: "... no, it changes totally, especially in marriage, it feels as if you pull apart. You're not erm, luckily my wife, where I was maybe lucky, she works from home so I, in the day I saw her. But erm, the time that she was not there then I lay at home and sleep then I don't see her and then when she came home, then I'm done then we see each other for about two to three hours for the day. You can feel your marriage pulling apart. It just does not work, it's not made, it's not, it cannot work. "

- ✓ Participant 6: "Actually, even for my wife, actually I don't think it does affect her 'cause she's also working night shifts 'cause she's also doing studies. She wanted to further her career somewhere else so she's also working night shift permanently. For now I think it's best for us. It does work 'cause each and every time we are sleeping during the day you see, yah, for my side it's best because she's busy with something, I'm busy with something. At the end of the day... I think it's best."
- ✓ Participant 9: "...it's better for night duty because she knows that in the morning I'm there until in the afternoon."
- ✓ Participant 10: "We fell in love by the time I was already working night shift. She's used to night shift. I have never heard any complaints from her. I think she's fine with it because I've been working this night shift for six years now. I must say we got married in 2008 when I was having one year working night shift."

Josling (1999) is of the opinion that shift workers are experiencing enormous strain and stress in order to cope with everyday life at the workplace as well as at home because of the few opportunities to interact in social as well as family gatherings.

❖ **Sub-theme 3.3: Relationship with children**

Swensen, Waselenski and Hartl (2008:302) profess that the evening shift, usually between 15:00 and 23:00, disrupts quality time that should be spent with children and consequently can estrange parent and child and result in children not forming a good relationship with the parent during the week or during the time that the parent works shifts. Shift work therefore contributes to a divergent family life as shift workers have to sleep in the morning and work in the evening or at night. Hossain and Shapiro (1999:293) explain that shift work could constitute an opportunity for shift workers and their families to facilitate flexibility in relationships with regard to child care and domestic life. It is a way of satisfying individual preferences and building individual relationships as one has variation in one's lifestyle. Individual preferences further seem to be the major motivating factor in deciding to work permanent night shift or to avoid doing so,

There seems to be conflicting views on the impact that working permanent night duty has on children. One participant felt that his children might experience rejection and feel that he did not want to be with them, while another participant mentioned that his children might feel that he was at home too frequently, intruding, especially during school holidays. It was also acknowledged that working permanent night duty created the opportunity to coach sports at school or to transport children to training sessions as well as gave the parent the opportunity to attend matches. A drawback was that it could prove difficult to attend events such as concerts or parent evenings as these took place in the evenings. One of the participants seemed to be of the opinion that a baby could not be affected much if one of the parents were not available at night as a result of working permanent night duty, while another participant explained that parents could not expect of their children to understand the consequences of working permanent night duty, as this did not form part of their frame of reference.

- ✓ Deelnemer 1: “Ek kon die kinders vat vir hulle sport byeenkomste en rugby oefeninge en al daai goedjies. Met die skeisaak saam is die kinders by haar, so dit werk ook nie lekker nie. Jy kan hulle nie elke aand gaan sien of, jy kan hulle naweke sien maar dit is ook net 'n periode dan moet jy hulle weer terug vat na

die ma toe want jy moet vanaand werk. So daar is, dit voel of, ek neem aan dit lyk of die kinders voel ek wil nie by hulle wees nie, want ek is meer betrokke by my werk, ek wil net werk, en dit maak 'n breuk tussen daai pa en seun verhouding.”

Participant 1: "I could take the children for their sporting events and rugby training and all those things. With the divorce the children are with her, so it also does not work well. You cannot go and see them every night, or you can see them weekends but it's also just a period then you have to take them back to the mother because you have to work tonight. So there, it feels like, I guess it looks like the kids feel I do not want to be with them, because I'm more involved in my work, I just want to work, and it causes a split in the father and son relationship."

- ✓ Participant 2: “Meaning the children, I wasn’t able to help them with their school work. Then when I arrive in the morning, they are already on their way to school, so it was a problem. Your children are affected, because when you knock off in the morning, you find that your children are on their way to school then, it’s a problem.
- ✓ Deelnemer 3: “Die kinders is ‘n ander issue, want weet met ‘n volwassene kan jy nou so, jy weet so probeer so ooreenkoms maak waar met ‘n kind dit is nou nie so maklik is nie. Die kinders word tot ‘n sekere mate meer daardeur geraak as ‘n volwasse persoon, om die eenvoudige rede hulle het nie die, veral ‘n jong kind het nie die vermoë om te kan verstaan, weet lekker weet, ‘maar hoekom is my pa nou nie soos ander pa’s nie?’...’n Kind verstaan dit nie en ek bedoel, jy kan nie eers kwaad wees vir die kind nie, want in sy lefwêreld, kinders werk nie nagdiens nie, so dit is buite sy verwysingsraamwerk. Weereens as ek kon kies, hou dit by ‘n gereelde, want die kinders sal as dit op ‘n permanente basis is, die kinders sal aanpas, maar as dit op ‘n wisselende basis is, ek wil half sê, dan kry jy ‘n geïrriteerde ma, pa en kind.”

Participant 3: "The kids are a different issue, because with an adult now, you can you know, try to make such agreement but with a child it is not so easy. The kids to a certain extent are getting more affected compared to an adult, for the simple reason, they have not, especially a young child does not have the ability to understand, know clearly know, ‘but why is my father not the same as other dads?’ A child does not understand it and I mean, you cannot even be angry with the child, because in his world, children do not work night duty, so it is outside their frame of reference. Again, if I could choose, keep it to a regular, because the children will be, on a permanent basis, the children will adapt... but if an alternating basis, I want to say, then you get an irritated mother, father and child."

- ✓ Deelnemer 4: “...die kinders is altwee groot pluimbal spelers groot sport mense en uhm, ek het met die nagdiens het ek afgerig. Jy weet, ek was in die laerskool,

het ek krieket afgerig. Pa is altyd langs die veld en Pa is altyd daar...maar aan die ander kant weer, jy kan agterkom weer 'nee man ek wil nie heeldag vir Pa', veral in vakansies weet, dan dan's Pa die heeldag by die huis...so jy kan agterkom hulle raak moeg, hulle wil jou ook nie die hele dag sien nie. Met die aande goeters dan vat jy, jy moet maar verlot vat en, maar as jy nie kan nie jy weet, dan weet die, veral die meisiekinders sy wil hê jy moet daar wees met 'n optrede ... hulle wil nie verstaan jy kan nie kom nie maar elke dag is jy by die huis hoekom kan jy nie in die aand ook kom nie?"

Participant 4: "...the children are great badminton players, great sportsmen and uhm I could, with the night shift I coached. You know, I was in primary school, I coached cricket. Dad is always next to the field and Dad is always there but on the other hand, you can see 'no man, I don't want Dad all day'. Especially during holidays now, then Dad's the whole day at home. So you can see them getting tired, they also do not want to have to see you the whole day. The evening stuff then you take, you have to take leave but if you cannot you know, you know, especially the girls... she wants you to be there for a performance. They do not understand you cannot come but every day you are at home why can you not come in the evening?"

- ✓ Participant 9: "...they know that I'll be there during the day and night the mother is there."
- ✓ Participant 10: "I can't say if my working night shift is impacting on behalf of my child or not. I can't say 'cause she's still young."

Shift work can have advantages as well as disadvantages with regard to the social or family lives of shift workers. Williams (1999) highlighted that people who work night shifts have to alter their normal activities and adjust their time with family and friends.

❖ **Sub-theme 3.4: Relationship with extended family members**

Shift work contributes to health problems, as it interferes with the dynamic equilibrium between work, sleep and one's family. This happens for example when a shift worker sacrifices sleep in order to spend time with family and consequently it reduces the shift worker's ability to function effectively at work. The shift worker's personality, social environment and work situation also impact on the destabilisation process (Kundi, 2003:306 and Totterdell, 2005:39).

Three participants mentioned that working permanent night duty impacts negatively on their participation during family gatherings or on special occasions that family members enjoy or celebrate together. One participant believes that his extended family members cannot really influence his decision to work permanent night duty, while another participant explains that extended family members will only have a problem with him working permanent night duty as soon as it impacts negatively on his immediate family. Another participant does not seem to get much support from extended family members with regard to his decision to work permanent night duty.

- ✓ Deelnemer 1: “Ja dit is ook ‘n probleem, veral as ‘n mens op byvoorbeeld nou die naweke, Sondag nou, altyd Sondag aande begin werk het vir die nuwe week, met ander woorde jy moet Sondag aand 18:00 of Sondag middag 14:00 begin het vir jou nuwe skofte. Dit het ‘n invloed gehad, want baie keer soos veral familie, ma’s en pa’s, julle kom bymekaar en eet Sondae saam en as dit tyd is om op te skep dan moet jy klaar maak vir werk want jy moet al ry of so.”

Participant 1: "Yes it is a problem, especially if you, for example, now the weekends, Sunday now, always Sunday nights started working for the new week, in other words you have to start Sunday evening 18:00 or Sunday afternoon 14:00 for your new shifts. It has had an impact, as many times especially family, moms and dads, you assemble and eat Sundays together and when it's time to dish up then you have to prepare for work because you have to leave or so."

- ✓ Participant 2: “Yes, it affected my family because sometimes when there’s events or wedding celebrations or funerals then I have to go to work, then it became a problem.”
- ✓ Deelnemer 4: “... hulle sê ek is mal... ek moet ‘n sielkundige gaan sien. Jou sosiale lewe, alles word omgedraai.”

Participant 4: "... they say I'm crazy ...I need to see a psychologist. Your social life, everything turns around."

- ✓ Participant 6: “They don’t have a problem, I’m the one who’s telling them and then I don’t, I don’t need any permission from them, see... after explaining everything to them, they do understand, that’s it.”
- ✓ Participant 9: “There is going to be a problem for them if it disturbs the family. As long as it does not affect the family, then for them it’s not a problem.”

Negative attitudes might be attributed to personal problems associated with shift work such as the disruption caused in a shift worker's family life and to their personal activities. (Sulsky and Smith, 2005:104 and Swensen, Waselenski and Hartl, 2008:302).

❖ **Sub-theme 3.5: Relationship with friends**

Shift workers are often unable to become involved in social, community and religious activities due to work schedules. Shift workers also seem to have fewer friends and tend to spend leisure time isolated from other people. Williams (1999) highlighted that people who work night shifts have to alter their normal activities and their time with family and friends. This contributes to a divergent life as these workers have to sleep in the morning and work in the evening or at night.

Three participants in the study indicated that they did not really have close friends. Working permanent night duty has an impact on when you can meet with your friends and according to three of the participants their friends are not always supportive when they indicate that they have to go and work. However, two participants in the study felt that in some cases their friends were not even aware that they were working as they usually saw them at home, especially with the new shift pattern. One of the participants explained that even extroverted people, in the end, tend to isolate themselves more often.

- ✓ Deelnemer 1: "...ek het nou nie juis 'n groot vriendekring nie. Jy kan nie regtig by mekaar kuier nie, want jy's altyd in die aande is jy weg want jy werk of jy's moeg en jy't nie lus om uit te gaan nie, jy't nie lus vir mense nie, want jy wil rus en jy wil die tyd wat jy het saam met jou familie spandeer."

Participant 1: "I do not exactly have a large circle of friends. You cannot really visit each other, because you're always in the evenings you are away because you're working or you're tired and you do not feel like going out, you do not feel like people because you want to rest and you want to spend the time with your family."

- ✓ Participant 2: "Yah, it was very difficult for my friends because they wanted to be with me during the night, so I have to go to work, so they were not happy at all. I've lost few friends because they wanted to be with me during the night,

spending, partying, doing all kinds of things. So, but I didn't. They didn't understand."

- ✓ Deelnemer 3: "Sosiaal gesproke is daar 'n vermindering in sosiale kontak. Natuurlik as jy nie 'n baie, 'n vreeslike ekstrovertiese persoon is nie, gaan jy nou nie, weet as jy van nature introvert is, gaan jy nou nie so vreeslik moeite doen daarmee nie. Maar ek dink selfs by die ekstrovert gaan die sosiale interaksie verminder word. Al is ek nou af die naweek, maar ek het nou tot die Vrydag toe nog nagdiens gewerk, gaan ek waarskynlik nou wil probeer slaap inhaal."

Participant 3: "Socially speaking, there is a reduction in social contact. Of course, if you are not an extrovert you will not know, if you are an introvert by nature, you will not go through so much trouble with it now. But I think even the extrovert's social interaction will be reduced. Though I am now off over the weekend, but I have worked night shift until the Friday, I will probably want to try and catch up on lost sleep now."

- ✓ Deelnemer 4: "...jou sosiale lewe moet verander, meen jou vriende is almal in die aande by die huis, jy moet werk toe gaan."

Participant 4: "... your social life needs to change; I mean your friends are all in the evenings at home, you have to go to work."

- ✓ Participant 5: "Sometimes friends don't understand why I should have to go to work while they pay me a visit or we should have to go somewhere. You only find that when I go there I should have to come back early so that I can go back to work. Friends are there for that moment, thereafter they won't be around when I'm no longer working at all."
- ✓ Participant 6: "...during the day you cannot sit with people and talk. You just getting tired, you just feel like sleeping each and every time 'cause sometimes you might find that people are wanted to visit you, you no longer interested in them 'cause you feel like, actually you just lazy."
- ✓ Participant 7: "I don't have because of I'm busy. I'm a sportsman and I'm going to church, I'm active at church something like that. So I don't have time to stay with friends, I don't have any friends, I don't have any friends. That's the truth, I don't have any friends."
- ✓ Deelnemer 8: "Aag, dis maar bitter min, ek is maar eintlik 'n familie mens. Dis maar my vrou en my kind."

Participant 8: "Oh, that's just very few. I am actually a family man. It's only my wife and my child. "

- ✓ Participant 9: “Some of my friends they don’t know where am I working. They only saw me during the day. Some they may think that maybe I’m not working during the day, but at night they don’t know that I’m going to work. They only saw me during the day.”
- ✓ Participant 10: “... we are staying home, some other people think that in fact I’m not working because three days I’ll be out, three days I’ll be in, two days I’ll be out, two days I’ll be in. Actually, they don’t see actually, how can I put it? There’s no more time of my absence at home. I’m always home, you see. Then I think we get used to each other as always I’m with them.”

Landy and Conte (2007:412) further mentioned that most of the research and theory related to work-family equilibrium concentrates on the negative impact of a lack of balance. This is normally discussed in terms of the stress created by conflicting demands between work- and leisure-time activities.

❖ **Sub-theme 3.6: Relationship with colleagues**

Working night shift might contribute to fewer arguments with co-workers, clients and supervisors. On the other hand, the relationships of nightshift staff can deteriorate with those who work day shifts. This results from a possible lack of proper communication with regard to new developments in the workplace (Rivera [sa] and Waters, 2011).

One of the participants in the study emphasises the feeling of isolation and of not being appreciated, while another participant believes that one must not allow other correctional officials to discourage you when you do something that you believe in.

- ✓ Deelnemer 4: “Dis uiters min, uiters min dat jou seksiehoof of iemand na jou toe kom en vir jou sê ‘baie dankie’. Dit gebeur min met nag diens jy voel, jy voel naderhand half uitgeskuif. Al die funksies weet, jy’s nie deel daarvan nie want daai aand moet jy nou werk.”

Participant 4: "It's very seldom, very seldom that the unit manager or someone comes to you and say 'thank you'. It happens seldom with night shift you feel, you feel excluded. All the functions you're not part of it because you're working that night."

- ✓ Participant 6: “Obviously they gonna talk, obviously they are talking, maybe even my colleagues, they will keep on talking. Forget about whatever people are

saying outside 'cause they'll keep discouraging you about this night shift thing, whatever."

While some employees might prefer to work on their own, it can sometimes be to the detriment of other workers according to Williams (1999). Being secluded from other co-workers can also contribute to higher stress levels in some night shift workers.

Key findings in theme 3:

Participants in the study believe that working permanent night duty must be voluntary and fully supported by the family. This arrangement needs to be reconsidered at some stage, even if everyone has agreed to it at the outset. Participants had different views on how their relationships with their wives and children were affected due to them working permanent night duty. Some participants feel that working permanent night duty can be a contributing factor when correctional officials get divorced. Every participant has very unique but sometimes quite similar experiences with regard to the impact that working permanent night duty has on their marital relationships or relationships with partners. Not all children wanted to have their fathers around for the whole day, especially during school holidays. Working permanent night duty, created the opportunity of coaching sport at school or of transporting children to training sessions and to attend matches while it could be difficult to attend events such as concerts or parental evenings as these took place during the evening, when participants were obliged to work. In some cases this caused children to feel confused. Permanent night duty also impacted on the ability of participants to participate in family gatherings and organised events, as well as on opportunities to meet with friends and attend functions or events with family and friends. Some participants also felt that colleagues could be more supportive of their efforts to work permanent night duty.

The most important aspect regarding the interaction of the ecosystems perspective is the ability of the individual to form relationships and cultivate attachments. Germain (in Friedman and Neuman, 2011:14) indicated that family structures and guidelines with regard to relationships, vary as these are based on culture, but

explained that characteristics of human relationships, competence at maintaining these, cultivating self-assurance and developing self-esteem, can be explained with regard to the relationship existing between the person and his immediate environment.

3.3.2.4 Theme 4: Impact of permanent night duty on correctional official's career in the Department of Correctional Services

Landy and Conte (2007:430) concur when they communicate that psychologists have found that, in general, disturbance of the circadian cycle has adverse consequences on health, performance and work satisfaction. Finn (in Swensen, Waselenski and Hartl, 2008:300) stresses that “You can tell when shift work is getting to officers...their work gets sloppy, their searches become careless, their units are filthy, and they stop following the rules”.

Theme 4 therefore explains participants' views and their personal feelings on their career in the Department of Correctional Services. Participants also share their views on the impact of working permanent night duty on their opportunities of being promoted as well as their opportunities to qualify for performance bonuses.

❖ Sub-theme 4.1: Correctional official's feelings about their career

A significant higher level of burnout, emotional exhaustion, work-related stress and psychosomatic health problems such as headaches, diarrhea and difficulty experienced to fall asleep, is reported amongst shift workers when compared to daytime workers. A possible cause might be the circadian disturbance, while it additionally appears that a lack of daylight exposure can be detrimental when referring to existing mood disorders in shift workers (Adler, 1991:82; Culpepper, 2010 and Saunders, 2010).

The participants in the study support different views on the impact that working permanent night duty exerts on their careers. Four of the participants in the study still have a positive outlook on being employed by DCS, while one participant does

not clearly indicate whether he feels positive or negative about his career. He only indicates that he is grateful for what he could learn during his years of service in DCS. One of the participants preferred not to say anything about how he feels about his career in DCS, while another participant just does not mention anything about his feelings with regard to his career in DCS. Three participants in the study believe that they are nearing retirement and that working permanent night duty for many years contributed to them not being able to advance their careers in DCS. The remaining participant indicates that the manner in which management and other correctional officers are treating those officials, who work permanent night duty, is playing a significant role in the way they view a career in DCS.

- ✓ Participant 2: "I am very happy, I don't have a problem. This is something I wanted to do, so I'm very happy. I enjoy working here."
- ✓ Participant 5: "Really, I do enjoy my work with DCS. Maybe it's just because I did work for a previous private companies before I came to the Department of DCS. So since when I joined this Department of DCS is that I feel I enjoy to work because it's my first Department to work under government since I was started. Since when I started to work here it's just like I'm feeling at home."
- ✓ Participant 6: "I'm still learning here. I don't want to see myself just working night shift in here and then somewhere, some of the good years, I want to see myself up there ... managing some other part."
- ✓ Participant 7: "I appreciate to work here and I enjoy to work here and a one other thing, give me lots of time to do my things you see? There's no pressure."
- ✓ Participant 9: "My career is very short you see. I have only twelve years to go it's very short twelve years. But I learn a lot experience that I've learn from the past twenty two years."
- ✓ Participant 10: "I prefer not to answer."
- ✓ Deelnemer 3: "...snaaks genoeg, ek het nou 'n klomp kwalifikasies en goed maar ek, volgens my, is ek op my aftree rang. Ja, ek dink dit het 'n negatiewe invloed op, op 'n loopbaan."

Participant 3: "... funny enough, I have a lot of qualifications and things but I, in my view, I am on my retirement rank. Yes, I think it has a negative impact on a career."

- ✓ Deelnemer 4: “jy raak kwaad, jy raak maar jy raak moedeloos...jy’s moedeloos dan dink jy ‘aag man wat help dit?’ naderhand het jy ‘n traak-my-nie-agtige houding weet jy, veral as dit nou kom by die werksituasie ook. Jy’t nie meer daai, jy weet daar is ‘n offisiere dan dink jy ook ‘aag man jy sê in elk geval ek doen niks, hoekom sal ek nou opstaan en hoekom sal ek nou weet, enige eer of iets betoon?’ Nee dit maak jou baie negatief. Die plek maak jou, veral as jy nag diens werk, die hoofde, die offisiere, weet almal maak jou heel die hel in en ek, jy’s nie eers meer lus dat, nee dit maak jou verskriklik negatief, baie baie negatief.”

Participant 4: "you get angry, you get but you get discouraged ... you're discouraged then you think: Oh man, what does it help? Eventually you have a couldn't-care-less attitude you know, especially if it comes to the workplace. You don't anymore have that, you know there is an officer then you think: Oh man you say anyway I don't do anything, why should I get up and why would I now show any respect or something? No it makes you very negative ...this place makes you, especially if you work night shift, the heads, the officers know, everyone makes you feel 'to hell' and I, you're not even in the mood anymore that, no it makes you terribly negative, very, very negative."

- ✓ Deelnemer 8: “Man, ek is nie meer vandag se kind nie. Ek gaan maar vorentoe, ek wag vir pensioen. Waar sal ek heen gaan?”

Participant 8: "Man, I am not a child anymore. I go forward, I will wait for retirement. Where will I go?"

Stress generated by shift work can impact on the attitudes of shift workers towards their work. Negative attitudes might be attributed to personal problems that seem to be associated with shift work such as the disruption generated in a shift worker’s family life and in his personal activities. Health problems and work load also seem to contribute in lowering the morale, resulting in the lack of job satisfaction and commitment of shift workers. (Sulsky and Smith, 2005:104 and Swensen, Waselenski and Hartl, 2008:302).

❖ **Sub-theme 4.2: Promotions in the Department of Correctional Services**

In addition, night shift staff can develop problems with staff members who work day shifts, due to a possible lack of appropriate communication with regard to new developments in the workplace. This lack of communication with day shift staff as

well as with management might also impact negatively on anticipated promotions at work (Rivera [sa] and Waters, 2011).

Half of the participants in the study are of the opinion that working permanent night duty had a negative impact on their opportunities to be promoted in the Department of Correctional Services, while the other half does not feel that working permanent night duty will impact negatively on their opportunities to get promoted.

- ✓ Deelnemer 1: “Man, ek gaan nie sê dat ek enige, hoe kan ek sê, bevorderings of iets sal kry of so nie, want vanweë my nagdiens werkery het dit alles nou terug gegooi. Uhm, want ek meen, in die dag het jy tog take wat jy doen en by-take wat ‘n mens doen en so, maar in die nag het jy net, ek meen, wat doen jy, jy kom en jy sit, jy patroleer, jy sit, daar’s nie regtig, so ek dink dit het ‘n groot invloed gehad op my toekoms om myself te bevorder in die Departement. Dit het tog sy nadeel daarin voel ek.”

Participant 1: "Man, I'm not going to say that I will get any, how can I say, promotions or something or so, because of my working night shifts it threw all back. Uhm, because I believe in the day, you still have tasks you have to do and ad hoc tasks you do so, but at night you just, I mean, what do you do, you come and you sit, you patrol, you sit, there's not really, so I think it has a great influence on my future to promote myself in the Department. I feel it still has its downside in it."

- ✓ Participant 2: “I don’t think it will have a positive impact because, when you’re working night shift, there are no activities during night shift. The inmates are locked so you don’t handle complaints. Then I don’t think working night shift will help you to get promotion, because most of the activities that are done during the day...a...when you attend interviews, they ask about things that are happening during the day, not at night shift.”
- ✓ Deelnemer 3: “Ek glo nie ek gaan vorder as sodanig in Korrektiewe Dienste nie Jy’s uit die spotlight uit, jy’s nie in die, jy’s nie daar waar die verhoudings gevorm word nie. Ek wil half sê, jy’s minder blootgestel aan al die geleenthede.”

Participant 3: "I do not believe I will make progress as such in Correctional Services... you're out of the spotlight, you're not in, you're not there where relationships are formed. I want to say, you're less exposed to all the opportunities."

- ✓ Deelnemer 4: “Jy gaan baie sukkel om verder te kom as waar ons nou is en ek is nou maar op die, ek is op daai stadium wat ek sê nee ek is op ‘n aftree rang. Ek wag nou net, ek sal nou maar aangaan. Anyway, ek is té oud om iets anders te gaan doen.”

Participant 4: "You will have difficulty to get beyond where we are now and I am now on, I'm at that stage that I said no I'm on a retirement rank. I just wait, I will just continue. Anyway, I'm too old to do something else."

- ✓ Participant 5: "But I do believe that I won't be remaining at the very same standard where am I. I believe that with coming two to three years from now, two to three years I will be somewhere else to another level. It's what I do believe."
- ✓ Participant 6: "Promotion I don't think. Promotion is all about qualifications. As long as you are having the right qualifications you go to the interview, you passed it then you get promoted. Simple as that yah."
- ✓ Participant 9: "No, it doesn't have any impact. Because if you see a post and you want to apply for it, you can apply for it even if you're working night duty, even if it's ten years. Then if it's given to you, it's given to you, no problem."
- ✓ Participant 10: "Then, anything anyway can happen you see. Your promotion you can get even if you are working during the night because the record is there. The record what is happening during the night it is also the record that is happening during the day. I don't think you can lose some opportunities because everything is jotted down in the paper."

Night shift workers are not always as competitive as day workers. A lack of proper supervision at night can also have a negative impact on one's performance evaluation and consequently on promotion. This situation might therefore contribute to career stagnation instead of development (Williams, 1999).

❖ **Sub-theme 4.3: Performance bonuses**

Shift work and working long hours therefore appears to have a negative impact on the performance of shift workers. Working permanent night shifts for longer periods at a time, can cause sleep deprivation and fatigue in correctional officials and this will consequently have a negative impact on their ability to stay alert, to be vigilant, making the right decisions which might lead to high risk behaviour in the workplace and the inability to prevent possible escapes or dangerous incidents at night. Totterdell (2005:48) stated that shift work and long working hours have been connected with a wide range and significantly higher number of negative outcomes when compared to that of standard work schedules, but they are not necessarily high in overall terms.

In general, most of the participants in the study feel that working permanent night duty impacts negatively on their chances of being awarded merit awards or performance bonuses. Most participants indicated that it did not bother them that much, as many day duty officials also had not received merit awards or performance bonuses. It was clear that some of the participants in the study did not accept this state of affairs easily, as they felt that they were also working hard and meeting expectations and goals. There exists a general feeling amongst participants in the study that management does not recognise their efforts when working permanent night duty.

- ✓ Deelnemer 1: “Jy’t net gepatroleer en bewaak, dis al. Daar’s geen by-take wat jy gedoen het of iets ekstras wat jy gedoen het nie. Ja, so dit het ‘n groot invloed, daar’s op nagdiens sal jy dit nie kry nie, in elk geval, prestasie belongings en daai goeters nie. Dit is uit.”

Participant 1: "You just patrolled and guarded, that's all. There are no tasks that you have done or something extra you did. Yes, so it has a great influence, there's on night duty you will not get it, anyway, performance rewards and those things. It is out."

- ✓ Deelnemer 3: “Ek gee nie om nie, so ek, ek kry dit net eenvoudig nie. As jy nie rêrig waar moeite doen vir dit nie is die kans om dit te kry natuurlik zilch.”

Participant 3: "I do not care, so I, I just do not get it. If you do not really bother then the chance to get it of cause is zilch."

- ✓ Deelnemer 4: “Veral met meriete weet jy doen nie veel nie so jy moet ook nie veel verwag nie, want jy werk nagdiens. Dit is die siening tussen al die lede. Ek werk mos nie deur die dag met gevangenes en ek is mos nie heeldag besig nie.”

Participant 4: "Especially performance bonuses know, you do not do much so you should not expect much, because you work night duty. It is the view of all the members. I don't work during the day with prisoners and I'm not busy all day."

- ✓ Participant 6: “No one is gonna recommend you because most of our supervisors, managers are not there during the night. How can they see you that you are performing? When it's coming to achievement it's up to the managers actually and supervisors so that they can see how, how is your, how are you doing your work.”

- ✓ Participant 7: “Yes, I think it affects the achievement because of, they tell you about the night duty you're not doing anything just so that's the reason why we

don't get awards. I don't feel anything because of majority of people that are working day duty also they don't get the award."

- ✓ Deelnemer 8: "Omdat ons nagdiens werk dink hulle ons het minder om te doen, maar dit is nie so nie. Nou kwalifiseer baie van ons nou nie. Nogal sleg, want ek meen ek bring my kant. Ek is altyd by die werk, werk hard, so."

Participant 8: "Because we work night shift they think we have less to do, but it is not like that. Now many of us do not qualify. Pretty bad, because I think I do my part. I'm always at work, work hard, so."

- ✓ Participant 10: "No, because what I know is that what is happening during the day is the same thing that is happening during the night because during the day you've got supervisors and during the night you've also got people who are in charge of the prison. They can see your performance; they can mark on your performance."

Key findings in theme 4:

The participants in the study have different views on the impact that working permanent night duty has on their various careers. While some participants feel that they have stagnated and are only in line for retirement, there are some participants who still enjoy being employed by DCS. Many of these employees firmly believe that the manner in which management and other correctional officers are treating those officials, who work permanent night duty, is playing a significant role in the way participants feel about a career in DCS. Half of the participants in the study are convinced that working permanent night duty has a negative impact on their opportunities to be promoted in DCS, while the other half does not feel that working permanent night duty will impact negatively on their opportunities to get promoted. Participants in the study agree that working permanent night duty impacts negatively on their chances to receive merit awards or performance bonuses. Some participants claim not to be bothered by being excluded from the opportunity to be awarded performance bonuses, while others feel that they, too, work hard and deserve to be awarded performance bonuses. Participants in the study also agree that management does not recognize their efforts to work permanent night duty.

Lichtenberg (in Besthorn, 2013:180) states that the ecosystems perspective assumes that individuals have the capacity to overcome obstacles from external environments even if these individuals may have little chance of exercising their own will, especially when they feel that they are oppressed by certain institutions.

3.3.2.5 Theme 5: Challenges presented by working permanent night duty

Weiten (1992:158) gives prominence to the fact that shift work is common practice when one works as a nurse, pilot, police officer (correctional official) and many other industrial occupations, and that according to research, complaints of shift workers are well founded. It seems as though shift work has to deal with negative consequences only and these include greater exposure to health risks, more negative attitudes, decreased work performance and an increase in personal problems; all this when compared to day workers. Scott and Kittaning (2001) as well as Swensen, Waselenski and Hartl (2008:306) however, agree with Sulsky and Smith (2005:104) in that possible coping mechanisms exist as to shift work problems.

Two participants in the study are, however, of the opinion that permanent night duty officials experience no real challenges, although one of these two participants feels that the mosquitoes can really present a problem at times.

- ✓ Participant 7: “There’s no more challenges, there’s no movement. It’s only prisoners that are sleeping.”
- ✓ Participant 10: “The mosquitoes, it’s a challenge yes. You have to buy yourself things to feel better, that’s it. That’s the only challenge, but with the inmates, you don’t see an inmate in the night because they are sleeping. There’s actually no challenge, I think, the challenge can only be during the day.”

Theme 5 will be deliberate about the challenges of working permanent night duty as experienced by participants in the study. In sub-themes to theme 5, the focus will be on the challenges presented by the nature of the work as well as on the working environment of permanent night duty officials.

❖ Sub-theme 5.1: Working environment

The Community Law Centre (2000) mentioned that, in most cases, staff shortages during the night can be regarded as even more chronic compared to staff shortages that are experienced during the daytime. There is very often only one official on duty at night, compared to the four or five per section during the day. These staff shortages seem to contribute to high levels of stress, lack of motivation and feelings of being overwhelmed by the work load, especially as it is important that one has to be alert and vigilant at all times.

Three participants in the study agreed that staff shortages during the night present one of the greatest challenges that permanent night duty officials are experiencing. There is a distinct possibility of being overpowered by offenders trying to escape or pretending to be sick at night.

- ✓ Participant 5: “So the challenges that we are facing there are; there is a possibility that the inmates or the offenders are not sick but they pretend as someone is sick. We do open and they might overpower us and then you know we’ll end up in getting ourselves in trouble. And at the other hand again, the escape, most of the escape did happen during the night when they get out from the cell, is it possible that they might meet anybody whom they will find to the passage or to the other department, they might harm that particular official. So that’s why I said it’s a high risk more especially during the night, because manpower is less. So it’s where we said we’re working under the high risk, but we do understand that we declared that we can work under any circumstances.”
- ✓ Participant 6: “... you might find that you are relaxing, those people are busy cutting the cells and then which you’re alone in that unit you’re in deep danger if they can manage to come out you see, yah, that’s the thing that you need to try to avoid actually.”
- ✓ Participant 9: “...it’s frustrating, some of the inmates are getting ill during the night and then you have to remove some officials to take the inmate to the hospital during the night ... you find that one official works two units, which is a bit difficult for him because some they got four to five floors, then he has to be in his unit and the other body’s unit which is empty making it difficult. If anything happen in that unit, they will not be able to detect the time, what did happen and when because he was alone.”

Inadequate sleep impacts negatively on the shift worker’s ability to solve problems and the consequences in the correctional services context might include possible

escape of offenders as officers experience fatigue while trying to stay awake and while the brain tries to shut down at night (Swensen, Waselenski and Hartl; 2008:301).

❖ **Sub-theme 5.2: Nature of work**

Arousal levels in the body are parallel to the 24-hour temperature cycle and the mental and physical health of employees are determined by the tasks they perform at work, the time of the day they work their shift and for how long they have to work. Sleep deprivation affects one's ability to memorise and learn as well as influences the level of alertness and performance severely, especially between three o'clock and six o'clock in the morning (Swensen, Waselenski and Hartl, 2008:300 as well as Culpepper, 2010).

Two participants feel that having to stay alert over a period of twelve hours at a time, is challenging, while one participant is of the opinion that quick rotation shifts are challenging because there is little time to rest or to adjust.

- ✓ Participant 2: "You can't concentrate for about, if you are working for twelve hours, you can't concentrate for twelve hours and then, you will sometimes fall asleep, then it's not safe to sleep here. I was alone in the unit, so it's unsafe."
- ✓ Deelnemer 3: "My ou gesanik, ja as dit is om dit op 'n baie lang termyn, weet op 'n lang basis te doen, nie op 'n rotering, weet aan-af, aan-af nie. Ek sou dit sterk aanbeveel, met ander woorde, kry en op 'n vrywillige basis, 'n ou wat dit vir 'n tydperk doen dan kan jy daarna sê 'nee goed nou's dit 'n ander ou se beurt', maar ook weer vir 'n tydperk nie 'n week of twee dae of drie dae nie. Ek's heeltemal daarteen."

Participant 3: "My whining; yes if it is on a very long term, know on a longer basis not on a rotation, on-off, on-off. I would strongly recommend, in other words, get on a voluntary basis, a guy to work for a period, you can then say 'no good now it's a different guy's turn', but again a period not only a week or two or three days. I'm totally against it."

- ✓ Deelnemer 4: "Jy word twaalf ure daarbinne toegesluit. Al wat jy sien, as die besoeker kom en uhm jy kry glad nie ete nie, jy praat met niemand nie, behalwe as jy nou die telefoon het."

Participant 4: "You are twelve hours locked inside. All you see, if the visitor comes and uhm you do not have a lunch break, you don't talk to anyone, unless you phone."

Working permanent night duty is perfect for people who prefer to work on their own or who desire to be awake during the dark hours and who struggle to perform at work during the day (Rivera [sa] and Waters, 2011). Working by yourself can sometimes be to the detriment of other workers (Williams, 1999). Being secluded from other co-workers can also contribute to higher stress levels in some night shift workers. Older employees; those over the age of 40 or 50, experience more severe problems with regard to rotating shifts, sleeping difficulties and often experience disease or physical discomfort (Landy and Conte, 2007:431; Sulsky and Smith, 2005:106).

Key findings in theme 5:

The majority of the participants in the study felt that working night duty presented great challenges. Even a problem as trivial as mosquito bites can grow very irritating. One participant mentioned that, having to deal with the mosquitoes at night can present a real issue. Only two participants in the study believed that there are no challenges that permanent night duty officials experience. Staff shortages during the night are one of the greatest challenges that permanent night duty officials are facing. Participants in the study were concerned that inadequate staffing at night might cause them to be over powered by offenders who might then attempt an escape or who might pretend to be sick. Another serious challenge experienced by participants, is the difficulty they have to stay alert for twelve hours at a time. Quick rotation shifts are also challenging because they provide little time to rest or to adjust.

Friedman and Neuman (2011:13) indicate, from the ecosystems perspective, that problem solving skills and the ability to control and adjust to negative feelings are necessary in order to cope with challenges. The source of stress may have an external origin, but the need to be able to cope and to develop some defenses to

deal with the stress is related to internal anxiety that was created by the external stressor.

3.3.2.6 Theme 6: Correctional officials' coping strategies with working permanent night duty

Individual and situational factors such as set sleep patterns and workload, contribute to lack of sleep and lack of social skills that trigger different types of coping behaviour (Smith et al. in Totterdell, 2005:39).

During the discussion of theme 6 the focus will be on the coping strategies of participants when attempting to cope with working permanent night duty. Sub-themes that were identified and that will be addressed include the use of substances, regular leave taking and sick leave, conducting research and receiving training on working permanent night duty. Other coping strategies necessitated in order for permanent night duty officials to function effectively and enabling them to cope with the impact of working permanent night duty will also be researched.

❖ Sub-theme 6.1: The use of substances

Shift work can further behavioural patterns such as increased smoking and / or alcohol consumption detrimental to good health (Saunders, 2010). Scott and Kittaning (2001) accentuates the fact that up to 20% of people who work shifts, display high prevalence of illnesses related to chronobiologically and poorly planned shift schedules that usually include night work. A persistent and intense set of medical complaints which include behavioural changes and a frequent use of sleeping tablets are inevitable. These symptoms worsen with continued exposure to shift work and can consequently lead to a worker getting retrenched, an employee resigning or being involved in an accident.

One participant does not smoke or use alcohol at all. Four participants in the study indicated that they have never felt the need to use any substances to either stay awake or to be able to sleep. They do not smoke, but use alcohol recreationally as

social drinkers, not as abusers. This also holds true for one of the participants who smoke cigarettes. One of the participants in the study explained that he never used any substances to assist him with insomnia or to prevent him from falling asleep at work, though he, as well as two other participants mentioned that they smoke cigarettes and that they sometimes tend to smoke excessively. They believe this can be attributed to the high level of stress that they experience at work, as well as to boredom and loneliness at night. Three of the participants in the study used sleeping tablets to help them cope with insomnia, especially when they were really very over tired. One of these three participants also used 'Grandpa's' to help him stay awake and cope with night duty, while another participant had at least two red bulls or Powerade with him in order to help him stay awake. One of the participants in the study is of the opinion that drinking a lot of water will force the night duty worker to frequently use the toilet and that this will help him stay alert.

- ✓ Deelnemer 1: "Nee ek het nie sulke goed, middels gebruik nie om te slaap en goeters nie nee. Al wanneer ek nou sal drink (alkohol), is wanneer ons miskien vleis braai maar dit het nie my beïnvloed in my werk situasie of so nie nee".

Participant 1: "No I did not use such things, drugs, to sleep and stuff no. Even now I only drink (alcohol), when we might have a barbecue but it did not affect me in my work situation or so no."

- ✓ Participant 2: "No, I don't do drugs and I don't drink. I'll only drink on weekends but when I'm working then I don't take any alcohol".
- ✓ Deelnemer 3: "Ek rook glad nie. Alkohol sal ek neem net met geleentheid, met ander woorde as dit by 'n braai is of so iets. Ek persoonlik, nee weet, nee ek glo nie die nagdiens as sodanig het, was 'n faktor by meer drink of minder drink of *whatever* ook al nie. Ek dink as jy vooraf nie baie drank gedrink het nie, dink ek gaan dieselfde patroon voortgaan."

Participant 3: "I do not smoke. I'll take alcohol occasionally, in other words if it's a barbecue or something. I personally know no, no I do not believe the night shift as such, was a factor in drinking more or drinking less or whatever. I think if you had not drunk much alcohol beforehand, I think will the same pattern continue. "

- ✓ Deelnemer 4: "So twee tot drie maande het ek iets gebruik, 'n slaap pilletjie of 'n dingetjie om net aan die slaap te raak en dan maar ook weer dieselfde ding, toe begin ek, dis toe dat ek gesê het 'nee ek gaan dit maar los'. As jy daar wakker word is jy nog steeds moeg. Jy's nie, jy's nie uitgeslaap nie. Jy't nie 'n normale

slaap gehad nie, dis dit het my ook gepla toe sê ek 'nee ek gaan nie meer die pilletjies gebruik nie' en toe't ek maar so, so gewoonnd geraak. Ja, ek rook en natuurlik, 'n bewaarder drink 'n ou bietjie. Rook, meer ja rook baie meer ... ek wil nou nie vir jou lieg nie, ek het seker 'n pakkie en 'n half, twee pakkies 'n dag gerook deur die nag. Jy weet jy jy't niks om te doen nie, so en dit hou jou nogal besig. En as ek nog 'n ding kan byvoeg, sonder om te lieg, ek het nou nog die gewoonte as ek jou kan wys, in die nag uhm, ek kan seker maar noem 'Grandpa' ...dit het my baie wakker gehou uhm 'Grandpa's' en rook, dit het verskriklik gegaan."

Participant 4: "About two to three months, I used a sleeping pill or something a little thing to just fall asleep and then, but again the same thing when I started, that's when I said 'no I'll rather leave it'. If you wake up you are still tired. You're not, you have not been sleeping. You have not had a normal sleep, it bothered me then I say 'no I will not use the pills anymore' and so I got accustomed to that. Yes, I smoke and of course, a custodian official drinks a little bit. Smoke, yes smoke more ... I will not lie to you I've smoked about a pack and a half, to two packs a day through the night. You know you you've got nothing to do, so it keeps you pretty busy. And if I can add without having to lie, I still have the habit I can show, in the night erm, I can probably mention 'Grandpa' ... it made me very alert erm 'Grandpa's and smoking, it was hectic."

- ✓ Participant 5: "Not smoking, drinking sometimes when it is functions, sometimes. I'm not usually drinking."
- ✓ Participant 6: "...I started using the sleeping pill. I thought maybe I will, 'cause I was getting tired of sleeping net actually at the morning actually...I was using a sleeping tablets but my doctor recommended me that it's not good for me...for now I'm no longer using anything. When I am at the work so now I can use something to boost my system not to sleep. Actually I prefer a Red Bull ... that's the best ... maybe two per night ... each and every night when I come to the work then I think most of the time I'm bringing something that is gonna help me not to sleep. You smoke lots of cigarette 'cause sometimes you just smoking because you're having it and then you are getting bored, sometimes you feel like sleeping you say 'let me just smoke maybe I'll be better'. I'm not drinking, not at all."
- ✓ Participant 7: "No, I'm not smoking. No, I'm not drinking."
- ✓ Deelnemer 8: "Nee, nee niks, nog nooit gebruik nie. Dit hang af party keer rook ek meer as ander dae. Ek dink dis die stress by die werk. Partykeer op nagdiens, hier gebeur ook maar dinge en so aan."

Participant 8: "No, no, no, never. It depends sometimes I smoke more than other days. I think it's the stress at work. Sometimes during night shift, things happen and so on. "

- ✓ Participant 10: "Not something to stay awake but something to help me to sleep. I sometimes take some pills. ...then I take some pills, sleeping tablets. Then when I drink them I'll be well, I'll be fresh again. I'm not taking them always, sometimes I can go up to a month without taking them, then after a month I can take without taking them every day, maybe for that night, once, then I'll be okay, yah. You drink water the whole night because during the day we used to drink cold drinks, then during the night at least it's a better time for you to drink water. Water, water let you stay awake because each and every hour you have to go to the toilet then you stay awake. I'm not smoking, I'm not drinking alcohol."

Harold Thomas (in Josling, 1999) states that night duty workers are also more prone to increased body weight due to their abnormal eating habits and the lack of exercise. A large number of night duty workers are getting divorced, abuse substances severely, are depressed and are also more likely to view their jobs as stressful.

❖ **Sub-theme 6.2: Taking leave and sick leave**

Health problems and workload also contribute in reducing the morale, job satisfaction and the commitment of shift workers. This is usually related to the number of sick days on leave as well as the level of absenteeism involving shift workers and the turnover of shift workers (Sulsky and Smith, 2005:104 and Swensen, Waselenski and Hartl, 2008:302).

Information from the personnel files of participants indicated that three of the participants in the study tend to abuse leave and sick leave. This tendency caused these participants to exhaust their leave prematurely and consequently they have to take unpaid leave. The same three participants also have disciplinary cases against them, particularly for not reporting for duty.

One participant in the study indicated that he has a tendency to report sick or as having insurmountable difficulties when he feels frustrated at work. Two participants

prefer to take four or five days leave on a monthly basis, but gave the assurance that they don't use sick leave as an excuse not to work. Four participants mentioned that they usually plan their leave for specific periods. They also explained that the twelve hour shift pattern makes it easier for them to have longer periods of recovery without utilising too many leave days. Two participants in the study indicated that they do not plan specific periods to take their leave. They normally take leave when they have personal problems or when they feel they need time off in order to rest.

- ✓ Deelnemer 1: “Ag, ek vat. Ek bespreek nooit vooruit nie, ek vat maar soos ek nodig kry. As daar 'n persoonlike probleempie by die huis is of so. Dis minimaal dat ek nou sou sê, verlof bespreek dat ek vir 'n week of twee, ek vat dit maar soos ek dit nodig kry, twee dae hier of drie of vier dae daar. Siek verlof dieselfde, is maar as ek siek word dan sal ek die siek verlof gebruik; maar dis nie, ek sal nie siek verlof gebruik om te rapporteer as ek nie lus het om te kom werk nie.”

Participant 1: "Oh, I'll take. I never book beforehand, I take but as I need. If there is a personal problem at home or so, it's minimal I would say now, that I book leave for a week or two, I take it as I need it, two days or three or four days. Sick leave the same, but if I get sick then I will use the sick leave; but it's not, I will not use sick leave to report as I did not want to come to work."

- ✓ Participant 2: “I only take sick leave when I feel sick...it doesn't happen all the time. Every month, so I do take leave, about five days every month.”
- ✓ Deelnemer 4: “...veral as dit nou laat aflos, weet sulke goed kom. Dan raak jy vinnig frustreerd, dan bel jy sommer en sê 'Man ek vat nou siek verlof' jy weet. So jy gebruik dit nogal. Jy raak vinnig frustreerd uhm, daai frustrasie dan, man ek tel sommer op en ek bel 'ek gaan nie inkom nie, ek voel nie lekker nie of ek het goed wat ek moet doen'. Dis nie omdat ek verlof vat om te gaan vakansie hou nie, dis nie hoekom jy op nagdiens verlof rêrig vat nie ...dan wil jy nou maar net wys man, 'kom ek wys jou as ek nou vir 'n week af vat hoe gaan julle sukkel'.”

Participant 4: "... especially if it's late relief, such things. Then you become quickly frustrated then call you just say 'Man I take sick leave,' you know. So you use it quite... you get frustrated quickly erm, that frustration, man I pick up and I call 'I will not come in, I do not feel well or I have stuff I have to do'. It's not because I take leave to go on holiday, that's not really why you take leave on night duty. Then you just want to prove a point, 'let me show you if I'm off for a week how are you going to struggle."

- ✓ Participant 5: “I'm originally from Mpumalanga. I prefer to take my leave where I will take almost more than seven days. It's where I, I take almost after a month or two, it's where I take seven days off or seven days leave because I'm taking my

off mixing with some extra two days, taking my off, extra leave of three days, then it's three plus two adds two, it gives me seven days. So it's, I can say at once a month or after a month I'll be offing like that...to see my family at home. Sick leave you know it's not something that you can predict, it happen sometimes. It depends sometimes I can take three months without a sick leave."

- ✓ Participant 6: "...per month, I think I'll take four days leave. I'm not sure about sick leave. I'm just using, I'm just utilising my leave."
- ✓ Participant 7: "I don't take sick leave... only report sick when it's necessary. I like to take my leave in winter. You see, I don't take the leave unnecessary. In winter because of I'm training, I know it's cold so I can still go and train round about 10:00, 11:00, 12:00 because of it is hot. So, I don't take leave unless it's May or June, yes."
- ✓ Deelnemer 8: "Siek verlof bitter min, maar my verlof gebruik ek so, ek gebruik dit op elke jaar. Ek beplan. As ek voel my gestel is bietjie af, so dan vat ek twee tot drie dae om te rus."

Participant 8: "Sick leave very little, but my leave I use so I use it every year. I plan ...when I feel my system is a little off, then I take two to three days to rest."

- ✓ Participant 9: "I can take leave if I feel that I'm tired. I do take at least seven days off. I haven't taken a sick leave before in the past 22 years. No, I'm not sick. No, if I feel I'm not in the mood to work, I take a day of leave, I take a few days to rest at home."
- ✓ Participant 10: "Each and every year in February I like to take, I prefer to take them after all the festive season has gone, everything of the New Year is gone. Actually, after those seasons you feel more tired, then I prefer to take it from February at any time at least for two weeks. Sick leave goes about when you are sick then you can take it. Not because I'm not in the mood to work. This twelve hour shift it's nice because when you work three days, first now I'll work three days, I'll be off for two days. Then taking leave, when you put in two days you get three days off, you're the whole week out actually it cannot get to the situation where you can call and say I cannot come in, I'm sick as you got more days out. Yes I can say we've got more days now, once you take two days, it's a week."

Stress caused by shift work can impact on the attitudes of shift workers towards their work. Negative attitudes might be attributed to personal problems that seem to be associated with shift work such as the disruption caused in shift workers' family lives and their personal activities (Sulsky and Smith, 2005:104 and Swensen, Waselenski and Hartl, 2008:302).

❖ **Sub-theme 6.3: Doing research and receiving education on working permanent night duty**

Hossain and Shapiro (1999:295) are of the opinion that limitations to the management of shift-work disorder may include a lack of awareness as well as of education among shift workers and management who schedule shift work. The objective of education in the field of shift work is to decrease physiological, psychological and social implications related to shift work on a permanent or temporary basis, in order to improve individual tolerance towards shift work.

Two of the participants in the study were encouraged by both their supervisors and some of their managers to go for medical examination during the period of working permanent night duty. Seven participants in the study were never prepared for the challenges of working permanent night duty and were never assisted in any way to develop coping mechanisms in order to work permanent night duty. One of the participants only became aware of the value of regular medical examinations when he felt sick and consulted his medical practitioner, while another participant was of the opinion that it might be helpful if officials who consider working permanent night duty could be forewarned of challenges beforehand.

✓ Participant 2: “No, nobody”.

✓ Deelnemer 3: “Nee, nou leef jy in ‘n droomwêreld. Nie in DCS nie, nee.”

Participant 3: "No, now you live in a dream world. Not in DCS, no."

✓ Deelnemer 4: “Nou dat jy so praat, dit sal nogal ‘n goeie ding wees. Jy spring in die diep kant in en dan gaan jy skop om bo te bly, nee glad niks so iets nie.”

Participant 4: "Now that you mention it, it will be quite a good thing. You jump into the deep end and then you have to kick to stay afloat, no nothing like that."

✓ Participant 5: “Up to so far nobody, because I remember the other time when I went to the doctor and explain that I do have a headache and a stomach problem, he asked me ‘what kind of shift do you work?’ I told him, I said ‘I’m working permanent night shift’. He asked me these very same questions.”

- ✓ Participant 6: "... our supervisors, they most of the times they are telling us most of those things. I think they know very well 'cause some of them, most of the people they will tell you that night shift is not good for your health and then must, when you are working night shift you must do, most of the times you must do checkup. Not only checkup about your life, and then they do tell you about the prisoners inside."
- ✓ Participant 7: "No, never, yes."
- ✓ Deelnemer 8: "...niemand het my gesê nie, dat jy moet dokter toe gaan as jy nagdiens werk of so nie."
- Participant 8: "... no one told me that you must go to the doctor if you work night shift or so."*
- ✓ Participant 9: "...I did get the advice from some of the managers."
- ✓ Participant 10: "No one has encouraged me, no one again has lectured me to go and working it."

Scott and Kittaning (2001) as well as Swensen, Waselenski and Hartl (2008:305) additionally explain that family members also need to be included in the raising of awareness or educational process in order to develop individual coping strategies that enable shift workers to be successful and to reduce the staff ratio turnover for shift workers.

❖ **Sub-theme 6.4: Other coping strategies**

Sulsky and Smith (2005:104) as well as Swensen, Waselenski and Hartl (2008:306), agree with Scott and Kittaning (2001) that possible coping mechanisms concerning shift work stipulate that shift workers keep to a set sleeping routine. Meals should also be taken according to a set eating routine where shift workers try to keep to this routine. Regular exercise, but not later than two to three hours before bedtime, can also be helpful. Caffeine and alcohol intake should be limited. When sleeping during the day, the shift worker should try to choose the quietest room with soft lighting and no intrusive noise. Family members should be encouraged to recognise and respect the need for silence. Relaxing before going to bed is recommended, but the bedroom should only be regarded as a place of relaxation and sleep. Swensen,

Waselenski and Hartl (2008:304) further assert that it is advisable for shift workers to sleep for an hour or two, prior to going to work as this might delay the onset of fatigue during the shift.

Participants in the study also apply other strategies in order to cope with working permanent night duty, which include staying awake during the day on which your shift ends, ensuring that you get sufficient sleep, stay occupied with games such as Sudoku, exercising and pinching yourself.

- ✓ Deelnemer 1: "Wat ek gedoen het as ek nagdiens gewerk het en ek is vir die twee dae af, ek sal nie by die huis gekom het en gaan slaap het nie. Ek sou my besig hou met iets dat ek vanaand moeg is om te kan slaap."

Participant 1: "What I did when I worked night shift and I was off for two days, I would not come home and go to bed. I would keep myself busy with something so that I got tired to sleep at night."

- ✓ Deelnemer 3: "...probeer maar die beste en kry soveel slaap in as wat jy kan, maar ons weet almal, weet, dat die res van die wêreld kan nou nie gaan stil staan omdat jy nou nagdiens gewerk het en jy moet jou slaap inkry nie, maar jy probeer nou maar die ding normaal hou. Jy probeer die stilste plek waar jy gaan kry as jy moet gaan slaap, jy probeer donker kry en sulke goed."

Participant 3: "... try the best and get as much sleep as you can, but know, everyone knows, that the rest of the world cannot stop because you're working night shift and you need to have your sleep, but you try now to keep it as normal as possible. You try to get the quietest place you get if you have to go to sleep, you try to get it dark and stuff like that."

- ✓ Deelnemer 4: "Sudoku, glo vir my Sudoku werk. Uhm, partymaal dan loop ek en Sudoku speel. Party aande is dit bietjie erg, dan raak dit rêrig erg dan loop jy maar. Gelukkig ons het darem telefoon, dan tel jy op en jy bel maar die vriend langsaan..."

Participant 4: "Sudoku, believe me Sudoku works. Uhm, sometimes I walk and play Sudoku. Some evenings are a bit bad, then it gets really bad then you walk. Fortunately we have phones, then pick up the phone and you call the friend next door..."

- ✓ Participant 5: "I go to exercise before I go to sleep, so it doesn't give me a big effect at all. Since well I decided to take exercising before I go to sleep, most of the time it's where I realise that I'm sleeping better than if I just knock off and go to sleep."

- ✓ Participant 7: “I’m a sportsman, I’m running an athlete. So you see when you are doing sports you are always, your mind is always sober, you’re always flexed, always adjusting to something that you want to do. After you trained you want to sleep. Your body is want to rest so you don’t have to use anything because of your body is tired and your mind is tired.”
- ✓ Deelnemer 8: “Ja, ek probeer, ek oefen. Jy slaap in die dag, maar deesdae is dit so warm mens kan nie rêrig slaap nie. Stap maar bietjie of kyk TV. Ek gaan vang vis, gaan saam met familie uit, braai, kuier.”

Participant 8: "Yes, I attempt to, I exercise. You sleep in the day, but nowadays it's so hot you cannot really sleep. Walk a little or watch TV. I go fishing, go with family, 'braai'; socialise."

- ✓ Participant 9: “If I struggle to sleep, I wake up and do some work in the garden and cleaning the yard. After washing I will go back to sleep, if I don’t sleep I either watch TV. At night I used to wash with a bit of cold water, sometimes when you feel like sleeping you want to wash your face with cold water, and make some rounds so that you don’t sleep. I only drink water to refresh me.”
- ✓ Participant 10: “It’s easier for you to adjust especially if you can stop sleeping on your off day. Then on your day off then you sleep in the night, it is fine then you can continue again to sleep the other day.”

Other techniques that might assist in enhancing alertness during a shift, might include talking aloud, singing to oneself, listening to music, walking around, exposing oneself to a cold, refreshing breeze, slapping and pinching oneself, as well as splashing one’s face in cold water, but in the end sleeping is the best way of warding off fatigue (Swensen, Waselenski and Hartl, 2008:304).

Key findings in theme 6:

Coping strategies that participants utilize in order to be able to cope with the consequences of working permanent night duty, were discussed. Some participants in the study are not substance abusers and those who are using alcohol believe that working permanent night duty does not really impact on how often or how much alcohol they consume. Participants in the study who are smokers indicate that they normally smoke appreciably more while working night duty, as they sometimes feel bored or lonely and at times experience working night duty as being stressful. Some participants in the study are using sleeping tablets to aid sleep, especially on days

off and one participant also became dependent on 'Grandpa's to help him fight off fatigue while on duty. Other coping strategies involve going for a walk, splashing one's face with cold water, playing Sudoku, phoning a colleague from a different work section, drinking a lot of water, etc. Participants in the study mostly plan their leave and normally only take sick leave when they are sick, but there are three participants in the study who have to make a great effort to manage their leave and sick leave properly. This forced them to have to take unpaid leave at irregular times and also caused them to have disciplinary actions taken against them for not reporting for duty. Only two participants received training from supervisors and managers which prepared them to cope with unforeseen incidents. This was done before they started working permanent night duty, while the rest of the employees never received any information or education. One participant felt that it might be beneficial to correctional officials planning to work permanent night duty, to first receive some information and training.

Individuals rely on their own strengths and abilities to cope with stressful situations. From the ecosystems perspective it is regarded that an individual's coping ability is reduced when he feels that his resources are tapped. When this occurs, maladaptive defenses are raised (Friedman and Neuman, 2011:13).

3.3.2.7 Theme 7: Recommendations to assist towards the betterment of working permanent night duty

It seems as if shift work has negative consequences only (Sulsky and Smith, 2005:104). These consequences involve greater health problems, more negative attitudes, decreased work performance and an increase in personal problems when compared to issues faced by day workers. It is clear that there are several advantages as well as the disadvantages of working night shift. Personal preferences seem to play a role in how shift workers experience working night shift. Where the impact of working night shift can be regarded as an advantage to one person, another might regard it as a disadvantage.

Theme 7 focuses on what participants in the study felt could be done to improve their experiences of working permanent night duty. Sub-themes for theme 7 explain the role of management as well as the role of other officials in the improvement of circumstances when working permanent night duty.

❖ **Sub-theme 7.1: Management's role**

Totterdell (2005:40) mentions that models by Monk (1988) as well as by Olsson, Kandolin and Kaupinnen-Toropainen (1990) focus more on the shift worker's ability to cope with shift work. Shift work entails only one of a number of work stressors, the impact of which depends on the adaptability and coping strategies of the shift worker.

The general feeling amongst participants in the study is that it will be better if there are more officials booked to work night duty as it can reduce some of the stress when offenders get sick. More officials on night duty will increase the number of employees sharing the same difficulties empathising and communicating, which assist workers in staying alert and vigilant. Participants in the study feel that their efforts to work permanent night duty are overlooked and not fully appreciated. They will appreciate managers making the effort to get to know them or spend time talking to them when they come to visit at night, rather than them simply signing their books and leaving again. One of the participants feels that an increase in the amount entailed by night shift allowance will be greatly appreciated, while another participant believes that having a one hour break during the shift or alternatively reporting for duty an hour later or going off duty an hour earlier, will also make a difference. There is one participant however, who is satisfied with the system and enjoys working permanent night duty as the system is employed at the moment.

- ✓ Participant 2: "I think maybe if they utilise more officials during the night. Like in my case, I was alone in the unit, so it's unsafe. So if maybe they can utilise two to three officials during the night, then people will feel comfortable, they will feel safe to work night shift".
- ✓ Deelnemer 3: "...ek dink van bestuur se kant af is daar die opinie van: 'Nee man die ouens, hulle slaap mos maar op nagdiens.' So, weet dit is...dit word half in 'n,

'okay jy kry jou geld daarvoor' en dis verby. Ek dink hulle kyk baie ander omstandighede mis. Met ander woorde, dit moet baie meer gewig dra, uhm, nou nie vir my nie maar vir ander ouens, prestasie beoordelings en sulke goed. Dis 'n opoffering vir daai individu, uhm, en my opinie doen die teenoorgestelde. Dit word eerder in 'n negatiewe sin geïnterpreteer deur bestuur, as 'dis 'n opoffering van die individu' en in my opinie moet dit daai, daar moet daai houding skuif kom in bestuur."

Participant 3: "... I think management's side there is the opinion of: 'No man those guys, they sleep anyway on night duty.' So, know this; it is sort of, 'okay you get your money for it' and it's over. I think they miss many different circumstances. In other words, it should carry more weight, erm, not for me but for other guys, performance bonuses and stuff like that. It's a sacrifice for that individual, erm, my opinion does the opposite. It is rather interpreted in a negative sense by management, as it is a sacrifice of the individual and in my opinion there must be that attitude shift in management."

- ✓ Deelnemer 4: "... jy kan mense roteer of ekstra lede aanstel dat jy ten minste net iemand het om mee te kommunikeer of so ietsie, net 'n bietjie meer omgee vir die nagdiens lede ook, weet hulle aanvaar vinnig, veral die permanente werkers, hulle aanvaar vinnig 'nee jy werk nou hier jy sal nou maar daar werk'. Verder voel hy niks, hy, jy word min bedank vir iets veral as jy permanent werk."

Participant 4: "... you can rotate people or appoint additional members that you at least have someone to communicate with or something. Just a little more care for the night shift members now, they accept quickly, especially the permanent workers, they quickly accept 'no you work here now you will continue to work.' And he feels nothing, he, you receive little appreciation especially when working permanently."

- ✓ Participant 5: "...they can add some more members so that the strength or the numbers of the officials that are working for night shift should at least... They can be double to the number that they do work up to so far, because to really speak, is it easy for officials to be overpowered with inmates during the night because it's really less numbers. You find one, one, one, one per section of which it's a less numbers though we do give the support, we call each section to attend to that particular problem but still when I calculate it's less than, you find that it's less than ten officials."
- ✓ Participant 7: "I think maybe if they can give us the money for night duty, they can at least give us little bigger for the night duty, yes."
- ✓ Deelnemer 8: "Hulle kan gerus vir ons 'n bietjie 'n uur breuk gee, of later laat begin werk of vroeër laat huis toe gaan. Ons is hier van 18:00 – 06:00, ons het nie 'n uur breuk nie. Ja, hulle moet die mense bietjie prys en sê baie dankie vir

hulle werk, of bedank of belang stel. Kom besoek 'n mens en praat 'n bietjie. Moenie net kom besoek en 'alles reg' en loop nie. Doen daai ekstra moeite vir vyf minute en gesels bietjie met 'n mens. Ons is ook mense, ons werk nagdiens, maar ons is hier. Ons moet die plek oppas in die nag.”

Participant 8: "They can give us a bit of an hour break, or let us start later or leave to go home earlier. We are here from 18:00 to 06:00 we do not have an hour break. Yes, they can give a little praise and say thank you for your work, or thank them or show some interest... Come visit a person and talk a little. Do not just visit and 'everything in order' and leave. Make that extra effort for five minutes and talk a bit to a person. We are people, we work night duty, but we are here. We look after the place at night."

- ✓ Participant 9: “I think the Department can add some more officials during the night; more officials during the night will be far much easier.”
- ✓ Participant 10: “I think the system is right, the system is fine there’s nothing wrong, the system is okay. I don’t know what they can change, but the system is fine.”

In most cases staff shortages during the night can be regarded as even more chronic compared to staff shortages that are experienced during the day. Very often only one official is on duty compared to the four or five per section during day shifts. These staff shortages seem to contribute to high levels of stress, lack of motivation and feelings of being overwhelmed by the work load, especially since it is important that employees be alert and vigilant at all times (The Community Law Centre, 2000).

❖ **Sub-theme 7.2: The role of other officials**

Common stressors at work may include heat, cold, noise, duty stressors, work load, work pace and time pressure, work schedules including shift work schedules, interpersonal demands and conflict, situational constraints, perceived control, emotional labour as well as traumatic work stressors such as workplace violence (Landy and Conte, 2007:421).

One participant believes that other correctional officials should be able to improve the circumstances for permanent night duty officials. He is not always able to have

an opportunity to attend functions arranged at the centre or at the management area as he has to work permanent night duty. This contributes to the feeling of being isolated from other correctional officials.

- ✓ Deelnemer 4: "Hulle sal nie vir jou sê: 'hoor hier, kom bietjie na ons funksie toe ons sal reël dat iemand wat nie na die funksie toe kom nie, dat hy nagdiens werk'; jy voel heeltemal uitgeskuif."

Participant 4: "They will not tell you 'listen here, come to our function we will arrange for someone who does not come to the function, that he will work night shift'; ... you feel completely excluded."

While some employees might prefer to work on their own, it can sometimes be to the detriment of other workers (Williams, 1999). Being secluded from co-workers can also contribute to higher stress levels in some night shift workers.

Key findings in theme 7:

Having more officials on duty during night shift can reduce some stress when offenders get sick. It will also help to have someone to talk to and to stay alert and vigilant. Efforts at working permanent night duty are simply taken for granted as participants feel that managers should make an effort to get to know them better or spend more time talking to them when they come to visit at night, rather than just to sign their books and leave again. A larger night shift allowance and an hour long break during the shift, or at least reporting for duty or giving notice of leaving work an hour later or earlier can also make a difference. Other correctional officials can also improve the circumstances of permanent night duty officials by relieving them when they need to attend functions arranged at the centre or at the management area, as this would limit the feeling of isolation.

Power is emanated by external sources. Dominant groups normally use their power or position to influence other groups through interaction and this control might include the ability to withhold resources (Friedman and Neuwman, 2011:14). The abuse of power or position by dominant groups can also be regarded as a source of tension in the person-environment interaction.

3.4 Summary

In this chapter the researcher deliberated about the methods that were used during the study, while also investigated the way in which the empirical study was to be conducted. This chapter was an endeavor at discussing the second objective of this study, namely exploring the positive and negative impact of working permanent night duty on correctional officials at the Kgoši Mampuru II Management Area. Findings arrived at during the course of the study, were presented in a descriptive manner, as this was a qualitative study. Themes and sub-themes were identified during the process of data analysis and were supported by direct verbatim quotes from the interviews with participants in the study. These were also substantiated with informational notes.

The following subject matter was identified and discussed according to sub-themes:

- Theme 1: Correctional officials' views on the different shift patterns in the Department of Correctional Services.
- Theme 2: Impact of permanent night duty on the health of correctional officials.
- Theme 3: Impact of permanent night duty on social life / relationships.
- Theme 4: Impact of permanent night duty on correctional officials' careers in the Department of Correctional Services.
- Theme 5: Challenges presented by working permanent night duty.
- Theme 6: Correctional officials' coping strategies with working permanent night duty.
- Theme 7: Recommendations to assist towards the betterment of working permanent night duty.

Chapter 4 will focus on discussing the third objective of this study, namely to draw conclusions from the study and to make recommendations concerning employee work place support to correctional officials working permanent night duty, based on the findings of the study.

Chapter 4

Summary, conclusions and recommendations

4.1 Introduction

The previous chapter involved a dissertation of the methods used by the researcher while conducting the empirical study in an attempt at addressing the second objective of this study, namely exploring the positive and negative impact of working permanent night duty on correctional officials at Kgoši Mampuru II Management Area.

This chapter will focus on discussing the third objective of this study, namely making recommendations towards employee / workplace support lent to correctional officials working permanent night duty, based on the findings of the study.

4.2 Summary

4.2.1 The objectives for the study

Three objectives were formulated for this study in order to simplify achieving the goal of the study and finding answers to the research questions set.

- ***To explore night duty as a phenomenon.***

This objective was achieved in chapter 2 through a literature review on working night duty as a phenomenon. The literature review focused on the theoretical framework, and specifically on the ecosystems perspective, shift work in the Department of Correctional Services, models for shift work, health related aspects with regard to shift work, the possible positive and negative impact that working permanent night duty could exert on the physiological, psychological, social and behavioural contexts of the shift worker's life. It additionally focused on the advantages and disadvantages of working shifts and the coping mechanisms established.

Correctional facilities have to be staffed twenty four (24) hours a day and therefore correctional officials have to work fixed or rotating shifts in order to ensure that there are always staff members on duty as these are to take care of the needs of offenders. Circadian systems are disrupted when working night shifts and rotating shifts. Fatigue sets in and encourages impairment of attention span, impaired vigilance, poor concentration, a shorter memory span, and the slowing down of mood- and reaction times. The impact of intolerance towards and the inability to cope with shift-work is usually ignored by employers and ignored with regard to the clinical and socioeconomic outcomes. Management and medical staff also seem to have a tendency to view employee complaints of shift-work intolerance with scepticism. This ignorance then leads to lack of appreciation and neglect of treatment of the symptoms, contributing to these disorders becoming serious health concerns.

- ***To explore the positive and negative impact of working permanent night duty on correctional officials at the Kgoši Mampuru II Management Area***

This objective was achieved through an empirical study that was discussed in chapter 3. A qualitative research approach was followed in order to conduct a collective case study with ten participants from one correctional centre at Kgoši Mampuru II Management Area. Semi-structured one-on-one interviews, as well as documented studies of their personnel records were used in order to collect data. Findings of the empirical study were presented in a descriptive manner and supported by direct / verbatim quotes from the interviews with participants in the study. This was also substantiated with literature and assisted the researcher in gaining a better understanding of what the positive and negative impact of working permanent night duty on correctional officials at Kgoši Mampuru II Management Area entailed.

The following themes were identified from the data collected and discussed in context with sub-themes:

- Theme 1: Correctional officials' views on the different shift patterns in the

Department of Correctional Services.

- Theme 2: Impact of permanent night duty on the health of correctional officers.
 - Theme 3: Impact of permanent night duty on social life / relationships.
 - Theme 4: Impact of permanent night duty on correctional official's career in the Department of Correctional Services.
 - Theme 5: Challenges presented by working permanent night duty.
 - Theme 6: Correctional officials' coping strategies with working permanent night duty.
 - Theme 7: Recommendations to assist towards the betterment of working permanent night duty.
- ***To make recommendations regarding employee workplace support to correctional officials working permanent night duty based on the findings of the study.***

Chapter 4 provides recommendations based on the findings from the empirical study that was discussed in chapter 3. Working permanent night duty should be considered on a voluntary basis after having consulted with immediate family members. It is preferable to work permanent night duty when one is still young and able to adjust to the different shift patterns. Before starting to work permanent night duty, it would be advisable to receive some training on coping with the challenges that working permanent night duty present, as concerns correctional officials' physical and mental health, social and family relationships, as well as his / her career. Regular medical examination and follow-ups can ensure early identification of symptoms related to shift-work disorders and can prevent the shift worker from developing serious chronic health conditions. Greater appreciation from other correctional officials as well as support from management will also make it easier for permanent night duty officials to cope with the challenges of working permanent night duty.

4.2.2 Goal of the study

The researcher formulated three objectives for the study according to which the study was planned and conducted. By means of achieving the objectives of the study, the researcher also managed to achieve the goal of the study. The goal of the study was:

- **To explore the positive and negative impact of working permanent night duty on officials in the Department of Correctional Services.**

The exploration of the negative and positive impact of working permanent night duty on officials in this study, showed an interesting variety of outcomes of both a positive and a negative nature on officials working permanent night shift. This information assisted the researcher in gaining insight and an improved understanding of the impact of working permanent night shift on participants. Seven themes reflecting these impacts were thematically analysed and these included:

Theme 1 focuses on how participants' attitudes regarding the old shift patterns (eight hours), that they used to work, compare to the new shift pattern (twelve hours), that they are currently working and which was implemented in July 2009. Correctional officials' feelings regarding working permanent night or day duty or rotational shifts were shared in combination with their reasons for working permanent night duty. Sub-themes further focused on participant's assessment on how long they believed they could still continue working permanent night duty and whether they felt they could recommend working permanent night duty to other correctional officials in DCS.

Theme 2 described the impact of working permanent night duty on the health of the participants. Sub-themes, that were discussed, included the impact of working permanent night duty on participants' sleeping patterns, diet or intake of nourishment, physical health, mental health and the impact of working permanent night duty on the use of medication or treatment.

Theme 3 reflected the impact of working permanent night duty on the social lives and relationships of participants in the study. Sub-themes on relationships that were looked at, included discussions on how working permanent night duty impacted on interaction in the immediate family, including the impact of working permanent night duty on relationships with participants' wives or partners, relationships with their children as well as relationships with extended family members, friends and colleagues.

Theme 4 illustrated the way in which participants in the study interpret their own feelings about their career in DCS. Participants also shared their views on the impact of working permanent night duty on their opportunities of being promoted as well as on their chances to qualify for performance bonuses.

Theme 5 reflected the challenges of working permanent night duty, with sub-themes focusing on the challenges posed on the quality of the work as well as on the working environment.

Theme 6 showed the coping strategies of participants employed in order to cope with working permanent night duty. Sub-themes included the use and abuse of substances, taking leave and sick leave, doing research and receiving training on working permanent night duty, as well as illustrating other coping mechanisms that permanent night duty officials employed in order to enable them to cope with the impact of working permanent night duty.

Theme 7 focused on what participants in the study felt could be done to achieve improved experiences and adapt better at working permanent night duty. Sub-themes explained the role of management as well as the role of other officials in the improvement of working permanent night duty conditions.

4.2.3 The research question

The following research question was formulated:

- **What are the positive and negative impacts of working permanent night duty on officials in the Department of Correctional Services?**

Through this study the researcher was able to develop an understanding of how working permanent night duty impacted on participants' physical and mental health, social and family relationships, as well as on their attitudes concerning a career in the Department of Correctional Services and their productivity in the workplace. This improved understanding of the impact of working night duty was made possible through the interpretation and thematic analysis of the seven themes and sub-themes, as indicated in the discussion of the goal of the study.

4.3 Conclusions

At the outset conclusions will be discussed with regard to the literature study and, secondly, there will be discussion on the conclusions as regards the research methodology. Thirdly, a discussion of the conclusions on the key findings of each theme, as researched in the empirical study in chapter 3, is included.

4.3.1 Conclusions regarding the literature study

Shift work seems to be a phenomenon that is increasing at world scale proportions in different types of industries. Shift workers do not seem to experience any serious health problems when their illnesses are compared to that of the general public, irrespective of the number of health problems, including stress-related problems that were detected in shift workers. Circadian rhythms in human beings determine that their lives and activities evolve around daytime activities mainly, while they are usually inactive during night time. Most people do not always function well at night, as the body functions are at its lowest levels during the night and as these functions normally peak during the day. It is important to have an understanding of the way in which the body functions and how changing normal routines affects a person physically, in order to be able to comprehend the positive and negative impact of working permanent night shift. A physiological difference exists between nightly sleep patterns and daytime sleep

patterns. Unusual sleep patterns impact on one's behaviour and additionally contribute to psychological differences. Correctional centres, as a consequence, have to be staffed over a period of twenty four hours a day in order to ensure that the needs of offenders are taken care of. As a consequence, a need for correctional officials to work different shift patterns exists, which include permanent night duty. Staff shortages, experienced in correctional centres at night, causes complications when correctional officials are forced to cope with the demands of working permanent night duty, and can therefore contribute to high levels of stress, lack of motivation, and feelings of being overwhelmed by the work load, especially as it is important to be alert and vigilant at all times. Permanent night shifts furthermore cause disruption in the shift worker's social and family life, as they cause the shift worker's daily schedule of work and rest to be out of phase with that of the family, friends and community life. A greater amount of problems are experienced in shift workers' personal lives which include more severe marital dissatisfaction, higher divorce rates, more family conflict, greater emotional problems as well as poorer school achievements in the children involved. There are many advantages and disadvantages with regard to working permanent night duty and the way in which correctional officials experience working permanent night duty. What one person regards as an advantage, another person might regard as a disadvantage and this, in due course, determines the extent to which the correctional official will be able to cope with the demands of working permanent night duty.

The ecosystem perspective used as theoretical framework in this study, serves to investigate the personal experiences of individuals in their environment, as well as the relationships involving individuals and other systems in the environment. Permanent night duty officials influence an integral part of the family system and move amongst their own circles of friends, but they form part of the Department of Correctional Services where they are not only employees, but also colleagues. In order to understand the positive and negative impact of working permanent night duty exerted on officials in the Department of Correctional Services, one

has to fully understand that all these systems are dynamic. Consequently, it is normal that the interaction of all these systems and the environment can cause stress or tension. There is a continuous need for systems to restore the balance, and therefore it is necessary that these systems be adapted to changes that are taking place. Permanent night duty officials constantly have to adjust to all the changes they experience in their daily routines, as these also impact on their family members as well as on their relationships at work and with friends. Tension that is brought about by the impact of their shift patterns on family time as well as on their daily routine (e.g. with regard to eating and sleeping), might contribute to physical and mental health problems, if these are hard to adjust to. Permanent night duty officials experience working permanent night duty from their personal perspective with regard to age, gender, culture, physical and emotional states as well as experiences. These different perspectives determine that, what one person experiences as stressful might not prove stressful to another person. They all have different ways of coping with these stressors and where one person might find it easy to adjust to the changes, another might find it difficult to adjust. Some families find it easy to adjust, while others struggle to cope with change and therefore, working permanent night duty will impact differently on all systems and relationships.

4.3.2 Conclusions regarding the research methodology

Making use of a qualitative research approach with a collective case study research design was appropriate for this study, as it assisted the researcher in gathering rich data and gaining insight on the way in which participants in the study experience working permanent night duty. Semi-structured one-on-one interviews and document analysis of public records, such as personnel files, were used successfully to collect data. A set of pre-determined questions that is integrated in an interview, worked well to assist in guiding and giving meaning to the interviews. Official documents, such as individual personnel records as well as leave and sick leave records, were relevant in confirming some of the data that was collected during the interviews. The research population for this study

included all the correctional officials who were permanently working night duty at all the correctional centres in Gauteng. Only a few correctional officials work permanent night duty and therefore non-probability volunteer sampling was successfully used as sampling technique. Ten (10) participants from one of the correctional centres at Kgoši Mampuru II Management Area, volunteered to be involved in the study. Written informed consent was obtained from participants in the study in order to conduct interviews, make audio recordings and consult personnel files. The interviews were afterwards transcribed verbatim by the researcher. The researcher is of the opinion that conducting research in focus groups, with permanent night duty officials, could possibly have provided yet more meaningful information to the study, but conditions at the centre at night, made it difficult for focus groups to be conducted, as there were only a few officials on duty during the night shift. Making use of colour and symbols assisted the researcher in generating seven themes with sub-themes from the data that was collected. A general profile of the participants was provided, while a thematic analysis was provided on both themes and sub-themes. Literature and verbatim quotes were appropriately used to substantiate the findings of the study.

4.3.3 Conclusions regarding the research findings

Seven themes with sub-themes were identified during the thematic data analysis, as illustrated in Table 2:

TABLE 4.1: THEMES AND SUB-THEMES

THEMES	SUB-THEMES
<p>Theme 1: Correctional official's views on the different shift patterns in the Department of Correctional Services.</p>	<ul style="list-style-type: none"> ❖ Old shift patterns (14:00-22:00 & 22:00-06:00) <i>versus</i> new shift patterns (18:00-06:00). ❖ Permanent night or day duty <i>versus</i> rotation shifts (Day – Night). ❖ Reasons for working permanent night duty.

	<ul style="list-style-type: none"> ❖ Period working permanent night duty. ❖ Recommending working permanent night duty to other correctional officials.
<p>Theme 2: Impact of permanent night duty on the health of correctional officials.</p>	<ul style="list-style-type: none"> ❖ Sleeping patterns. ❖ Diet / Eating routines. ❖ Physical health. ❖ Mental health. ❖ Use of medication / treatment.
<p>Theme 3: Impact of permanent night duty on social life / relationships.</p>	<ul style="list-style-type: none"> ❖ Impact on interaction in the immediate family. ❖ Relationship with wife (marital partner) / partner. ❖ Relationship with children. ❖ Relationship with extended family members. ❖ Relationship with friends. ❖ Relationship with colleagues.
<p>Theme 4: Impact of permanent night duty on correctional official's career in the Department of Correctional Services.</p>	<ul style="list-style-type: none"> ❖ Correctional official's feelings about their career. ❖ Promotions in the Department of Correctional Services. ❖ Performance Bonuses.
<p>Theme 5: Challenges presented by working permanent night duty.</p>	<ul style="list-style-type: none"> ❖ Working environment. ❖ Nature of work.
<p>Theme 6: Correctional officials' coping strategies with working permanent night duty.</p>	<ul style="list-style-type: none"> ❖ The use of substances. ❖ Taking leave and sick leave. ❖ Doing research and receiving education while working permanent night duty.

	❖ Other coping strategies.
Theme 7: Recommendations to assist towards the betterment of working permanent night duty.	❖ Management's role. ❖ The role of other officials.

The following conclusions are made, based on the key findings of the study as discussed following each theme in chapter 3.

4.3.3.1 Theme 1: Correctional officials' views on the different shift patterns in the Department of Correctional Services

Prior to July 2009, night duty consisted of two shift patterns; 14:00 to 22:00 and 22:00 to 06:00. After July 2009, the Department of Correctional Services embarked on the seven day establishment and consequently combined the two night shifts to one twelve hour shift, extending from 18:00 to 06:00. Correctional officials have different preferences with regard to working the old or new shift patterns, as well as with regard to working fixed or rotation shifts. Both the old and new shift patterns, as well as the fixed or rotation shift patterns, present advantages as well as disadvantages.

- The twelve hour shifts are very long and cause correctional officials to lose concentration, while an eight hour shift is ideal if the employee simply intends to finish the shift.
- One of the biggest problems encountered with the eight hour shifts, was that relief workers did not always report for duty at 22:00. This tardiness created problems in that participants could not go off duty and leave their posts unmanned. In some cases night duty officials struggled to find transport home and there were no rooms available for them to sleep in, if they could not go home at 22:00. The twelve hour shift starts and ends when transport is still available, and those on relief duty have to report for duty in the morning.
- When the eight hours shifts were in place, participants had to work for ten or twelve consecutive days and only had two days off, but with the twelve hour

shifts they have to work for two days, rest for three days, work for three days, then rest for two days. Correctional officials have less family time on their working days with the twelve hours shifts, but they have more off duty days in between shifts which could be spent with their families. It was physically taxing to work for ten or twelve consecutive days and rest for two days, but more time was available in the evenings to spend with families when the old shifts started at 22:00. There was also more time to rest between the different shifts.

Correctional officials also disagree with regard to preferences for working fixed day or night shifts, compared to working rotation shifts (night shift, day shift, night shift). Working rotating shifts might contribute to more time spent at home more often during the evenings, but it is more difficult to adjust to the shift pattern if the rotation takes place over a short period. Older participants find it even more difficult to adjust to the rotating shift pattern, especially when the rotation extends over a short period.

Personal reasons or individual circumstances, determine why correctional officials volunteer or request to work permanent night duty. Possible reasons for being in favour of working permanent night duty include family responsibilities or circumstances, financial problems, studies, transport arrangements and offers to assist in addressing the shortage of officials on night duty. Working permanent night duty can be seen as a possible solution to problems and is a preferred shift pattern for some correctional officials, but there is a stage at which these correctional officials feel that they need to take a break from working permanent night duty. When correctional officials change their shift pattern to work permanent day duty or rotating shifts, they tend to find it difficult to adjust again and once they have managed to adjust, they find it difficult to return to working permanent night duty. Although working permanent day duty seems to be the ideal shift pattern for some officials, it is not without challenges of its own.

Working permanent night duty could therefore be recommended to young officials planning to further their studies. Permanent night duty, however, needs to end at some stage and should not be extended over a very long time, (approximately three to four years would be recommended).

4.3.3.2 Theme 2: Impact of permanent night duty on the health of correctional officials

In most of the cases where correctional officials volunteered to work permanent night duty, they reported fewer physical or mental health problems. In general, some of the health problems that were reported by permanent night duty officials included fatigue, lack of energy, lack of concentration, headaches, irritability, eyesight, high blood pressure and gastrointestinal or stomach ailments. Most of these problems could be ascribed to a lack of proper sleep as well as poor diet and irregular meal times.

Inconsistent sleeping patterns have the greatest effect on correctional officials with regard to health related matters. The quality and duration of sleep during the day as well as during their off duty nights have a negative impact on permanent night duty officials. Participants in the study, however, are of the firm belief that one can adapt to little sleep.

Correctional officials, who work permanent night duty, have their meals later at night, when it grows quieter in their units. Diets consist mostly of food that is quick and easy to prepare or cooked food that has been packed by their wives and that they only need to warm up when they wish to eat it. Sometimes, take-away foods are ordered and there is a tendency for correctional officials to eat more during the evenings, compared to what they eat during the day. Working permanent night duty on the other hand, also impacts negatively on correctional official's appetite and this causes some of them to eat less than what they normally would. Changes concerning eating habits and diets of correctional officials who work permanent night duty, therefore impact on their ability to

manage their weight, as some officials tend to gain weight. Mealtimes on their off days can sometimes be a problem, when correctional officials prefer to eat later than the rest of the family do, and their family members expect of them to be sociable and eat with the rest of the family.

Working permanent night duty can cause correctional officials to feel isolated, either due to the shift pattern, or as a result of them being tired and preferring to be left alone. This, together with some personal problems, may contribute to said correctional officials feeling depressed, which can be potentially dangerous when placed on their own at posts where firearms are provided as part of their required equipment for that specific post.

In cases where correctional officials are suffering from chronic conditions such as high blood pressure, working permanent night duty can cause their medication not to be as potent as it used to be. Changing the time, at which the medication is taken, can help to enhance the effectiveness of the medication.

4.3.3.3 Theme 3: Impact of permanent night duty on social life / relationships

The impact of working permanent night duty on the correctional official's family relationships, especially on their relationships with their wives, is of far greater consequence than are implications for any of the other areas in their lives affected by working permanent night duty. The decision to work permanent night duty has to be one agreed upon in a family. Although everyone might agree to it in the beginning, there might be a time at which one has to reconsider the arrangement since working permanent night duty can sometimes have an irreversible negative impact on the marriages of correctional officials who work permanent night duty. Communication in the marriage is affected and this may result in couples drifting apart. It is therefore important for someone who works permanent night duty, to make an effort to spend time with his or her family. This could either be achieved in the afternoon before going to work, or in the mornings when employees return home from work, as well as on off days.

Correctional officials have conflicting views on how working permanent night duty impacts on their relationships with their children. Parents cannot expect their children to fully understand the consequences of working permanent night duty, as it does not form part of a child's frame of reference. Depending on the age of the child, some children may draw the conclusion that their fathers do not want to be with them, while some children may feel that their fathers are at home over very long periods of time, especially during school holidays. Working permanent night duty, however, creates the opportunity for correctional officials to get involved in coaching sport at school or to taking children for training sessions attending matches, while it could be difficult to attend events such as concerts or parent evenings, as these are normally scheduled for the evenings. These absences could be difficult for children to interpret as their fathers are available in the afternoons to attend their school activities, but not in the evenings.

The impact that working permanent night duty can have on relationships with extended family members is not as important to correctional officials as is the impact of working permanent night duty on relationships with partners or children. Correctional officials who work permanent night duty tend to distance themselves from friends and would prefer to rather spend time with extended family members. Permanent night duty officials have to juggle their off time between partners and children, as well as create opportunities to attend family gatherings and celebrations. Extended family members and friends are not always supportive when correctional officials cannot spend time with them when they indicate that they have to go on duty. The new shift arrangements, however, do not make it obvious to friends and relatives that they are working permanent night duty, as they usually see them at home.

Working permanent night duty can also cause correctional officials to feel isolated from their colleagues who work other shift patterns. In some cases permanent night duty officials feel that their colleagues try to discourage them

from working permanent night duty, even though not many officials are prepared to work the shift.

4.3.3.4 Theme 4: Impact of permanent night duty on correctional officials' careers in the Department of Correctional Services

There are conflicting views on how working permanent night duty impacts on correctional officials' attitudes concerning their careers in the Department of Correctional Services. Correctional officials also have conflicting views on how working permanent night duty impacts on their opportunities for future promotions in the Department of Correctional Services. The general feeling is that working permanent night duty has a negative impact on correctional official's chances to receive performance bonuses. Some correctional officials feel grateful for what they have learned and achieved during their years of service in the Department of Correctional Services, but there is also the feeling that the way management and other correctional officers are treating those officials who work permanent night duty, plays a significant role in the way they feel about their careers in the Department of Correctional Services.

In most of the cases correctional officials who have had many years of service in the Department of Correctional Services and who have worked permanent night duty for many years feel that they have achieved retirement status and that their chances of being promoted to a higher rank was negatively affected by them working permanent night duty. Correctional officials who have completed fewer years of service in the Department of Correctional Services and who have not worked permanent night duty over a long period of time, still have positive expectations that permanent night duty officials have a chance of being promoted when applying for promotion. Some correctional officials believe that their qualifications will assist them in being promoted in the Department of Correctional Services, while others who have worked permanent night duty in order to further their studies, feel that all their qualifications cannot have a positive impact, as working permanent night duty for many years has already

impacted negatively on their career opportunities. This is due to a lack of experience in different work related areas where officials who work day duty are acknowledged. There is also a general assumption amongst management and correctional officials, who are working different shift schedules that permanent night duty officials sleep while on duty.

Permanent night duty officials share the feeling that working permanent night duty impacts negatively on the opportunity to receive merit awards or performance bonuses. In many cases permanent night duty officials feel that not receiving merit awards or performance bonuses is not of major importance, as many deserving day duty officials also do not receive merit awards or performance bonuses. There are those permanent night duty officials who feel that they also work hard and do what is expected of them and therefore would like to receive these bonuses. Permanent night duty officials therefore feel that management does not recognise their efforts of working permanent night duty.

4.3.3.5 Theme 5: Challenges presented by working permanent night duty

Challenges experienced by correctional officials who work permanent night duty vary from those as insignificant as being exposed to mosquitoes, to threats as serious as the dangers posed by offenders who can manage to overpower the few officials who are on duty during the night shift.

Staff shortage during the night is the greatest challenge that permanent night duty officials experience. There is very often only one official on duty, compared to the four or five per section during the day. This is an even greater challenge when offenders become sick at night and need to be taken to hospital for treatment. Being the only official in the unit and having to call and rely on officials from other units to assist, leaves a window of opportunity for offenders to plan an escape, as officials can never be sure who is feigning to be sick and who is seriously ill. These staff shortages contribute to high levels of stress, lack of

motivation and feelings of being overwhelmed by the work load, especially as it is important that night staff has to be alert and vigilant at all times.

Working for twelve hours on end without having any breaks and without anyone to communicate with is challenging to permanent night duty officials, as one tends to lose concentration and tends to grow drowsy between three o'clock and six o'clock in the morning.

4.3.3.6 Theme 6: Correctional officials' coping strategies with working permanent night duty

Not all correctional officials who work permanent night duty use substances to assist them in order to sleep during the day or during their off duty nights or to assist them in staying awake while they are on duty. Personal preferences also play a role in the methods that correctional officials choose to apply in order to cope with working permanent night duty.

Some officials who experience severe fatigue or stress consult their medical practitioners for a prescription of sleeping tablets. These prescriptions are normally taken when correctional officials are off duty and are struggling to sleep. Some officials believe that taking sleeping tablets occasionally, helps them to sleep properly and leaves them feeling rejuvenated. There are other officials who experience the opposite, as the tablets cause them to feel even more tired and not well rested.

Correctional officials who work permanent night duty and use alcohol in moderation when they socialising with family members or friends, will not necessarily abuse alcohol in order to be able to cope with the effects of working permanent night duty. Correctional officials who smoke cigarettes, however, tend to smoke more, especially when they are on duty. Smoking cigarettes during a shift helps them pass the time and assists them in staying awake. Correctional

officials are aware that they tend to smoke more while on night shift and some of the officials are concerned about their smoking habits at work.

Other medication / substance coping measures include drinking 'Grandpa Powders' for the relief of headaches and some believe that it helps officials to stay awake and alert at night. Drinking beverages containing high levels of caffeine, or taking energy drinks such as 'Powerade' and 'Red Bull' help officials stay awake and alert. Drinking lots of water causes officials to have to visit the toilet regularly, which forces them to stay alert and vigilant as they have to move about.

Other coping mechanisms when working permanent night duty include contacting colleagues in other units over the phone when bored or tired, walking around in the units, splashing one's face with cold water and playing Sudoku or snacking. On the first off duty day after having finished two or three night shifts, correctional officials try to avoid sleeping in order to be able to sleep at the same time as family members. This sometimes helps as they are really tired by the time they adjust to normal sleeping patterns. Some correctional officials believe that exercising before going to sleep will help improve daytime sleep. This also frees them from stress they experience while working night duty. Fishing and spending time with family members on off duty days are beneficial to coping with changing shift patterns.

There is a link between the officials who abuse and exhaust their leave and sick leave days prematurely and those officials who are facing disciplinary charges. These officials also experience a lack of support from management and other correctional officials and feel that they are only working in order to eventually retire, as there is not really any hope of future promotion in the Department of Correctional Services. They feel unappreciated and overlooked and will therefore easily book sick leave when they are frustrated with situations such as struggling to be relieved at the end of their shift in the morning. Personal problems or family

problems are also high on the priority list of contributing factors, especially where permanent night duty officials experience marital problems or go through divorce. These problems are, however, not the norm. There are correctional officials who work permanent night duty, planning their leave in advance in order to spend time with their families or to rest and sleep properly. The latest shift patterns (twelve hour shifts), make it easier for these officials to take more days leave, utilising fewer of their days on leave at a time. They will normally use the three work days in between two and three off duty days and end up with being off duty for a week. The majority of permanent night duty officials do not take advantage of their sick leave, as some officials seldom use sick leave days in succession. It therefore seems that a negative attitude towards work in the Department of Correctional Services, contributes to the tendency to misuse leave and sick leave credits.

In general, permanent night duty officials work permanent night duty without being informed about the possible effects of night duty on their health, personal and social lives, and their careers in the Department of Correctional Services. Correctional officials do not receive guidance in coping strategies regarding the effects of the shift pattern, and they do not consult with anyone about their problems, until it is too late. Medical practitioners are only consulted when officials experience health problems that become unbearable. Permanent night duty officials, however, agree that there is merit in being trained and screened before working permanent night duty.

4.3.3.7 Theme 7: Recommendations to assist towards the betterment of working permanent night duty

The following suggestions were made by correctional officials who work permanent night duty in order to improve the lives of those continuing to work permanent night duty:

- More officials should be booked to assist with working night duty in order to assist when offenders get sick. Night duty workers should have co-workers or officials to talk to when struggling to stay alert and vigilant.
- Management needs to notice and appreciate the efforts made by permanent night duty officials when they volunteer to work permanent night duty.
- Managers need to make an effort to get to know the permanent night duty officials by spending time talking to them when they come to visit at night rather than just to sign their books and leave again.
- Increasing the night shift allowance that night duty officials receive, can encourage more officials to volunteer to work night duty.
- Allowing an hour break during the shift or at least allowing for night duty officials to report for duty an hour later or leaving work an hour earlier, would help to cope with fatigue during the shift.
- Creating opportunities for permanent night duty officials to attend functions arranged at the centre or at the management area, will help to reduce the feeling of being isolated from other correctional officials.

4.4 Recommendations

The following recommendations have been made based on the conclusions of the study, which can help to improve the working conditions for correctional officials:

4.4.1 Recommendations from the research findings

4.4.1.1 Theme 1: Correctional officials' views on the different shift patterns in the Department of Correctional Services

- Working permanent night duty must be voluntary.
- Correctional officials' personal circumstances and individual preferences should be taken into consideration when a decision is made to place them on a specific shift pattern.

4.4.1.2 Theme 2: Impact of permanent night duty on the health of correctional officials

- Correctional officials who plan to work permanent night duty can benefit from a thorough medical examination with a medical doctor before starting on permanent night duty in order to identify possible health risks.
- Annual medical checkups for officials who work permanent night duty can assist in identifying health risks or deterioration that might be resulting from the impact of working permanent night duty.
- Correctional officials who work permanent night duty should be encouraged to follow a consistent sleeping and eating routine.
- Equipment should be available to night duty officials at the centre to heat up their food and make it easier for them to have nourishing meals at work.
- Healthy meals at affordable prices could be made available by the mess for officials to order when they go on duty at night.
- Regular monitoring of officials' mental state could be encouraged in order to assist in early detection of possible dangers of issuing firearms to officials suffering from depression.

4.4.1.3 Theme 3: Impact of permanent night duty on social life / relationships

- The decision to work permanent night duty needs to be a collective family decision that can be reconsidered from time to time.
- Permanent night duty officials and their family members (partners and children) should be encouraged to make a deliberate effort to spend family time together in order to strengthen communication and relationships.
- Permanent night duty officials should be encouraged to find a hobby or pursue activities where they can build healthy relationships with friends without sacrificing too much of their family time, e.g. going to the gymnasium or coaching sport with other children's parents at their children's schools.
- Awareness-raising sessions can be arranged to make all correctional officials aware of the impact of working permanent night duty.

- Partners and children of permanent night duty officials should also be included during awareness and motivational sessions, and pamphlets can be handed out to these officials to discuss with their family members at home.
- Permanent night duty officials must be encouraged to attend monthly debriefing sessions with the EAP in order to identify and address possible problems that might be experienced in the social life / relationships of correctional officials who work permanent night duty.

4.4.1.4 Theme 4: Impact of permanent night duty on correctional official's career in the Department of Correctional Services

- Correctional officials can be involved in career planning sessions where they can be assisted or guided in order to make correct choices to benefit them when they apply for other positions in the Department of Correctional Services.
- Permanent night duty officials would be better motivated if they perceive that management is more supportive of them and notice the efforts that they put in when they work during the night in order to ensure the safe custody of offenders.
- Separate criteria relevant to the job descriptions of night duty officials might be helpful in order to ensure that night duty officials compete against each other for merit awards or performance bonuses rather than compete with daytime officials who only work day duty and get more exposure as to working with offenders.

4.4.1.5 Theme 5: Challenges presented by working permanent night duty

- Booking more officials on night duty can assist in creating the opportunity for permanent night duty officials to take "supper breaks" where they can go and eat their meals or take a "power nap," while relieved by another official in his section. This assistance can also be implemented when sick offenders have to be attended to during the night, as well as in order to keep officials awake by visiting the sections from time to time.

- Correctional officials can be encouraged to bring insect repellent with in order to assist in dealing with mosquitoes. Petty cash could be used to buy products that can be plugged in at posts and unit offices in order to prevent many mosquitoes from disturbing officials at night.

4.4.1.6 Theme 6: Correctional officials' coping strategies with working permanent night duty

- Permanent night duty officials can benefit from educational sessions on how to cope with working permanent night duty and how to adjust their eating and sleeping patterns.
- Permanent night duty officials can benefit from being informed on the possible effects of using substances to help them cope with working permanent night duty.
- Sessions with the Employee Assistant Practitioner organised at regular intervals can assist permanent night duty officials in addressing their personal, as well as work related problems or stress that might contribute in the abuse of leave and sick leave. This will also play a role in preventing correctional officials who work permanent night duty from having to report for disciplinary hearings.
- Arranging projects to uplift the morality of permanent night duty officials might limit problems that are experienced in coping with working permanent night duty.

4.4.1.7 Theme 7: Recommendations to assist towards the betterment of working permanent night duty

Refer to 4.3.7 for suggestions made by permanent night duty officials to improve circumstances with regard to working permanent night duty.

4.4.2 Recommendations for future research

Future research should be conducted on:

- Exploring the positive and negative effects of working permanent night duty on female correctional officials.
- Exploring the impact of different shift patterns on the relationships that exist between correctional officials and their immediate family members.
- Exploring whether working permanent night duty causes all correctional officials to become more isolated or whether mostly introverts who prefer to work permanent night duty become introverted.
- Developing, implementing and evaluating an educational programme in order to educate permanent night duty officials on the possible effects of working permanent night duty as well as training them on coping with working permanent night duty.

4.5 Closing statement

Not every correctional official can work permanent night duty over a long period. The decision to work permanent night duty must be an informed and voluntary decision agreed on as a couple or family, as it can have irreversible consequences if family members do not adapt. Correctional officials who work permanent night duty are often isolated from other officials and can easily feel misunderstood and unappreciated, which will consequently impact negatively on their feelings towards management, their colleagues as well as the Department of Correctional Services in general. These negative feelings, in turn, encourage low self esteem and can contribute to stress and feelings of depression amongst permanent night duty officials.

It is also true that not all permanent night duty officials are experiencing working permanent night duty as a negative experience. They are able to adjust better, flourish and still feel positive about a career in the Department of Correctional Services. Correctional officials who consider volunteering to work permanent night duty can however benefit from information on how to cope better with the shift pattern, as well as what markers of stress to look out for and address in order to prevent problems with regard to physical and mental health problems, as

well as dissatisfaction with their social and family relationships. Regular medical examinations as well as sessions with the Employee Assistant Practitioner are recommended in order to prevent possible negative effects resulting from working permanent night duty.

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APPENDIX A: UNIVERSITY OF PRETORIA PERMISSION TO CONDUCT THE STUDY



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Humanities
Research Ethics Committee

20 April 2010

Dear Prof Lombard

Project: The positive and negative impact of permanent night duty on officials in the Department of Correctional Services
Researcher: MEC Smit
Supervisor: Dr C Carbonatto
Department: Social Work and Criminology
Reference number: 91339252

Thank you for your response to the Committee's letter of 12 February 2010.

I have pleasure in informing you that the Research Ethics Committee formally **approved** the above study at an *ad hoc* meeting held on 19 April 2010. Please note that this approval is based on the assumption that the research will be carried out along the lines laid out in the proposal. Should your actual research depart significantly from the proposed research (as sometimes happens for a variety of possible reasons), it would be necessary to apply for a new research approval and ethical clearance.

The Committee requests you to convey this approval to Ms Smit.

We wish you success with the project.

Sincerely

Prof. John Sharp
Chair: Research Ethics Committee
Faculty of Humanities
UNIVERSITY OF PRETORIA
e-mail: john.sharp@up.ac.za

APPENDIX B: DEPARTMENT OF CORRECTIONAL SERVICES LETTER OF PERMISSION TO CONDUCT THE STUDY



correctional services

Department:
Correctional Services
REPUBLIC OF SOUTH AFRICA

Private Bag X136, PRETORIA, 0001 Poyntons Building, C/O Church and Schubert Street, PRETORIA
Tel (012) 307 2000, Fax (012) 328-6111

Ms. MEC Smit
P.O Box 53969
Wierda Park
0149

Dear Ms. Smit

RE: FEEDBACK ON THE APPLICATION TO CONDUCT RESEARCH IN THE DEPARTMENT OF CORRECTIONAL SERVICES ON "THE IMPACT OF PERMANENT NIGHT DUTY ON OFFICIALS IN THE DEPARTMENT OF CORRECTIONAL SERVICES"

It is with pleasure to inform you that your request to conduct research in the Department of Correctional Services on the above topic has been approved.

Your attention is drawn to the following:

- The relevant Area and Regional Commissioners where the research will be conducted will be informed of your proposed research project.
- Your internal guide will be **Deputy Director: EAP- Ms. Hira**. You are requested to contact her at telephone number (012) 305 8332 before the commencement of your research.
- It is your responsibility to make arrangements for your visiting times.
- Your identity document and this approval letter should be in your possession when visiting the center.
- You are required to use the terminology used in the White Paper on Corrections in South Africa (February 2005).
- You are not allowed to use photographic or video equipment during your visits to the Correctional Centre, however the audio recorder is allowed.
- You are required to submit your final report to the Department for approval by the Commissioner of Correctional Services before publication (including presentation at workshops, conferences, seminars, etc) of the report
- Should you have any enquiries regarding this process, please contact the Directorate Research for assistance at telephone number 012-307-2359/2770 or 305-8523.

Thank you for your application and interest to conduct research in the Department of Correctional Services.

Yours faithfully

MS. T.M. MAGORO
DC: POLICY CO-ORDINATION & RESEARCH
DATE:

2009 07.27



APPENDIX C: LETTER OF CONSENT FOR PARTICIPANTS IN THE STUDY

Faculty of Humanities

Department of Social Work & Criminology

SECTION A: RESEARCH INFORMATION

RESEARCHER:

Marietjie Smit

Leeuwkop Medium C Correctional Centre

Private Bag x2

BRYANSTON

2021

(011) 208-9596

TITLE OF THE STUDY

The positive and negative impact of permanent night duty on officials in the Department of Correctional Services.

INTRODUCTION

Mrs Smit is currently busy with the Masters degree MSD (Social Health Care) at the University of Pretoria. One of the requirements for the completion of this degree is to conduct research on a relevant topic in the field of study and present the findings in a mini-dissertation.

PURPOSE

I have been chosen to participate in the study on the basis of my working permanent night shift. The researcher would like me to share my experience of working permanent night shift during the exploration of how working permanent night shift is positively and negatively impacting on officials in the Department of Correctional Services.

PROCEDURES

The study will consist of an interview of approximately two (2) hours that will be conducted with me at my workplace during my shift in order not to inconvenience me. I am requested to give my informed consent after having been provided with the details of this study in this document.

This includes permission for the researcher to get relevant information from my personnel file as well as to record the interview and later transcribe it. Confidentiality and anonymity will be adhered to in this process. It is required that the data from this research be stored for archival purposes at the University of Pretoria for 15 years, after which it will be destroyed.

RISKS

If I should experience any emotional problems or discomfort as a result of my involvement in the study, I may withdraw from the study at any time. The researcher will debrief me after the interview and if needed, I will also be assisted in making an appointment with an Employee Assistant Practitioner for counseling.

BENEFITS

I will not benefit directly from participation in the study. However, depending on the outcome of the study, recommendations can be made to improve on working conditions for the future. If I did not volunteer to work permanent night duty, recommendations from this study could for instance contribute to rotating shifts in order to ensure a healthier and happier workforce. The findings of this study will be helpful in order to understand the positive and negative impact that working permanent night duty has on officials in the Department of Correctional Services. These findings can also be used in order to address work related problems that may impact on work performances of correctional officials as well as health conditions that may occur as a result of working permanent night duty.

RIGHTS OF PARTICIPANTS

Participation in the study is entirely voluntary. As respondent I choose to participate out of my own accord and may choose to leave the study at any time and without any negative consequence. Respondents are entitled to receive professional and competent debriefing, after engaging in the interview and will have access to the researcher should any difficulties arise resulting from the interview. I will also have access to the research document once the study is completed. In order for me to read the contribution made by means of my participation in this research.

CONFIDENTIALITY

The information gathered from respondents will be dealt with as completely confidential and anonymous. Names will be replaced with alphabet letters and only the researcher will have

access to the data. The researcher's supervisor will only have access to data once it has been transcribed and alphabet letters have been assigned to respondents thus assuring anonymity and never revealing my identity. If I choose to withdraw from the study all information gathered will be destroyed or deleted from the data base and research document.

RIGHT OF ACCESS TO THE RESEARCHER

Respondents will have access to the researcher for the duration of the study and for three months after completion of the study. Should the respondents contact the researcher after this time, it will be considered as the beginning of a new client – social worker relationship and will be defined as such.

Please sign the consent form on the next page.

Kind regards,

Ms M Smit
Researcher

Dr CL Carbonatto
Supervisor

SECTION B: RESEARCH LETTER OF INFORMED CONSENT

By signing this form I am giving permission to participate in the research and acknowledge that I understand what it entails.

I, _____(Full name and surname of participant) hereby confirm that I have been informed by the researcher, Marietjie Smit about the nature, conduct, procedure, benefits and risks of the research study. I am aware of what is required of me as participant. I have read the purpose of the study and understand how the research process will be followed. I have asked relevant questions that I may have had.

I agree to take part in the study and understand that my personal details will be kept confidential. I agree to partake in a personal interview with the researcher, for her to tape record the interview and for her to access information needed from my personnel file.

I further understand that if I choose to withdraw from participating in the study at any time, I will not suffer any negative consequences.

PARTICIPANT:

Name and Surname: _____

Signature: _____

Date: _____

RESEARCHER:

Name and Surname: _____

Signature: _____

Date: _____

APPENDIX D: SEMI-STRUCTURED INTERVIEW SCHEDULE

INTERVIEW SCHEDULE

RESEARCHER: MEC SMIT

1. NIGHT DUTY

- 1.1 How many years are you working permanent night duty?
- 1.2 How did it come about for you to work permanent night duty?
- 1.3 Tell me about the reasons why you work permanent night duty?
- 1.4 How long do you think you will still be able to work permanent night duty?
- 1.5 Will it affect you financially if you should stop working permanent night duty
How?
- 1.6 Would you recommend working permanent night duty to other correctional
officials? Why?

2. IMPACT OF NIGHT DUTY ON HEALTH

- 2.1 How does working permanent night duty affect your eating and sleeping
habits?
- 2.2 Do you use something to help you to sleep?
- 2.3 How often do you take leave or sick leave?
- 2.4 What changes did you experience with regard to your health, if any since you
started to work permanent night duty?
- 2.5 How does working permanent night duty affect your mood?
- 2.6 Does alcohol or drugs help you to cope with working permanent night duty?
- 2.7 If you don't rely on substances to cope, what do you do to help you manage working
permanent night duty?

3. IMPACT OF NIGHT DUTY ON SOCIAL AND FAMILY LIFE

- 3.1 What changes did you experience in your social life or relationship with your friends
since you started to work permanent night duty?
- 3.2 How do your friends feel about you working permanent night duty?

3.3 What changes took place in your relationships with your children since you started to work permanent night duty?

3.4 How do your children feel about you working permanent night duty?

3.5 What changes took place in your relationship with your partner since you started to work permanent night duty?

3.6 How does your partner feel about you working permanent night duty?

4 FUTURE CAREER

4.1 How do you feel about your career in the Department of Correctional Services?

4.2 Did your feelings about your career in the Department of Correctional Services change since you started to work permanent night duty? How?

5 OTHER

5.1 Is there anything that you think needs to be addressed or recommended in order to improve the conditions for officials who work permanent night duty?

Thank you for your participation in the study.