

TOWARDS RANGER RESILIENCE: A SOCIAL WORK MODEL TO ASSIST
RANGERS IN DEALING WITH WORKPLACE CHALLENGES

By

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DECLARATION

TOWARDS RANGER RESILIENCE: A SOCIAL WORK MODEL TO ASSIST RANGERS IN DEALING WITH WORKPLACE CHALLENGES is my own work and all sources quoted are acknowledged and appear in the bibliography list.

Signature

Date

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*“Teach your children what we have taught ours, that the earth is our mother. Whatever befalls the earth befalls the sons of the earth. **The earth does not belong to man; man belongs to the earth.** Man did not weave the web of life; he is merely a strand in it. **We do not inherit the earth from our ancestors; we borrow it from our children.**”*

– Chief Seattle, leader of the Native American Suquamish Tribe.

DEDICATION

In memory of my grandmother

Aunty Lena Nnana Molefi

8 October 1926–10 October 2015

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To God be all the glory.

To my supervisor, Dr Johannah Sekudu, we have come the full circle. Thank you for undertaking my academic journey with me. I am grateful for your support and guidance.

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SUMMARY

Rangers, as vanguards of wildlife conservation, are constantly fighting off armed poachers. That makes their work stressful and dangerous. In spite of this, their needs are neglected and are not considered as the focus is on saving wildlife. Undoubtedly, the African continent is not spared from the unrelenting poaching menace that threatens to drive the world's wildlife species into extinction. In response to this scourge, countries, in their quest to safeguard these species from extermination, have signed various treaties, continuously come up with different strategies and pledged their support to fight illegal wildlife trading.

This study was conducted at Hluhluwe-iMfolozi Park (HIP) and Mkhuze Game Reserve, which are under the management of Ezemvelo KwaZulu-Natal (KZN) Wildlife Management. These parks have turned into a battlefield between poachers and rangers. The intrinsic case study approach, which is explorative and interpretive in perspective, was used to unravel and describe the experiences from the world view of rangers. A descriptive qualitative research design was used to gain insight from the rangers about their challenges and needs in the workplace.

Furthermore, developmental research was used to design and develop a tailor-made technology – a ranger resilience-building model – to assist rangers to deal with their workplace challenges. Focus group discussions were conducted with a group of rangers, while individual semi-structured interviews were conducted with managers in order to solicit information from purposively selected sample of rangers and managers at HIP and Mkhuze Game Reserve, that assisted in the development of the model.

Ethical considerations, which involve the informed consent of the participants, confidentiality and privacy, participants' right to withdraw from the study and the management of information, were applied to ensure that the participants were protected from harm.

The collected data was analysed by using codes and themes that best described the experiences of the rangers, and data verification was done before the process of model development. It was evident that rangers are faced with a variety of workplace challenges, such as poor quality of work life, unpleasant living conditions, coupled with poor amenities, inadequate wellness interventions, and the poor management and implementation of policies by the Human Resources (HR) Department. Nevertheless, teamwork and their cultural practices were positive aspects that promoted their coping capacities in dealing with their everyday challenges.

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LIST OF ABBREVIATIONS AND ACRONYMS

AAPG:	Addis Ababa Principles and Guidelines on Sustainable use of Biodiversity
ABS:	Access and Benefit-Sharing
APA:	American Psychological Association
APIGSA:	Anti-poaching Intelligence Group Southern Africa
APU:	Anti-poaching Unit
AWF:	African Wildlife Foundation
CEO:	Chief Executive Officer
CITES:	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CBD:	Convention on Biological Diversity
COP 17:	17th meeting of the Conference of the Parties
CSIR:	Council for Scientific and Industrial Research
DEA:	Department of Environmental Affairs
D&D:	Design and development
DRC:	Democratic Republic of Congo
DSD:	Department of Social Development
EAP:	Employee Assistance Programme
EAPA-SA:	Employee Assistance Professionals Association of South Africa
EIA:	Environmental Investigation Agency
HIP:	Hluhluwe Imfolozi Park
HR:	Human Resources
IAPF:	International Anti-Poaching Foundation
ICAS:	Independent Counselling and Advisory Services
IFSW:	International Federation of Social Workers
IUCN:	International Union for Conservation of Nature
KNP:	Kruger National Park
KZN:	KwaZulu-Natal

LEAP:	SADC Protocol on Wildlife Conservation and Law Enforcement Strategies
MHS:	Military Health System
MRT:	Master Resilience Training
MTPA:	Mpumalanga Tourism and Parks Agency
NEMA:	National Environmental Management Act
NEMBA:	National Environmental Management: Biodiversity Act
NEMPAA:	National Environmental Management Protected Areas
NQF:	National Qualifications Framework
PTSD:	Post-traumatic Stress Disorder
RHoDIS:	Rhino DNA index system
Sapa:	South African Press Association
SADC:	Southern African Development Communities
SAMHSA:	Substance Abuse and Mental Health Services Administration
SANParks:	South African National Parks
SAPS:	South African Police Service
ToPS:	Threatened or Protected Species
TRAFFIC:	Wildlife Trade Monitoring Network
UN:	United Nations
UNEP:	United Nations Environmental Programme
Unisa:	University of South Africa
VGL:	Veterinary Genetics Laboratory
WSN:	Wireless Sensor Network
WWF:	World Wide Fund for Nature

CHAPTER 1:

GENERAL INTRODUCTION AND PROBLEM FORMULATION

1.1 Introduction

Rangers perform one of the most dangerous jobs in our national parks as they are mostly under siege by poachers who are not afraid to kill in order to lay their hands on the taxa of the targeted wild animals, as they are promised large amounts of money from their illegal trade. In addition, rangers are said to be exposed to fatalities of man and animal that affect them in various ways, often causing them to suffer from post-traumatic stress disorder (PTSD), mental illnesses and, in some instances, pressure from poachers who intimidate their families (Adams, 2012:24). It is important to note that, despite these challenges, rangers continue to do their jobs and hope that things will eventually turn out for the better. Of central concern is that little attention is given to the welfare of the rangers, as not much is said about the plight of the rangers who are exposed to the real work of wildlife conservation; who bear the brunt of poaching and illegal trade in wildlife; and consciously risk being injured or even killed in the line of duty as they focus on safeguarding our country's endangered wildlife. The evidence in support of the above assertions is found in Warchol and Harrington (2016:24) and Khooshie Lai Panjabi (2014:6–7), who indicate that poaching and the illegal trade in wildlife has become a worldwide problem that affects many countries because of human greed. The driving force behind the illegal trade in wildlife is said to be the Asian black market, due to the belief that rhino horn has medicinal value, and as a consequence, poachers are prepared to risk their lives for the promise of high profits.

Evidently, globalisation has also contributed to Africa being targeted because of its wealth of resources (minerals and wildlife), yet its people remain impoverished. For these reasons, Khooshie Lai Panjabi (2014:3) states that “nature gave us just one planet, suitable for our needs, but not adequate for our degree of greed”. This statement suggests that poaching is affecting Africa negatively, leading to its high level of poverty because of the insatiability of internationals who loot its natural resources because of uncontrolled greed.

In highlighting the above sentiments, several authors (Sellar, 2017:1; David, 2016:400; Andrews, 2015:34; Russell, 2015:1) have recorded that illegal trade in wildlife is a thriving, multibillion dollar trade, run by organised, sophisticated cartel networks comprising several syndicates. Because their operations involve large amounts of money, poaching is characterised by violence, injury and sometimes the death of either the animals or the people who stand in their way. News24 Wire (2017) reported that 23 rhinos had been poached in KwaZulu-Natal within 12 days, of which nine were killed in Hluhwe-Imfolozi Park (HIP). While a lot of coverage has been given to the failed efforts of protecting endangered species, there has been less concern for the safety and security of the rangers who are at the forefront of wildlife conservation, and how they are dealing with the pressure of being faced with ruthless poachers and putting their lives in danger. In addition, Khooshie Lai Panjabi (2014:5–7) maintains that global solutions are needed to protect the biodiversity that sustains life on our planet, as failure to do so would mean that humans too will be destroyed. Therefore, while nations globally devote economic resources and implement a series of agreements to save wildlife from extinction, including anti-poaching efforts, it is important to incorporate strategies that ensure that the rangers themselves are mentally, psychologically, physically and emotionally equipped to make a difference in wildlife conservation processes.

To highlight the seriousness of the scourge of poaching in Africa, and in an effort to emphasise the huge task that faces the rangers, Table 1.1 shows the extent of rhino poaching from 2006 to 2012. The eastern African countries are threatened, but the southern part of Africa (particularly Zimbabwe and South Africa) is the hardest hit. It is argued that South Africa is the premier rhino state, because it hosts 80% of the world's rhino population. This explains the high levels of poaching in this country (Westerveldt, 2015:23; IUCN, 2012).

Table 1.1: Recorded poached rhinos in Africa

Country	2006	2007	2008	2009	2010	2011	2012	Total
Botswana	0	0	0	0	0	2	0	2
Democratic Republic of Congo (DRC)	0	0	2	2	0	0	0	4
Kenya	3	1	6	21	22	25	12	90
Malawi	0	0	0	0	0	0	1	1
Mozambique	0	9	5	15	16	10	12	67
Namibia	0	0	0	2	2	1	0	5
South Africa	36	13	83	122	133	448	425	1 460
Swaziland	0	0	0	0	0	2	0	2
Tanzania	0	0	2	0	1	-	0	3
Uganda	0	0	0	0	0	-	0	0
Zambia	0	1	0	0	0	0	0	1
Zimbabwe	21	38	164	39	52	35	13	362

Source: International Union for Conservation of Nature (IUCN), 2012

The above table illustrates that South Africa has become a target for rhino poaching. This has resulted in it being declared a national security risk and a national priority. Some of the strategies adopted by the South African government in August 2014 include, at the local level, green militarisation, which involves the use of military personnel and tactics, surveillance by aircrafts and drones, and the auctioning and relocation of rhinos to private game lodges. At the continental level, strategies include relocating rhinos to Botswana, which does not have a serious poaching challenge as South Africa. At the international level, the plan was to fly 6% of South Africa's rhino population to Texas in the USA, which has a similar climate to South Africa (Westerveldt, 2015:23; Lunstrum, 2014:817).

Furthermore, Bryman (2016:64–67) argues that rhino horn is the most sought-after commodity and, as a result, some of the rhino breeders, in trying to protect this endangered animal, have resorted to dehorning their rhino and keeping the rhino horn in vaults with the hope of selling them when trade is legalised. In South Africa, it is permitted to remove the horn of a rhino, as the rhino horn will regrow, but selling it is illegal. It could be said that the abovementioned strategies may be paradoxical, as some private lodges where rhinos are kept have been accused of rhino-related crimes. It is important to note that, in all the strategies mentioned above, nothing is said about the rangers and their role. This suggests that their wellbeing is not taken into consideration. They are just expected to protect wildlife, even if their lives are at risk. The researcher finds it very important to always think about the rangers' role in all these efforts, due to their frontline position in the anti-poaching processes.

In an attempt to raise awareness of poaching, with special reference to rhinos, Chutel (2014:4) posits that 4 October has been pronounced World Day for Animals. Wildlife is an important part of the ecology, as it balances the life cycle and maintains the food chain; therefore, it should be maintained for generations to come. South Africa has also joined the international fight to save the dwindling numbers of wildlife like rhino, lion and elephant. The anti-poaching demonstrations were about raising awareness of the international ivory trade and to press governments to implement stringent legal measures to prevent poaching (Chutel, 2014:4). It could be said that anti-poaching demonstrations by South Africans assist in showing the world the seriousness of the poaching menace, notwithstanding the impact it has on the lives of the rangers.

Chutel (2014:4) continues to argue that, for South Africa, the high prices that can be obtained for rhino horn make poachers brazen and ready to do battle in order to get it. Rhino poaching jumped from 13 animals killed in 2007 to 1 215 in 2014, mostly in the Kruger National Park (KNP), which is under the custodianship of South African National Parks (SANParks). This was the initial research site identified by the researcher as she is employed by the organisation and has first-hand observation on the challenges faced by the rangers, especially those stationed in KNP. Nevertheless, SANParks withheld its permission for the study in

KNP, citing the sensitivity around poaching. This led her to approach Ezemvelo KwaZulu-Natal (KZN) Wildlife, hence the change of research site to HIP and Mkhuze Game Reserve (see annexures 2 and 3). This change of research site was found to be appropriate because the rangers in both environments are facing the same challenges that need to be discovered and addressed.

Savides and Clausen (2017:2) argue that rhino poaching has increased drastically in KZN, as 161 rhinos were killed in 2016 alone, which is an increase of more than 40% compared to 116 in 2015. Nonetheless, Sellar (2017:3) argues that crimes against wildlife should receive the priority attention of law enforcement agencies if the sophisticated illegal trade in wildlife is to be curbed. In the same way, Bryman (2016:66) quoted the chief ranger of KNP, Xolani Funda, who expressed his frustrations about the whole justice system, where police work with poachers, lose legal cases and equate poaching to drug cartels as money and bribery are involved, putting further pressure on the rangers as they have to protect these animals.

Rangers' stations are central in the management of the park as the rangers are the first ones to detect poachers or any other abnormality in the park during their patrols. These patrols are normally done during a set period of time (shift work), in a team of two to five. They do patrols to scout the area on horseback, on foot or in a vehicle (Ghoddousi, Hamidi, Soofi, Khorozyan, Kiabi & Walt, 2016:273). This emphasises the fact that rangers are the ones in the frontline of protecting wildlife. They find themselves exposed to danger in the process of executing their responsibilities.

Furthermore, Bewick ([sa]), who is the Head of the Anti-poaching Intelligence Group Southern Africa (APIGSA), argues that, to be a ranger, one has to be physically and mentally healthy, as it requires a resilient personality, basic knowledge of conservation, firearm competency and a clean criminal record. In the same way, it involves working under unfavourable conditions, such as walking for many hours and over long distances. However, despite these difficulties, many choose to remain rangers and continue to survive and thrive despite a climate of workplace adversity (Neme, 2014). General Johan Jooste, quoted by the South

African Press Association (Sapa) (Sapa-AFP, 2014:5), alludes to the fact that rangers work under taxing circumstances, such as navigating thick bushes, tracking poachers in 45 °C/113 °F or heavy rains and often exchanging gunfire with poachers. Disappointingly, the law only allows them to shoot in self-defence. Likewise, the Environmental Management Inspector Report (SANParks, 2015a) highlighted that, on average, rangers experience two poaching incidents per day. The abovementioned assertion is supported by Westerveldt (2015:23), quoting the Minister for Environment Affairs, Ms Edna Molewa, saying that poaching is spiralling out of control as 393 rhinos were killed in KNP between January and April 2015. Furthermore, Adams (2012:24) argues that rangers are exposed daily to workplace adversities associated with the risk of excessive violence from poachers, attack by the animals they are supposed to safeguard, as well as unfavourable working conditions, inclement weather and occupational health and safety issues. The researcher is of the opinion that rangers are faced with many workplace challenges that needed to be investigated scientifically and the information was used to develop a scientific model to assist them to cope and continue to be productive.

Neme (2014), in the same way, argues that game rangers endure ordeals similar to soldiers in combat. They routinely face death, injury or torture from poachers, and the wildlife they protect can kill them too. They operate in the bush under harsh physical conditions, often with inadequate pay and support. Sapa (Sapa-AFP, 2014:5) echoed the same sentiments by citing the example of Stephen Midzi, a section ranger in KNP with 16 years of experience. He spoke of the harshness of being a ranger as it involves walking long distances, acquiring tracking skills, and developing high vigilance to detect invaders such as animals and poachers. He continued by stating that there is despondency when it is full moon, as on clear nights, poachers come out in large numbers. This time of the month is found to be stressful because of high incidences of poaching, and the rangers often feel that they have let down society and the animals they are supposed to protect. In an interview with section ranger at Punda Maria in KNP, Tinyiko Golele, a mother of three young children who only sees them once a month, indicated that the most stressful, painful and traumatic part of being a ranger is seeing a bleeding or dead rhino (Sejake, 2016).

The researcher believes that rangers' work is not only stressful, but has a negative effect on family relations since a mother only gets to see her children once a month. This means that the parent-child relationship in this family is disturbed and the mother misses seeing her children going through the various stages in their development. This is detrimental to the strong relationships that are needed to give children direction in life, and leads to many challenges during the children's teenage years, hence jeopardising their future.

A cursory glance at this situation suggests that rangers are under siege of poaching, which has an impact on them and their families. Having said that, the focus of the study is not on poaching, but on the services rendered to the rangers. A model is needed to enable them to soldier on amidst their workplace challenges. Thus, the researcher, as the Corporate Manager of Employee Wellness of SANParks' 19 national parks spread across the country, has to develop interventions that are geared towards assisting rangers to cope with their work stress. As the Corporate Manager, she reports to the Head of Human Resources and forms part of the Human Resources Management team. Her main responsibility is to oversee and ensure that SANParks' employees are actively supported to achieve a healthy work-life balance through the ongoing promotion of their good health and wellbeing.

The Wellness Department has two social workers: the Corporate Manager (the researcher) and the KNP Wellness Manager, and the rest of the support staff offer the following services: physical wellness, ambulance services, early childhood development, taking care of the hostels that cater for employees' children during school seasons, and providing housing to KNP employees. In addition, there are wellness champions across SANParks, and there is a link between the Wellness Office and the employees in terms of wellness events. Clark (2015:45) refers to them as on-site ambassadors, who have a strong wellness orientation to drive the programme through referrals, ongoing communication and interaction. The main responsibility of wellness practitioners is to implement the wellness programme. Travelling to different locations is inherent to the job, as the officer has to offer on-site psychosocial support services to the employees and their families.

In addition, the officer has to market wellness services in the organisation to ensure increased utilisation of these services and also to arrange wellness-related events that aim to improve employees' work-life balance. Telephones and cars form part of their tools of trade, thus they receive allowances and only claim for expenses incurred on official trips according to applicable set tariffs.

According to Brekke (2014:519) and Doel (2012:6), social work is the profession and integrative scientific discipline that uses a range of theories and strategies to promote social change by helping and empowering people to solve human relationship problems, thereby enhancing their wellbeing. It could be said that social work is a professional discipline that assists people to address life challenges that may have a negative impact in their wellbeing. Jacobson and Lamb (2008:18), further, argue that social workers are trained to meet the needs of both the employer and the employee, as they have the ability to identify and offer assistance to employees experiencing psychosocial problems. In this study, the terms "employee assistance" and "wellness" are used interchangeably, as they both refer to employer-sponsored programmes that are aimed at assisting employees and their families to deal with challenges that may hamper their workplace productivity. In this instance, social workers are responsible for workplace wellness.

In meeting SANParks' needs, the Wellness Department uses an integrated model to assist employees to deal with issues and concerns that may affect their performance, whether it involves social, emotional, financial or legal matters. The off-site services are offered by a contracted external service provider whose services are accessed through a call centre and contracted affiliates, while the on-site services are offered internally by the social workers. They handle a variety of services that the external service provider cannot offer due to internal processes.

According to Berry, Mirabito and Baun (2010:4) a workplace wellness programme is an employer-sponsored programme that is aimed at supporting employees and their families to adopt healthy behaviour that improves their quality of life and enhances their effectiveness, thereby benefitting the organisation's bottom line. Jacobson and Lamb (2008:18) posits that the Employee Assistance Programme

(EAP) is a workplace resource that uses core technology to enhance employee and organisational effectiveness. She further argues that social workers are the perfect fit for employee assistance programmes, as they are able to support vulnerable employees, especially in an unstable work environment. As far as the EAP is concerned, the standard on preventative services states that the focus of an EAP should be on the effectiveness of the programme and adding value to the organisation and its beneficiaries. Thus, the services of an EAP should be broadened to include an integrated employee wellness management programme that will reduce environmental and psychosocial risk factors that influence the productivity of both employee and employer (EAPA-SA, 2010:16).

As far as SANParks is concerned, the KNP's EAP monthly report of April 2015 (SANParks, 2015b) states that most rangers were not coping emotionally because they are unprepared for warfare. They were recruited for conservation, and all of a sudden they find themselves at war. The report further indicates that the stress levels are so high that some have committed suicide; while others have been accommodated in other posts such as security (SANParks, 2015b:1). Schlossberg (2011:2) suggests that individuals differ in their ability to adapt to change, and that this may explain why others are still continuing to work as rangers despite the aforementioned adversities. This resonates with what Bewick [sa] says by arguing that, for many, the attraction to the ranger post is the promise of a job, and such adversities become secondary. Considering the high level of unemployment in South Africa, it could be argued that many rangers find themselves in this work environment not by their own choice, but by their efforts to fend for their families.

It is against this backdrop that the researcher is of the view that rangers need to be capacitated to bounce back from their daily work adversities and should be able to forge forward in their efforts of wildlife conservation. The researcher is of the view that a preventative model would bring about remarkable results as the rangers will be assisted to experience hope, optimism and positivity, and be able to cope with their job demands at the psychosocial level.

1.1.1 Problem statement

According to Creswell (2012:76), a problem statement is an educational issue that is real and justifies research to address the problem. In the same way, Fouché and De Vos (2011:80) argue that it is about focusing the project on a specific path and defining the territory to be explored. It could then be said that a problem statement is a navigator, as it guides and directs the researcher throughout the study process, enabling him or her to focus on reaching the study outcome. As has already been indicated, poaching has become a serious problem across all the parks and game reserves in South Africa. This is also seen in KZN where this study was conducted. According to Stolley (2016:1), the high numbers of poaching incidents in KZN prompted the then Premier, Willies Mchunu, to declare the establishment of a provincial anti-poaching task team to tackle the menace of poaching. Although the Chief Executive Officer (CEO) of Ezemvelo KZN Wildlife, Dr David Mabunda, agrees with the abovementioned assertion, he maintains that the moratorium on new appointments had a negative effect on anti-poaching efforts, as the organisation had 179 vacant posts that they were unable to fill due to restrictions from lawmakers. Even though the government was aware of the scourge of poaching in the province, there seems to be a lack of willingness to overcome the problem, because the efforts of the fight against poaching needs to be coupled with human capital. In this situation, rangers find themselves mostly affected negatively because they are forced to work long hours to make up for the shortage of staff, where there is no intention to fill the vacancies.

These factors leave a question in one's mind regarding the role a social worker can play in the conservation industry to enhance the coping mechanisms of these rangers. The absence of scientific information on ranger wellness became a cause of concern that confronted the Corporate Manager who, as the overseer of corporate wellness, had to provide direction to the organisation. Thus, the problem formulation of this study is the lack of interventions based on scientific information to support rangers to deal with their workplace challenges. This compelled the researcher to seek more information on the problems experienced in order to develop a model that could be used to address the situation.

This suggests the need for a knowledge base to assist rangers to deal with their workplace challenges in a resilient manner. In the final analysis, the lack of proactive interventions to assist rangers to deal with their workplace challenges causes tremendous stress for them and their families.

According to Clark (2015:47), a strategic EAP partner has to have the intelligence to recognise trends in the industry, and to adapt to these, as well as changes in the organisational culture, as this will enable him or her to offer a comprehensive range of services when responding to the needs of both the employer and the employee. These services must be robust, proactive, promotive and dynamic. From this perspective, the researcher aims to promote wellness as a strategic partner in the anti-poaching environment, and has developed a scientific model to help rangers tap into their inner strengths during life's challenges. This will go a long way to facilitate the achievement and confirmation of this aspired strategic position.

1.1.2 Rationale for the research

According to Els and De La Rey (2006:46), there has been a growing trend among organisations to promote the total wellness of employees. This means that organisations acknowledge and understand the importance of employees' strengths, coping patterns, adaptive abilities and growth potential as a key to increase their productivity and quality of work-life balance. By the same token, the World Economic Forum (2010:3) postulates that the health and wellness of employees is of strategic importance for any business that wants to be a leader in a global business world as it adds value to the top line growth and bottom line performance. Thus, health and wellness have to be incorporated into broader organisational effectiveness if an organisation wants to realise the real value of its business gains.

According to the Occupational Health and Safety Act, Act No. 85 of 1993, which governs the safety of diverse organisations in South Africa, the responsibility to prevent and protect employees against work-related injuries and illnesses is placed on the employers (Department of Labour, 1993).

Thus, the occupational health and safety of rangers, as employees within South Africa, is governed by this piece of legislation. However, despite rangers receiving personal protective equipment, among other things, in the form of a special uniform that minimises their exposure to risk such as inclement weather during their patrols, in accordance with the Occupational Health and Safety Act, they are not adequately resourced to deal with psychosocial workplace challenges, such as trauma caused by their anti-poaching efforts.

The researcher observed that, in response to the poaching crisis, the focus has only been on increasing technology, as well as the militarisation of rangers. The rangers' workplace challenges have been omitted or neglected. The researcher furthermore observed that SANParks, in its quest to fight poaching, has become desperate and inadvertently vulnerable to many speculators who may bring more damage than good. Notwithstanding that, SANParks' acceptance of ad hoc solutions may be a precautionary approach. Any action that could reduce poaching ought to be tried as it may give useful insight. As the Corporate Manager of Employee Wellness at SANParks, the researcher observed that the current wellness interventions do not fully address the needs of rangers in as far as their quality of life at work is concerned. This observation is based on the fact that management's efforts are mainly focused on fighting poaching and protecting wildlife, without stopping to think about the bodies involved in this process. This means that rangers' wellbeing is not taken into consideration. This can be seen from the following ad hoc interventions and incidents:

- SANParks received grant funding from the US-based Howard G Buffet Foundation (HGBF) of R254.8 million, which was to be used to purchase a helicopter and technology to support anti-poaching in KNP (SANParks, 2015).
- SANParks received a financial boost of R325 000 as a contribution to nature conservation efforts from a South African-based financial services company, Gallet Group Employee Benefits (Pty) (SANParks, 2015).

The abovementioned information shows that the focus is on the conservation of wildlife and the human beings behind the efforts are neglected. It is evident that little attention is given to rangers' wellness. This suggests a need for positive and realistic approaches to enable rangers to respond positively to current challenges.

There is lack of scientific and specific information on ranger wellness, prompted by the need for the study to fill the gap by identifying the actual challenges faced by rangers in their efforts to execute their daily work, so as to ultimately develop appropriate intervention strategies to support rangers. In response to these challenges, the researcher developed an intervention model based on the experiences of Ezemvelo KZN Wildlife rangers based at HIP and Mkhuze Game Reserve regarding their workplace challenges to help enhance rangers' resilience. It is hoped that the implementation of this model will enable rangers to bounce back and cope with the effects of the harmful challenges that accompany their job. The utilisation of the ranger resilience-building model should contribute to the enhancement of rangers' willpower, and their ability to adapt and face life positively, thereby strengthening their ability to continue to fight poaching. The aim of the model is not only to enhance rangers' physical and mental fitness to adjust to their circumstances and withstand the hardships of being a ranger, such as unfavourable weather and the trauma associated with poaching warfare, but its successful use has the potential to position the social work profession as a strategic partner in the wildlife conservation sphere.

In conclusion, in achieving the abovementioned objective, SANParks' Wellness Department, in collaboration with varied stakeholders within the organisation, should be able to form an important support structure to help rangers absorb the onslaughts of life, thereby assisting them to thrive and flourish, regardless of the adversities they face at work. Hence, the notion of resilience is introduced to assist rangers to become resilient and enhance their quality of life.

1.2 Theoretical framework

The purpose of this section is to explain the choice of theoretical framework that was used to guide this study. The focus here will be briefly on defining resilience and the reason it was selected as a theoretical framework to guide this study. A detailed discussion of resilience theory is presented in Chapter 3.

The researcher is of the opinion that the theory of resilience was best suited as a proactive wellness intervention approach to assist the rangers deployed at HIP and Mkhuze Game Reserve to tap into their inner self to deal with the adversities they are facing on a daily basis in their work environment. The conceptual basis of this study was therefore underpinned by the notion of resilience as a multidimensional construct.

Resilience comes from the Latin word “resilire”, which means “to recoil”. It is about flexibility, rebound, elasticity and spring back (Taormina, 2015:36). Resilience has multifaceted meanings from different professional perspectives, but all encapsulate the ability to absorb, adjust and fit in, the determination and willpower to endure, the ability to recuperate and re-establish to an earlier condition and the ability to have caring and supportive collaborations (Taormina, 2015:36; Jackson, Firtko & Edenborough, 2007:3). In addition, Jackson et al. (2007:6) refer to resilience as the ability of an individual to adjust to adversity, maintain equilibrium, retain some sense of control and continue to move on in a positive manner. However, Warner [sa], on the other hand, defines resilience in an organisation as the ability to cope, to remain task-focused and productive while experiencing tough times at work and home. It incorporates the concept of emerging from the adversity stronger and more resourceful than before. As their work environment is characterised by challenges, resilience can be applied to rangers through strategies such as maintaining positivity, developing emotional insight, spirituality, and building positive and nurturing relationships in order to achieve an improved quality of life.

It is against this backdrop that the resilience theory, which is about coping during hard times, is chosen as a supportive theory to frame this study. In order to support rangers to cope and to continue with their challenging work, there is a need to identify rangers' workplace challenges.

1.3 Research questions, goal and objectives of the study

The following discussion presents the research questions, goals and objectives of this study.

1.3.1 Research questions

Various authors point to the fact that a research question is a signpost. It directs the focus of the entire research as it determines the research type, design, sample, collection and analysis of the data, and ultimately the way results will be reported. It should be cogent and specific, provocative, interesting, current and stimulating for it to give good direction (Bless, Sithole & Higson-Smith, 2013:71; Creswell, 2012:109–110; Maree, 2011:3–4). It could thus be said that a research question is the researcher's guiding light throughout the research process to ultimately have the research questions answered.

The study was aimed at answering the following questions:

- What are the challenges and needs of the rangers with regard to their workplace environment at HIP and Mkhuze Game Reserve?
- What should be contained in a model that is aimed at building resilience among rangers?

1.3.2 Goals of the study

A goal is defined as “a person's ambition or effort, an aim or desired result”. It is synonymous with “the destination of a journey” (Oxford Dictionaries, [sa]). To further differentiate between goals and objectives, Fouché and De Vos (2011:94) define the goal of the study as the dream, whereas the objectives are the realistic steps that are taken within a certain time frame to achieve the said dream.

The following goals were formulated for this study:

- To develop an in-depth understanding of the workplace challenges and needs of rangers with regard to their workplace environment at HIP and Mkhuze Game Reserve.
- To develop a ranger resilience-building model to assist rangers based at HIP and Mkhuze Game Reserve to deal with their workplace challenges and needs.

1.3.3 Objectives of the study

The objectives of the study are there to assist the researcher gain new insights into the phenomenon, to accurately portray characteristics of the particular situation and to determine the frequency with which the events occur (Kothari, 2008:2). Fouché and De Vos (2011:94) refer to objectives as the realistic steps taken within a certain time frame to achieve the dream. The following are the objectives that enabled the researcher to meet the goals of the study. They are divided into two sections: research objectives and task objectives:

The research objectives are as follows:

- To explore the workplace challenges and needs of rangers stationed at HIP and Mkhuze Game Reserve.
- To explore the experiences of rangers as they execute their daily responsibilities at HIP and Mkhuze Game Reserve.
- To explore the challenges and needs of rangers from their managers' or supervisors' point of view, in relation to the existing organisational policy and support structures at HIP and Mkhuze Game Reserve.
- To describe the workplace challenges and needs of rangers at HIP and Mkhuze Game Reserve.

- To describe the experiences of the rangers in the daily execution of their jobs at HIP and Mkhuze Game Reserve.
- To describe the challenges and needs of rangers from their managers' or supervisors' point of view in relation to the existing policy and support structures at HIP and Mkhuze Game Reserve.

The task objectives are as follows:

- To select two samples, comprising rangers and management (line managers and corporate managers) at HIP and Mkhuze Game Reserve respectively.
- To facilitate focus group discussions with the sample of rangers at HIP and Mkhuze Game Reserve in order to establish their workplace challenges and needs.
- To conduct face-to-face interviews with management to determine how they understand the challenges and needs of rangers, as well as the policy or strategy of Ezemvelo KZN Wildlife on ranger support.
- To analyse data obtained through focus group discussions with rangers and individual interviews with managers, firstly by transcribing the data from the notes and audio recordings, and coding that information into themes and subthemes.
- To formulate conclusions and recommendations based on the literature and empirical findings.
- To develop a ranger resilience-building model based on the empirical findings.

1.4 Ethical considerations

Social researchers always have to take ethics into consideration when conducting research as they use human beings as their subjects (Hammersley & Traianou, 2012:3). Business Dictionary ([sa]) defines ethics as the basic concepts and fundamental principles of decent human conduct. It includes the study of universal values such as the essential equality of all men and women, human or natural rights, obedience to the law of the land, and concern for the health and safety of society and the natural environment. Moreover, Bryman (2012:6) states that the researcher has the responsibility to be ethically sensitive and have integrity to avoid transgressing ethical principles.

In the same way, Creswell (2012:620) argues that ethical issues in a qualitative study are underscored by the researcher informing participants about the purpose of the study in an honest and respectful manner, while maintaining confidentiality of the information that is mutually shared during collaboration with participants. Ethics in this study was ensured in the following manner:

Firstly, since the study involved human beings, the researcher had to write the research proposal, which was assessed and cleared by the Social Work Departmental Research and Ethics Committee at the University of South Africa (Unisa). This was to ensure that the participants' rights would be protected and they would not be harmed by their participation in the study, as well as to ascertain the scientific merit to the study (see Annexure 1).

The second step involved obtaining permission from Ezemvelo KZN Wildlife by highlighting the meaningful contribution the study would make, not only for the researcher, but also for game rangers at HIP and Mkhuze Game Reserve, as well as the organisation.

The last step involved a signed informed consent form from the participants on the day of the data collection.

The following brief discussion highlights ethical aspects that were taken into consideration when this study was conducted.

1.4.1 Informed consent

According to Delpont and De Vos (2011:117) and Neuman (2007:54), informed consent is about giving participants adequate, accurate and complete information, and never to coerce them to participate in the study. The participants in this study were informed about the purpose and aims of the study and their right to voluntarily participate in it. Thereafter, the letters of consent were distributed to those who were willing to participate in the study to read, question and give consent by signing them before the interviews and focus group discussions could commence (see Annexure 6).

Furthermore, the participants were also informed that the findings would be shared with the reading public, as well as the management of Ezemvelo KZN Wildlife, for the recommendations to be implemented with the aim of improving service delivery to the rangers, hence improving their quality of life. However, the informed consent process with rangers took more time. This resulted in long sessions due to the language barrier as the assigned social worker first had to translate the letters into isiZulu, and then assist others with the signing of the consent letters. The researcher used the services of a social worker to ensure that the ethical aspects of the study were adhered to as she was briefed on the whole process and bound by the stipulated ethics as a social worker.

1.4.2 Confidentiality and anonymity

Confidentiality involves the protection of privacy and anonymity, while integrity is about avoiding the deception of participants (Strydom, 2011:119; Neuman, 2007:53–57). In addition, Jupp (2006:35) posits that information about the participants should only be revealed with their consent. The researcher ensured the protection of privacy and anonymity by assuring the participants of confidentiality and disassociating names from the participants during the analysis and interpretation of the collected data, by using numbers, thereby ensuring that the shared information was not linked to any of the rangers. Furthermore, the information obtained for the purposes of this study was used solely by the researcher for the intended purposes. Participants were made aware that confidentiality would only be breached if there was a danger or threat to life, child abuse, or a subpoena from a court of law, and in those instances, the affected participants would be informed.

1.4.3 Maintenance of research information

According to Yin (2011:29), duplicating the study data (notes and recordings) and having separate copies is the best backup option of carrying and securing qualitative data from the field as this cannot be replaced. The researcher protected and secured the study data by duplicating both the notes and recordings and storing them in separate files that were on a computer that was password secured, as well as on an external hard drive of which she was the only person who had access.

Lastly, the code of ethics of the Employee Assistance Professionals Association of South Africa (EAPA-SA) (EAPA-SA, 2010:6) stipulates that members should ensure that records are discarded in a manner that will not compromise confidentiality. Even though the results in this study were anonymous, the researcher promised to destroy information records as soon as the study was completed and the thesis had been accepted as fulfilling the requirements for a doctoral degree by Unisa.

1.4.4 Professional conduct

Integrity in qualitative studies is important as the research has to be accurately and fairly conducted. Therefore, the researcher should be trusted to produce a truthful research and even be willing to be challenged (Bryman, 2012:47; Yin, 2011:41). The researcher is a social worker, who is guided by a professional code of conduct. Therefore, she conducted the research in the most objective way and did not compromise any ethical considerations as she observed the participants' right to decision-making and self-determination.

1 4.5 Avoidance of harm

According to Strydom (2011:115) and Neuman (2007:50–51), avoidance of harm is about the researcher protecting participants from any physical or emotional harm that can be induced by the study. In addition, Neuman (2014:148) argues that it is about the researcher accepting the legal and moral responsibility of ensuring that the study will be terminated if the safety of the participants cannot be guaranteed.

The semi-structured interviews were pre-designed in order to avoid any degrading or discriminatory questions or any unacceptable language that was offensive to any member of the sample. During the interviews, the researcher focused only on the information that was directly related to the research questions, and no private or personal questions were asked of the participants.

Debriefing is described by Firing, Moen and Skarsvåg (2015:301) as the process of listening to the participants reliving their traumatic incidents by sharing their experiences in a safe environment in order to compose them.

After the interviews, participants' feelings were explored to determine if they had been unsettled by the discussion. This was done with a view to diffusing the tension and restoring their emotional state to the one prior to their involvement in the data-collection process. For those who were found to be in need of further counselling, the researcher arranged a referral system with the Ezemvelo KZN Wildlife Wellness Manager to ensure that participants who needed further intervention were assisted to avoid secondary trauma. This had to be accomplished by the researcher, who had the responsibility of restoring the participants to their prior state, and she only referred those who needed further counselling to the designated counsellor. Nonetheless, none of the participants indicated the need for this service (see Annexure 5).

1.5 Clarification of key concepts

The following are key concepts used in this study. They are defined as follows:

1.5.1 Park ranger

According to the Game Ranger Association of Africa ([sa]), ranger is a term that has different designations, such as field ranger, game ranger, conservation officer, park ranger and many more. However, the common meaning is a wildlife custodian who works at the coalface of conservation. Their main role is to ensure territorial integrity and safeguard protected areas.

A park ranger or game warden is a safety officer who provides law enforcement protection throughout the park system (Stone, [sa]). It can be seen from the above analysis that a ranger is someone who is entrusted with protecting and conserving wildlife. In the context of this study, rangers are the people who take care of wildlife at HIP and Mkhuze Game Reserve.

1.5.2 Poaching

The term “poaching” refers to the illegal hunting, killing or capturing of animals, a practice that occurs in a variety of ways (The Encyclopaedia of Earth, [sa]). According to Manel, Berthier and Luikart (2002:650), poaching is the illegal harvesting of plant and animal taxa.

Poaching can thus be referred to as the failure to comply with regulations for legal harvesting, resulting in the illegal taking of wildlife that would otherwise not be allowable. The use of the word “poaching” in this study refers to the illegal hunting of wildlife.

1.5.3 Resilience

Resilience encapsulates the ability to adjust and fit in, determination and willpower to endure, the ability to recuperate and re-establish oneself to an earlier condition and collaborations (Taormina, 2015:36; Jackson et al., 2007:1). According to McCubbin (2001:3), resilience is the ability to bounce back or overcome adversity. It involves successful adaptation to adverse conditions.

Resilience can thus be referred to as the ability of an individual to bounce back to an earlier state by adjusting to adversity, maintaining equilibrium, retaining some sense of control over the environment and continuing to move on in a positive manner. In the context of this study, resilience refers to the rangers’ ability to cope with their workplace challenges and maintain a healthy quality of work life.

1.5.4 Employee Assistance Programme

An EAP is a voluntary worksite-based benefit programme aimed at assisting employees to optimally perform by helping them identify and resolve concerns that may affect their job performance (ODE, 2010; Soeker, Matimba, Machingura, Msimango, Moswaane & Tom, 2016: 570).

According to Frauenholtz (2014:154) and Business Dictionary ([sa]), an EAP is an employer-sponsored confidential support service to help employees cope with problems, including, but not limited to, health, marital issues, family, emotional issues, stress and any personal issues that may otherwise negatively affect their lives or work performance. In addition, Jacobson and Lamb (2008:18) argue that employee assistance is a multidisciplinary field of practice in which social workers, psychologists, nurses, professional counsellors and substance abuse counsellors use specific core technologies to enhance employee and workplace effectiveness. The EAP can be referred to as a voluntary and confidential personal support service offered by the employer to help employees be healthy and productive. In the context of this study, the EAP refers to the integrated health and wellness services offered by the employer to employees, which is aimed at improving the quality of life of the rangers at HIP and Mkhuze Game Reserve.

1.5.5 Social work

The International Federation of Social Workers (IFSW) defines global social work as follows: “Social work is a practice-based profession and an academic discipline that promotes social change and development, social cohesion, and the empowerment and liberation of people. Principles of social justice, human rights, collective responsibility and respect for diversities are central to social work. Underpinned by theories of social work, social sciences, humanities and indigenous knowledge, social work engages people and structures to address life’s challenges and enhance wellbeing” (IFSW, 2014). Garthwait (2012:54) refers to social work as a profession that helps individuals, groups and the community to restore their social functioning. Social work can be regarded as a diversity-competent discipline and a helping profession that empowers people by enabling them to address challenges that may affect their wellbeing and social functioning.

This study was conducted by a social work professional, and was therefore grounded on social work principles as outlined in the above definitions.

1.5.6 Model

According to Cohen, Manion and Morrison (2005:12-13), a model is an explanatory device that uses analogies and graphics or visual representation to assist one in obtaining a clear and focused understanding of the key issues of a particular phenomenon. Furthermore, De Vos and Strydom (2011:36) state that a social science model consists mainly of words and abstracts to describe the main features of the social phenomenon without explaining or predicting anything from the description.

Thus, the model in this study refers to a framework that guides the implementation of a plan to address a particular phenomenon.

1.5.7 Workplace

According to Business Dictionary ([sa]), the workplace is the establishment where one works. Also, Heathfield (2013) says that a workplace is a location in a variety of settings where work is performed. The workplace is the location where an employee performs a duty for an employer in exchange for payment. In this study, workplace means the research sites where participants are employed, namely HIP and Mkhuze Game Reserve.

1.6 Research report structure

This research report is divided into seven chapters as follows:

Chapter 1: General introduction and problem formulation

The general introduction and problem formulation focuses on the conceptualisation of the study where poaching, as a phenomenon, is contextualised within the broad foundations of poaching on the African continent, the South African Development Community (SADC) and Ezemvelo KZN Wildlife.

In this chapter, the discussion establishes the purpose and framework of the research through a detailed discussion of the problem statement, rationale for the study, research questions, goals and objectives, ethical considerations and clarification of the key concepts. The chapter is concluded by presenting the problems encountered during the execution of the study, as well as the limitations of the study.

Chapter 2: Literature review on poaching as a phenomenon

This chapter entails a review of relevant literature in order to acquire the background and context pertaining to the phenomenon of poaching. The discussion is based on poaching as a phenomenon, an overview of rangers' traits and their working conditions, and what delineates poachers in South Africa.

This is followed by information on international conservation legislative contexts, Africa's comprehensive anti-poaching strategies, integrated anti-poaching strategies in SADC, South Africa's conservation legislation, anti-poaching strategies for Africa, SADC and South Africa's legislative framework on conservation, and South Africa's integrated strategic management of rhinoceros. The chapter is concluded by the effects of poaching.

Chapter 3: Resilience theory as a theoretical framework used in this study

This chapter covers an in-depth review of the theoretical framework that was used as a lens in executing this study, which is resilience. The discussion contained in this chapter covers the application of resilience, resilience approaches and its factors and techniques. The discussion is centred on the value of resilience in overcoming adversity and positioning resilience-building strategy. In framing the study, different models of resilience were explored in order to provide a comprehensive understanding of resilience in relation to assisting rangers deal with their workplace challenges.

Chapter 4: Research methodology

The detailed research methodology used in this study is presented in this chapter. The discussion includes the research approach, research design, research methods, population, sampling methods, data-collection methods, data analysis techniques and verification. A detailed discussion of the application of the research methodology is presented.

Chapter 5: Data analysis and interpretation

This chapter focuses on presenting a descriptive data analysis and interpretation of the challenges and needs that rangers at HIP and Mkhuzi Game Reserve are faced with in the daily execution of their duties. The findings of this study are presented in a comparative manner, where the information from the two categories of the sample (rangers and management) is compared. Further comparison is made between the ordinary rangers and the Anti-poaching Unit (APU) members (specialised ranger unit). The meaning and expressions of the participants are extrapolated to describe the findings of the study.

The detailed presentation, analysis and interpretation of the qualitative data from empirical sources have been correlated with literature from past studies.

Chapter 6: Summary, conclusions and recommendations

This chapter presents a summary of the study, conclusions based on the literature review, as well as the empirical findings and recommendations drawn from both the literature review and the empirical parts of the study.

Chapter 7: A social work model to assist rangers develop resilience

This chapter presents the proposed ranger resilience-building model that is based on the confirmed challenges and needs that rangers of HIP and Mkhuzi Game Reserve are faced with in their workplace.

1.7 Problems and limitations of the study

The study was limited to Ezemvelo KZN Wildlife. However, the findings can be used to advance the knowledge base of employee wellness in any conservation organisation, thereby improving service delivery.

Although there was more than sufficient information on the resilience of employees working in high-tempo environments, such as nursing, the police force and the army, there was limited information in publications on rangers and their challenges. As a result, the researcher had to rely on online sources of information from anti-poaching agencies to ground the study.

Due to circumstances beyond the researcher's control, the primary research site had to be changed and she ended up conducting her research at Ezemvelo KZN Wildlife as an alternative site. The initial research site was KNP, which the researcher is overseeing. Unfortunately SANParks withheld its permission for the researcher to conduct the study there, citing sensitivity around poaching at the time of the study.

The researcher was faced with the problem of limited literature on rangers and social work literature relevant to the focus of the study. As a result, some dated sources were used. The researcher had to rely on the limited sources, resulting in some sources being used extensively, which could be seen as overuse.

CHAPTER 2: LITERATURE REVIEW ON POACHING AS A PHENOMENON

2.1. Introduction

This chapter presents a detailed account of the literature that was reviewed in an effort to understand poaching as a phenomenon and its impact on the lives of the rangers as the persons on the frontline as far as the protection of wildlife is concerned. As was indicated in the introduction to this thesis, the poaching of wild animals has developed into a worldwide problem, which affects South Africa as well. Governments are making efforts to curb the scourge, but it still persists. According to Fortin (2012), wildlife poaching does not only threaten animals and plants, but also the stability and security of nations, especially communities around the parks, and those with the responsibility to protect wildlife. In most cases, poaching is used to finance armed conflict and terrorist activities run by networks of organised criminals. Furthermore, global anti-poaching approaches are undermined by linkages to terrorism as it involves money laundering.

In trying to unpack poaching as a phenomenon, this section provides an overview of rangers' traits and their working conditions, as well as what delineates poachers in South Africa. This is followed by a discussion on the international conservation legislative context, Africa's comprehensive conservation response strategy, SADC's integrated conservation strategies, South Africa's conservation legislation and its integrated strategic management of the rhinoceros. It concludes with a discussion on the challenges associated with the rangers' work.

2.2. Overview of rangers' traits and their working conditions

Rangers are forced to work under very difficult conditions and, as a result, they are expected to have particular traits to sustain them. According to the International Anti-poaching Foundation (IAPF) (2014) and Kruger (2011:83), rangers' workplace environment needs individuals who are passionate about wildlife protection and conservation, able-bodied incumbents who have the ability to handle stress daily and who can stay calm under pressure, have the stamina to walk for many hours, as well as the ability to track and monitor wildlife, have good observational and

communication skills to report any abnormality in the terrain, be able to fight fires, and have the capacity to survive in the wilderness under unforgiving weather conditions. In addition, they need to be team players who enjoy sharing information. It is important to note that, in terms of the Ezemvelo KZN Wildlife human resources (HR) profiling records, the credit weighting of the educational qualifications of a ranger on the National Qualifications Framework (NQF) is an NQF 4 (optional). This means that a ranger is a low-skilled job that does not require a matriculation qualification (SAQA, 2012:7; Ezemvelo KZN Wildlife, 2011:3).

By the same token, Norris, Paton and Ayton (2012:7) argue that a high-risk profession involves environments where there is consistent exposure to risk, threats and demanding challenges that are associated with the work of a ranger. Nonetheless, Hammer (2016:80) equates a ranger's job to counter-terrorism as it involves endlessly responding to threats such as chasing poachers and engaging in a gun battle with casualty as a consequence. This implies that, to become a ranger, one needs to be fit and have stamina to pursue poachers. One also needs to be a risk taker, as there are possibilities of getting injured or – even worse – being killed. In concurrence, Schiffman (2016:38), in an interview with Emmanuel de Merode, Director of the Virunga National Park in the DRC, indicated that the country's armed conflict affects rangers, as the militia use the park as their refuge, and poach wildlife to fund their war. He further said that dying a violent death is obvious to rangers as over a period of 20 years, 150 rangers have been killed. He himself survived an ambush that left him seriously injured in 2014. In addition, Schiffman (2016:39) quoted De Merode as saying that, despite their stressful combat work, the ranger community shares a sense of mutual trust and support, commitment and camaraderie. Furthermore, the park employs the sons, daughters and grandchildren of rangers as a way to motivate them and encourage loyalty. As a consequence, the rangers go the extra mile, particularly by negotiating with the rebels to spare the park.

One can say that rangers need to possess hardiness traits to be able to fight poaching and protect wildlife. In addition, they should be loyal and trustworthy, not act as informants to the poachers, and be team players who are dedicated to wildlife conservation.

These points are confirmed by the work of several authors (Fourie, 2014:244; Kruger, 2011:85; Bryden, 2005:125), who argue that the responsibilities of rangers, as vanguards of wildlife, include security, patrolling the park, law enforcement, research assistance and administration. In the process, they are exposed to recurrent shock and trauma. Based on the abovementioned, it is important to build their resilience and empower them to bounce back within the harsh work environment in which they find themselves, which is often characterised by adversity.

Like police officers, rangers work in dangerous environments. Their passion for conservation has driven them to safeguard wildlife against human destruction. Hence, the demands of their work necessitate them to be on call 24 hours a day, while at the same time they need to be highly alert, as there is the potential of a fatal attack. This means that, for their own survival, their observations, instincts and radar should be alert at all times, irrespective of whether they work long hours (Fourie, 2014:243; Drylie, 2012:100; Kruger, 2011:89; Bryden, 2005:119). While it is possible for human beings to be awake and alert for an extended period of time, going beyond a certain threshold can be fatal. When the rangers are exhausted, this puts them in a dangerous situation in which they will be susceptible to accidents.

Damm (2014:3) and Anderson and Jooste (2014:2) argue that rangers are overstretched. Currently, in KNP, one ranger is allocated to an area of 50 km², against the norm of one for every 10 km². Furthermore, Bryden (2005:117) maintains that rangers have to adapt to bush life as their living quarters are situated in the wilderness. They work long hours away from home, and this affects their social and family life, especially their children who, more often than not, have to attend boarding school. It could be said that work-life balance for rangers is a misnomer since they are mostly away from home, and the parks are understaffed, making them overworked. Norris et al. (2012:37) point out that, when one family member experiences a dilemma, it affects the whole family. For rangers, this can be very stressful as they are always away from home and, as a result, are unable to offer the necessary support to their families.

Healy (2014:115) maintains that social workers use a systems approach to analyse the interaction within and across multiple social systems, as well as to understand the problems and assist individuals, as interrelated factors contribute to the wellbeing of both the individual and the community. This suggests that wellness practitioners should not treat their clients in isolation, but as a unit made up of their family, friends and the general community that may at times contribute to their actions.

In pursuit of doing their duties of protecting wildlife, rangers continuously learn new tricks of the trade, but in the midst these are a number of setbacks that frustrate them, such as illegal dealers who lure rangers who are easily influenced to be in cahoots with poachers who exchange information for money, and dedicated and committed rangers, who innocuously share information with family members, who in turn maliciously pass this information on to the poachers. In addition, overcast days and nights are a challenge during a patrol, as rangers and unmanned aerial vehicles are unable to detect poachers wearing camouflage. Rangers often get sweaty and confused, lose their sense of direction, and sometimes wander fruitlessly, going around in never-ending circles (Bryden, 2005:118–122). All these setbacks put rangers in danger, and, as a result, it seems that they are not doing their jobs.

While persistently safeguarding wildlife is core to the execution of their duties, teamwork, interdependence and trust relationships are also important qualities of rangers. Bryden (2005:110) states that rangers' lives are in peril as shootings with poachers can ensue at any time. In addition, these poachers are unrelenting, because of their political connectedness. For example, some Mozambican poachers were caught in KNP with overwhelming evidence, but because of their political connections, their detention was considered to be in contradiction of international amnesty law, which is opposed to arbitrary decisions and the excessive use of force during detention. Thus they were released without being convicted, and their poaching equipment was returned to them. In addition, rangers are unable to confront the poachers for fear of reprisal. A conservationist, Martinez, from Mozambique, was killed with his family in 1973 for confronting poachers (Bryden, 2005:114).

This suggests that there is a high risk of rangers been shot at, even killed; hence the establishment of an anti-poaching unit that uses military tactics to combat poaching. Like humanitarian aid workers' families, the families of rangers are also not immune to the risk of trauma and stress that comes with the territory. There are several cases of employees and their family members being attacked and sometimes killed by animals in the rangers' place of work. For example, in Ezemvelo KZN Wildlife, two employees were killed by animals at HIP in 2016. The first incident took place on 17 February when an employee was mauled by a lion during routine pump maintenance. The second incident took place on 14 July when an employee was crushed to death by an elephant.

As far as attacks on family members are concerned, the following incidents have been recorded: On 4 December 2014, a crocodile killed the son of a park employee; on 14 August 2003, a leopard killed the son of a park employee; and on 8 March 2001, the wife of a park manager died after a leopard attack (Bloch, 2016; Savides, 2016; Gritti, 2015:450; SANParks, 2014a; Kruger, 2011:60; Helfrich, 2001).

In light of the abovementioned, the researcher is of the opinion that rangers need to be passionate and resilient, as their work environment has various challenges that affect their lives in general, and sometimes their family members become casualties as they get injured and/or killed.

2.3. Types of poaching and characteristics that delineate poachers

According to several authors (Fourie, 2014:247; Bryden, 2005:103; Tactical Training and Wildlife Services, 2001), poaching is a wildlife crime. There are different types of poaching: subsistence poaching, which is said to be comparatively low and survival-driven as animals are killed for food and traditional medicine as well as commercial and trophy poaching, which is done to make money and involves trading animal species for financial gain. The latter type of poaching is well organised, syndicate-driven, and poachers use sophisticated ammunition. In contrast, other authors (Wildlifecampus, [sa]; Knappa, Peaceb & Bechtel, 2017:28) argue that subsistence poachers are poverty stricken, poach for survival and kill animals indiscriminately for food.

They poach at night and use dogs, bait and traps to poach, and would give up poaching if they were caught. However, they can be easily corrupted by commercial poachers. Commercial poachers use the same methods of poaching as subsistence poachers. However, they are driven by money and trade on the poached taxa, such as meat or plants. They are mostly farm managers, traditional healers, trophy hunters and plant collectors. They are seasonal poachers and do not have wildlife knowledge. Furthermore, syndicates of poachers are organised and sophisticated networks of criminals who are internationally orchestrated and funded, and poach day and night. They run a business of trading in selective and targeted species, such as rhino and lions. These poachers are professional and use high-technology innovations for rapid, undetected poaching. They are brazen, most have paramilitary skills and they operate in large groups (Wildlifecampus, [sa]; Knappa et al., 2017:27). It can be seen from the above analysis that subsistence poachers poach at night and are easily deterred, whereas syndicate poachers are brazen and because there is a lot of money involved, they poach day and night as they would like to get more money by selling substantial amounts of their poached products.

In addition, Damm (2014:3–4) and Anderson and Jooste (2014:2) argue that most poachers are said to be from Mozambique. The number is estimated at 80%. They are said to enter South Africa through KNP, mostly from the south of the Olifants River (locally known as the Lepelle River), which borders South Africa and Mozambique. They permeate the park at night, walking in threes (the rifle handler, who shoots; the navigator, who leads the way; and the carry man, who carries all the provisions, such as food, water, knives and axes). They are uneducated and approximately 20 years old. Conduits of poached horn and reward monies are handled by men from Massingir who are referred to as Level 2 bosses. Warchol and Harrington (2016:26) claim that poachers are local residents with a low socio-economic status who earn a small profit, while the trafficker (smuggler) and the retailer are mostly outsiders who receive larger profits for a job well done.

Anna (2016:3) argues that KNP is located between South Africa's two provinces with the highest unemployment rates, Mpumalanga (29%) and Limpopo (18%), which makes poaching an attractive option.

In the same way, Schiffman (2016:39) cited Emmanuel de Merode, Director of the Virunga National Park in the DRC, saying that economic reasons are the underlying causes of poaching in the DRC as armed conflict and an unemployment rate of 70% would naturally lure the poor, especially from the communities neighbouring the park, to join the militia purely for survival. Therefore, the park management has resorted to employing community members in order to curb poaching and protect the park.

The above information suggests that poaching is a complex subject, as poachers and middlemen (conduits of poached horn) are mostly impoverished individuals, who are trying to break the cycle and fend for their families by committing crime. Although some of the poachers are from South Africa, many are from Mozambique. However, less is known about the masterminds and the kingpins. This situation increases the danger that rangers are facing in trying to do their jobs of protecting wildlife.

2.4. International conservation legislative context

According to Kabukuru (2013:70), 2011 was the “the worst year for wildlife”, based on the following information: 22% of all poaching cases were carried out in protected areas, while the remaining 78% took place in wildlife dispersal areas. A study by the United Nations (UN), released in Bangkok, Thailand, revealed that 17 000 elephants were killed in 2011 alone. The African continent, which is rich in wildlife and economically dependent on this natural resource, has been ravaged by poaching. Therefore, there is a need to rally behind every available resource to help combat this peril. In response to the abovementioned scourge, intergovernmental collaborations had to be coordinated and strengthened to conserve wildlife. It is therefore important to explore conservation in the international context on the African continent, in the SADC region and within the national legal framework in an effort to understand the poaching phenomenon and its effects on the working conditions of rangers.

2.4.1 Convention on International Trade in Endangered Species of Wild Fauna and Flora

The convention on International Trade in Endangered Species (CITES) of wild fauna and flora was established because the trade in wild fauna and flora was a lucrative business that exposed certain plants and animals to exploitation and possible extinction. This convention is a voluntary, international treaty that ensures that the trade in plants and animals does not threaten their survival. Moreover, international governments have agreed on controls to regulate the trade of these at their ports of entry as a way to safeguard these species. Lists of endangered species were therefore developed for each government to ensure that the right documentation permitting their trade was produced when entering and exiting their ports as a way to protect these species (CITES, [sa]).

South Africa became part of CITES due to the unrelenting poaching of the white rhino population. In 1994, rhinos became regulated as a species under threat, and were thus included on the list of threatened or protected species (ToPS) in the CITES appendices. This means that an exportation permit is required if rhinos are to enter or exit the country, or even be moved within the country (CITES, [sa]). Thus, the possession of a rhino specimen without the necessary documentation is a punishable offence. In highlighting the seriousness of this, Etheridge (2017) reported that two Chinese nationals were arrested at a restaurant in Cape Town because they were found to be in possession of processed rhino horn and ivory without a permit. Their sentence was five years' imprisonment or a fine of R35 000 each. They were also declared undesirable persons in South Africa, which means that they are barred from visiting the country once they leave.

2.4.2 Convention on Biological Diversity and Nagoya Protocol

The Convention on Biological Diversity (CBD) and Nagoya Protocol declarations promote the conservation of biological diversity for the benefit of humans, as well as its sustainable use, to avoid long-term decline, and to share in a fair and equitable manner the benefits derived from their genetic material. In addition, the Convention acknowledges that the returns from conservation of biological diversity should bring about environmental, economic and social investment in the local communities (CBD, 2016).

South Africa, as a signatory to these conventions, had to develop and adopt strategies to manage their biodiversity that mitigate poaching and protect wildlife. Samatran rhino captive breeding and South Africa's white rhino and Cape Buffalo breeding are a few examples of sustainable projects that South Africa is running as a commitment to the Convention. These endangered species projects are aimed solely at preventing the possible extinction of the rhino and Cape buffalo in particular (Savetherhino, 2013; Skinner, Dott, Mattee & Hunt, 2006:238).

In addition, CBD (2016) argues that South Africa ratified the Nagoya Protocol by issuing an Internationally Recognised Certificate of Compliance (IRCC) through the Access and Benefit-sharing (ABS) Clearing House, which permits and grants united national authorities access, under the Nagoya Protocol, to use the kanna plant, sharing its traditional knowledge and its medicinal benefits for commercial use. In so doing, South Africa was not only operationalising the protocol by sharing the benefits of its flora, but was also protecting its intellectual property as the issuing of a certificate means that the product developed from the kanna plant is patented. In other words South Africa is sharing its knowledge of flora to benefit mankind globally. Thus, the rangers, as protectors of the natural fauna and flora, who have to report any abnormality observed during their routine patrols, ensure that the plant does not become extinct through illegal harvesting or other maladies.

2.4.3 Kasane Declaration

The Kasane Declaration was concluded in Botswana in 2015, and was based on the 2014 London Declaration where the Conference of the European Union decided to take action and combat illegal wildlife trade. The Conference recognised efforts made up to that stage and called for harsher sentences for criminal syndicates who used legal routes to trade in species that had been acquired illegally, as well as criminals who take advantage of the divergent and sometimes conflicting approaches of countries internationally (such as the hunting of wildlife being illegal in one country, but permissible with a permit in another) (UNEP-Interpol, 2016:25; Lee, 2015).

Moreover, the Environmental Investigation Agency (EIA) (2015) argues that participating governments pledged to strengthen their legal systems in order to tackle the profits of illegal wildlife trade syndicates by forming networks with communities and other stakeholders.

South Africa, as a signatory to the Kasane Declaration, is committed to the objectives of the Declaration. The development of the Biodiversity Management Plan for White Rhinoceros (Notice 1191 of 2015) (Republic of South Africa, 2015) was a consequence of this declaration. The evidence from Wilson-Späth (2017) suggests that South Africa has made progress in some areas. These include the training of magistrates, prosecutors and border officials on wildlife issues. The results are an increase in arrests and convictions, as well as harsher sentences. However, challenges such as a lack of resources, the under-funding of wildlife agencies and the poor cooperation of provincial authorities and police in Mpumalanga and Limpopo, in particular, who are sometimes linked to corrupt practices, were noted. In addition, the Constitutional Court decision of 5 April 2017 that lifted a ban on trade in rhino horn was a setback that will increase poaching (Wilson-Späth, 2017; IOL & Independent Media, 2017). In short, despite challenges in implementing the Kasane Declaration, South Africa's affiliation to the international declaration and its role and efforts in ratifying the relevant legislation show a commitment to eradicate wildlife crimes in order to achieve a sustainable environment.

On the whole, these international declarations seek to share information on how to balance humans' needs and the sustainable use of the global environment in a manner that would avoid the long-term decline of the country's fauna and flora. This could be achieved by regulating the sharing and use of information gained from the environment in a fair and equitable manner to benefit people. Making rangers aware of these declarations may encourage them to cope and not despair as their efforts in fighting poaching are being backed up by a call for harsher sentences for wildlife crimes.

2.5. Africa's comprehensive conservation response strategy

According to Barret and Arcese (1998:455), the crux of the illegal harvesting of wildlife lies in the imperfect labour and production markets, static agriculture production, and natural risks, such as climate change and population growth. They argue that, for poaching to be controlled, more durable approaches are needed to meet the challenging endemic rural poverty. It could be said that wildlife poaching has trapped most African countries as they are grappling with its menace. In responding to the threat of wildlife extinction, the African continent developed the following multi-tiered approach to deal with the problem:

2.5.1 Brazzaville Strategy

According to the African Wildlife Foundation (AWF) (2015), the Brazzaville Strategy came about as a result of a conference held in Brazzaville, Congo, in 2015, where an approach was developed that denotes a commitment by African countries to combat the illegal exploitation and trade of the continent's fauna and flora. In order to achieve the goals of the Brazzaville Strategy, a framework was established to implement stringent laws, and strengthen capacity to deal with the illegal exploitation of and trade in fauna and flora. These included plans on the ground to support all anti-poaching efforts in protected areas, increase global awareness of the poaching menace, advocate for the strengthening of anti-poaching laws and partnering with and supporting policy makers to tackle the poaching crisis (AWF, 2015; Anderson & Jooste, 2014:2). All these efforts were geared towards the conservation of African wildlife, and South Africa, as part of this conference, ensured the existence of environmental legislation and its enforcement. Whether all these efforts work or not continues to be a matter for debate, as evidence from Wilson-Späth (2017) paints a bleak picture of a government that pledges to fight wildlife crime on paper, yet its actions suggest otherwise. He alleges that "South African laws provide scant protection for non-native species as there are a minimum of 280 tigers held captive in 44 facilities. The trade in the tigers' parts and products is growing, as between 2006 and 2015, 212 live tigers, 25 tiger "trophies" and 20 tiger skins were exported from South Africa".

It could be said that the South African government is trying to combat poaching through its engagement in Africa's efforts, but it still lacks the ability to implement these anti-poaching laws, as well as to advocate for strong regulations that would deter the exploitation of wildlife. Furthermore, the latest Constitutional Court ruling that legalised the buying and selling of rhino horn within South Africa compromises the South African government's anti poaching efforts and its position on CITES. This state of affairs has a negative impact on the lives of the rangers, as they continue to have the pressure of safeguarding the wildlife. The researcher is of the opinion that, despite the abovementioned setbacks, rangers should be comforted by the successful conviction rate of cases, as alluded to earlier in this chapter, even if it is on a small scale.

2.5.2 Partnerships

Various species of wildlife in Africa appear on the CITES and IUCN lists of endangered species. Therefore, the continent is part of the International Consortium on Combating Wildlife Crimes (ICWC), where different countries internationally collaborate with each other's law enforcement agencies to denounce wildlife crimes. For instance, in 2016, the 17th meeting of the Conference of the Parties (COP 17) to CITES, as well as the IUCN, recommended that domestic markets of ivory trade should be closed. The USA was the first country to regulate the ban on rhino horn and ivory trade, whereas China announced its intention to enact the regulation in 2017 (CITES, 2016a; IUCN, 2016). Likewise, Asian countries, which are said to have a predominant desire for rhino horn and ivory, are said to be following suit. For instance the governments of Japan, Taiwan, South Korea, Yemen and Vietnam are engaging in robust public awareness campaigns to demystify the medicinal value of horns (Ellis, 2013).

In addition, partnerships that condemn poaching were forged with the USA, where awareness and education strategies employed included aggressive and strong messages of outrage, distress and sorrow, while statistics were used to demystify the benefits associated with the use of animal taxa, as well as to awaken the public about the poaching crisis. On the continental level, 3 March has been declared Africa Environment Day.

It creates a platform to raise awareness and challenge the continent's pressing environmental issues (Kimenyi, 2015:1; Anderson & Jooste, 2014:2; AWF, 2014:6).

In brief, one can say that these varied partnerships, when effectively employed, can assist in rooting out wildlife crimes and safeguarding wildlife for future generations. In doing so, the rangers, who are at the forefront of conservation, will be assisted to achieve a country that is characterised by people who respect wildlife, and their stress levels will be reduced. This could be beneficial to their quality of life, including that of their families.

2.5.3 Socio-economic development

According to the Addis Ababa Principles and Guidelines on Sustainable Use of Biodiversity (AAPG) Convention, the ecosystem should serve and maintain communities and society. Likewise, society should not exploit wildlife, but rather ensure its sustainability for generations to come (CBD, 2004). Correspondingly, the African solution encourages its countries to use their diverse legislative framework to ensure the long-term sustainability of wildlife by encouraging local stewardship.

The suggested collaborations may include conservationists, law enforcement, policy makers and society to ensure that the economic development approaches are compatible with human needs and the sustainability of biodiversity (Convention on the Conservation of Migratory Species of Wild Animals, 2008). In other words, collaborations may include encouraging local community members to be informers by giving authorities tip-offs on possible poaching activities, while partnerships between law enforcement agencies may include officials at ports of entry working closely with the police and prosecution authorities. Economic development approaches may include allowing communities to benefit from the park by allowing the seasonal harvesting of wildlife (Kimenyi, 2015). For example, SANParks always allows communities neighbouring KNP to harvest mopani worms and grass for thatch roofing. In coastal areas, they are allowed to harvest fish and wood along the Garden Route.

With regard to community-based conservation strategies, the communities adjacent to protected areas may participate in their sustainability by assisting in raising awareness and educating the public about the importance of wildlife conservation. In turn, these communities will benefit through the sharing of park revenues, social responsibility projects and job-creation programmes. In most cases, the incentives are hoped to build the communities' allegiance as they become vigilant by jealously guarding their heritage and investment against poachers. In the case of the Virunga National Park in the DRC, community members were offered jobs and opportunities to run small agri-businesses that uplifted them, thereby discouraging community members from joining in rebel groups. As a result, this contributed to the attainment of peace and stability. It also averted poaching from the park. However, the downside of human settlement within protected areas was recorded in Kenya and Botswana, as the co-existence of humans and wildlife had unintended repercussions such as cross-infection between wild and domesticated animals, which may be hard to control, for example, food-and-mouth disease (Schiffman, 2016:39; Kimenyi, 2015; Anderson & Jooste, 2014:2; AWF, 2014:7; Cheteni, 2014:65).

In addition, Distefano (2009:6) and Marikia, Svarstad and Benjaminsen (2015:19) maintain that communities in Africa are grappling with the effects of co-existence with wildlife, as wild animals destroy their crops and predate on their livestock. An example of a successful response to this challenge is in South Africa where the Cape Leopard Trust, in collaboration with the Cederberg Conservancy, worked with communities and farmers in managing the human-wildlife conflict that was due to leopards, caracal and jackals preying on their livestock. Their interventions were not only educational, but were also empowering as the communities and farmers are now enclosing their livestock at night and using sheepdogs to guard them rather than using snares to control predators (The Cape Leopard Trust, [sa]).

In view of the abovementioned factors, the sustainability of biodiversity can only be achieved if the socio-economic needs of human beings are met. One way of doing this is by establishing compatible collaborations between the protected areas and their neighbouring communities.

2.5.4 Local-level activities

Africa, in its quest to sustain wildlife, uses different strategies by governments and their agencies responsible for the management of protected areas. On the ground, the efforts include activities such as providing sources of water to wildlife during dry seasons to keep the animals within protected areas. Furthermore, the continent's diverse countries use sophisticated high-technology innovations such as tracking equipment and aerial surveys to monitor the location of animals, as well as to determine the species' population. Lastly, on the frontline, rangers were to be given paramilitary and ecological training to assist them to do their work, such as tracking and identifying any environmental anomalies or changes (Peter, 2015:2; AWF, 2014:3; Cheteni, 2014:68).

It could be concluded that, although wildlife crime is increasing, Africa is trying its best to save its wildlife heritage by collaborating with countries globally and agencies to fight the menace of the illegal hunting of wildlife. Rangers are at the frontline of conservation. They are the ones responsible for monitoring the sources of water for wildlife during dry seasons. What is more, they sometimes witness dying animals, and this can be disheartening. There is a need to ensure that the psychosocial wellbeing of the rangers is taken into consideration by investing in them as people on the frontline of wildlife conservation. In doing this, their productivity will be increased, as they will realise that they are being taken seriously by their superiors in the conservation fraternity.

2.6. SADC's integrated conservation strategies

SADC came up with consolidated anti-poaching strategies to avoid the adverse effects of poaching, but most importantly, to harmonise legislation and coordinate activities in response to the steeply rising statistics of poached rhinos. This, in turn, led to region-wide conventions such as the Lusaka Agreement, in which African countries agreed to use a task force to enforce anti-poaching laws and reduce the illegal trade in flora and fauna, as well as LEAP, SADC's Protocol on Wildlife Conservation and Law Enforcement Strategies.

These are all geared towards averting the poaching menace, as well as recognising the interdependency between human welfare and wildlife for the sustainable management of the rhino population (SADC, 2015; Republic of South Africa 2015; Lusaka Agreement Task Force, 1994). The development of LEAP propelled successful strategies, while unsuccessful ones were abandoned, especially those that were in contradiction of human and/or animal rights. The following methods are used to protect SADC's wildlife:

2.6.1 Horn poisoning and dehorning

Horn poisoning involves injecting a mixture of indelible ink and poison into the horn of a live rhino. The ink can be detected through scans at airports or immigration posts if the horn is smuggled out of the country. Nevertheless, this method had to be abandoned due to ethical reasons as the poison was harmful and could cause death to anyone who uses the horn powder (Anderson & Jooste, 2014:3; Langkilde, 2013; Mukwazvure & Magadza, 2012:1064).

According to Lindsey and Taylor (2011:2), dehorning is a contentious issue in Africa. Countries such as Namibia, South Africa, Swaziland and Zimbabwe used the approach and felt it was effective, although Botswana, Tanzania and Zambia preferred proactive and non-invasive methods. Nevertheless, dehorning was not a success, neither was it effective in Zimbabwe, as the dehorned rhinos were killed within 12 to 18 months after the process was implemented. The assumption was that poachers either killed the animals in retaliation or killed them for the remaining horn stub. However, in Namibia, the method worked because security was strengthened by increased ranger patrols (Cheteni, 2014:64; Langkilde, 2013; Mukwazvure & Magadza, 2012:1065).

Owing to the aforesaid factors, the researcher's view is that the horn poisoning and dehorning methods failed in general as they did little to deter poaching activities. Nonetheless, the use of the horn poisoning and dehorning methods remained ineffective. The Namibian government therefore coupled these methods with ranger patrols, which shows that rangers are the indispensable vanguards of wildlife conservation. As a result, their wellbeing has to be taken into consideration.

2.6.2 Deterrent policies

In responding to the increase in wildlife crimes, SADC embarked on different legislative measures with the aim of discouraging illegal hunting. For instance, the Zimbabwean government employed this approach to absolve rangers who killed poachers and believed it to be a successful deterrent. However, the policy was withdrawn due to the human rights violation element, as killing someone is seen as violating one's right to exist (Cheteni, 2014:65). Various authors (Etheridge, 2017; Zambia States News Service, 2016; Adams, 2012:24–25) state that Zambian laws on the possession of rhino horn are unforgiving as one can receive up to 20 years' imprisonment on average. Likewise, South Africa uses penalties and imprisonment as a preventative approach, but unfortunately this was ineffective due to poaching being an organised crime with high incentives. Poachers were able to pay the set fines and hire the best lawyers, who often successfully defended their cases. The case of two Chinese nationals found in possession of processed rhino horn and ivory without a permit is a classic example of ineffective laws, as these criminals received five years' imprisonment or a fine of R35 000 each. They opted to pay the fine.

However, according to Adams (2012:24), another point has to be considered. Although anti-poaching laws exist, the general frustration is about the prosecution of rhino poaching cases as it is difficult to prove beyond reasonable doubt that a poacher is guilty. If a poacher is apprehended before the actual poaching takes place, there is very little to prove, except for armed trespassing. Legal measures to crack down on poaching are not working as intended, as poachers are often acquitted at trials. Poachers who do not receive a prison sentence may return to the protected areas to poach more rhino, as well as to harass the rangers. This situation may be discouraging for rangers, hence the need to empower them to cope with their workplace challenges. This is another reason that contributed to the researcher's motivation to embark on this study, so that – ultimately – a model that is pro-rangers could be developed to assist them to develop resilience, as their workplace challenges are a reality.

2.6.3 Radio tagging

Radio tagging is used to help locate the animals. A transmitter is tagged around the neck or ankle of an animal, and sends radio signals indicating the location of the animal. South Africa, like other SADC member countries, experienced challenges such as irregular and false frequency transmission, battery units that were weak in power and very heavy, ill-fitting collars that caused injuries, and sometimes infertility and death. This led to the abandonment of this method (Cheteni, 2014:65; Wildlife ACT, 2014). The researcher's opinion is that since rangers do patrols, they are most likely to witness animals that have been injured by the ill-fitting collars and also stumble on dead animals due to the side effects of radio tagging. This could affect them negatively as they may regard themselves as failing to protect wildlife as stipulated in their job descriptions.

2.6.4 Wireless sensor network (WSN)

Wireless sensor network uses a combination of infrared motion sensors and cameras to monitor areas of special interest, such as wildlife passages. This is a targeted tracking technique that uses wireless sensors for the real-time tracking and detecting of the whereabouts of an animal. A wireless sensor with a camera is attached to the animal and the data is transmitted to a central computer to provide the GPS location of the animal. The system is able to detect any abrupt change and abnormalities, and send the information to the rangers for prompt response.

However, the challenge of limited power computation makes this technique less effective. Like the abovementioned methods, the challenge with the system is false alarms. Nonetheless, South Africa is using this method in KNP and the wildlife areas under the management of Ezemvelo KZN Wildlife (Associated Press, 2016; Mukwazvure & Magadza, 2012:1065; Ramya, Kumar & Rao, 2012:93). The researcher is of the opinion that the continuous failed technologies suggest that rangers are valued assets in wildlife conservation, and should be treated as such.

2.6.5 Veterinary forensics

This forensic approach uses a combination of the Rhino DNA Index System (RHoDIS) and DNA mapping. Veterinary forensics has been used to support the criminal justice system to successfully prosecute poachers. RHoDIS is a system established by the University of Pretoria's Veterinary Genetics Laboratory (VGL) to enable South Africa to keep a database of all rhino DNA samples. DNA mapping is used to determine the precise origin and location of the animal killed, and was developed by conservationist Samuel Waser in response to high numbers of poached elephants in Africa. Therefore, adequate pay and training of rangers, as well as educating the public, are some of the best strategies to fight poaching because it is preventative in nature (Wasser, Brown, Mailand, Mondol, Clark, Laurie & Weir, 2015:84; Cheteni, 2014:67; Mukwazvure & Magadza, 2012:1066; Shaw, 2011; Biello, 2007:1; RHoDIS, [sa]). In summary, it could be said that RHoDIS is a South African innovation that is shared by the SADC region to advance wildlife conservation. The researcher believes that, although the veterinary forensic approach is a major step towards sustainable biodiversity, it remains just one of the strategies towards curbing animal cruelty and wildlife crimes, but the rangers remain a great deterrent against poaching. Thus, their importance cannot be underestimated.

2.6.6 Unmanned aerial vehicles or drones

Drones are aircrafts without human beings aboard. They are usually used for dangerous missions, which is why they are remotely piloted. This means that missiles can be launched from an office. They are aerial vehicles used for surveillance and are fitted with sensors and cameras to help with the real-time tracking, detection and monitoring of animals. This strategy was used successfully in Nepal and the USA, and is currently being used in South Africa. Although its expense makes it unaffordable to most developing countries, there are legal concerns, such as security challenges and risks, for instance, collision with other aircrafts, possible damage and injury to property and people. Recent terrorist attacks make this method less appealing to national security (Cheteni, 2014:67; Mukwazvure & Magadza, 2012:1066; South African Civil Aviation Authority, [sa]).

Hodgson and Pin Koh (2016:404), further argue that, although unmanned aerial vehicles are good for observing and monitoring wildlife, the technology has undesirable, unforeseen effects on animals, such as accidents that crush the animals and excessive noise that disturbs the wildlife.

Overall, SADC's efforts flow from the strategies of countries internationally and on the African continent to fight wildlife crime. Their integrated anti-poaching interventions range from simple human interventions, such as rangers to patrol the area, to high-technology methods such as wireless sensors and drones. In spite of the use of high-technology innovations to reach remote and sometimes dangerous areas, the researcher is of the opinion that these technologies remain the enabling tools that assist in determining the situation. They can only show what is happening, but rangers still have to go to the scene of the incident, making them the real backbone of conservation efforts, which calls for the authorities to always be mindful of their wellbeing.

2.7. South Africa's conservation legislative framework

The South African government has the responsibility to safeguard its natural resources against exploitation, and ensure that they are sustainable and benefit its people, while preserving it for future generations. The researcher found it important to examine the South African conservation legislative framework to illustrate the role played by government in giving direction in all its conservation efforts. The South African government introduced the following regulations in an effort to meet the aforementioned objective:

2.7.1 National Environment Management Act

The National Environmental Management Act (NEMA), Act No. 107 of 1998 (Republic of South Africa, 1998), is the overarching regulation that articulates South Africa's vision of sustainable and integrated environmental, social and economic resource management. The Act is embedded in Section 24 of the South African constitution, which states that everyone has the right to a safe and clean environment that is non-detrimental to their health and welfare.

This means that environmental management should put the people and their needs first, and the environment should be protected as the people's heritage. The purpose of this Act is to ensure the sustainable and integrated environmental, social and economic management of biodiversity, where research will be used to ensure the preservation of South Africa's environmental resources for future generations. In addition, the Act seeks to ensure that every citizen has the right to a safe environment that is not harmful to their health, and that is free of environmental pollution and degradation. In terms of fulfilling the socio-economic and environmental rights of all its people, the state will promote and protect its citizens by ensuring the equitable distribution of wealth and resources.

Furthermore, the needs of the previously disadvantaged communities will be met in order to redress the effects of poverty (Republic of South Africa, 1998). Lastly, NEMA strives to provide agencies that are tasked with coordinating environmental functions with a framework on which they will base their decision making when administering and enforcing environmental regulations.

2.7.2 National Environmental Management: Protected Areas Act

The National Environmental Management: Protected Areas Act (NEMPAA), Act No. 57 of 2003 (Republic of South Africa, 2003), is grounded on the NEMA framework, which manages the country's biodiversity. The role of NEMPAA is thus to provide protection and conservation of South Africa's diverse natural, biological, landscape and seascape resources. To achieve this, a national register of all protected areas had to be established for better management in accordance with certain norms and standards.

The Act calls for continuous consultation with public and intergovernmental organisations on matters pertaining to protected areas, as well as their governance and functions for their continued existence. In addition, the agencies that are tasked with the authority to manage and monitor these protected areas should report annually to the Minister of Environment Affairs on the status of the implementation of the management plan (Republic of South Africa, 2003).

Ezemvelo KZN Wildlife is one of the agencies mandated and governed by NEMPAA to protect and manage KZN's wildlife. This means that Ezemvelo KZN Wildlife is a custodian of KZN's protected areas and parks, for instance, the uKhahlamba Drakensburg heritage site. The coastal and Zululand regions should be managed in a responsible manner (Ezemvelo KZN Wildlife, [sa]). Having said that, the role of the rangers cannot be overemphasised, as they remain the necessary resource to enable Ezemvelo KZN Wildlife to achieve its mandate of wildlife conservation, through their safeguarding roles.

2.7.3 National Environmental Management: Biodiversity

The National Environmental Management: Biodiversity Act (NEMBA), Act No. 10 of 2004 (Republic of South Africa, 2004), provides legislative commitment to promote and conserve South Africa's biodiversity within the framework of NEMA. The Act seeks to ensure that the maintenance, protection and sustainability of the country's biodiversity is fair and equitable in sharing benefits derived from its genetic resources. It also ensures the establishment of institutes to manage these resources.

Furthermore, the Minister of Environment Affairs should appoint agencies to manage these resources on behalf of government. Ezemvelo KZN Wildlife is one of the agencies mandated to safeguard and conserve South Africa's wildlife. Like other agencies, such as SANParks, the Mpumalanga Parks Board and the Limpopo Tourism and Parks Board, it needs to submit its biodiversity management plans for regulation and approval, advise the Minister on conservation-related matters and the gazetting of such matters, and list its endangered species as per the ToPS regulations (Republic of South Africa, 2004).

These agencies have to ensure that, as trustees of government's biodiversity, they act within the framework of NEMBA, which is the protection of the ecosystem as a whole. They should ensure that environmental resources such as land, air and water are safe from pollution, and that the wildlife is protected from poaching, thereby conserving them for generations to come, as per NEMA.

It is argued that the state subsidises these agencies to ensure the proper management of biodiversity. However the funding is often inadequate. For instance, Kubheka (2016) quoted Ibrahim Moola, the financial manager of Ezemvelo KZN Wildlife, saying that its government subsidy had been cut by R145 million. One can say that, under these circumstances, wildlife agencies have to find alternative ways to supplement their insufficient funding in order to continue to properly conserve and manage the state's biodiversity.

In summary, the South African legislation on conservation provides a framework for the sustainable protection, conservation and responsible use of its natural resources in order to ensure that they are preserved for future generations. Even though nothing is mentioned about the role that has to be played by the rangers, it is apparent that they cannot be excluded. Rangers form an integral part of the whole process, as they are the foot soldiers in the efforts of wildlife conservation. This calls for their wellbeing to be taken seriously by all stakeholders involved in the country's conservation efforts.

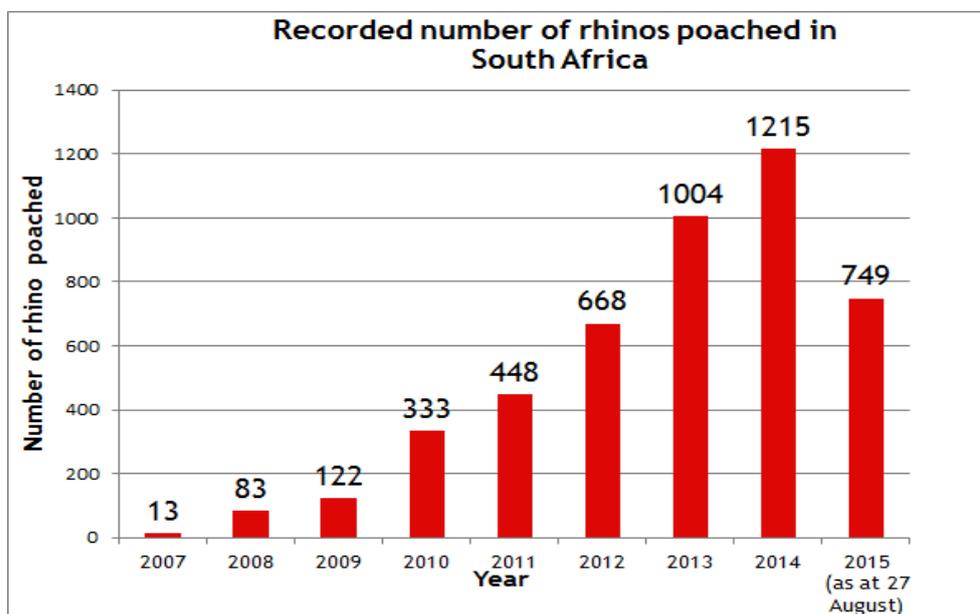
2.8. South Africa's integrated strategic management of the rhinoceros

Rangers are employed by conservation agencies as a vital support structure in the management of national parks and other protected areas, since they are at the forefront of conservation. To be precise, they assist the state's trusteeship with the deployment of their mandate by safeguarding biodiversity against human destruction. It is therefore important to highlight that regulations may unintentionally put pressure on rangers' working environment. It becomes important then for the social worker working within the conservation environment to be aware of the relevant legislative framework and regulations in order to appropriately advise, clarify any misconception, as well as empower rangers to better understand their responsibilities in relation to those of the organisation. Due to the fact that rhino poaching has become a serious challenge for the South African government, its management efforts need to be highlighted.

The national strategy for the safety and security of the rhinoceros population in South Africa, the Biodiversity Management Plan for White Rhinoceros, Notice No. 1191 of 2015 (Republic of South Africa, 2015) is grounded on NEMPAA and NEMBA. This strategy is in line with the National Environmental Policies and Strategies No. 874, and is embedded in the Biodiversity Management Plan under NEMBA (Republic of South Africa, 2015). So far, South Africa has the largest number of rhinos and they are the hardest hit by poaching.

Figure 2.1 shows that the country's poaching statistics skyrocketed to 1 215 poached rhinos during 2013/14. However, in 2015, substantial progress was noted with regard to the implementation of rhino management, as the number dropped to 749 poached rhinos (DEA, 2015a). Most of the poached rhinos are from KNP and the parks under the management of Ezemvelo KZN Wildlife as they have South Africa's largest rhino populations, estimated at 53% in 2013 (DEA, 2015a).

Figure 2.1: Recorded number of rhinos poached in South Africa



Source: Department of Environmental Affairs (2015)

In response to the aforementioned occurrences, government derived the following integrated strategies that combined technology and human efforts to deal with poaching challenges:

2.8.1 Stakeholder collaboration

The South African government had to engage in diverse activities to protect its rhino population from the threat of poaching. Collaborations take place with different stakeholders, such as law enforcement agencies, criminal investigations where there is a network of intelligence gathering to combat poaching that works with informers for tip offs, prosecution structures and improved relations with neighbouring countries such as Mozambique. For instance, being in possession of a rhino horn in South Africa is a crime, while in Mozambique it is not. This called for the harmonisation of conflicting laws as the current ones compromised South Africa's efforts, as most of the poachers were from Mozambique (Savetherhino, 2013; DEA, 2015a).

Nevertheless, WWF-SA (2013) claims that the Mozambican government promised to improve its responses to fighting wildlife crime after unrelenting pressure from CITES and South Africa. Since then, Mozambique not only amended its laws to make wildlife crime a serious offence, but intensified its communications to all its stakeholders. Above all, it improved its information sharing with the communities in their own language.

Collaborations within South Africa were also improving. The South African Revenue Service, Department of Home Affairs, Police Services and Parks joined the efforts to protect the country's biodiversity by using the canine units of the South African Police Service (SAPS) in the parks and points of entry to assist in detecting wildlife species and ammunition being smuggled in or out of the country. Arrests were made through this collaboration (DEA, 2015a).

It is apparent that wildlife crime is a complex issue that is not easy to curb. Thus, different stakeholders need to team up with conservation agencies and rangers to implement a medley of intervention measures and regulations aimed at protecting biodiversity.

2.8.2 Community conservation

According to Brooks, Waylen and Mulder (2013:31), community-based conservation is an effective tool for the promotion of long-term conservation, as engaging the community in the management of natural resources has dual benefits. These include the improvement of society and the promotion of biodiversity conservation. In addition, Cawthorn and Hoffman (2015:15) argue for the need for an interlinked approach involving wildlife and people, as they see this as a panacea to poaching. They entrenched their arguments by quoting John Robinson who said, “ultimately, conservation approaches must be sustainable ecologically, culturally, socially, economically and politically – otherwise they will fail both practically and ethically”. Haas and Ferreira (2016:12) maintain that the development of legal and economic opportunities for communities neighbouring the parks will curb the nefarious activities of the poachers, and their criminal expeditions, which aim to recruit, organise and fund poaching, will be scorned by these communities. The Department of Environment Affairs (2015) and Savetherhino (2013) argue that community conservation is an alliance between agencies of the protected areas, private land owners and neighbouring communities. This natural resource management approach is a deterrent to poaching as communities act favourably towards the parks. For example, community-based conservation is being promoted with the Mdluli Tribal Authority in Mpumalanga, and the Balepye and Selwane communities in Limpopo, where beneficiaries of the land are shareholders and, as a result, are actively involved in the co-management and conservation of the park. Therefore, these communities support rangers’ efforts to protect the parks and are decisive in condemning any illicit act that may threaten the continuity of their heritage.

2.8.3 Securing and monitoring of rhino horn stockpile

According to the COP 17 Report (CITES, 2016a:8), illegally acquired specimens should be confiscated and disposed of to deter illegal trade. As a result of this, countries such as Kenya, Mozambique and Vietnam showed their determination by destroying stockpiles of ivory and rhino horn, thus ensuring that these animals do not become extinct (Agence France-Presse, 2016:2; Unepnewsdesk, 2016; Mozambique States News Service, 2015). Nevertheless, for South Africa, securing and monitoring the rhino horn stockpile remains a problem.

To point to its failure, evidence from Smalman and Oosthuizen (2014) shows that, in May 2014, the safe vault of the Mpumalanga Tourism and Parks Agency (MTPA), in which 112 rhino horns were kept, was broken into in an organised attack. Despite the available records of DNA and microchips installed in some of the horns, it has not been easy to trace the stolen horns. As a result, no arrests have been made thus far. This suggests that a well-organised syndicate is running a poaching enterprise. Under these circumstances, these horns will likely be smuggled into illegal international markets.

2.8.4 Human resource skills development

According to Gherman, Brad and Dincu (2016:4), people are key to the sustainability of every organisation, as their effectiveness will ensure it survives, succeeds and develops. Therefore, an organisation uses its human resources to achieve its goals.

The South African Human Resources Skills Development Strategy is about building the human capacity of the country by ensuring that people have sufficient skills. In conservation agencies, this means that rangers have the skills to ensure the protection, sustenance and social support of rhino conservation efforts. The current human development strategy practice in nature conservation is skewed towards the Lusaka Agreement, which called for the establishment of intergovernmental conservation enforcement institutions that will ensure that capacity-building programmes are geared towards fighting wildlife crimes. For this reason, rangers are exposed to law enforcement and paramilitary training to enable them to combat the illegal trade in wildlife (AMCEN, 2016:3; Lusaka Agreement Task Force, 1994).

Clearly, the abovementioned aspects show that the psychosocial capacitation of rangers is neglected. Thus, there is a need to assist them to deal with workplace challenges that they may experience while executing anti-wildlife crime strategies, be it at the global, continental, regional or country level. It could be said that the conservation fraternity is still untapped by the helping professionals. Therefore, there is a niche market for social workers to position the profession as a strategic conservation partner.

This can be achieved by giving the right services to the right people, such as integrated psychosocial support services that are proactive and reactive to ensure that rangers who are constantly exposed to poaching challenges are correctly assisted.

2.8.5 Use of high-technology innovations

According to the Department of Environmental Affairs (2015), a medley of proactive initiatives is in place to mitigate the poaching scourge. These include collaborations with highly scientific research organisations and advanced technologies, such as the University of Pretoria's VGL, which has assisted with forensics capacity. The VGL is timeously processing DNA samples, sourcing DNA kits and conducting advanced crime scene management, which means that mobile laboratories are driven to the crime site, making it possible for post-mortems to be performed immediately. The Council for Scientific and Industrial Research (CSIR) and Denel have helped with the design and integration of different sensors and communication for the surveillance, detection and monitoring of the risk areas, thus enabling rangers to deal with poachers before they can poach. In addition, Denel has assisted with the training of tracker dogs that use sniffing to detect a wide range of substances, including the scent and tracks of poachers (Denel Media Centre, 2016:1; DefenceWeb, 2016).

As far as the use of high-technology innovations is concerned, both KNP and HIP use a range of technologies, such as WSN, to monitor their intensive protection zones (IPZs), which are areas with high numbers of endangered animals, from their sophisticated operating centres. KNP received the donation of a plane from an African defence contractor, Paramount. The plane, known as "Seeker", has a quieter engine and a sensor, which enables it to detect both animals and humans on the ground. HIP also received a drone that started operating in February 2016 (Associated Press, 2016; Mukwazvure & Magadza, 2012:1065; Sibeko, 2012).

The researcher views all these efforts as enabling rangers to do their job better, as the early detection of poachers would mean rapid response and saving the wildlife from being killed. Nonetheless, none of these efforts talk about the psychosocial preparation of rangers in dealing with imminent attacks.

What happens to them emotionally while waiting, and are they ready for any eventuality? Hence, the need for a social work model to assist rangers to deal with imminent challenges within their work environment.

2.8.6 Translocation and husbandry

The Department of Environment Affairs (2015) postulates that translocating rhinos from high-risk to more secure areas was a viable solution, given the poaching menace. To preclude the risk of foul play, such as giving rhinos to the wrong people, private owners who were interested in buying rhinos were vetted before an auction sale. Some rhinos were translocated to neighbouring states such as Botswana, which does not have as serious a poaching challenge as South Africa. In addition, private and governmental partnership initiatives were employed for rhino husbandry. The proceeds of these projects are used to continue conservation efforts (DEA, 2015a; Savetherhino, 2013). The translocation and husbandry of wildlife is another form of protection because these endangered animals are bred on private farms with better security.

Although a variety of strategies is used to conserve South Africa's wildlife, rangers form the cornerstone of the wildlife safeguard. They continue to put their own lives in danger as they form the first line of defence. Without them, the preservation of wildlife for generations to come will be only a pipe dream. In addition, they play a critical role by being the link between the park and the community. Therefore, they are best placed to be the ambassadors. This suggests that their behaviour should resonate with that status. In conclusion, although rangers' roles are undermined, there is no doubt that they are the cornerstone in wildlife conservation, thus all these strategies have no prospects of success in the absence of rangers.

2.9. Challenges associated with the rangers' work

The South African wildlife agencies, in their quest to quell poaching frustrations, had to strengthen rangers' efforts in various ways. For example, SANParks resorted to the use of high-technology innovations, and brought in retired Major-General Johan Jooste from the South Africa Defence Force to assist with the combat.

Such anti-poaching practices of militarising parks have an unintended outcome on conservation, tourism and, importantly, on rangers' general wellness. Hence, rangers feel that, despite disturbing scenes of mutilated carcasses that they often see, which remind them that they have failed in their safeguarding duties, the militarisation of the park is not a desirable solution (Sapa-AFP, 2014). Ezemvelo KZN Wildlife's rangers are experiencing similar challenges as KNP's rangers. According to Wieners (2016), Dr David Mabunda, former director of KNP and now CEO of Ezemvelo KZN Wildlife, asserts that Ezemvelo KZN Wildlife has not been spared, as in 2016 it recorded 23 poached rhinos by 21 February in that year alone. This is because KNP has tightened security on its Mozambican borders, thereby diverting poaching to Ezemvelo KZN Wildlife. Furthermore, factors such as drought and limited water spots have exacerbated the problem, as rhinos have become exposed because of the bare vegetation. Lastly, the full-moon period meant that poachers were able to poach at night.

One can say that the implementation of various anti-poaching strategies places increased pressure on the rangers and sometimes has unintended consequences, as rangers are at risk of depression, anxiety and possible burnout. Violanti (2012:180) contends that, as much as highly dangerous jobs are a precursor to acute and chronic PTSD, they are also associated with adaptive and resilient outcomes. This then calls for supportive programmes that would increase the mettle of rangers who are at the coalface of poaching. Both local and global anti-poaching strategies show little evidence that the human element behind anti-poaching efforts is being given enough support to help the rangers cope with the challenges that come with their responsibilities.

Furthermore, Love (2009) argues that being involved in combat comes with tremendous stress. Therefore, the army had to ensure that soldiers grew personally, within their families, and thrived in their communities in order to succeed in mission execution. Failure to foster social relations led soldiers to use maladaptive, immature and undesirable behaviours, such as substance abuse, eating disorders, risky behaviour that involved casual sex, self-mutilation, speeding and suicide, to cope with the demands of their work.

Due to the fact that rangers are exposed to similar working conditions as soldiers, the aforementioned effects are applicable to them as well. This point is supported by the work of Bryden (2005:125), who says that rangers often drink beer at the end of their patrols in an effort to unwind from the tension-intensive work environment to which they are exposed.

Rushton, Batcheller, Schroeder and Donohue (2015:412) argue that nurses work in highly stressful environments with continuous demands that put them under tremendous pressure, such as the suffering and sometimes death of their patients. This stress sometimes leads nurses to indulge in substance abuse, and to suffer from depression, anxiety, decreased job satisfaction, disengagement, reduced loyalty and the intent to leave the profession. Sapa-AFP (2014) maintains that rangers suffer frustrations of harassment from the families of poachers when they are killed, as well as pressure from the police when poachers are released due to dismissed cases. The abovementioned factors correlate with the KNP Health Risks Assessment Report of the Independent Counselling and Advisory Services (ICAS) (2008:8), which shows that rangers have a high prevalence of hypertension and diabetes mellitus. The report further suggests that constant exposure to stress leads to emotional, psychological and even physical problems, including heart disease, chest pains or irregular heartbeats. In addition, the Critical Incident Intervention Report of ICAS (2014:3) indicates that some of the rangers use sport as a stress reliever. Others allege to suppress thoughts and feelings about their experiences to avoid anger and frustration. Others use self-medication, while some use alcohol and *cannabis sativa* (marijuana) to help them cope.

By the same token, the US army has similar challenges as the aforementioned and, in response to that, a proactive wellness programme, Comprehensive Soldier Fitness, was established in 2008 to enhance mental and physical performance, and to build the resilience of soldiers and members of the Navy, especially those who work in high-tempo and persistent conflict areas. The programme aimed to prevent problems before they occur by teaching soldiers and their families, techniques that ground them emotionally, spiritually, physically and socially, and build family strengths by building their resilience (Litz, 2014:4).

It could be said that different professions are faced with the challenge of finding an approach to encourage positivity that develops employees and their families, thereby minimising negativity that may pathologise the situation. Resilience in this instance seems to be the ideal approach to help individuals mitigate challenges that may cause burnout and moral distress.

Lastly, the International Committee of the Red Cross (1992:5) argues that humanitarian staff and civilians living in conflict zones experience cumulative stress due to continuous exposure to aggression. They often have a variety of experiences, such as strong emotions, fatigue, fear, exhaustion, burnout and impaired performance. Furthermore, their families become contaminated by their distress, and they too become traumatised and helpless. This resonates with the KNP EAP November Report (SANParks, 2015c:1), which indicated that the daughter of one of the rangers had to receive trauma counselling after witnessing a group of men wearing balaclavas threatening her father at their home.

2.10. Summary

As shown above, wildlife poaching is a global phenomenon that is driven by the greed of organised syndicates that are determined to kill to satisfy their indulgence, thereby undermining the conservation industry's efforts to preserve wildlife for future generations. In trying to mitigate poaching risks, governments throughout the world have formed collaborations and different strategies to save wildlife from extinction. South Africa is no exception, as it uses different methods, such as regulations, private and public partnerships, and collaborations that bring about a variety of high-technology innovations, to curb wildlife crime. However, these methods lack the psychosocial support efforts to back up the human beings behind the anti-poaching endeavours.

The following chapter focuses on resilience as a theoretical framework and its application in this study.

CHAPTER 3: RESILIENCE THEORY AS A THEORETICAL FRAMEWORK USED IN THIS STUDY

3.1 Introduction

The purpose of this chapter is to explain the choice of the theoretical framework that was used to guide this study. The section covers an in-depth review of resilience as a theoretical framework and its application in this study.

Since rangers are at the forefront of wildlife conservation, they are constantly exposed to workplace challenges that require them to be resilient. This study was aimed at understanding the workplace challenges and needs of the rangers and using this understanding to develop a model that will assist rangers to adapt and cope with their workplace challenges. As a result, understanding the concepts of resilience and its factors assisted the researcher with the insight that contributed to the development of the resilience-building model. Resilience theory was thus best suited as a proactive wellness intervention to assist the rangers tap into their inner self and deal with the challenges they face on a daily basis in their work environment.

The discussion has been centred on the value of resilience in overcoming adversity and positioning a resilience-building strategy within the conservation fraternity. The resilience literature review assisted in developing the study framework as different models of resilience were explored to provide a comprehensive understanding of resilience in relation to the envisaged model. Thus, the discussion is launched by clarifying resilience as a construct in an effort to facilitate understanding.

3.2. Resilience as a construct

According to Rutter (2012:335), the theory of resilience was pioneered by Norman Garmezy and has since developed an array of evidence-based studies from multifaceted professions, all seeking common answers on how to increase opportunities, enhance coping and find elements that enhance resilience.

Pearn, Flint-Taylor and Cooper (2013:32) argue that resilience is about working through difficult challenges, and achieving the outcome of quicker recovery, combined with an increased capacity to cope with pressure and grow stronger. The American Psychological Association (APA) (2011) agrees with the abovementioned statement, but goes on to say that the road to resilience involves developing and learning new behaviours, thoughts and actions to deal with distress. It is about learning gratitude, which is about being grateful for life's lessons, whether positive or negative. It could be said that resilience is not the absence of difficulties, but choosing positive attitudes while experiencing those challenges, discovering and learning one's own strength.

The APA (2011) is further of the opinion that people react differently to distress. Therefore, varying factors can contribute to resilience. Nonetheless, caring and supportive relations that offer encouragement and reassurance, the ability to make plans and carry them out, communication and problem-solving skills, a positive view of the self and confidence in one's own abilities and strengths, and the ability to manage one's own feelings and impulses are key and important strategies to building resilience. Schlossberg (2011:10) concurs by asserting that an interpersonal support system that refers to a convoy of social support is a determinant of wellbeing as it provides individuals with advice, protection and a sense of self-worth, thereby increasing their coping mechanisms.

According to Kristine (2016), Eliasov (2011) and APA (2011), today's complex environment needs individuals who are conscious and principled in critical thinking in order to keep things in perspective. Self-discovery, which is about being aware of one's own growth, having a sense of strength and self-worth, is therefore critical for enduring and emerging from adverse experiences. Moreover, any fundamental change starts with the self and ripples outwards. Thus, it is important to focus one's energies on what is possible to change; that is, the circle of influence. One can say that today's world is full of challenges that need one to be realistic and positive, therefore focusing on what one can change, rather than fighting things that are beyond one's control, as this wastes energy and is emotionally draining.

Moreover, Flint-Taylor et al. (2013:33) argue that, in order to manage difficult and stressful situations, it is important to assess and be aware of one's resilience. This will assist with crafting a way forward that involves improving one's coping capability. The researcher seeks to understand how rangers have been coping with their workplace experiences, as well as their thoughts in terms of the new behaviour that needs to be learned. In concurrence, APA (2011) argues that accepting change as part of living is an optimistic outlook as it safeguards one against seeing distress as insurmountable, but rather encourages one to concentrate on possible and achievable actions that will help deal with adverse situations. One can say that a positive interpretation and response to distress is important as it encourages the client to see the glass as being half full rather than half empty; that is to say, substituting negative thoughts with positive thoughts about what can go right rather than what could go wrong. In summing up, Schlossberg (2011:12) speaks of self-attitude (referred to as psychosocial competence), which is about the internal locus of control and sense of responsibility. It could be said that clients should be encouraged to change their attitudes to be positive and hopeful about themselves and their situation, as failure to do so can be self-destructive.

Evidence in support of the abovementioned assertion can be found in Pearn et al. (2013:33), who argue that replacing negative thoughts with positive and realistic ones is known as reframing. It encourages clients to see challenges rather than problems, thereby strengthening their ability to respond in a resilient manner. In addition, reframing encourages positive emotions, such as happiness, enthusiasm and gratitude, which, in turn has benefits for the wellbeing and performance of individuals and teams. In the final analysis, APA (2011) states that maintaining a hopeful outlook is about expecting good things to happen, and nurturing a positive self-view by trusting one's instincts and attitude. One can then state that campaigns that encourage positivity in the workplace can inevitably foster resilience.

With reference to organisational support, Taormina (2015:37) argues that determination, endurance, adaptability and recuperation are core and critical characteristics of individual resilience, and collaborations are only there for support.

APA (2011) supports the same sentiments by positing that caring and supporting relations strengthen resilience. It could be understood that accepting and giving support has shared value; that is, it is beneficial for both the helper and the receiver. For example, volunteering one's services at a local old age home may make one feel good about being able to assist others, despite one's own challenges, while the recipient of the services may be appreciative of the assistance given. By the same token, Schlossberg (2011:10) states that institutional support from religious groups, social welfare and community support groups play a vital supporting role that shows individuals that they are not alone during trying times, thereby giving the individual hope to carry on in a resilient manner.

Self-care is about engaging in activities that one enjoys to benefit the mind and body. Regular exercise is said to improve stamina and fitness levels, and strengthens the immune system, resulting in improved health. This has been proven by the US Army, which successfully used this initiative to help soldiers and their families cope during challenging times (Pearn et al., 2013:34; APA, 2011). It could thus be said that relaxation and any activity that takes one's mind off the hardship are important for survival, thereby providing individuals with the strength and determination to deal with challenges in a resilient way.

It could be concluded that resilience uses an inward/outward approach, which is about enhancing self-consciousness and receptivity of the world around the self, thereby enhancing coping mechanisms in a chaotic and confusing world. It is against this backdrop that the researcher used resilience theory to ground the envisaged model on social work practice among rangers to address their workplace challenges, thereby improving their quality of life.

3.2.1. Defining resilience

The conceptual basis of this study is underpinned by the notion of resilience as a multidimensional construct. Therefore, it is important to define resilience. According to Taormina (2015:36), resilience comes from the Latin word "resilire", and it means "to recoil". It is about flexibility, rebound, elasticity and spring back.

The same sentiments are expressed by Jackson et al. (2007:3), who claim that resilience has multifaceted meanings from different professional perspectives, but all encapsulate the ability to absorb, adjust and fit in, determination and willpower to endure, the ability to recuperate and re-establish to an earlier condition and the ability to have caring and supportive collaborations. In addition, Jackson et al. (2007:6) refer to resilience as the ability of an individual to adjust to adversity, maintain equilibrium, retain some sense of control and continue to move on in a positive manner.

On the other hand, Warner ([sa]) defines resilience in an organisation as the ability to cope, to remain task-focused and productive while experiencing tough times at work and home. It incorporates the concept of emerging from adversity stronger and more resourceful than before. Resilience can be applied to rangers through strategies such as maintaining positivity, developing emotional insight, spirituality, building positive and nurturing relationships in order to achieve quality of life, seeing that their work environment is characterised by challenges. The application of these aspects is discussed in detail in the proposed resilience-building model in Chapter 7 of this thesis.

3.2.2 Describing resilience

Resilience is the process of coping, adjusting, recovering and the outcome of beating the odds and experiencing post-adversity growth (Sabina & Banyard, 2015:337; Meichenbaum, [sa]). Van Hook (2013:2) concurs with the previous statement and goes on to say that it is also about making a meaningful contribution to the lives of others. It could be said that resilience is not all about surviving the ordeal unscathed, but about withstanding the challenges, not despairing and being able to assist others while experiencing hardships.

Several authors, such as Litz (2014:2), Grant and Kinman (2012:605), Jones (2012:63), Greene (2010:413) and Henderson (2007) suggest that resilience is a myriad of flexible, protective and promotive factors that buffer and strengthen one to navigate through the challenges. It is about continuous engagement in adaptive and coping strategies that assist one to search and find meaning for one's distress.

Furthermore, they argue that humans are born and hard-wired with the innate self-righting abilities that give them the capacity to positively draw on their internal resources to help them to bounce back and emerge unscathed from challenges. This innate control is referred to as the internal locus of control, a mental acknowledgement of the control one has over one's own life, which is important for recovery and the healing of traumatic experiences. Mancini and Bonanno (2006:979) argue that personality has a role to play in resilience, and people who are attuned and healthy tend to possess elasticity and coping mechanisms. Therefore, this suggests that people should be allowed a chance to self-ratify and only be offered assistance such as counselling when the situation worsens.

Litz (2014:2), Rutter (2012:341) and Shepherd, Reynolds and Moran (2010:286) agree with the notion of resilience as not only being complex and multidimensional, but also as being an interplay of factors such as post-trauma, coping resource and recovery from adversity. It is a co-existence of positive and negative experiences that are empowering and encourage reflective attitudes, which lead to pride once recovery has been achieved. In addition, resilience has been characterised as the interplay of both internal and external activities. The internal resources refer to a sense of hope, meaning, purpose and value for life, and involve external resources such as praying, relaxation, exercise, play and ways of thinking that lessen distress, while the external resources may include institutional support from which one draws strength to deal with threats to one's authenticity, integrity and commitment (Rushton et al., 2015:418; Jones, 2012:63). This suggests that hope begets resilience. Therefore, organisations should encourage employee-engaging activities to avoid burn out.

Furthermore, Litz (2014:2) and Shepherd et al. (2010: 273) describe resilience as a recovery process that is besotted with achievements and regrets. Therefore, short- and long-term strategies should be used to gain new perspective, clarity, affirmation and positive self-image, thereby bringing respite from distress. Thus far, resilience has been shown to be a variety of experiences and the co-existence of loss and regains, a combination of risks and coping strategies that work together to shape vulnerability and recovery.

It encourages a positive life outlook of the self and others, while at the same time acknowledging doubts and sad memories. The researcher views resilience as the tenacity to handle difficult situations and contentiously seeking to improve.

In the light of resilience being a complex matter, Litz (2014:9) maintains that there is no universal framework or prevention efforts for the resilience construct because time, events, culture and indigenous resources tend to differ in context, as well as the unfolding of the trajectory process. For example, a person may cope well socially and behaviourally during distress, but may struggle and suffer from internal conflict. Nevertheless, Rutter (2012:341) and Shepherd et al. (2010:280) submit that pivotal moments often provide a starting point of recovering from adversity, “a wake-up call” linked to experiencing an external catalyst that varies from the sudden realisation that one deserves more respect and self-worth.

The researcher is of the opinion that resilience is a process of experiencing difficulty, being hopeful that things will change for the better, and being proud of oneself post-adversity. Developing resilience in rangers can assist them to cope with their workplace challenges, recover and grow from such experience, and be proud that they are victors and not victims of their circumstances.

3.3 Resilience approaches

Several studies have been undertaken to understand how individuals deal with stressful events that change their lives. Despite the different contexts in which these studies were done, they all highlight common and fundamental factors that counteract, prevent and protect one against the negative effects of adversity, thereby achieving resilient outcomes. Theories like Reuben Hill's ABC-X model, Michael White's narrative therapy, Norman Garmezy's risk and resilience model, to name but a few, were all developed in a quest to understand how people bounce back after experiencing adversity (Sullivan, 2015:90; Freedman, 2014:14; Litz, 2014:3; Rutter, 2012:335). Resilience can be used to promote an individual's wellbeing (Meichenbaum, [sa]). Since there are many pathways to resilience, only the predominant factors will be discussed here.

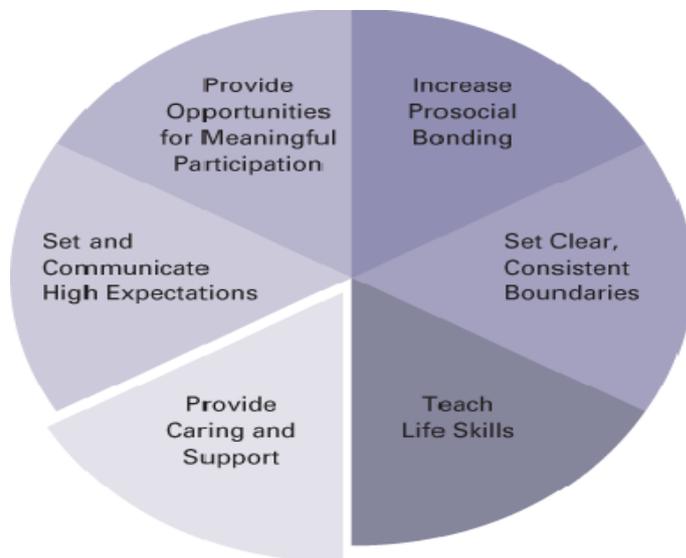
The researcher chose to entrench this study in three models: the resilience wheel of Henderson (2013:26), the Three-factor Model of Norris et al. (2012), which underpins the survival of Antarctic employees during their expeditions, and the Navy and Marine Corps Four-colour Spectrum Model of Litz (2014), which is grounded in a normal and good to pathology continuum. The environments in which these models were implemented are similar to rangers' workplace circumstances, which is a high-tempo environment. The identified elements are crucial in the facilitation of resilient outcomes. These models assisted the researcher to develop the model presented in Chapter 7 of this thesis. The model that was developed is aimed at assisting rangers to deal with everyday challenges that may have adverse effects on their personal and work lives.

According to Ungar (2012), resilience involves navigating through challenges, negotiating for meaningful and supportive resources in order to sustain wellbeing. This means that unconditional positive support and engaging relationships are pivotal to building resilience. In the same way, Mancini and Bonanno (2006:980) argue that the therapist should assist clients with self-definition in order to have self-worth and retain a sense of continuity. This can be done by encouraging clients to examine their lives by identifying and focusing on the positive rather than the negative, thereby enabling them to be hopeful that things will pan out for better. That is to say, change can be promoted and encouraged through self-redefinition, new roles and relationships, as well as renewing self-assertion. For instance, the supportive relationships of family and friends will enable one to step into a new life after the loss of a loved one.

The different approaches/models are discussed as follows:

3.3.1 The resilience wheel approach

Figure 3.1: Visual synthesis of resilience-building conditions



Adapted from Henderson (2013:26)

The resilience wheel is about life as a process of the connectedness of people and the environment and how those supportive interlinkages give meaning that fosters resilience inside and out. This suggests that a nurturing and supportive milieu contributes to resilience. The resilience wheel comprises the following elements:

- **Increasing social bonding**

Social bonding refers to social capital, which offers reciprocal and valuable networks. It is about connected people, such as family, friends, acquaintances and associates, who trust each other and work together for a variety of benefits and shared values. These social bonds offer a safety net during difficult times and offer efficacy, which is a belief that one can make a difference in a social context, for example, a neighbourhood watch network, where everyone keeps an eye on each other's property, especially during people's absence (Bernard, 2013; Henderson, 2013:24; Henderson, 2007; The University of Minnesota Extension Center for Community Vitality, 2008).

In the context of this study, it is important to state that because rangers work in groups, forming reciprocal and valuable safety networks is important, especially during patrols when they are vulnerable to attack from poachers and animals.

- **Providing opportunities for meaningful participation**

According to California Department of Education ([sa]), meaningful participation is democratic and nurtures high expectations that are crucial for a resilient outcome. Bernard (2013) equally argues that the best way to empower people is to involve them in planning and offering opportunities to determine the solution to their problem. Allowing clients to partake in issues that affect them makes them feel valued, and they are therefore able to own and take responsibility for any outcome. Rangers know the ins and outs of their work environment and its demands. Therefore, they are well positioned to share valuable information to address these demands. As a result, involving them in solving their workplace challenges is the best strategy to ensure that they embrace and own the solutions of which they are part. In this manner, rangers will be motivated to implement the solutions, hence, alleviate the stress related to the demands of their workplace.

- **Setting and communicating high and realistic expectations**

According to Henderson (2013:22), Bernard (2013), Henderson (2007) and Livingston (2003), there is power in expectation. The way managers treat their subordinates can either improve their performance or cause it to deteriorate. For example, employers are challenged by underdeveloped, underutilised and ineffective management, which is subtly resentful of knowledgeable, talented young professionals because they feel threatened by them. It can be argued that managers have the ability to create a challenging environment that stimulates or stunts performance. Managers can encourage rangers to achieve high performance by expressing their belief that they will fight poaching with all they have. This could motivate the rangers to perform at their highest level, knowing that their managers believe in their commitment to overcome poaching. With this in mind, the rangers could also develop a sense of believing in the capabilities that they need in this complex work environment for them to continue being productive despite the hardships.

- **Providing care and support**

Various authors (Bernard, 2013; Henderson, 2013:23; Commonwealth of Australia, 2005; APA, 2011) assert that caring and supportive relationships from family, friends, and the work and community environment are good resources that offer support that enable one to deal with stressful situations. Furthermore, care and support promotes mental resilience as it is about emotional and social wellbeing, which involves thoughts, feelings and relationships. Resilient people have a sense of autonomy but at the same time they are caring, empathetic, responsive, supportive of others, and able to seek help when in need. Therefore, sharing and caring offer a sense of belonging. This means that when people share their time and stories, they feel better, thus build trust, which is important to building resilience. One can develop the opinion that care and support decrease stress and vulnerability, and enable one not to be afraid to request assistance. It becomes important for the managers to show the rangers that they care for them and support them for the rangers to develop a sense of value within the organisation.

The sense of value could foster commitment from the rangers and motivate them to succeed in doing the difficult tasks because they know that their efforts are recognised as they add value to the organisation. Furthermore, managers may utilise the employee wellness services to provide care and support for their employees. The sourcing and utilisation of wellness services can be seen as assuring rangers that their managers care about them and understand their circumstances, thereby building the loyalty of the rangers.

- **Learning life skills**

Learning life skills has been seen by Bernard (2013), Henderson (2013:22) and Henderson (2007) as being imperative for living a balanced and functional life, as it enables one to navigate through challenging environments. For instance, learning effective communication skills can offset negative relationships caused by unresolved conflict due to poor communication, such as a simple issue that becomes harder to resolve because it spiralled out of proportion.

Rangers who are not assertive may be taught to articulate their needs, thereby assisting them to have a voice and have their problems attended to for them to be happy and give their best performance at work. This could be achieved by providing unconditional care and support for them to realise that they are valued as part of the organisation. In the case of the rangers in this study, the services of the wellness officers could be utilised to assist the rangers to learn new skills to equip them to deal with issues as they occur. This could assist in preventing bottled up emotions that accompany issues that might explode at the wrong time and place.

- **Setting clear and consistent boundaries**

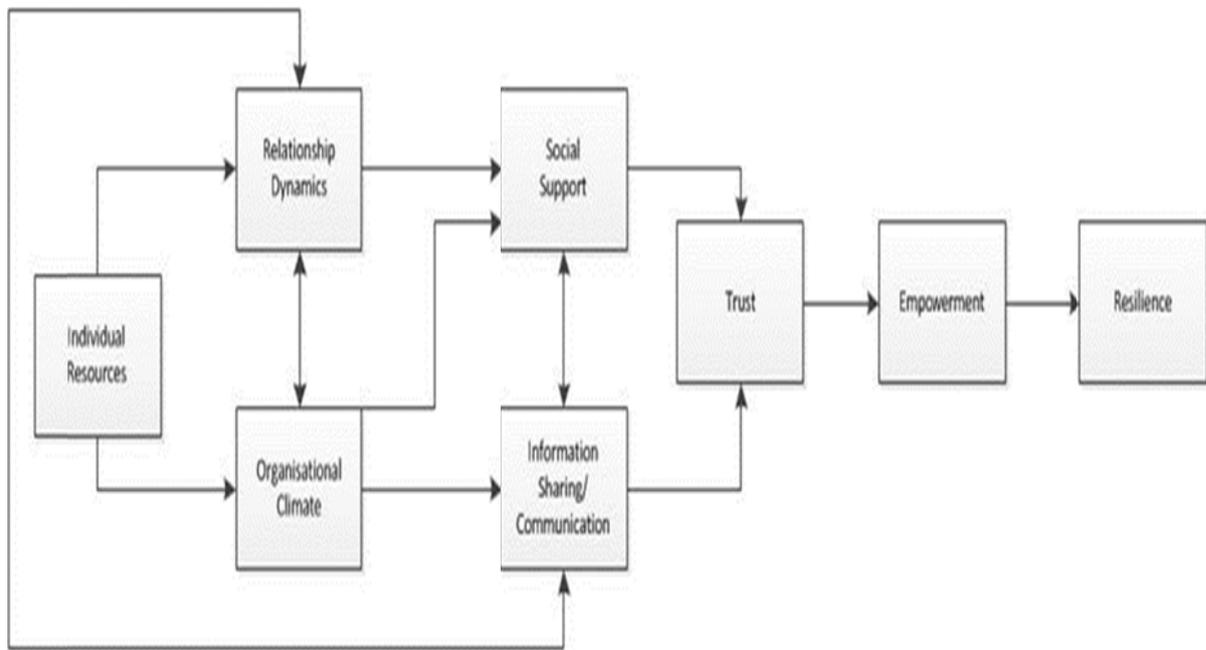
Setting clear and consistent boundaries is about being fair, consistent and reasonable. This encourages people to be compliant when given responsibilities because they respect the decision. Assertiveness training can help clients set boundaries, thereby giving them a sense of control (Bernard, 2013; Henderson, 2013:25; Henderson, 2007). This could be applied to rangers as well, for them to know where they stand with regard to their relationships with their managers and colleagues. Managers need to be consistent in their communication and avoid favouritism if they are to be successful in their work. Rangers, by the same token, will respect a manager who does not take sides, thus they will not take chances by misrepresenting facts.

All in all, the resilience wheel approach emphasises that healthy relationships, especially social bonds, are critical to building resilience as they provide individuals with supportive and caring relationships that give one the opportunity and space to make mistakes and learn from them, while at the same time encouraging independence, self-determination and expressing a positive belief in the person.

The next approach is a Three-Factor Model that is based on the survival of the Antarctic employees during their expeditions.

3.2.2 The Three-Factor Model: resilient outcomes in Antarctic populations

Figure 3.2: Mechanisms underpinning resilient outcomes in Antarctic populations



Adapted from Norris et al. (2012:40)

According to Norris et al. (2012:35–36), the inherent challenges of Antarctic expeditions are geographical isolation, freezing temperatures and fierce weather conditions. However, it was established that an individual resource, relationship dynamics and organisational climate were the three factors that enabled these employees to adapt, endure and recover from the harsh environment, as well as the social and psychological challenges associated with the expedition. Therefore, Norris et al. (2012:40) maintain that Antarctic populations' resilience is based on a three-factor model.

In the first place, there is an individual resource that is embedded in self-efficacy and reframing domains that are crucial in influencing positive change to resilience. Relationship dynamics is the second factor, which is based on communal relationships that facilitate trust and shared experiences that are pivotal in increasing organisational trust.

Lastly, the organisational climate, which is rooted in supportive supervisor-supervisee relationships, is critical in promoting competencies that are empowering and bring about feel-good emotions. In agreement, Grant and Kinman (2012:614) argue that reflective supervision is an enabling relationship, where the supervisor creates space for supervisees to be creative, thus nurturing their emotions to deal with stress.

Another significant factor in a collaborative organisational climate is said to be positive relationship dynamics, open communication and social support, as these are traits associated with trust, growth and empowerment, which are consistent with resilient outcomes (Grant & Kinman, 2012:614). Ungar (2011) concurs with Norris et al. (2012:2) by mentioning that “in the context of exposure to significant adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural and physical resources that sustain their wellbeing, and their capacity – individually and collectively – to negotiate for these resources to be provided in culturally meaningful ways”. The researcher is of the opinion that a supportive organisation can assist its employees to adapt and respond to their stressors in a resolute manner.

The Community Tool Box (2016) maintains that a culturally competent organisation creates an environment that is inclusive of all cultures and celebrates the positive outcomes of the power of diversity that is brought about by the contribution of each culture. Lindsay, Tétrault, Desmaris, King and Piérart (2014:19) postulate that social workers, as cultural brokers, have to conscientise the organisation regarding clients’ backgrounds, thereby enabling a culturally sensitive environment.

The researcher is of the opinion that the abovementioned model implies that unconditional, positive support and engaging relationships from colleagues and the organisation are vital in building resilience. Social workers, in particular, should have knowledge about their clients’ culture in order to break any cultural stereotypes that may exist, thereby assisting in building a harmonious relationship between employers and employees. Rangers also should be encouraged to believe in themselves, which is the trait of self-efficacy.

They should also have the opportunity to determine the solution to their challenges, be positive and be hopeful that they will overcome those challenges. Secondly, emphasis should be placed on trusting communal relationships, which are similar to social bonding. Rangers should have supportive managers who trust and empower them to be the best they can be. In that way, rangers will be able to cope with their workplace challenges as they are of the opinion that the organisation cares for them.

The last approach to be presented is grounded in the Navy and Marine Corps Four-Colour Spectrum Model: the Normal and Good to Pathology Continuum Model, which is used to assist the Navy and Marine Corps to promote and assess its employees' psychosocial health.

3.2.3 Navy and Marine Corps Four-Colour Spectrum Model: the Normal and Good to Pathology Continuum

Figure 3 3: The Navy and Marine Corps Four-Colour Spectrum Model

READY (Green)	REACTING (Yellow)	INJURED (Orange)	ILL (Red)
<p>DEFINITION</p> <ul style="list-style-type: none"> • Optimal functioning • Adaptive growth • Wellness <p>FEATURES</p> <ul style="list-style-type: none"> • At one's best • Well-trained and prepared • In control • Physically, mentally, and spiritually fit • Mission-focused • Motivated • Calm and steady • Having fun • Behaving ethically 	<p>DEFINITION</p> <ul style="list-style-type: none"> • Mild and transient distress or impairment • Always goes away • Low-risk <p>CAUSES</p> <ul style="list-style-type: none"> • Any stressor <p>FEATURES</p> <ul style="list-style-type: none"> • Feeling irritable, anxious, or down • Loss of motivation • Loss of focus • Difficulty sleeping • Muscle tension or other physical changes • Not having fun 	<p>DEFINITION</p> <ul style="list-style-type: none"> • More severe and persistent distress or impairment • Leaves a scar • Higher-risk <p>CAUSES</p> <ul style="list-style-type: none"> • Life threat • Loss • Moral injury • Wear and tear <p>FEATURES</p> <ul style="list-style-type: none"> • Loss of control • Panic, rage, or depression • No longer feeling like normal self • Excessive guilt, shame, or blame 	<p>DEFINITION</p> <ul style="list-style-type: none"> • Clinical mental disorder • Unhealed stress injury causing life impairment <p>TYPES</p> <ul style="list-style-type: none"> • PTSD • Depression • Anxiety • Substance abuse <p>FEATURES</p> <ul style="list-style-type: none"> • Symptoms persist and worsen over time • Severe distress or social or occupational impairment

Adapted from Litz (2014:6)

Litz (2014:5) indicates that the Four-Colour Spectrum Model was developed by the US military to help deal with members who were suffering from combat-related stress.

This approach is used as a wellness strategy to help identify the Navy and Marine Corps members' functioning level in the face of adversity, ranging from wellness and thriving, to illness and disability, which can happen post-exposure. It highlights the fact that people who are exposed to the same challenges react and recover differently. Their reactions can range from acute to chronic stress, coupled with recurrent and disturbing memories of years of sadness. Therefore, resilience is the outcome of the capacity to endure (Mancini & Bonanno, 2006:972).

Since this approach is about endurance and the promotion of normal functioning, the focus should be on how to alleviate risks that may lead to PTSD during adversity. Litz (2014:5) posits that there is shame associated with the use of the services of the helping and caring professions. As a result, the following trajectory was developed to demystify shame, labelling and stigma associated with accessing these services:

- **Green** focuses on health promotion, where various extrinsic universal prevention programmes are introduced to the Army, for example, tough training, effective leadership and a cohesive unit emphasis.
- **Yellow** refers to an intrinsic prevention programme, which is selective as only members who were exposed to trauma, regardless of the severity, are provided with debriefing sessions; this is done to detect and mitigate the latent psychological and physical consequences of exposure to stress.
- **Orange** focuses on case identification, where members who developed preclinical impairment are targeted so that they do not develop mental disorders and related disabilities.
- **Red** refers to the pathological phase, where health problems affect not only the member, but the family as well. The Army's performance is impacted on negatively by absence, and the organisation's health costs are escalating because of an increase in insurance costs. During this phase, the employees are offered a combination of services to assist, support, guide and help them recover and bounce back.

The phases of the Four-Colour Spectrum Model, as outlined above, are less convoluted, therefore their application can ensure that wellness services to rangers are timely, thereby improving their efficiency and effectiveness. Offering rangers a comprehensive wellness service in accordance with the Four-Colour Spectrum Model could assist them to remain resilient, and enable the organisation to identify challenges before they become chronic problems, and restore and achieve healthy, happy, productive employees.

The abovementioned models suggest that people and the environment are connected. Therefore, a nurturing and supportive milieu contributes to resilience. The application of the elements of these models will assist rangers to cope with their workplace challenges, as they know that the organisation is supportive, cares about them and does not take sides. In addition, it is important that rangers are encouraged to develop linkages that support their resilience, for instance, forming reciprocal and valuable safety networks at work could be of assistance during attacks from poachers and animals. Receiving clear and consistent communication from managers can enable them to be open and articulate their needs without fear, and then focus on their work diligently, knowing that their employer is caring and supportive towards them by offering them confidential services through the Wellness Office. The above approaches and models were useful in assisting the researcher to develop the resilience-building model for rangers that is discussed in Chapter 7.

3.4 Factors that contribute to resilience

According to Griffith and West (2013:141), resilience is a stress adaptation process, whereas resilience refers to elements that contribute to adaptation. Identifying attributes that enable individuals to withstand and overcome stressors enabled the researcher to develop a resilience-building model that would assist rangers to deal with their workplace challenges. Sabina and Banyard (2015:339) and Henderson (2013:25), equally, argue that a combination of biological and genetic characteristics, which refer to personality, and external dynamics, such as psychosocial factors and environments, are regarded as important factors that contribute to the coping strategies that, in turn, promote resilience.

These competencies assist one to manage one's emotions and behaviour, and to have beneficial and enabling relationships that promote one to bounce back from adversity, thus promoting resilience. A number of different factors have been found to contribute to resilience:

3.4.1 The self-efficacy factor

Zimmerman (2013:381) suggests that promotive factors, such as assets and resources, are key to a resilient outcome. Assets denote self-efficacy and self-esteem attributes that are necessary for healthy development, whereas resources refer to supportive relationships that provide opportunities to learn and help overcome risky situations. According to Griffith and West (2013:142) and Norris et al. (2012:41), optimism and self-efficacy enhance adaptation because being realistic and having positive thoughts during tough times makes one endure the situation and be hopeful. Shepherd et al. (2010:282) support the above statement by saying that, notwithstanding the turmoil, self-aware individuals persistently reformulate their thoughts to be positive as they perceive and associate good performance with success and an optimistic future. Likewise, Bernard (2013) maintains that the following core components are paramount to self-efficacy: communicating high and reasonable expectations, articulating one's belief in a person's ability, and providing enabling resources. Furthermore, Jones (2012:63) says that people with high self-esteem cope better because self-belief enables one to recover quickly from stress.

In addition, Bradberry (2016) and Seligman (2011:101–102) are of the opinion that positive thinking protects individuals against anxiety and depression, thus view setbacks as temporary inconveniences. Notwithstanding that, when people are aware of their emotions, they learn to manage their behaviour in a way that will not compromise their social relations, thereby achieving positive results that make them believe in themselves. Seligman (2011:103) refers to wellbeing factors that influence resilience. These are positive emotions, engagements, relationships, meaning, accomplishments (PERMA). To put this differently, Bradberry (2016) argues that a survival wisdom tendency is about encouraging one's brain to ward off threats and focus on the positive happenings.

It could be said that the survival wisdom tendency equates to a glass-half-full rhetoric, which is about positive self-talk where one chooses to focus on the positive during testing times.

Moreover, Gritti (2015:452) suggests that, in general, individuals' resilience is centred on personality, family and a support system. For instance, self-efficacy promotes and strengthens emotional and interpersonal capacities that facilitate and regulate social attachment. Similarly, Henderson (2013:26) and Henderson (2007) underscore that positive bonds and social connections are survival factors that affect the quality of life. Therefore, people's connections are important for their mental and physical health.

Undoubtedly, people who participate in enjoyable activities have generalised good health when compared with those who are lonely, because they lack a sense of connection with their community, and as a result, they are likely to have heart conditions. A number of authors argue that affective and narrative story-telling practices should be encouraged, as they stimulate a bliss hormone called oxytocin. Talking about one's own success, for instance, evokes happiness and positivity, and one could use those highlighted strengths to deal with a current problem (Tops, Buisman-Pijlman & Carter, 2014:1113; Henderson, 2013:22; Henderson 2007).

The researcher postulates that self-esteem, confidence and a supportive work and family environment are factors that may assist rangers to think differently about their challenges, thereby assisting them to overcome challenges. Then the employer may encourage rangers to engage in relaxation and social activities at their staff villages, which will strengthen their alliance, while at the same time improving their wellbeing and resilience.

3.4.2 The psychological fitness factor

Cognitive flexibility is the ability to take initiatives and learn new skills, such as communication, stress and conflict management, that benefit one to navigate challenges (Henderson, 2013:24–25; Bernard, 2013; Meichenbaum, [sa]). Importantly, US soldiers in the Comprehensive Soldier Fitness programme use the

Global Assessment Tool (GAT), a questionnaire that measures the emotional, social, family and spiritual fitness and strength of soldiers, thereby helping them to develop positive emotions and a sense of meaning, which are attributed to a reduction of stress, anxiety and post-traumatic stress. Through an emotional fitness programme, soldiers were taught to be aware of their thoughts and identify when negative emotions, such as anger and sadness, are becoming perilous, and how and when to strengthen their positive emotions (Seligman, 2011:104). Rangers may be exposed to communication and conflict management skills so that they can be better prepared to handle any difference that may occur, as it has the potential of affecting their performance, especially during patrols.

Similarly, Norris et al. (2012:40) assert that the functioning and wellbeing of Antarctic employees were enhanced and encouraged through their use of proactive strategies, such as adaptive psychological resources. Survival wisdom strategies were inculcated during pre-departure, during the expedition and following their return, thereby enabling them to handle any information, experiences and expectations. The researcher is of the opinion that rangers may benefit from these survival wisdom strategies because it will make them hopeful and focus their thoughts on the positive during testing times.

Shepherd et al. (2010:283) claim that experiencing adversity can be empowering as it inculcates personal development, assists one to reconnect with the self, rids one of limiting beliefs and teaches one to be grateful, to assist others and to embrace adverse events, rather than receiving pity. In other words, the experiences being good or bad strengthen wisdom, and teach one to appreciate others. In striving for psychological fitness, rangers should be encouraged to reconnect with themselves as this would give them inner peace. In that way, they would be able to embrace their workplace challenges and focus on their anti-poaching efforts.

In the light of research conducted by the University of California, the inability to say “no” is considered stressful, and can cause burnout and sometimes depression. To put it in another way, this suggests that the ability to say “no” is powerful and liberating.

Henderson (2013:24) and Henderson (2007) congruently refer to this as setting and maintaining boundaries to ensure that one feels safe and yet doesn't become overwhelmed. Bradberry (2016) also argues that setting boundaries heightens feelings of inner security, frees one of unnecessary constraints, and frees time and energy to do other important things. This, in turn, builds resilience. In concurrence, Dean (2012:16) claims that nurses work under huge pressure and stress that exhaust them mentally, physically and emotionally, causing them to experience burnout. Nonetheless, those who had access to and participated in activities such as a gym, sports clubs and social activities were more relaxed and had improved health and wellbeing, but managed and continued to focus on offering their caring duties to their patients. In short, it could be said that social activities helped nurses to be resilient, thus averted burnout. This can be summed up by saying that a polite refusal and standing one's ground is empowering, as it increases one's inner peace. Rangers can be empowered with psychological fitness skills, such as learning to say "no" without feeling guilty, as this will carry them through difficult times.

Furthermore, Bradberry (2016) and Grant and Kinman (2012:605) argue that emotional intelligence (EQ) is one of the elements of building and growing resilience, as it is about reflective abilities, empathy and social confidence. In addition, it encourages one to understand and manage one's own emotions, which helps in navigating social complexities to achieve the desired courage and humility to admit to the need for assistance and request it.

It could be said that the psychological fitness of rangers needs to be nurtured. Teaching them to reconnect with themselves will help them be aware of their emotions and navigate through challenges, and consequently toughen their positive emotions to avoid burnout.

3.4.3 Pro-social bonding or social support

Literature reveals that pro-social bonding increases and strengthens positive connections such as teamwork, and increases family involvement in communal activities (Bernard, 2013; Henderson 2007). In addition, cognitive convergence is associated with mutual understanding, and increases organisational trust, which reduces stress and leads to higher achievements.

For instance, in emphasising the pro-social bonding factor, US soldiers in combat were encouraged to use tools such as Skype, cell phones, emails and Facebook to keep in contact with their families, thereby building trusting relationships, managing possible conflicts and creating a shared meaning. This was done because the Army recognises that work-life balance is key, and broken relations affect work performance (Griffith & West, 2013:143; Seligman, 2011:104). Rangers too may be encouraged to keep their pro-social bonding intact by using cell phones, for instance, to keep in contact with their families, as this will keep them informed of what is happening back home and maintain connectedness with their loved ones.

Moreover, Greene (2010:413–416), suggests that there is a relationship between a positive family environment and resilience. For instance, holocaust survivors indicated that their positive family climate and personal bonds before the war built and nurtured their resilience and helped them to carry on during those testing times.

Furthermore, Henderson (2013:26), Bernard (2013), Shepherd et al. (2010:285) and Henderson (2007) maintain that providing an individual with the necessary support, while giving them the opportunity and space to recover from personal problems, can be a life-changing paradox because it affords them a right to self-determination, which is empowering as they are able to meaningfully contribute to their circumstances. For instance, helping someone with their problems despite having one's own is gratifying. To demonstrate the paradox of life change, a rebelling adolescent may have strained family relations, while at the same time be gaining control over their social life and achieving a sense of self.

It is important for rangers to nurture their pro-social bonding, as having positive and trusting relationships with their families, colleagues and society may help reduce stress during testing times.

3.4.4 A caring and supportive environment

A caring and supportive environment is critical in any relationship, because it is about reciprocal support, which is unconditional support, which is positive and encouraging (Bernard, 2013; Henderson, 2013:26; Griffith & West, 2013:153). In addition, Seligman (2011:104) says that social fitness has been used by the US Army to encourage soldiers to co-exist in racially and culturally diverse settings, and be empathetic in understanding one another in order to identify and share each other's pain. Greene (2010:114) claims that positive engagements helped holocaust survivors become resilient and overcome their extremely unpleasant and traumatic circumstances. They also managed to rebuild their lives, while successfully living with those memories. Nonetheless, Bradberry (2016) and Seligman (2011:106) suggest that suspending one's judgment and focusing on what is being communicated without rebuttal or input is true listening, which is about understanding the spoken language, tone of voice and body language. This suggests that listening is a way of showing care and support, but we often listen to reply rather than paying attention and being empathetic. Rangers who are struggling to cope with their work environment may be offered supportive counselling. In so doing, they would be encouraged to cope, because they know that their employer cares about them and supports them.

Shepherd et al. (2010:282–283) sum up social support as an enabler to repair and reconstruct strained relationships. They give the example of adolescents, who, because of social support, were not only forgiven by their significant others, such as their parents, but were able to recover and reconnect to their former, less troubled self, thereby feeling valued. One can say that “no man is an island”, hence forming social bonds and being in a caring environment is important for survival. Listening to rangers' stories and offering assistance where possible is a way to show them that the organisation cares about them. Social workers, as wellness practitioners, may encourage rangers who have experienced trauma to talk about it as a way to debrief them. Furthermore, the organisation can offer rangers a platform where they can voice their workplace challenges and frustrations, thereby demonstrating that it is a supportive and caring organisation that enables its employees to repair and reconstruct relationships that were likely to be strained.

3.4.5 A collaborative organisational climate

Violanti (2012:171) posits that, since resilience is about relying on physical, psychological and other resources to deal with stressful events, there is a need for both the individual and the organisation to explore coping strategies that buffer stress and enable one to maintain balance in difficult and stressful jobs. Furthermore, organisations should provide structures that assist employees with sustenance in dangerous and stressful occupations to deal with stressful events. This can be done by, among other things, promoting coping strategies that focus on employee health rather than pathogenic stress. Seligman (2011:105) concurs with the abovementioned and adds by arguing that assessing both the strengths and the weaknesses of the team will not only help minimise personal weaknesses, but will encourage and strengthen the team to tackle different challenges as a set, thereby achieving their goals. This emphasis on having a collaborative organisational climate by encouraging teamwork fosters an environment of support and growth among the employees.

Equally important is communication and information sharing between the organisation and its employees, as it is said to assist with adaptation and empowerment. Therefore, collegial support and trust do not only facilitate a sense of control and mastery over the situation, but also enhance social support (Norris et al., 2012:44). Rushton et al. (2015:412) are in agreement and go further to argue that an institution should strive to understand what causes distress and exhaustion in its employees, as this will assist with the development of mitigation interventions. Norris et al. (2012:37) further state that a collaborative organisational climate, trust, availability and positive relationships give employees a sense of empowerment as they are able to identify irrational thoughts, and, in so doing, restructure their cognition. By the same token, Violanti (2012:175) maintains that organisational climate can empower individuals' capacity to improve by allowing employees to exercise judgment that encourages decisiveness and doing what is right at that moment. Additionally, collaborative problem solving is another way to manage stress, as it encourages and influences individuals to adapt to change. That is to say, teamwork provides social cohesion and assists individuals to adapt and cope with stressful experiences.

In addition, Norris et al. (2012:37) posit that a healthy supervisor-supervisee relationship boosts and empowers supervisee competence by creating a condition for personal growth and a positive organisational culture.

The manager should encourage camaraderie among rangers as they are each other's keepers, and tackle their challenges as a unit, because a chain is as strong as its weakest link. A healthy organisational climate can encourage rangers to continue with their safeguarding duties and be resilient as they will be seeing the efforts of their employer towards creating a healthy organisational environment that fosters positivity. Communication is key in fostering resilience among rangers as it would give them the insight and understanding of why some of the decisions were taken, for example, doing night patrols because of poachers' night attacks.

3.4.6 The spiritual fitness factor

Spiritual fitness, as a resilience attribute, is about building a "spiritual core" with self-awareness, self-regulation, self-motivation and social awareness. It is about belonging and servanthood; that is, serving something larger than oneself (Seligman, 2011:103). Moreover, Bradberry (2016) postulates that spirituality plays an important role in people challenging themselves out of their comfort zones and achieving greatness. Henderson's study revealed that setting high, but realistic, goals for success reinforced clients' resilience because, in striving for recognition and reward, they overcame challenges that made them better at solving problems and coping (Henderson, 2013:25; Henderson, 2007).

Van Hook (2013:6) refers to spirituality as a morality guide resource that gives a sense of meaning and purpose through connection with others. It is a price that involves beliefs, rituals and the community, and is usually a support system that offers comfort, reduces fear and improves self-acceptance. Rangers can be encouraged to draw on spirituality for strength and healing, thereby helping them deal with workplace challenges. This can be achieved through compassion and avoiding imposing others' beliefs on them. Pargament and Brandt, cited in Van Hook (2013:3), argue that spirituality promotes effective coping and a sense of control when rationality fails.

Offering support, care and empathy can make individuals appreciate being alive, thereby strengthening and offering them possibilities towards improving their outcome. Additionally, as already indicated, Lindsay et al. (2014:19) argue that the social worker, as a cultural broker, can educate the organisation about its cultural strength, mediate differences, as well as link clients with resources that will assist them to overcome the challenges they are experiencing.

According to Seligman (2011:104), the following self-regulation, self-motivation and awareness elements, which are related to spirituality, should be taught in developing post-traumatic growth:

- The normal response to trauma includes shattered beliefs about the self, others and the future. It does not mean that one has PTSD or a character defect.
- One has to avoid intrusive thoughts and images as they are paralysing and induce anxiety.
- Debriefing is encouraged as bottling up trauma may worsen physical and psychological symptoms. Constructive self-disclosure is encouraged.
- The narratives of trauma paradox, such as loss and gain, grief and gratitude, vulnerability and strength, are encouraged in order to appreciate life better.
- New life principles, such as altruism and/or crafting a new identity, should be articulated.

Van Hook (2013:7) argues that reframing can be used to help re-examine some spiritual views that are detrimental, such as self-blame and associating adversity with punishment from the higher being. The social worker can enlist the services of the clients' spiritual leaders to come and assist with conveying restorative messages and rituals within the context of maintaining diversity. In providing support to the rangers, the social worker has to be mindful of their different belief systems and incorporate those into the helping process.

This can assist in showing the rangers that they are accepted as they are without any judgment towards who they really are. This will assist rangers to face their challenges without fear because they have the backing of their belief systems. This approach can also encourage active participation, because the rangers see that they are respected as they are. In this way, the social worker, as a wellness officer, demonstrates the values of the profession, as well as a culturally sensitive social work practice.

In concluding the factors contributing to resilience, it could be said that caring and a supportive environment at work, family and the community offer social support that is important for a resilient outcome, as it encourages self-efficacy with a positive self-view. In addition, psychological fitness enables one to learn new skills that can improve positivity and individual growth. Most importantly, a positive environment is a resource that is important to building and maintaining resilience in the workplace, because a trusting environment is empowering and supportive to both personal and team growth. Hence, the workplace is the ideal place to offer a flexible milieu that ensures that individuals are flexible enough to cope and be resilient.

3.5 Resilience-fostering strategies

It is important to mention here that the factors that contribute to resilience, as discussed above, are closely linked to resilience-fostering strategies. As a result, they do not have to be seen in isolation. They were separated in this discussion in order to give each aspect a space to be elaborated on. As the focus of this study is to build resilience, it is important to elaborate on the identified strategies that may be used to enhance and nurture rangers' coping capacities. Shepherd et al. (2010:280) are of the view that, in the recovery process, individuals resort to short-term strategies that not only offer them emotional comfort and self-affirmation, but also give them moments of power and escapism. For this reason, they may use intoxicating substances such as drugs and alcohol, or indulge in excessive clubbing, with the intention of normalising the situation. In the same way, long-term recovery strategies are intertwined and complex processes that involve engaging, experiencing and regaining strength.

In this instance, in the study conducted by Shepherd et al. (2010:281), participants had to strengthen and rebuild their resilience by reconnecting with healthy social relationships that enhanced their self-worth, sense of control and self-awareness, as well as better role models because of traversing adversity.

Griffith and West (2013:141) and Seligman (2011:105) posit that master resilience training (MRT) is a broad-based strategy that is used to assist soldiers to develop competencies to embrace, preserve and bounce back from stressors. It is about building mental toughness, signature strength and strong relationships. Emphasis is placed on the active constructive response, which is a supportive, authentic and enthusiastic way of encouraging one to relive positive moments, especially by affirming good news and giving positive responses. In addition, soldiers who were exposed to MRT reported increased self-awareness, strength of character, increased mental agility, and positive connections and relationships that assured them during hard times that things will be OK. Exposing rangers to programmes similar to MRT may assist them to soldier on during testing times, as they would be prepared for any challenge that may come their way because their supervisors have the power to positively influence their ranger teams. Therefore they should be aware of their responses.

The following strategies are found to be important in fostering resilience:

3.5.1 Building mental toughness strategy

According to Griffith and West (2013:142) and Riordan (2010), mental toughness and resilience are the best combination for achieving excellence. However, the following components are fundamental in building one's mental toughness: psychological preparedness, the ability to deal with stress and take another perspective in order to quickly recover and bounce back, the determination to tackle tough situations, the flexibility to adjust, having positive team collaborations and celebrating success. Similarly, Seligman (2011:105-106) refers to mental toughness as emotional resilience, since it is based on the premise that emotional consequences do not stem from adversity, but from one's own belief about the adversity.

Besides, Cowden, Clough and Asante (2017:273) and Cowden (2016:343) argue that mental toughness gives one the tenacity to learn from one's mistakes. The key to mental resolve is the flexibility to adapt and look for alternative ways to solve the problem. Rangers can be taught how to dispel unrealistic beliefs regarding adversity and to avoid negative thoughts. Since they are the ones experiencing challenges, they are best suited to look at alternative ways of handling those challenges. The therapist (the wellness officer and, in this case, a social worker) should only be the facilitator. Furthermore, Seligman (2011:105) cautions against overgeneralisation and/or judging a person based on a single incident as it may negatively affect the supervisor-supervisee relationship; managers need to be conscious of their behaviour towards their subordinates as certain stereotypes can harm team efforts and performance.

According to Breazeale (2011), catastrophic thinking refers to thinking about the worst-case scenario. The teaching of worst-case scenario thinking is in pursuit of minimising catastrophic outcomes as one is able to come up with realistic plans of handling and coping with the situation. Similarly, Seligman (2011:105), maintains that this thinking offers individuals the opportunity to offload by discussing their fears and negative thoughts. In so doing, they are able to concentrate on the present mission. Rangers may be afforded the chance, through therapy, for example, to voice their worst fears and come up with realistic solutions.

Bradberry (2016) argues that timing and quietness is another key point to mental toughness. Choosing battles wisely can be an effective way to handle conflict and save relationships. It could be said that timing is very important as one would know when is the right time to unload and stand your ground, and when to keep quiet and avoid detrimental conflict. Rangers are faced with many challenges at their workplace that have adverse effects on them. As a result, they need to be mentally tough to survive, while looking for alternatives, as well as waiting for the right moment to raise those challenges with the organisation. Thus, mental toughness may assist rangers to soldier on amidst their workplace challenges and needs that are not met.

3.5.2 Building signature strength strategy

According to Seligman (2011:105), signature strength refers to using one's own strength for a purpose greater than the self, which is about happiness achieved by taking care of one's own needs, striving for a pleasant life, enjoying companionship and living a meaningful life. Furthermore, Sharp (2010) argues that diet and nutrition, exercise and activity, sleep and rest not only contribute to overall wellbeing, but promote signature strength, which is key to resilience. In addition, Bradberry (2016) maintains that quality sleep is good for the brain as studies from the University of Rochester found that sleep removes toxins from the brain. Therefore, when one does not get enough sleep, one's ability to think is impaired and the processing of information, problem solving, creativity and reactivity become slow.

An organisation can contribute to building its employees' strength by setting clear and consistent boundaries. This refers to being consistent and fair in implementing rules and regulations, as this will increase cooperation at work, because there is no favouritism (Bernard, 2013). Additionally, Gritti (2015:452) argues that organisations can adopt employee care policy strategies that limit risk and encourage resilience; in other words, promoting and encouraging social networks that help those who have succumbed to adversity, and developing the workplace into a cohesive and resilient environment. This includes exposing workers to varying skills and intrapersonal resources, such as self-awareness, adaptability, problem solving and social networks that will promote staff resilience, to equip them to cope with different challenging situations.

The organisation's fair application of rules can assist rangers to build signature strength as it increases cooperation at work. In addition, rangers should be encouraged to be involved in activities that build and enhance individual signature strength, such as preparing affordable, nutritious meals, exercise and getting a good night's sleep in order to operate effectively and have general good health.

3.5.3 Cognitive restructuring as adversity paradox strategy

King, Cathers, Brown, Specht, Willoughby, Polgar, MacKinnon, Smith and Havens (2003:186) highlighted that, as much as the loss of a protective system around young adults contributes to distress, it can equally contribute to resilience. In other words, self-awareness involves making sense of one's life and reaching a decisive moment where one relinquishes, confronts, controls and recognises one's own emotions and thoughts, and how they impact on one's life. As a result, they make change possible and achieve recovery. In agreement, Shepherd et al. (2010:274) argue that negative events can become catalysts for positive change, as awareness and alternative courses of action can be achieved by using tools such as writing journal entries, diaries and poems to clarify one's thoughts and feelings. Rangers should be encouraged to be aware of their thoughts, as this will make them resilient to challenges. For example, cognitive restructuring may assist rangers to adapt to distressing situations by encouraging them to express positive feelings and focus on pleasurable activities as opposed to dwelling on negative situations over which they do not have any control.

3.5.4 Narratives strategy

Maya Angelou once said: "There is no greater agony than bearing an untold story inside you." (Angelou, 2015). Narratives strategy allows clients to be the primary authors of their lives. This suggests that people are best suited to tell their story. The therapist facilitates and guides them by using questioning, labels and metaphors. Since this strategy uses a non-blaming approach, it separates the problem from the person, which externalises the problem and focuses on clients' strengths (Freedman, 2014:15; Narrative Therapy Centre of Toronto, [sa]). It could be said that the narratives approach encourages the therapist to see the problem as a separate entity from the client, which is so crucial to building an enabling therapeutic relationship. By the same token, Shepherd et al. (2010:274) argue that reconstruction strategy can be used to help the client identify alternative ways to view their life and create capabilities in the new story; that is to say, reconstruction of the new truth that catalyses positive change. For example, rangers should be encouraged to see their failure to capture poachers as a setback and temporary inconvenience rather than a dismal failure.

The wellness officer may assist rangers to resist negatively labelling their stories and help them look for hidden positive story lines that are hopeful and full of possibilities.

The researcher is in agreement that encouraging rangers to externalise their problems, while telling their workplace challenges, could save them from blaming themselves, thereby assisting them to focus on their strengths and achieving positive outcomes.

3.5.5 Peer coaching strategy

The use of the term peer coaching, according to Ball, Bowling and Bird (2016:122), refers to the strategy of using driven and motivated individuals to push and motivate other members to work as hard as the rest of the group. Grant and Kinman (2012:613) concur by saying that peer coaching uses directed learning, which enhances strengths and improves weaknesses as it encourages one to deal with uncertainty, and thereby manage stress better. It is based on collaborative relationships that promote shared feedback and reflection that positively support self-awareness. In other words, everyone is a coach. The focus is on encouraging the adoption of a solution-based rather than a problem-based resolution. The researcher affirms that rangers can use peer coaching to encourage each other to look at the challenges from another perspective, thereby managing stress better, as this will foster oneness, a sense of belonging and sharing of the pain.

3.5.6 Mindfulness strategy

According to Grant and Kinman (2012:612–613), mindfulness is about connecting with your life by paying attention to the moment without judging. It is about promoting active listening, self-awareness and critical reflection, calming the mind and reducing anxiety. Activities such as meditation and yoga can be undertaken to facilitate mindfulness, which is said to enable good sleep and help one to be effective in managing hardships. In addition, Turner (2009:97) is of the view that practising mindfulness in a therapy session has shared value for both the client and the therapist, as it involves being attentive and empathetic.

According to The Free Dictionary ([sa]), being attentive means paying attention, being alert and observant. It involves being receptive to the therapy session, such as being in the moment with the client. The therapist needs to pay attention to what the client is saying in a non-judgmental way. This will assist them to be in the moment with the client (Turner, 2009:98). It could be said that being in the moment with the client will enable the wellness officer to offer compassion because they are aware of and understand the client's distress.

Affect regulation refers to the ability to regulate and control one's emotions. By the same token, Turner (2009:98) cited a study by Goleman and Swartz that shows that participants who practised mindfulness were calm, even after being exposed to horrifying images. This suggests that mindfulness increases mental awareness, while at the same time reducing reactivity to distressing events. Gritti (2015:453), in the same way, posits that organisational mindfulness can be used to build resilience by encouraging healthy working environments where employees are afforded time to reflect, learn and care, thereby preventing burnout. Furthermore, Rushton et al. (2015:418) maintain that physical and spiritual activities, such as exercise, eating, playing and praying, nurture mental and emotional stability as individuals who embark on activities that enhance mindfulness have reported decreased emotional exhaustion, despite a stressful work environment.

It could be said that rangers should be encouraged to identify and engage in mindfulness activities that are appealing to them in order to have a routine in which to practise them. This could help them deal with the demands of their stressful work environment.

3.5.7 A trust relationship strategy

Norris et al. (2012:45) say that there is a growing body of evidence that shows that trust is the core to effective relationships, be they interpersonal, intimate and platonic, group or organisational. A trust relationship is about dependable collaborations and care that enable people to deal with challenging situations that are complex and high risk. Organisations that promote a culture of openness and trust contribute to their employees' learning, integrity, development and the growth of their adaptive capacity, since there is mutual interest in each other's welfare.

Trust relationships are both developmental and empowering, as they promote and enhance competence and the capacity to confront self-efficacy, which is essential when facing challenging events (Norris et al., 2012:45). Furthermore, Mancini and Bonanno (2006:983) advocate for the creation of supportive environments where insight, construction of meaning and disclosure afford alternative pathways to inculcate flexible coping. That is to say, if the employers want to create a self-disclosure environment, they should be willing and available to listen to their employees. It can be argued that trusting stakeholder collaborations in the workplace are critical to prevent and manage workplace distress. Thus, employers have to create a safe and trusting milieu of disclosure where rangers will be able to talk about their challenges without fear of victimisation. This is beneficial not only to build resilience, but also to promote rangers' work-life balance and their productivity.

It could thus be concluded that difficulties and distress are part of human life and cannot be avoided. However, resilience-fostering strategies such as mental toughness, telling their own stories and encouraging each other to take a look at the challenges from a different perspective can assist in the development and achievement of a resilient outcome.

3.6 Summary

The chapter presented a detailed discussion on resilience in an effort to locate it as a suitable theoretical framework that provided the study with a directional lens. This chapter also identified a myriad of protective and coping factors that were used in different situations and could be used to develop resilience among rangers. All in all, this chapter highlights that relationships are core to a resilient outcome as no man is an island; people and their environments are connected. Therefore, nurturing and a supportive environment, such as family, friends and societal organisations, contribute to resilience.

The following chapter addresses the research methodology that was followed in executing this study.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

The focus of this chapter is to outline the descriptive, qualitative research methodology steps followed in executing this study.

According to Kothari (2008:8), research methodology is a way to systematically solve research problems and the logic behind the methods or techniques used. Maree (2011:34), equally posits that a methodological framework is about the study's mode of inquiry that describes the research methods, strategy and tactics. This section outlines the methodological framework of the study and contains a detailed discussion of the research approach, research design and research methods, which include population, sampling methods, data-collection and analysis methods, and data-verification techniques. The research site of this research project is highlighted below in order to clarify aspects that may cause confusion.

4.2 Description of the research site

The initial research site was KNP, but challenges beyond the researcher's control led the researcher to change the initial research site. The researcher began the process by writing a request letter to the CEO of SANParks in January 2016 to be granted permission to conduct the study in KNP. It was unfortunate that the permission could not be granted based on internal aspects regarding anti-poaching strategies that were implemented at the time (see Annexure 2). Since the researcher could not collect the data as planned, an alternative location with similar challenges had to be sought, and two areas managed by Ezemvelo KZN Wildlife were identified as a perfect fit to collect the needed data. Ezemvelo KZN Wildlife accommodated the research as it believed this study would contribute to a new body of knowledge regarding poaching and how to improve the quality of life of rangers as pillars in the efforts of protecting wildlife. The study was therefore approved (see Annexure 3).

HIP and the Mkhuze Game Reserve, which fall under the management of Ezemvelo KZN Wildlife, were the specific research sites selected due to their common similarities with KNP as far as the challenge of poaching is concerned. Their rangers are exposed to similar working conditions and experiences and, as a result, the focus of the study was not compromised as it remained on exploring the challenges and experiences of rangers in their workplace.

HIP and Mkhuze Game Reserve are both protected areas. HIP was established as a consequence of a merger between the Hluhluwe and Imfolozi game reserves, and covers an area of 96 000 ha. Mkhuze Game Reserve is smaller in size, and covers an area of 40 000 ha.

4.3 Research approach

Qualitative research is about exploring and understanding the experiences of a purposefully selected small sample. It involves the observation of participants in their natural environment, exploring and understanding the subjective insights and perspectives of the participants' realities and using non-statistical means to describe such realities (Maree, 2011:15; Fouché & Delport, 2011:96; Sharan, 2009:2). The researcher used a qualitative research approach for this study to get rich, insightful information on the workplace challenges and experiences of the rangers at HIP and Mkhuze Game Reserve. The use of the qualitative research approach assisted the researcher to gather rich information from the participants' world view, which brought to light the actual circumstances to which the rangers are exposed.

Furthermore, the interpretative paradigm is said to bring an understanding of the phenomenon through the meanings people assign to them (Maree, 2011:59). Creswell (2012:429) and Parton (in Sharan, 2009:9) speak of a constructivist epistemology, which seeks to describe, understand and interpret the multiple and real experiences of participants using the qualitative research approach.

Since the constructivist epistemology is about making sense of people's experiences while using the inductive reasoning process to build concepts from the words and narratives of the participants, the researcher chose to use constructivist inquiry to hear rangers' workplace stories and experiences in order to understand their challenges and develop a resilience-building model from the participants' rich words and narratives. This was aimed at constructing the reality of the rangers using their own words and understanding their own situation so that the envisaged resilience-building model could be responsive to their actual situation.

Sharan (2009:15-17) argues that the qualitative researcher should have attributes such as willingness to do fieldwork, as one has to interact with participants in their environment, a good questioning stance (the ability to pose good questions that would yield the necessary information), a high tolerance of ambiguity, as there is often "ebb and flow" during the investigation, be a careful observer, think inductively and be comfortable in writing as this involves long write-ups. The researcher is a social worker and possesses the abovementioned qualities. Therefore, she travelled to KZN, leaving her family in Pretoria, to interface with the participants in order to get rich, insightful information on the workplace challenges of the rangers at HIP and Mkhuzi Game Reserve.

Furthermore, Creswell (2012:16) argues that qualitative research is best suited to address a research problem when there is little information about the phenomenon being studied in order to learn more from the participants through exploration. Sharan (2009:15) agrees with the abovementioned statement, but continues by indicating that inductive processes are undertaken to gather data through observation, interviews and documents in order to build an understanding of the phenomenon under study.

It could be concluded that, in order to construct the participants' realities, the researcher had to use the qualitative approach to understand and describe the experiences and challenges of the participants in their natural setting.

For this reason, in this study, the researcher, as the primary instrument of data collection, used both verbal and non-verbal communication to get holistic and rich descriptions of the phenomenon under study. During the literature review phase, it was discovered that no study had been conducted within the theme of wildlife conservation and social work intervention, and this prompted the researcher to use the qualitative research approach with an exploratory inclination. Qualitative research was found to be suitable to attain the goals of the study, which were to develop an in-depth understanding of the challenges and needs of the rangers stationed at HIP and Mkhuze Game Reserve, and to develop a ranger resilience-building model to assist the rangers to deal with their workplace challenges and needs.

4.4 Research design

Research design is a plan that helps the researcher with the set of questions that needs to be answered in order to reach conclusions about the research question (Sharan, 2009:55). Creswell (2012:20), equally defines research design as a specific procedure involved in the research process. Additionally, Fouché and Delport (2011:73) are of the opinion that research design is about focusing one's perspective for the purpose of a particular study. It could be said that the research design is a strategy that helps to answer the research question.

According to Maree (2011:75) and Yin (2003:14), case study strategy is explorative and interpretive in perspective as it is embedded in constructivism, which strives towards a holistic understanding of how participants relate to each other in a specific situation and how they make meaning of the phenomenon under study. Fouché and Schurink (2011:321), Sharan (2009:39) and Baxter and Jack (2008:547), in the same way, describe a case study as an in-depth description and analysis of a unit that is intrinsically bound by time, place and activity, and that sets a boundary to ensure that the study remains within a particular scope. To be exact, this study used an intrinsic case study. Furthermore, this strategy involves the use of multiple sources of information to get a deeper understanding of the dynamics of the situation.

Sharan (2009:43) further encapsulates a case study as particularistic as it focuses on a particular phenomenon with puzzling occurrences, is descriptive in nature as the end product should be rich in description, is heuristic as it should illuminate and give insight and understanding, and captures complex ions of the phenomenon under study. Baxter and Jack (2008:544) agree with the above statement, but continue to say that the approach is about the collaboration between the researcher and the participants. The participants should describe their views of reality in order for the researcher to better understand their world.

The researcher needed to have access to and build the confidence of the participants in order to gain insight and understanding of the phenomenon under study in the participants' natural environment. In this study, HIP and Mkhuze Game Reserve were the case study's natural environments, which enabled the researcher to achieve the goals of the study. These were to develop an in-depth understanding of rangers' workplace experiences, challenges and needs, and then construct a resilience-building model. The researcher opted for the design and development (D&D) approach (also known as developmental research), mainly to make a contribution to the human behaviour body of knowledge because it is exploratory and descriptive, as argued by De Vos and Strydom (2011:474).

Thus, the research design that was used in this study is one of design and development (D&D). This design is discussed to illustrate how the research process unfolded.

4.4.1 Design and development model

Since this study was focused on inquiring about rangers' workplace experiences, challenges and needs, an applied research method was used to customise the knowledge needed to address these challenges and needs rangers face in their workplace and to conceptualise the ranger resilience-building model that is presented in Chapter 7 of this thesis.

Neuman (2014:27) refers to applied research as a design used to offer a practical and concrete solution to specific problems facing practitioners, whereas Jupp (2006:8) mentions that applied research focuses on the production of knowledge to further other goals. Design and developmental research is applied research that is embedded in developmental research, as conceptualised by Thomas and Rothman (2009). This research methodology denotes the development of a technology essential to professions such as medicine, nursing or social work. It is termed a behavioural science model as it is aimed at making a contribution to the knowledge of human behaviour (Fouché & De Vos, 2011:98). Since this study was about developing knowledge that would assist in understanding the actual experiences, challenges and needs faced by rangers in their workplace, with the aim of developing an appropriate intervention model that would assist them to develop resilience to deal with these workplace challenges, the design and development model was found to be suitable.

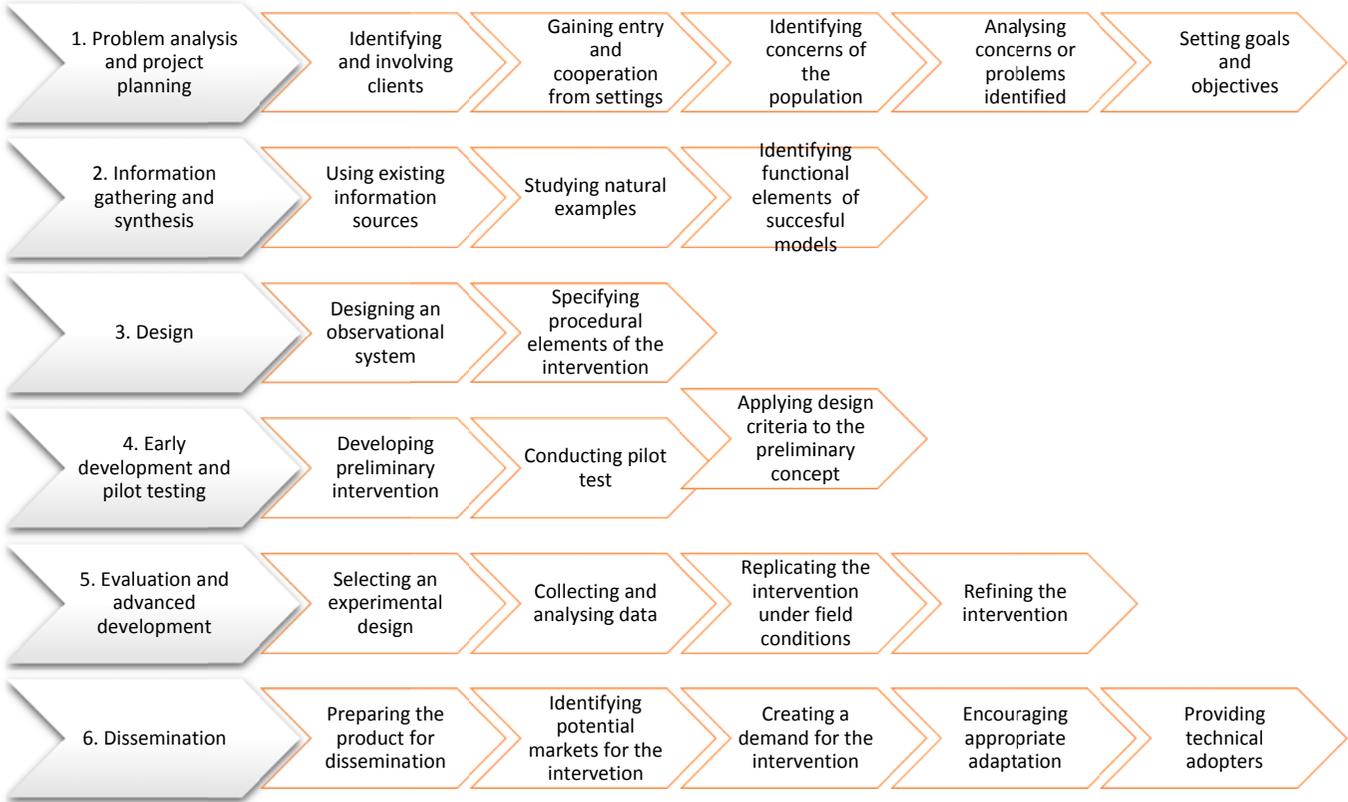
According to Fraser and Galinsky (2010:460), design and developmental research emphasises the design and development of a model to solve real problems. Another significant factor is that design and development is critical and central to social work research. Since this study is embedded in a social work background and is applied research, the researcher chose to use the design and development model which is grounded within the developmental research approach of Thomas and Rothman (2009), as outlined in De Vos and Strydom (2011:473), to inquire about the experiences, challenges and needs of rangers at HIP and Mkhuze Game Reserve in order to design and develop a tailor-made model to assist them to cope and develop resilience. In adopting the developmental research process, the study had to end with the development of a model, as guided by the goals of the study. This means that the application and evaluation of the model's effectiveness, as outlined in the intervention model, do not form part of this study. This becomes clearer as the discussion on the process of development unfolds.

According to De Vos and Strydom (2011:476) the intervention research model is a six-phase model with different steps that are not linear, but have a spiral effect because new information or difficulties often cause loop-back activity.

However, this study focused only on the design and development of the model, and left out the testing of the intervention.

The intervention research model is presented graphically in Figure 4.1

Figure 4.1: Six phases of the intervention research

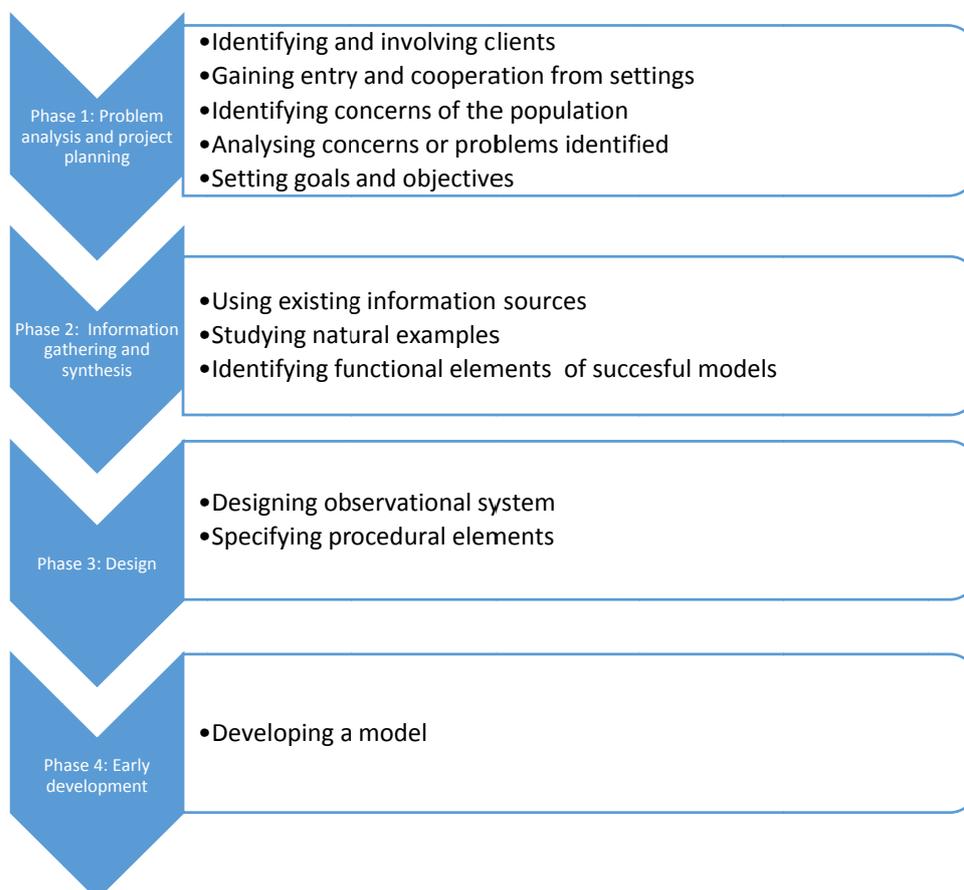


Adapted from De Vos and Strydom, 2011:476–489

However, as already indicated, this study focused only on the first four phases: Phase 1: Problem analysis and project planning up to Phase 4: Early development, concluding with the first step of the phase (developing a model). This was because the aim of the study was solely to develop the model and not to implement it within the scope of this study. Implementing and ultimately evaluating this developed model would take a long period of time, given the practical demands of the whole process. For the purpose of this study, the researcher therefore decided to end with the development phase. Due to time and resource constraints, the application and evaluation of this model will be conducted as a postdoctoral study.

The following interplay of phases and steps of the design and developmental research were used in this study:

Figure 4.2: Adapted phases of the model for this study



4.4.1.1 Phase 1: Problem analysis and project planning

According to De Vos and Strydom (2011:477), problem analysis is about understanding social conditions that negatively affect a significant number of people. Gilgun and Sands (2012:350) define a problematic situation in the context of injustices, vulnerability and human suffering, and continue to argue that change can only be effected once there is an in-depth understanding of the problematic situation. Similarly, Fraser, Richman, Galinsky and Day (2009:29), describe this as a phase of determining the feasibility of studying practice-related problems. This part therefore involved exploring the aspects that were seen by rangers as challenges in their workplace at HIP and Mkhuze Game Reserve. The first phase unfolded as follows:

- **Identifying and involving clients**

This step has to do with the researcher identifying the target group that is going to benefit from the technology to be developed. According to De Vos and Strydom (2011:477-478), during this step, the researcher selects the population whose issues are of interest to the researcher and the population itself. In this study, the researcher identified the rangers at HIP and Mkhuze Game Reserve as the target population that would benefit from the model that she intended to develop. This was informed by the researcher's position within the conservation field and the services that the wellness service provider has to provide to ensure that the rangers' psychosocial wellbeing is taken care of.

- **Gaining entry and cooperation from settings**

Fraser et al. (2009:29) are of the opinion that, in order to understand the problem from different levels and perspectives, it is important to identify key informants and potential collaborators. De Vos and Strydom (2011:478) are in agreement, arguing that the researcher has to collaborate with the population whose issues are of emerging interest to both the researcher and society. They further cited Fawcett et al. (1994), who argue that research that addresses the strengths and problems of constituencies has a greater chance of success, because of the support from the target population, profession and greater community.

Furthermore, De Vos and Strydom (2011:478) are of the opinion that collaborative relationships with representatives of the setting provide a sense of ownership, facilitate access, and provide the cooperation and support that is necessary to conduct developmental research.

The following key people were identified as gatekeepers for this study: The CEO of Ezemvelo KZN Wildlife was contacted through a formal letter requesting him to grant permission to conduct the empirical study. After the CEO granted permission (Annexure 4), the HR executive was contacted via email to approve the Wellness Department as the link between the organisation and the researcher. In addition, collaborators such as the Wellness Manager assisted with the preliminary data collection time table, linked the researcher with managers of HIP and Mkhuze Game Reserve, and the social worker in order to access the research sites. The area social worker vouched for the researcher in terms of the logistics at the research sites, and also encouraged rangers and management to participate in the study.

The researcher liaised with the Wellness Manager as a peer who vouched for her and assisted with access to HIP and Mkhuze Game Reserve site managers. In addition, the Wellness Manager made sure that the researcher had access to and the confidence of the participants by assigning the area social worker to accompany the researcher to the research sites, ensured that the logistics and messages were cascaded to the participants on time, and encouraged both rangers and managers to support the study by participating in it.

- **Identifying concerns of the population**

Fawcett et al., cited by De Vos and Strydom (2011:478), state that during this step, the researcher has to make an effort not to project the external views of the problem and its solutions, but ensure that the actual concerns of the population are understood from their point of view. It becomes very important during this step to make contact with the members of the population to ensure that what is seen to be a problem is actually a problem according to the people who are experiencing it.

The researcher has observed that the psychosocial wellbeing of the rangers was not given the attention that it deserves, specifically that they are seen by the management of the organisation as the pillar in the conservation process. As a result, the researcher needed to confirm this by engaging the rangers and their managers to confirm her observation, so that the envisaged intervention model could be responsive to the actual need.

- **Analysing concerns or problems identified**

Analysing the identified concerns is an important focus of this step in the process of developmental research. As stated by Fawcett et al. (in De Vos & Strydom, 2011:478), it is crucial to analyse conditions that are labelled as problems. The following key questions offered the researcher valuable guidelines in problem analysis:

- For whom is the situation a problem?
- What are the negative consequences of the problem to the affected individuals?
- Who should share the responsibility for solving the problem?
- What needs to change and what is the support necessary for change?
- At what level should the problem be addressed?
- Does the problem manifest itself in individual behaviour or broader structural conditions?

In trying to respond to the above questions, the researcher engaged herself in learning about the actual situation that the rangers as the population of this study are faced with. It was evident that the psychosocial wellbeing of the rangers is not given the attention it deserves, as observed by the researcher, and the organisation has to be involved in solving the problem.

Aspects that needed to be changed were then analysed and linked to the specific roles that each stakeholder has to play in trying to address the identified problem. The researcher found that it is also important to highlight the challenges that she faced when analysing the concerns and how to address them. One of the challenges was the distance the researcher had to travel from Pretoria to KZN. It meant that proper planning and arrangements had to be made to ensure maximum use of the opportunity. Thus, the researcher had to ensure that data-collection logistics were properly arranged to avoid unnecessary crises at the research sites.

Additional challenges that were experienced are as follows: Firstly, the managers were not committing dates and times for the interviews. It was only after seeking the intervention of the CEO that things started to happen. Secondly, the challenges with the rangers were that they were scattered across the two sites and assembling them at one venue without compromising the services they deliver at their work stations was raised as a concern. This was resolved by interviewing rangers at a central venue after their patrols. The final challenge was that, with the timing of the interviews, some rangers were tired from their patrols and not enthusiastic, despite agreeing to participate in the study. These problems were resolved by making sure that the line managers, who assisted with transporting the rangers to the interview venues, also participated in the interviews, and that their interviews were scheduled on the same day, starting with the rangers and finishing with the managers. To counter lethargy due to the rangers having been on patrol, the researcher arranged some refreshments, and reminded participants of the importance of the study and of their right to withdraw at any given time. Fortunately, none of the participants withdrew from the interviews. Lastly, the challenge of interviewing managers who were based at the corporate office in Pietermaritzburg was solved by coinciding their appointments with a scheduled Imbizo in HIP, and their interviews were conducted first thing in the morning and in the evenings in an effort not to interfere with their duties.

- **Setting goals and objectives**

Following an appropriate analysis of the problem, the researcher is able to set goals and objectives. This is the final step in the first phase, namely, problem analysis and project planning. Goals are referred to as the desired outcomes by the community of interest, while objectives are specific changes in the programme (De Vos & Strydom, 2011:478). Fraser et al. (2009:30), equally argue that it is important to establish time-specific goals. The goals and objectives set for this study are highlighted in detail in Chapter 1 and how they were achieved is stipulated in Chapter 6 of this thesis.

4.4.1.2 Phase 2: Information gathering and synthesis

This phase offers useful contextual information about the topic under discussion as it involves consulting existing literature and studying natural examples to avoid reinventing the wheel, as well as assisting in identifying functional elements of successful models that can be incorporated into the design of the desired prototype (Major & Savin-Baden, 2012:93; De Vos & Strydom, 2011:480; Fraser et al., 2009:30). It could be said that information gathering and synthesis is a good way of devising and developing an effective model that is guided by what others have already developed, or improving on what others have done to address challenges similar to those that are being experienced.

- **Using existing information sources**

According to Major and Savin-Baden (2012:3,12), using existing information sources is the first step in helping the researcher minimise the information explosion, make connections between existing studies and identify gaps in order to organise and arrange information generated on the study topic. In addition, De Vos and Strydom (2011:481) argue that the researcher should search for information beyond their particular discipline since the human challenges are complex. The researcher consulted various sources across human sciences disciplines, such as nursing, the defence force, the police force and polar expeditions, to name a few, in order to get a wide and detailed overview and understanding of resilience methods and concepts, as well as to establish the commonality of the workplace demands and challenges relevant to rangers in

order to learn from them. The researcher concluded that the information from the aforementioned disciplines was best suited as it was similar to the rangers' workplace scenario and therefore their experiences could be compared to those of the rangers. Above all, the programmes that were reviewed had reactive and preventative aspects, which are the elements that the researcher intended to include in the new model.

- **Studying natural examples**

Interviewing people who have experienced or have knowledge of the problem may give the researcher insights that may assist in devising possible solutions to the problem (De Vos & Strydom, 2011:481). The researcher embarked on this study after establishing that there was no plan in place to support rangers, especially those stationed at KNP, as they were under siege by poachers. As a result, the researcher, as the Corporate Manager of Employee Wellness at SANParks, had to do something in response to the identified need. The researcher established that Ezemvelo KZN Wildlife did not have a strategy either to support its rangers who, like the rangers in KNP, had workplace challenges that were exacerbated by poaching. Hence, there was a need for a model to assist rangers to deal with their workplace challenges and needs, as in both cases, there were no proactive ranger support services.

During this step the researcher embarked on eliciting information from the people who are affected by the problem, namely the rangers, as well as the management as the people who are close to the rangers and able to give information on what they observe as the challenges and needs of the rangers. The detailed information on how the data were collected and analysed appears later on, under the specific subsections in this chapter.

- **Identifying elements of the successful models**

This step focuses on the critical analysis of the elements of the programmes and practices that were previously used in addressing the identified concerns (De Vos & Strydom, 2011:481). This assist the researcher to know what worked earlier on and how these elements could be used in the envisaged technology to bring the desired outcomes. Fraser et al. (2009:66) refer to this subsection as the “failure case analysis” as it involves analysing the successful and unsuccessful components, because much can be achieved through knowing what happened and why.

In the same way, De Vos and Strydom (2011:481–482) argue that studying models that were used to address the phenomenon under study helps to identify elements that may be useful for the new model. As far as identifying elements of the successful models is concerned, Chapter 3 of this thesis outlined a myriad of successful elements of resilience models suitable to the development of the new model to assist rangers deal with their workplace challenges and needs, thereby assisting them to build resilience. The researcher chose to incorporate the following models and their functional elements: the resilience wheel (Henderson, 2013:26), the resilient outcomes in Antarctic populations model (Norris et al., 2012:40) and the Navy and Marine Corps Four-Colour Spectrum Model (the normal continuum model) (Litz, 2014:6) because their work environments were similar to the rangers’ workplace. How these elements were used in the new model is presented in chapter 7 of this thesis.

4.4.1.3 Phase 3: Design of the model

According to De Vos and Strydom (2011:482) and Fraser et al. (2009:31), this phase is about converting knowledge from literature into a practice-related model. The design phase therefore focuses on the early development of the design that will produce the desired effect. This phase is also about establishing specific activities that would lead to the development of a prototype to assist in determining the outcomes of the study. For this reason, the design of the observational system and specification of the procedural elements of the model are explained as follows:

- **Designing an observational system**

The Community Tool Box (2016) postulates that designing an observational system involves gathering information about a programme at different levels, and thus involves monitoring outcomes in order to get accurate information. De Vos and Strydom (2011:482) and Fraser et al. (2009:30–31) are in agreement with this, and maintain that this phase is about designing a feedback guide or a system of measuring and assessing the impact on the phenomenon under study. Thomas and Rothman (2009:34) postulate that this feedback system helps the researcher to observe events unfold in their natural environment and should involve those affected by the issue as they should specify what should change. De Vos and Strydom (2011:482–483) argue that functional analysis can be used as a strategy to measure relevant behaviour and outcomes. One way of doing that can be through direct observation. In cases where this may not be possible, independent observers, self-monitoring and self-reporting may be used to gather information related to the problem. The researcher used different strategies to design the model to assist rangers to deal with their workplace challenges and needs. Secondary sources of information were used, which, according to Rea and Parker (2014:5), refer to consulting already available sources of information to shed light on the study. In this instance, the researcher consulted the existing literature, as well as primary sources of information (the managers/supervisors of rangers and the rangers themselves). This was done to elicit rich information that could be used to develop the envisaged intervention. In this manner, the researcher was able to collect information from the relevant sources on the actual challenges and needs of the rangers. This led to the development of a model that is hoped to assist rangers to develop resilience in dealing with their workplace challenges and needs.

The managers were involved as participants. Because they work with the rangers on a daily basis, they directly observe the rangers' workplace conditions and challenges. As a result, they were able to shed light on the workplace challenges and needs of the rangers. Managers from the corporate office were also engaged as secondary sources of information, as they were expected to share evidence from reports and policies on organisational ranger support mechanisms.

Yin (2011:152) maintains that secondary sources provide second-hand evidence because someone tells about what they have heard. Correspondingly, Fraser and Galinsky (2010:461, 464) posit that the focus should be ensuring that the design content fits the environmental contingency in order to avoid compromising the outcomes. Thus, during this stage, the researcher has to check if the programme is culturally congruent with the target population and setting, whether the participants are engaged, and whether the model is effective.

The researcher worked closely with the social worker responsible for HIP and Mkhuze Game Reserve as she is conversant with the environment and the Zulu culture. Most importantly, she is the secondary source of information, as she has direct contact with the participants and understands the rangers' challenges and needs related to their work environment. She was also instrumental in assisting the researcher with understanding the Zulu culture for the model to be designed in a culturally sensitive manner.

Since the goal of the study was to develop a ranger resilience-building model to assist rangers to deal with their workplace challenges and needs, the construction of this model was based on an in-depth understanding of the workplace challenges and needs, as experienced by the rangers, as well as insight from management. The involvement of the social worker, who is from the Zulu culture and also directly involved with the rangers, was very beneficial as it assisted the researcher to develop culturally sensitive intervention technology. It is important to mention at this stage that the aim of the study was only to develop the intervention technology. The implementation and evaluation of the model did not form part of this study as this was a developmental study only.

- **Specifying procedural elements of the model**

According to De Vos and Strydom (2011:483), the functional elements of a prototype often become part of the practice model, which is the final product of the research. In addition, Thomas and Rothman (2009:35) argue that the researcher can identify procedural elements for the model by observing the problem, events occurring naturally and other prototypes. In this study, procedural elements of the resilience-building model were identified in Chapter 3 and discussed in detail in Chapter 7 of this research report.

4.4.1.4 Phase 4: Early development of a model

The last phase of this study involves the development of a model to assist rangers to deal with their workplace challenges and needs. It does not include the implementation and evaluation of the model. According to Fraser et al. (2009:32), the focus should be on the process rather than on the outcome. Both De Vos and Strydom (2011:484) and Thomas and Rothman (2009:36) refer to this phase as the development of a prototype or preliminary model to be tested for the first time in a real setting.

It could be said that the ranger resilience-building model is informed by rich and diverse descriptive information from the participants, and a literature review. Functional elements from resilience models have been designed and developed, and are ready to be tested in a real environment. As previously mentioned, they are presented in Chapter 7 of this thesis. Due to the tight time schedule, pilot testing of the model will be done as part of a postdoctoral study.

4.5 Research population, sample and sampling

In research, a population is defined as people who possess certain characteristics in which the researcher is interested and from which the researcher draws a sample (Neuman, 2014:247; Strydom, 2011:228). Bryman (2012:187), by the same token, describes a population as a universe or units from which the sample is to be selected. A population can thus be described as the group of elements or people in which the researcher is interested and ultimately draws a sample from.

HIP and Mkhuze Game Reserve were chosen as the population for this study as they were the only protected areas in Ezemvelo KZN Wildlife with the Big Five (lion, elephant, leopard, buffalo and rhino). According to Taylor, Lindsey and Davies-Mostert (2016:ix) and Caro and Riggio (2014:486), they are Africa's flagship species because they are the most sought-after mammals, dangerous, endangered and difficult to hunt on foot.

The research population for this study comprised of males and females of all ages who were willing to partake in the study. It included rangers, members of the Anti-poaching Unit (APU) who are rangers specialising in anti-poaching, and line managers at HIP and Mkhuze Game Reserve, as well as management from the corporate office who shared their insights on rangers' challenges and needs and the available support strategies used within the organisation.

Neuman (2014:246) and Flick (2007:119) define a sample as a small set of cases from a larger population. Correspondingly, Creswell (2012:142) argues that a sample is a subgroup of the targeted population the researcher intends to study. The researcher is of the opinion that a sample is a small group drawn from the targeted population with the aim of generating information. Flick (2007:27) states that qualitative sampling should be diverse in so far as the phenomenon under study is concerned. This will allow variation in the capturing of the empirical material. Furthermore, Cohen, Manion and Morrison (2005:104) argue that valid sampling should be planned to fit the purpose of the study, time scales and constraints, data-collection methods and research methodology of the study. The diversity elements among the participants in this study were limited due to the nature of their work. The focus groups consisted of black Africans, predominantly male, while the individual interviews were conducted with both black and white male participants, and a few women.

The researcher used purposive sampling to select the participants. Non-probability purposive sampling is when the researcher intentionally selects the sample from the population to try and understand the phenomenon under study. In relation to this, homogeneous sampling is purposive, as people who are bound by common characteristics are selected (Neuman, 2014:273; Creswell, 2012:206; Maree, 2011:10; Sharan, 2009:40; Cohen et al., 2005:103). In addition, Yin (2011:88) argues that study units that offer contrary views should also be included to get a broad perspective on the subject of study. Ezemvelo KZN Wildlife was purposively selected as the research area because of the high number of poaching incidents. This suggested that its rangers are experiencing challenges and needs that are exacerbated by the poaching menace, while the researcher was of the opinion that managers may have different views of the rangers' challenges and needs.

The persons who met the following criteria were selected to participate in this study:

- Males and females of any age who are employed by Ezemvelo KZN Wildlife and stationed at HIP and Mkhuze Game Reserve as rangers
- Males and females of any age who are employed by Ezemvelo KZN Wildlife as APU rangers
- Males and females of any age who are managers at HIP and Mkhuze Game Reserve, as well as those at the corporate office of Ezemvelo KZN Wildlife

Participants for both focus group discussions and individual interviews were purposefully selected with the abovementioned selection criteria in mind, because they had knowledge about the rangers' challenges and needs. Six focus group discussions were held with thirty eight (38) males and two females, which involved rangers and members of the APU group, from whom information on the challenges and needs of rangers in HIP and Mkhuze Game Reserve was collected. Seven males and three females from line and corporate management participated in the individual interviews. They shared information on the existing policies and strategies that are geared towards supporting rangers.

According to Creswell (2012:146) and Cohen et al. (2005:93), a qualitative study sample should be large enough to ensure the most perceptions and lessen sampling error. Bryman (2012:426) argues that sample size cannot be determined when theoretical saturation is used as a criterion for sample size. The size should be adequate enough to achieve information redundancy, which is when no new data emerges. Data saturation is defined by Creswell (2012:433) as the point where the researcher makes the determination that new data will not provide any new insights for the developing categories. The researcher therefore understands data saturation to be when the additional interviews do not yield any new information or concepts. The researcher did not determine the size of the sample at the beginning of the research process, but depended on the point of saturation.

4.6 Data-collection method

Data collection is the process of identifying, selecting and reviewing bits and pieces of information that will help understand the phenomenon under study. It is a collection of rich and diverse descriptive information that seeks to answer the research question (Maree, 2011:34–35; Sharan, 2009:87). As part of the preparation for data collection on arrival at the research site, the researcher, with the help of the social worker, called the line managers and explained the purpose of the study to them, that participation was voluntary, therefore giving consent to participate was important. They were requested to encourage the rangers to participate. Furthermore, they were informed that follow-ups would only be done with those who agreed to support the study, in order for them to sign the informed consent to participate. This was done solely to give all the participants the chance to decide whether they wanted to participate or not. Lastly, line managers were requested to assist with transporting participants to the central venue on the date of the data-collection appointment.

Maree (2011:87-90) argues that an interview is a two-way conversation in which the interviewer asks the participant questions with a view to collect data and learn about the ideas, beliefs, views and opinions of the participants. Additionally, Bryman (2012:494) argues that the best way to obtain information about people is to ask them, as they are best suited to reconstruct events. Correspondingly, Doody and Noonan (2013:28–29) argue that interviews generate deep, contextual accounts of participants' experiences and interpretations, therefore planning the interviews will ensure that the research questions are successfully answered. Having considered the interview, it is reasonable to consider semi-structured interviews, which, according to Doody and Noonan (2013:30), afford the researcher the opportunity to use predetermined questions to collect data from the participants in a focused and consistent manner. In addition, it gives the researcher the spontaneity and flexibility to explore new paths that emerge, thereby assisting with the collection of rich data for analysis. Correspondingly, Bryman (2012:212–213) argues that, because of the questioning style of structured interviews, paraphrasing and sequencing may differ from one interview to the next, and the interviewer has the latitude to follow up on significant responses.

The researcher used semi-structured interviews to collect the data from the managers and the focus group discussions with the rangers, based on the aims and objectives of the study.

With reference to a focus group interview, Maree (2011:90) maintains that it is a strategy that captures wide, rich and in-depth responses that may not be attainable from individual interviews. In addition, Greeff (2011:360) maintains that a focus group is a means of getting a better understanding of how people feel or think about an issue. Therefore, the researcher has to create an environment where participants with common characteristics will share perceptions, wishes, points of views and concerns. It could be said that a focus group is a joint discussion of a group of people with similar characteristics, facilitated by the researcher to construct meaning on a particular issue. Since the study underscores the constructivist perspective, focus group interviews, as a method of data collection, were well placed to assist the researcher to collect data about the interaction and realities of the participants under study, as it allowed flexibility in asking questions. Focus group discussions were conducted with the sample of rangers to gather data on their experiences, challenges and needs in their workplace.

Neuman (2007:190), in particular, suggests that face-to-face interviews permit extensive probing and have the highest response rates. Face-to-face semi-structured interviews were conducted with line managers from the corporate office to establish their perceptions of rangers' workplace challenges and needs. Individual interviews with managers were performed in English. The focus group sessions with rangers were challenging, as there was a language barrier. The researcher had to pose the questions in English and the social worker, who was assigned to assist with the logistics, was sworn into confidentiality, as she helped with the isiZulu translation. She also ensured that the consent forms were distributed, completed and collected while the researcher prepared the audio recorder to ensure that it was working properly in order to collect all the information. The participants were informed that they could stop the interview at any point if, for some reason, they did not want to continue with the interview or did not want the recording to continue.

Permission was also requested from the participants to use the audio recorder after its purpose had been explained to them.

Sharan (2009:97) suggests that the researcher asks the following types of questions to elicit information and opinions about the phenomenon under study: hypothetical questions to encourage speculation, devil's advocate questions when the topic is controversial, ideal position questions to ask participants to describe the ideal situation, and interpretative questions to get an explanation of the situation. It can be said that good qualitative questions should be able to yield descriptive data about the phenomenon under study.

The following prompts were used to stimulate responses from the rangers during the focus group discussions:

- Tell me about your experiences as a ranger in HIP/Mkhuze Game Reserve.
- Tell me about the challenges you experience while executing your duties as a ranger in this park?
- Describe your needs as a ranger on a daily basis as you execute your duties?
- Share with me how you have been coping with challenges in your daily duties?
- What kind of support has been offered to you to help you deal with the situation?
- Please describe your view regarding the support you are given?
- What would you like wellness services to assist/help you with in order to lessen the effect of the challenges and needs on your daily life, e.g. contact with loved ones?
- Tell me more about your relationship with your peers/co-workers?

- What do you do when faced with adversity in the line of duty?
- How would you like to be supported by management to cope with the daily challenges and needs you come across in your line of duty?
- Thank you for the valuable information. Is there anything else you would like to add before we end?

With regard to the individual face-to-face semi-structured interviews with management members, the researcher used the following requests and questions to illicit information:

- Tell me about your ranger management strategy/policy in HIP/Mkhuze Game Reserve?
- Share with me what you regard as the workplace challenges facing rangers in this protected area?
- Kindly share with me what you regard as the needs of the rangers in their daily work in this protected area?

Please explain the strategy/policy used to support the rangers in this protected area?

- Could you kindly explain how the above strategy/policy is meant to support the rangers?
- From your observation, in what way would you say this strategy/policy is effective in supporting rangers? Please elaborate?
- Please share with me how you believe these rangers cope with their daily work within this strategy/policy you have explained?

- Which elements within the current strategy/policy take rangers' wellness into consideration?
- Share with me your suggestions on how to improve this strategy/policy for it to meet the needs of the rangers?
- Thank you for the valuable information. Do you have anything else to share before we end?

It is, however, important to note that the researcher pilot-tested the semi-structured interviews on participants who were not part of the final sample in order to check the feasibility of the abovementioned interview questions. The pilot test assisted the researcher to refine the interview questions and ensure that all the participants understood them in the same way. The evidence in support of this assertion is found in Sharan (2009:95), who argues that pilot interviews ensure that the researcher asks good questions that extract the desired information.

The researchers used various instruments to record and enhance the credibility of the information collected from both the individual semi-structured interviews and focus group discussions. An audio recorder was used to capture stories from the participants, while note-taking and observations of the non-verbal cues were used to complement the process. In some instances, the researcher took pictures to corroborate facts. The researcher experienced a technical hiccup as the audio recorder stopped working, and she had to use her mobile phone to record the interviews at Mkhuze Game Reserve.

The researcher used non-verbal communication, such as nodding to show that she was paying attention, as well as observation to check whether what the participants were saying was congruent with their body language. Participation was encouraged by probing for more information, requesting elaboration on issues under discussion, as well as asking follow-up and clarity-seeking questions.

Additionally, participants were encouraged to respect each other's opinion, and share their experiences in a sensitive and respectful manner without interrupting one another.

The data collected from the interviews by audio recorder and notes was transcribed into emerging themes. The coded themes were refined into subthemes that were used to answer the research questions. Quotes that best defined the meaning of the category and provided expressions of the participants were extrapolated during data transcription. The interpreted themes and subthemes were used to develop ideas and concepts that helped develop a deeper understanding of the challenges and needs faced by the rangers, while photographs completed the picture of the challenges of the rangers stationed at HIP and Mkhuze Game Reserve.

4.7 Data analysis

According to Creswell (2012:236), analysing qualitative data is about making sense of the collected data to form answers to research questions. It is a sequential process that involves cleaning data from interviews to transcripts, to themes and patterns, to summary and accuracy verification. Inductive reasoning is a bottom-up approach. It is about moving from the specific to the general. It involves using specific occurrences to draw general conclusions about the situation, which are codes that emerge during data interpretation (Creswell, 2012:237; Delport & De Vos, 2011:49; Maree, 2011:107). The researcher used this process to analyse the data from the rangers and management of HIP and Mkhuze Game Reserve, and ultimately used the information to develop a ranger resilience-building model.

According to Creswell (2012:241), data analysis can be done either by hand or electronically. However, the following process needs to be observed: information needs to be organised, and the qualitative data from interviews collected by audio recorder and field notes has to be transcribed into emerging themes. The coded themes have to be refined into subcategories that answer the research questions. Quotes that best define the meaning of the category and provide expressions of the participants have to be extrapolated when describing the data.

The researcher chose to use manual data analysis in order to experience the process of interrogating the data. For easy identification, the collected data from the focus groups was organised and named using the interview site, whereas numbers were used to identify managers' interviews. This was done solely to ensure anonymity because it is important to ensure that no information could be traced back to the participants.

4.8 Data verification

Creswell (2012:259) and Maree (2011:114) argue that the credibility and trustworthiness of the study can be achieved through consistent checking of the data analysis, findings and conclusions. Furthermore, Maree (2011:113) refers to multiple data sources as a pointer to enhance the trustworthiness of the study by using different sources that point to the same conclusions. Since data verification is depicted as the use of more than one instrument to check if the information is logically accurate and reasonably error free, in this study, the researcher used triangulation, member checking, observation and credible reporting techniques. The process on how they were used is as follows:

- Triangulation is the combination of two or more methods of data collection in a human behaviour study. It is an attempt to map out or explain more fully the richness and complexity of human behaviour from more than one standpoint. It is a technique of corroborating the data and adds validity (relevance) and reliability (replicability) to the data in qualitative case studies (Flick, 2007:120; Cohen et al., 2005:112). The data-collection methods in this study were individual face-to-face semi-structured interviews and focus group discussions with the aid of an audio recorder to capture all the information, written notes and observations, specifically of the congruence between the verbal and non-verbal information. The researcher also used existing documents, such as Acts and policies, visits to rangers' accommodation, photographs and observations to corroborate, compare and check the validity and reliability of the data from the individual and focus group interviews.

- Sharan (2009:220) argues that reliability refers to consistency and the extent to which the research findings can be replicated. There was consistency with regard to the information from the rangers at HIP and Mkhuze Game Reserve. This was confirmed by the participants' responses during the different focus group discussions.
- Creswell (2012:259) defines member checking as the process of asking some participants to check the accuracy of the account of events. In addition, Maree (2011:114) argues that errors of fact should be checked with the participants by sending them the transcribed data to review before finalising the analysis. After transcribing the collected data, the researcher sent a summary of the data to a few purposefully selected participants to check and confirm the accuracy of the recorded information. Once the participants had verified the accuracy of their workplace challenges and needs, the researcher compared the analysed data with other literature to validate the interpretation.
- According to Strydom (2011:127), a research report should be written in simple language, which is not ambiguous. Investigations should be correctly done to ensure that findings are true and not deceiving. The abovementioned statement suggests that the integrity and credibility of the findings were crucial in the replicability of the study. Therefore, the researcher ensured that the data was accurately captured so that the findings could be replicated if the study was to be repeated with the same participants in the same context.

In short, data verification ensures that the results of the study are accurate and believable.

4.10 Summary

This chapter provided a discussion of the research methodology that was used in executing this study. HIP and Mkhuze Game Reserve were the case study's natural environments in which a qualitative research approach was used to gather rich information from the world view of the participants.

Design and developmental research, which is mainly exploratory, was chosen as the preferred approach to assist the researcher to contribute to the human behaviour body of knowledge by developing an in-depth understanding of rangers' workplace experiences, challenges and needs, and constructing a resilience-building model. The research population of this study comprised males and females of all ages who were willing to partake in the study. It included rangers and managers of HIP and Mkhuze Game Reserve, as well as management from the corporate office. The data analysis was done manually to experience the process of interrogating the data. The following data verification techniques were used: triangulation, member checking, observation and credible reporting to ensure the trustworthiness of the study.

CHAPTER 5: DATA ANALYSIS AND INTERPRETATION

5.1. Introduction

This chapter presents a descriptive analysis and interpretation of the data that was collected from the rangers and managers at HIP and Mkhuze Game Reserve regarding the experiences, challenges and needs that rangers are faced with on a daily basis in executing their duties.

The findings of this study are presented in a comparative manner, where the information from the two categories of the sample (rangers and managers) is compared to elicit the commonalities and differences. In this manner, the researcher was able to uncover the realities faced by the rangers from their own understanding, as well as from their managers' understanding. This enriched the information that was used to develop the proposed model that is hoped to assist in developing resilience in rangers for them to continue to be productive in as far as protecting wildlife is concerned. It should be noted that, within the rangers category, members of the APU are anti-poaching specialists, thus, their unique experiences, challenges and needs are also highlighted. In the managers' category, the sample consisted of line managers who are responsible for operations, as well as those from the corporate office.

As already indicated, focus group discussions were used to collect data from the rangers, and semi-structured interviews were used to collect information from the managers. The semi-structured interviews were conducted to determine rangers' workplace challenges and needs, and how they have been coping with their workplace circumstances so that an evidence-based model could be developed to assist rangers to develop resilience. The challenges and needs that rangers are faced with are a reality that cannot be disregarded. It is therefore important to empower the rangers to continue to protect the wildlife, even in the midst of adversity, as was established in the literature review in Chapter 2.

Six focus group discussions were conducted: three with rangers and three with specialised rangers of the APU in HIP and Mkhuze Game Reserve. Furthermore, ten (10) individual interviews were conducted with line managers and park managers of HIP and Mkhuze Game Reserve, and HR and wellness managers from Ezemvelo KZN Wildlife's corporate office.

The profile of the participants is provided to enhance an understanding of the discussion of the findings.

5.2 Participants' profile

The profile of the participants who took part in the focus group discussions showed that the participants were only black, with the dominant gender being male. However, the issue of the majority of the employees being only black is in line with the staff complement of HIP and Mkhuze Game Reserve, as Ezemvelo KZN Wildlife alluded to recruiting employees from the neighbouring communities, which are basically rural areas occupied by black people. This is confirmed by the statistics of the KZN census report, which indicates that the majority of the population of KZN is black. By the same token, the report indicates that the demographic distribution of the Zululand district, in which both research sites are located, still showed blacks to be the majority population group, followed by whites and then Indians (Statistics South Africa, 2011:17).

Furthermore, the researcher observed that the rangers were a homogenous group of Zulu descent as KZN is predominantly occupied by this particular ethnic group. Also, the APU groups comprised young males. It was also noted with interest that the conservation industry is still predominantly dominated by males, as demonstrated by the participants in this study, which comprised 38 males and two females.

Table 5.1 shows the participants' profile, which indicates the gender and total number of participants as opposed to the total ranger staff register. A total of 24 rangers formed three focus groups. An average of eight members per session participated in the discussions on their workplace experiences, challenges and needs, whereas 14 members of the APU also formed three focus groups, which

averaged five members per group. In total, 40 rangers out of a staff complement of 104 rangers in both HIP and Mkhuze Game Reserve participated in this study. This was confirmed by the APU and Field Rangers' Register (Ezemvelo KZN Wildlife, 2016).

Table 5.1: Focus groups' gender profile

Category	Male	Female	Total	Total number of HIP and Mkhuze APU and ranger staff complement
APU	14	0	14	104
Rangers	24	2	26	
Total	38	2	40	

The profile of the participants from the management group shows that the majority of the participants were male, as the conservation industry is dominated by males. This correlates with the statement by Dlamini (2016:23), who argued that wildlife careers are male dominated. Out of ten interviewees, three were black women, three were white males and four were black males. There were no white female participants. Four of the participants in this category were from the HR Department in the corporate office, as illustrated in Table 5.2 below:

Table 5.2: Individual interviewees' gender and racial profiles

Gender	Male	Female	Numbers
Black	4	3	7
White	3	0	3
Total	7	3	10

The other aspects, such as age, educational level and religious background were not found to be of importance in this study, so they were not explored.

5.3 Data analysis and interpretation

The researcher extracted the themes and subthemes that illustrate the experiences, challenges and needs of rangers that emerged from the collected data. They are summarised below. The themes and subthemes are discussed using verbatim quotations from the participants, as well as illustrations from the site to strengthen the data. Literature was also used to verify the findings.

5.3.1 Themes and subthemes

Table 5.3 provides an overview of the themes and subthemes that were identified from the data:

Table 5.3: Themes and subthemes

Themes	Subthemes
1. Quality of work life	Shortage of staff Working long hours Tools of the trade Living conditions Amenities Recovery activities Absent parents Spousal or partner issues Teamwork
2. Organisational support	Human resource support Wellness support Emotional problems Remuneration and rewards Training and development Poor or lack of communication Cultural issues Community relations
3. Work-related risk factors	Possible loss of life Environmental risk

The abovementioned themes and related subthemes are discussed below, supported by verbatim quotes, including literature verification:

Theme 1: Quality of work life

Participants were requested to describe their workplace experiences, challenges and needs. It became evident during data analysis that all participants (rangers and managers), irrespective of the site, were not happy with the quality of their work life. The lives of the rangers at HIP and Mkhuze Game Reserve were found to be characterised by stress due to the practical challenges and needs resulting from a shortage of staff, which comes with working long hours and staying away from their families for extended periods, residing at work under appalling conditions and sometimes not having enough resources to do their job. However, they indicated that teamwork was one of the factors that protected them from enormous stress and assisted them to cope, thereby keeping them going despite the challenges and needs that they face on a daily basis.

The majority of the participants indicated that the quality of their work life was not what they had envisaged as they were living under perpetual work stress. The abovementioned subthemes capture the quality of rangers' work life. The abovementioned sentiments were confirmed by a survey done by the World Wide Fund for Nature (WWF) and the Wildlife Trade Monitoring Network (TRAFFIC) Wildlife Crime Initiative (2016:20), which argued that African rangers' working conditions are the worst, most dangerous with the lowest salary and most inadequate leave.

The responses below show that the quality of rangers' work life was not what they had envisaged as they were not happy with working long hours without rest.

Rangers' sentiments are expressed in the following verbatim responses:

"We work day and night ... there is no time to rest, we have been out since yesterday, we came back this morning and after this we are going back to the bush."

“We rest when we are off duty, we work for the whole month and we get eight days for time-off, if we are inside the reserve, we work with no rest and sometimes when we are about to rest we find that we have to go back to the bush and we have no time to even eat.”

“Sometimes we can’t call our families for the whole week because of camping.”

“Yesterday I had a lunch box, but I forgot it in the patrol car so I only ate this morning.”

The data from the managers confirmed that rangers’ state of work life is unfavourable. In addition, they added that rangers are exposed to excessive work pressure and stress that often isolate them. The following were the responses from the managers:

“This job never ends, it never ends. You wake up at 02:00 and you think about the possible incursion areas and where the guys may come and shoot around and how you are going to counter that, ideas of how to stop it, things like that. It is ongoing, you constantly worry about the moon that is coming back. During the moon phase, we work the whole day and I tell our guys to sleep early because we are probably going to be woken up at 24:00, 01:00, 02:00 by gunshots that have been reported and you need to scramble for your clothes (“impahla”) and go out into the bush again and that can carry on until 04:00 or 05:00.”

“As a section ranger (supervisor), I think we are under a lot of stress as well, although we are not always out there in the trenches. We have to coordinate staff. It is very difficult for me, for example, to even consider taking time off. In fact, it affects your private life. We live in the reserve with our spouses and we don’t want to leave the reserve because if we leave the reserve ... what happens if a rhino dies in your absence?”

"I often tell people that our jobs are unpredictably unpredictable, that is what makes it stressful. You never know when and what to do, you can be about to relax and have Christmas lunch with your family and the radio goes: "gunshot!" You stand up and say, "sorry, I've got to go", and that's what is stressful about our work, it is so unpredictable".

"You have to do this with passion and dedication. It means there is isolation that you have to put yourself in so that you have full concentration on your job. It isolates you from your normal life of being a human being, you become an instrument in a way, although you are a human being, but you operate like an instrument because your feelings are detached from you, except the senses of what if somebody comes and shoots me, what will I do? You change from your normal life of being a human being to be like a robot, you have to go back to all your training, and use your senses of hearing, your eyes, ears, smell, and leave everything and anything else, that is your feelings, you become a robot"

The information above suggests that both rangers and their line managers are leading a stressful life as their responses suggested that their lives are far from normal due to the nature and the demands of their job. It is unpredictable. Therefore, it isolates them as they always have to be on guard. It can thus be said that the lives of the rangers and their managers are far from being balanced nor do they meet the standards of quality of work life as postulated by Srivastava and Kanpur (2014:54), who argue that quality of life refers to the experience, level of satisfaction, motivation and commitment individuals have about their lives at work. It is about the degree to which individuals are able to satisfy their important personal needs while at work. This cannot be said about the rangers and their managers, as indicated above, as rangers end up having to sacrifice their off-duty days and remain in the reserve to guard the rhinos as they would feel guilty if poachers killed them while they were away. It is, however, comforting that, despite the poor quality of rangers' work lives, they remain committed and loyal as they realise the value of their work. The discussion on the subthemes on the quality of life follows:

Subtheme 1: Shortage of staff

All the participants reported shortage of staff as the main challenge that continues to negatively affect them and has plagued them for a long time. The effects of staff shortage are far reaching as they have to cover large patrol areas with minimum staff, they are unable to rest properly or go and see their families, despite having leave days.

The following quotes from rangers indicated their challenges and needs due to staff shortages:

“The areas are too big, we need more staff, we need more staff so that others can search for information while others patrol.”

“The camps are few, but the reserve is very big, this makes us work day and night without rest. Staff shortage is a problem, because in the bush you can't work alone because poachers always walk in groups.”

In corroborating the abovementioned facts, the managers indicated that the perpetual crisis of vacant posts causes some rangers to have a low morale because they are overworked. Staff shortage compromises other conservation functions, such as environmental monitoring, which becomes neglected as the focus is on protecting the wildlife.

The following were the managers' responses regarding the staff shortage:

“There is a serious staff shortage most of the time and we find ourselves having to operate with two or three guys in this area where the problem of rhino poaching is rife, when some of the guys are sick and some are on time off. Even if you want to take time off, you can't because of the staff shortage.”

“There should be six people at every single camp, that's a full staff complement. At the moment, we have camps where there are only two people. Two rangers, and then you try and push somebody in there to make it three.”

“We are now short staffed, three or four guys have to run a reserve of 20 000 ha.”

“We don’t have enough staff, which is the problem. The posts we have are frozen, they have not been filled, each guard (section) should have three rangers, but at times you’ll find one field ranger because at times they have to take time off due to fatigue.”

“We are short staffed and my guys are camping all the time. They camp for eight days. One guy camped for 12 days out in the field, in a small tent because we are trying to make a small number of rangers cover a bigger area and be at the right place at the right time.”

“There are other things that get compromised, like biological monitoring services and taking photos. We rather have the guys rest because we know the moon is coming back, with all its challenges for rangers.”

“The staff shortage comes with long hours of working non-stop and that for me affects their health, their alertness when doing their job. They are supposed to be adhering to the Firearm Act that says you must be physically fit and mentally sane. They have headaches, you don’t know whether they have headaches because of migraines or if it is because of lack of sleep. Four months ago, we had a field ranger who hadn’t slept for 18 hours and, while on patrol, they chased poachers and he mistook a child for a poacher. He started firing 11 rounds of ammunition on the boy. Fortunately, the boy wasn’t killed, but only injured. He was obeying the rules of the organisation, he was trying his best to do his job as best as he can, he was trying to protect the animals he was hired to protect, but unfortunately he was not as mentally alert as he is supposed to be.”

“They are super stressed and they have had the most encounters and stuff, but they are under-staffed and I understand the dilemmas of the organisation at the moment. I understand the dilemmas of the government at the moment. They need to fill up the staff complement on this reserve”.

The shortage of staff suggested that the rangers' quality of work life is negatively affected on an ongoing basis as there are no proper measures in place to deal with this matter. The organisation should find a way to assist employees to deal with the potentially harmful effects of a staff shortage, for example, ensuring that there are work schedules and that they stick to them, so that people could be able to take time off and not unnecessarily work irregular hours. This could improve the rangers' plans to visit their families and also get some rest.

Subtheme 2: Working long hours

Linked to the shortage of staff, rangers are forced to work long and unpredictable hours. Despite this situation, it was evident from the data that rangers are dedicated to their work and that they would do anything to protect the rhinos, irrespective of the inherent risks associated with working long and extended hours. The abovementioned statements are confirmed by Damm (2014:3), as well as Anderson and Jooste (2014:2), who argue that rangers are overstretched as they patrol larger areas than they should, but they continue to do their work. This is confirmed by the verbatim responses from rangers and how they are affected by this state of affairs:

"You go for patrols, but you end up falling asleep because you are so tired."

"We work 20 hours because we have to cover a big area of 25 ha. We sacrifice our time with families by working long hours and not going on time off."

"We work day and night, whereas we are supposed to work six hours, we end up working 20 hours because we have to cover a big area of 25 ha. The area is too big for two people."

The managers confirmed the rangers' assertions that they are working long hours without rest, to protect themselves from feeling guilty that they abandoned their jobs. However, there were those who absented themselves because they were disillusioned by the situation, as confirmed by the following responses:

“The scourge of rhino poaching puts a lot of pressure on the guys, they patrol long hours, back to back.”

“Those that are committed can't go home when off, but their supervisors will tell you that they end up walking like zombies in the field and jeopardise their safety. They need to be awake to look around for animals, you can't walk looking at your feet. They work extended hours and long periods and their performance goes down. These guys are good because they know that if they don't come back after the off-duty period it could hurt their colleagues, but there are those guys who don't care because they feel aggrieved by the situation and you'll start seeing absenteeism on pay days, day before or after, or when they get time off, they'll come back three days later.”

“The guys need to be able to take their time off, need to be able to take their leave and not feel guilty about it. The only way to achieve this is if there is someone else to pick up the reins when you are away.”

“If you look at their number it is not enough as the reserve is 46 000 ha, so we still need more staff on the ground, they don't rest, they work more hours as poaching incidents can take place anytime, at night or during the day.”

Furthermore, the researcher observed that rangers who participated in the morning focus group discussion were fatigued and had bloodshot eyes, compared to those who participated in the afternoon sessions, as they had just returned from their patrols. Nonetheless, Harrington (2001:70) cautions against the harmful effects of working long hours as it disrupts the circadian rhythm and sleep patterns, thereby increasing accident rates and health problems because of fatigue, which is also detrimental to their work performance. The following statements by the managers confirm the above information:

“I had a situation where the occupational doctor, psychologist and psychiatrist wrote a report that, although there is nothing physically wrong with the ranger, she can't carry a firearm anymore, because she cannot be trusted with a firearm.”

If someone is totally stressed out and has suicidal feelings or tendencies, and I get to know about it, if they report to me that this guy says he is going to shoot himself, I will take away the firearm and I will be very reluctant to give back the firearm unless I get something in writing to say that I can. And then when he does shoot himself, then I can say, "hey guys, you see this letter?"

The above statements suggest that rangers are determined to do their work, even though their working conditions are unfavourable. Conversely, one may suggest that rangers may be inefficient and ineffective during long patrols and camping, as they are simply there and not adding any value, due to their level of alertness. In addition, the safety of the rangers may not only be compromised, but also the credibility of the organisation may be in jeopardy, for instance, the incident where a ranger who worked extended overtime shot at a civilian because he mistook him for a poacher. This incident may not give a good impression of the organisation, as it may dent its image as it was in contravention of the labour laws. Even if the rangers put their work first, efforts need to be made to meet them halfway for them to be effective and efficient.

Subtheme 3: Tools of the trade

The rangers indicated that they were not provided with sufficient tools to do their work effectively. This ranged from few vehicles, inadequate camping equipment and poor-quality uniforms that often take time to arrive. This is seen as a contravention of what is stated in the Occupational Health and Safety Act, Act No. 181 of 1993, as amended (Department of Labour, 1993), that employees have a right to a safe workplace, therefore the employer should avail them of personal protective equipment to minimise exposure to injuries and illness. This may include shoes, glasses, hats and any item that may reduce workplace risks.

Furthermore, the Labour Relations Act, Act No. 66 of 1995, as amended (Republic of South Africa, 1995), states that an employer should provide the employee with the tools of trade or the required work equipment regardless of whether at a cost or free to the employee.

On the other hand, the WWF and TRAFFIC Wildlife Crime Initiative (2016:20) survey results on Africa's rangers' perceptions showed that rangers felt that they did not have enough equipment to support their efforts to stay safe during patrols. The responses below gave an indication of rangers' perceptions with regard to various challenges they are faced with regarding the resources they need to do their work:

"The areas are too big, we need more staff and more vehicles."

"The distance between camps is too long, this makes it look like we are not working, and we need more vehicles because it takes too long to walk if there has been an incident. Currently, there is only one car in the main camp, it takes long for the car to get to where we are."

"When you get employed, you are given all the equipment you will need in the bush, e.g. first aid kit, torches and rifles, but we often go on patrols with less equipment. Sometimes when the battery is flat they don't replace it, they don't maintain our working equipment."

"We also need the night vision goggles so that we can patrol easy at night. We need quality uniforms, this one shrinks and fades. We wait a long time for our uniform supplies and have to wear worn-out ones in the meantime."

On the other hand, members of the APU group, who were said to be given first priority when it comes to the tools of the trade, were also discontent about the type of tools they were given to do their work. They indicated that the type of occupational tools they were given exposed them to harsh weather and terrain conditions. Some developed diseases such as sinusitis, while others got injured in the process. Below are the general views of the APU group participants:

"We really need cars that would protect us from different types of weather such as vehicles with canopies. We hold onto steel bars early in the morning and during winter, we freeze, when it rains we get wet and this has caused us to have our sinuses affected."

“You find that when it is raining you get wet before you even get to where you are travelling to and also our food gets spoiled because of the rain.”

“As a reactive unit, we have to speed and because of the condition of the terrains the person at the back gets hurt by bumping against the steel bar.”

“If each camp can be given a quad bike so that they are able to do their job properly and go further and cover a bigger patrol area, things could be better.”

On the other hand, managers felt that the organisation was doing its best to ensure that the rangers had the necessary tools of the trade. They disputed rangers' account of events and had the following to say:

“With regard to equipment, we do support them. However, it did come out that some of them have not received work equipment yet, it was bought and it was brought to them through their supervisors, but it took a long time to reach them. So I wouldn't know from this angle, especially sitting at head office. It's a bit difficult and I'd really be speculating.”

“We never send people camping without gas. You know, when I was an APU member, I used to forget stuff as well, you know, you forget a pin for your tent and you end up using a twig and you end up forgetting your gas. You cannot send staff camping without gas.”

The above statements from the managers suggest that the rangers are provided with adequate equipment, but they forget to take it along when camping. Nonetheless, two managers acceded that there might be some challenges with regard to the tools of the trade. This is confirmed by what they said:

“There are times when we find ourselves not getting enough resources according to our requests. In such situations, we are forced to adapt and make the best of the situation because, as section managers, we have to ensure that the job is done.”

“We require law enforcement-related equipment for the staff, which would include working firearms, a special kit for the bush like pepper spray and binoculars. All those kinds of things, backpacks, camping equipment, all the stuff that will enable rangers to do their jobs better.”

It is evident that the rangers are exposed to unforgiving weather conditions, as the researcher observed that most of the rangers looked older than their age. The responses provided by the participants indicated that the rangers are not always provided with all the necessary equipment to enable them to work effectively and efficiently. It is also noted that the managers at the corporate office and those in the field do not have the same perception regarding supply of the necessary equipment for the rangers. There seems to be communication breakdown between the two groups and this is affecting the rangers, as the equipment they need to perform their duties is sometimes delayed.

It would be beneficial if the appropriate protective equipment was provided as per law, and an open channel of communication was created for rangers to report any shortages. In addition, during the Imbizo (an employee engagement forum in which Ezemvelo KZN Wildlife’s senior management has general discussions with employees), like the one that was held on 8 June 2016, which the researcher had the opportunity to attend as it happened during her data-collection period, rangers complained about the tool of the trade, while some managers were resolute that they had bought and brought the equipment to the respective section rangers. This suggested poor organisational accountability and follow-through that compromises the quality of life of the rangers. In support of the abovementioned statements, Mancini and Bonanno (2006:983) maintain that coping can be inculcated by creating an open and trusting climate within the organisation.

This suggests that the employer should afford employees a chance to express their issues of concern because this will give them a platform to debate, clarify misconceptions and spread positivity, thus enabling employees to cope and be productive.

Subtheme 4: Living conditions

Both general rangers and APU members complained about their appalling living conditions, where they stay in a one-roomed hut that serves as a bedroom, living room, kitchen and bathroom. They expressed their frustration at having to work long hours walking and only to come to this unpleasant accommodation where there is no electricity and sometimes no water supply for days. The following were rangers' verbatim responses on how they experienced their living conditions:

“Conditions of our accommodation are not right, the rooms are small, we cook, bath and sleep in the same small rondavel. Even the doors in the rondavels are low so you sometimes hit your head when entering the room. When we complain to the managers they say it’s not our homes here, but we are here to work.”

“The problem is that we live in rondavels and there is no space for family to visit, rangers should be moved closer to home so that they could have access to their families.”

“They should build staff accommodation that can accommodate my family. Please ask our CEO to build us houses and give us proper vehicles.”

“The rangers are seen as the backbone of the organisation, but their living conditions are not right, they do not confirm what is said about us.”

Some of the participants from the APU group, who had moved to the new accommodation, felt that the accommodation was not adequate as it could only accommodate spouses and children were left out, while a few of the participants were despondent and felt there was no use for family or spousal visitation as they were always out working in the *veld*.

A contrary explanation was that the majority indicated the need for family cottages that would allow their children to visit, especially during school holidays. The general views below captured the views of the participants who are staying in the new accommodation (see illustrations 5.5 and 5.6)

“There is no privacy for the ladies at the camps with the new accommodation, as sometimes men can come in while the lady is bathing.”

“My wife can come and see me, but because of the condition of the accommodation, my children can’t, which is a limitation.”

“If you were to bring your wife here, you will leave her for long hours and if she works she ends up going back to work without you seeing her and sometimes they leave without spending time with you.”

Even though rangers felt that their current accommodation did not take family into consideration, managers were oblivious to the impact this arrangement had on family relationships. Some managers seemed to be in agreement with the current setup of single accommodation. They indicated that the rangers should be comfortable at their homes when off duty. This was despite the challenges of shortage of staff and working long hours, leading to limited off-duty days. In the researcher’s opinion, building family units seems unlikely as most managers deemed the current accommodation (see illustrations 5.2 and 5.4) better when compared to the rondavels (see illustration 5.1). Secondly, the organisation was said to not have enough budget for infrastructure development. The following responses summed up the managers’ perceptions:

“We are unable to maintain rangers’ accommodation, I’m sure we can provide better facilities for these guys, but we are all working towards that, though it’s easier said than done.”

“We have not sorted out accommodation that is bigger for the guys to keep them happy and comfortable, if someone is to give me R1 million for rangers’ wellbeing, I would upgrade their camps to make them more comfortable. Put in a communal room with a TV so that they can “phumula” (relax) a bit.”

“What we want to do is to have four rooms, communal ablutions and the kitchen and we are now faced with having to appoint women, which is a huge mistake, because where I was before in Drakensberg,

we had to deal with cases of male rangers raping female rangers and I had to deal with such cases. Obviously these guys are drunk and they have been working for two months without seeing their girlfriends, it is a recipe for disaster, if you know men”.

“They should have family units to have their families, but money to get proper buildings to accommodate them is a problem. The positive is that they’re slowly getting new accommodation although it is only two rooms including a sleeping room, it can only accommodate yourself and the wife or girlfriend, and children are not accommodated. Unlike me who is living in a big house, when I go to the kitchen, I sing a song, by the time I get there I’ve already forgotten what I was going to fetch, they don’t have that luxury.”

Below are some illustrations of the rangers’ accommodation at HIP and Mkhuze Game Reserve

Illustration 5.1: Rondavel: existing accommodation that is being phased out



This oval, one-roomed house is used to accommodate rangers. They are being phased out because they are not good for human habitation. The living conditions are said to be appalling, as these rondavels serve as a bedroom, bathroom and kitchen, despite being very small. Some of the women participants indicated that the space was so small that sometimes when bathing, water spills over their food, bed and everything around them.

The following illustrations are of the improved accommodation facilities that are being phased in for the rangers at HIP and Mkhuze Game Reserve. The first illustration is a block of four single-roomed accommodation units. The next picture depicts a kitchen and ablution block that is separate from the rooms. They differ from the rondavels in that the bathroom and kitchen are separate from the sleeping room (as shown in illustration: 5.1). However, the challenge is that the ablution facilities are not separated according to gender, leading to female rangers finding themselves having to bath in their bedrooms.

Illustration 5.2: New HIP accommodation: a new unit with four single rooms



Illustration 5.3: New accommodation: kitchen and ablution block



The pictures above depict the APU accommodation, which is only found at HIP. It is a modern structure, as it has a large kitchen cum sitting room and en-suite bedroom. This explains why one of the managers said that the APU members were the organisation's highest assets and they wanted them to be as comfortable as possible.

The following APU responses emphasise the aforementioned:

"We have new accommodation from 2013 and it is used by the APU members, but the challenge is that the houses that rangers are using still need to be worked on".

Illustration 5.4: HIP's APU accommodation: two-roomed unit



Illustration 5.5: HIP's APU accommodation: kitchen and bathroom



Although there is no legislation on employee accommodation, it is reasonable for the organisation to ensure that the staff accommodation is of an acceptable standard with regard to safety and hygiene.

It could be said that, although the new accommodation was far from what the rangers were hoping for, the organisation is trying its best by correcting the situation through the erection of new structures that are suitable for human occupation, thereby empowering the rangers. The managers pointed out that some of the rondavels will not be destroyed, but will be retained as a heritage site. The above statement is in accordance with NEMA (Republic of South Africa, 1998), which stipulates that disturbances of sites that constitute cultural heritage should be avoided and protected as people's heritage. Steyn (2006:21) argues that a rondavel is a round, thatched hut indigenous to African architecture. However, this traditional human settlement is gradually disappearing, and needs to be protected.

Subtheme 5: Amenities

Rangers indicated that they didn't have electricity in the accommodation and they used solar power for lighting, gas to cook their meals and gas deep-freezers to store their food. In addition, they pointed out that the solar system did not work properly when it is cloudy as it is dependent on the sun to activate the solar panels to recharge the batteries. On the other hand, Fruit South Africa (2013:5–8) maintains that the organisation should ensure that the basic needs of employees living at their facilities are met. This includes an adequate supply of water, lighting, separate ablution and cooking facilities to maintain hygiene and prevent contamination, which may result from sharing inadequate facilities.

Below are the views of rangers with regard to the amenities in which they are accommodated:

"We don't have water, sometimes we stay for four days without water in the camp."

“We need electricity because if we have electricity we can store more healthy foodstuffs.”

“We need electricity in the staff accommodation to make life easy for us to watch TV, especially for our partners when they are waiting for us.”

“Sometimes we can’t charge our phones because the solar system is not working during cloudy days.”

Illustration 5.6: Solar panels used for lighting and charging phones and two-way radios



Illustration 5.7: The solar panel system used in the staff living facilities



The responses from some of the managers acknowledge that the rangers are facing challenges with regard to the power supply because of the solar system that is not functioning well, as well as other essential amenities.

The managers indicated this state of affairs as being serious and worrisome. In their quest to improve the situation, some had to get funding from private donors. Their responses were as follows:

“We have a budget to renew the solar power system to make it much better than what we have now, and that’s what we’ll start with. This will be better as they will use TV and have supply in the kitchen, the kitchen will be different to what it is now. We are going to upgrade the solar system.”

“I just had a project approved funded by a private donor where we are upgrading the solar power system and at least they can watch TV and listen to the radio because it is critical for them to be in touch with what is going on in the world outside. We are very strict in ensuring that these guys take time off because absenteeism is a problem so having a TV will assist in entertaining them.”

Rangers continue to do their work diligently in spite of some of the line managers being oblivious and caring less about the state of the staff accommodation and amenities. For example, one manager had this to say:

“I’m not sure if in winter when it’s cold they have warm water to shower and bath, that the toilets are working, that there’s electricity, that they have gas to cook their food”.

It is, however, comforting to note that some of the managers are going the extra mile to improve the living conditions of the rangers while they are at work.

Gritti (2015:452), Seligman (2011:103) and Greene (2010, 413:416) are of the opinion that, in general, individuals’ resilience is centred on personality, positive family climate and social support, therefore keeping contact with their families builds trusting relationships and manages possible conflicts that might otherwise affect work performance. The challenge of the solar power system means that rangers are further isolated as they are unable to keep in contact with the outside world.

They are unable to recharge their two-way radios for communication with their seniors or to charge their mobile phones to keep in contact with their loved ones. This situation affects their individual resilience, as explained by the abovementioned authors.

Subtheme 6: Recovery activities

According to Van Hooffa, Geurts, Beckersb and Kompier (2011:55), the cycle of work and recovery is crucial to protect employee health and wellbeing and to preserve working capabilities. In addition, full recovery denotes recuperative periods between work periods (e.g. free evenings and weekends), which are sufficient to undo the negative effects of load (e.g. fatigue and stress) that has built up at work. Geurts and Sonnentag (2006:482) concur by maintaining that a stressful job has adverse effects on health, as lifestyle practices such as smoking, drinking alcohol, an unhealthy diet and lack of exercise become exacerbated. Rangers stated that they do not have any place to unwind or exercise.

One of them pointed out that he had to stop running in the park as he was almost attacked by a rhino. While most of them said they were often too tired to do anything, others said they relax by drinking alcohol. Their statements showed that rangers were constantly in a survival mode, as they are worried about getting enough to eat. The views below provided a general understanding of what rangers regarded as their recovery activities after work, as well as factors that impeded their efforts:

“We have no time to prepare food, when we go out for patrols, we carry water and tinned food, we only get good food during our off-duty period.”

“We would like to ask for ration packs, as you find that our food gets spoiled during patrols.”

“The body suffers and we eat very quickly because of the working conditions.”

“We need activities to help us relax, we need to bath with hot water and do exercises to help us relax and sleep.”

“In the past we had activities like soccer, singing at the ground in the staff accommodation, but now we can’t do that since there is an increase in rhino poaching, which discourages us from going there as we might be called anytime.”

Even though most of the rangers indicated that they appreciate the gesture of the organisation buying them gas deep-freezers, this was not helpful as they are unable to store their cooked meals and fruit as the freezer froze them solid. As a result, they were unable to eat properly, especially after long patrols or camping, as they were often too tired to even cook. Furthermore, they did not have a place and equipment to do some exercises because walking, jogging or running in the park is dangerous due to possible animal attacks, and therefore prohibited.

The managers concurred that rangers did not have formal recreational activities and tended to miss out on self-care activities, as alluded to by Pearn et al. (2013:34) and APA (2011), who maintain that engaging in activities that one enjoys not only benefits the mind and body, but improves health. Nonetheless, some managers pointed out various reasons why they were less eager to encourage unwinding activities for the rangers, mainly because it may open up the possibility of poaching. For example, poachers may go and poach if they become aware that the rangers' working stations are unattended because they are playing soccer somewhere. Some managers pointed out some activities that some rangers engage in from their own volition, as shown below:

“Some of the guys drink a bit, some play cards and “umlabalala” (a traditional African board game), but then again in most camps we only have three people and some go and see friends and have drinks over there.”

“There is nothing except to sit, those who drink, drink as there is nothing else to do. I was worried about it for a long time that we are more like soldiers. The relaxation that they get is playing cards, doing washing, listening to the radio, drinking alcohol, then others will be talking and those with girlfriends go relax with sex. There are no extramural activities that bring them together. Once in a while we come together and play soccer and we have a year-end function in HIP where they dance and sing, I invite neighbouring community members and head office members and we say thank you to them, I get sponsors and we have a braai and drink. I have been doing this for 10 years. Because of the work we do, we play soccer once a year and we invite outside clubs for matches.”

“These guys work extended hours, most of the days they are here 24 hours a day. The rest of the hours they just sit and rest at the camp.”

“Some of the rangers bring along their own laptops to watch DVDs, the ideal situation would be if these guys will get together here and have team activities, soccer and any physical activity that creates team spirit. But at the moment, it is impossible because as soon as you do that the rotten individuals within the system will compromise us, as soon as you take people away then the rhinos will be down”.

“There is no place where they can go play soccer in the middle of the bush you know. But when they get back from patrols, they can “khululeka” (relax). Of course they can listen to the radio or play on their cell phones if they have the network coverage. There are no specific activities planned for them, because when they get back, then it is time for them to “phumula” (rest), to relax, wash their clothes, you know hang around the camp. We can’t even facilitate – or let them go and play soccer outside the camp, because then we are going to remove them from an area where they are on standby, remember, what if there is a gunshot or whatever?”

“In the past, there used to be more activities where they could get together and play soccer once in a while and stuff like that. But I can tell you now, even today, having all those rangers were a huge risk, because there is obviously going to be “impimpis” (informers) out there and when they hear or see no rangers around, they tend to boom gunshots.”

“I tell my guys when they get any opportunity to rest, they should rest. They know the time and day when we encounter the problem then they need to be sharp (alert), outside of that they can relax and take a few days’ time off”.

In summing up the abovementioned discussion, one would say that eating correctly, engaging in enjoyable and relaxing activities and sleeping well contribute to overall wellbeing and promote resilience, but this is not a luxury that the rangers in this study have. The data showed that exhaustion made rangers less likely to engage in other recovery activities other than getting something to eat and sleep.

On the other hand, the organisation might be faced with the dilemma of factoring in other relaxation activities, such as recreation, without opening up the possibility for poaching due to unmanned work stations. Henderson (2007) underscores that participating in enjoyable activities leads to generalised good health.

People who are lonely lack a sense of connection and community, thus are likely to have heart conditions. Correspondingly, Trougakos, Beal, Green and Weiss (2008:140) claim that employees who take a break from their distressing jobs displayed positive emotions and had high performance levels. It is for this reason that the researcher posits that having well-organised recovery activities for the rangers could assist in maintaining their wellbeing that is so crucial to performing optimally.

Subtheme 7: Absent parents

The family members of rangers, specifically children, are susceptible to suffer the effects of their absent fathers. This study shows that rangers who are parents are unable to bond with and discipline their children, as they are in most cases not available at home and are forced to leave the disciplinarian role to their spouses. The participants indicated that their parent-child relationships are passive, with poor attachment, thus making it difficult for them to know how to behave towards each other.

The responses below shed light on the ideas held by rangers regarding the effects of their absence in their children's lives to play their role as fathers:

“The mother ends up being the only disciplinarian and when a man (father) confronts a problem he is seen as an enemy.”

“Our children forget us, they look puzzled every time they see us, they need to see us and spend time with us and the way we work it is as if we don't care about our families”.

“Our children need us, if they can improve our accommodation to family units so my children can visit during school holidays.”

This suggests that the rangers are aware that they are less likely to go home as frequently as possible, therefore the organisation should build accommodation that would enable their children to visit them during school holidays, thereby mitigating the effects of their continuous absence from their lives, with the aim of preventing possible family dysfunction. This will enable families to create fond memories of staying together as a unit. This could also strengthen the family relationships where the fathers would be available to witness the milestones in their children's development process.

The following responses are expressed by managers in acceding to the challenges faced by rangers and their families as a result of staying apart:

“On a personal basis, they don't live with their families. You know they have children, wives, relatives. So you know that will take its toll sometimes. You know they have personal preferences.”

“The rangers' situation creates marital problems, disintegration of families, you find that children grow up without knowing their father, the father will be like the cheque kind of a daddy, who pays for certain things, but there's no relationship or bond formed with the father. That is the type of families that they are raising”.

“Some of the rangers were moved far away from their homes because they were told that the operational demands needed them elsewhere, and this created a problem for them because they were placed far from their families where they were getting support. We then motivated that those people be moved back to parks where they will be near their families, but we were told that there is no money to fund new positions, which will replace these rangers. Therefore, they had to remain working far from their families because the organisation could not afford to get rhinos poached. In either way we are failing these people because we have moved them, and we have disintegrated their families and those that are still there don't get time to go see their families, and the cycle continues”.

Even though it was ideal for the organisation to move rangers nearer their homes, it was less likely to happen due to a shortage of staff and funding challenges. But still, authors such as Joiner (2014:8), Norris et al. (2012:41) and Greene (2010:413, 416) maintain that positive and trusting relationships reduce stress and foster resilience, therefore keeping in contact with their own families was important for a positive family environment. Rangers should be encouraged to maintain a healthy communication with their children through telephone contact since they are unable to visit them, as this will strengthen their parent-child bonds. Management has to remember that when these rangers reach a point of retirement, they will need their families. Therefore, efforts have to be made to enable rangers to maintain healthy relationships with their families.

Subtheme 8: Spousal or partner relationship

Employees who work long and irregular hours tend to experience family, marital and social problems (Harrington, 2001:70). This seems applicable to the participants in this study, because they work long hours and are unable to keep regular contact with their families. Rangers indicated that they are unable to have meaningful partner or spousal relationships as they are always busy at work. Therefore, they are unable to grow together and often have poor conflict resolution skills.

One of the participants said that he was unable to blame his partner for having extramarital relationships because he was never there to satisfy her sexual needs. The following responses indicate that rangers' spousal relationships were suffering because of their constant absence from their spouses or partners:

"You have no time to find a life partner because there is no time to visit."

"Since we have girlfriends at home, they think we have other girlfriends in the reserves, since we never come home, and sometimes we don't have network coverage, so the girlfriend will think you have switched off your phone."

"I have two wives, but because of time I can't satisfy them both."

“It is hard because even when you find a girlfriend, once she comes to visit you, within an hour you have to leave her because there’s a gunshot you have to respond to.”

“The ladies who visit us find that we have no time for them as we spend no time with them.”

“We have multiple partners because we don’t go home often to see our wives.”

“Our wives have trust issues since they see other staff members come home while we don’t.”

As pointed out above, distance can cause marital unhappiness such as loneliness and trust issues. Moreover Rizwan, Kant, Goswami, Rai and Misra (2014:280) argue that men who work away from home tend to use alcohol and engage in risky sexual behaviour, such as unprotected sex with non-spousal partners, thereby posing the risk of sexually transmitted infections and HIV/Aids to the spouse. The abovementioned assertion was deciphered from the data that showed that some participants had multiple partners, drank alcohol and had trust issues with their spouses.

Although managers acceded that the continuous absence of rangers from their homes may have a negative effect on their spousal relationships and spousal role confusion, they expressed concerns about the safety of the rhinos, as well as the potential low morale that might be experienced after the poaching investigation. The responses below are a follow up on the effects of rangers’ absence from home on their spousal or partner relationships. The managers responded as follows:

“The family will always suffer, their wives end up not knowing whether they are fathers or boyfriends because they have extramarital affairs with girlfriends in the camp (work) and the wife is at home.”

“When we go away, the rhino gets shot, and now we must investigate it. You don’t go home, your family life just kind of goes down the toilet. Your wife starts not understanding anymore, your kids start seeing that dad is just concentrating on work. Leave and time off become non-existent. Although some rangers try to take weekends off once in a while, we are always on standby, always available when there is a call. Trying to get time off is a very difficult thing to do sometimes. Last year, two of the section rangers (supervisors), including myself, lost 26 days’ leave because we couldn’t take leave. We felt pretty bitter that we had to lose the days, but it wasn’t going to help any of us because of the pressures that we are under. A bit of a break is important, but it is also very difficult.”

It could be said that managers are faced with a predicament because when they allow rangers to go home and bond with their families, there is a high likelihood that rhinos may be poached because of extreme staff shortages, because under normal circumstances there is a staff shortage. On the other hand, if the rangers remained in the park, their families suffer and there is a possibility for family conflicts and family dysfunction that could ultimately lead to broken marriages and unhappy children.

The above findings are confirmed by Bryden (2005:125) and Love (2009) when they argue that being involved in combat comes with tremendous stress, therefore the organisation has to ensure that the rangers grow personally, within their families, and thrive in their communities in order to succeed in their mission execution. Failure to be on the same wavelength as one’s spouse may lead to maladaptive, immature and undesirable behaviour, such as substance abuse, eating disorders and risky behaviour that involves casual sex. On the other hand, Scharff and Scharff (2011:259) maintain that culture plays a role in how spouses view being separate from their partners. While others accept the circumstances to avoid being helpless, some develop stress and relationship problems they cannot explain. This situation confirms the observation made by the researcher that protecting wildlife takes precedence when compared to the psychosocial wellbeing of the rangers as they are forced to sacrifice most of their rights just to remain in the camps.

Subtheme 9: Teamwork

A caring and supportive environment is critical in any relationship. This protective factor refers to reciprocal support, which is unconditional support, positive and encouraging (Bernard, 2013; Henderson, 2013:26). Teamwork contributes to resilience, thus rangers recognised that they needed to be each other's keepers in order to survive the harsh work environment that characterises their job. They often had to depend on one another's support during testing times, for instance, when one gets sick during a patrol, the other partner has to assist by carrying their rifle until they find help. Knowing that the person you are paired with cares about you gives one a sense of trust and peace of mind, which is needed in the line of duty of the rangers. The following comments show how critical teamwork is to rangers' survival and development of resilience:

"We prefer to do patrols in threes because if one of us has low energy (listless), then the other will help the weak to walk until we get help and the other one will carry his firearm".

"We depend on each other for support, even if we have conflict, we resolve it quickly. If we are unable to resolve the problem among ourselves, we call other rangers to intervene before we call the section ranger (supervisor)."

"If you work in twos, you have to trust each other 100% ... it is not easy, but if something happens, you have someone to help you."

"Our relationship is important, if my partner has a problem I have to assist him, but if we had conflict, it was going to be difficult to assist one another, because it means when he is in trouble I would not care."

The abovementioned responses illuminate the adage that there's safety in numbers as rangers too are each other's greatest support, as acting individually would be detrimental and ineffective. Seligman (2011:105) concurs with the abovementioned by arguing that teamwork minimises personal weaknesses as the team tackles different challenges as a set.

In addition, Taormina (2015:37), emphasises that determination, endurance, adaptability and recuperation are core and critical characteristics of individual resilience, and collaborations are only there for support. Rangers are determined to make their teamwork relationships work as their safety and survival depends on it. Managers concede that rangers' teamwork is beneficial, and went further to highlight the negatives of rangers who worked against team efforts, such as being informers of poachers.

However, efforts have been put in place to address the issue of deception. In addition, one of the managers said that they were struggling to uproot the behaviour of the "good guys gone bad". Below are responses from managers that show the existence of bad elements who do not uphold teamwork:

"We know that some of the rangers are involved in illegal rhino horn trade and they are working with us, but still against us, which is a huge challenge."

"One of the challenges we had before was when we identified two people who were involved, but we didn't have concrete evidence, if we had concrete evidence we could have acted against them. So we transferred those guys for operational reasons, you can't make allegations and say we're transferring you because you're a rhino poacher then they are going to object to it. That affected the morale of other rangers because on the face value these guys were good rangers, but then, because we didn't have systems in place, we couldn't prove that they were actually working against us."

"We can stand shoulder to shoulder and build this, but, if you've got a "vrot" (rotten) potato, you will not win this fight and we'll continue to lose rhinos, so we need to have a way to address this and that is a serious challenge."

"It is a fact that for every rhino that goes down, there is information that comes from inside to the outside, and the guys know that. So for the hard-working guys, to know that one of us is leaking information,

it kind of dents everyone. We are still busy with the lie detector policy. That will clear the guys so that their conscience is clear, you know! But to know that somebody is putting out information and putting us in danger, direct danger, those are the group issues the guys have to deal with daily”.

These findings were not surprising as they confirm what Bryden (2005:118) stated, that anti-poaching efforts suffer setbacks because bad rangers are in cahoots with poachers in exchange of information for money. Nonetheless, Seligman (2011:105) emphasises that team efficiency supersedes individual efforts by arguing that assessing both the strengths and weaknesses of the team will not only help minimise personal weaknesses, but will encourage and strengthen the team to tackle different challenges as a set, thereby achieving their goals. The researcher is of the opinion that rangers should be encouraged to work together as solutions will not only strengthen the team, but will also validate them. It becomes important therefore to emphasise the strengths of the team members and maximise them for the benefit of both the rangers and the organisation at large.

In conclusion, the quality of rangers' work life is far from being ideal, as it is plagued by a shortage of staff, which results in them working long hours with inadequate tools of the trade. In addition, the living conditions are of a low quality and they are unable to take regular time off, resulting in poor and strained spousal and parental relationships. It could thus be stated that the demands of the rangers' work environment in this study affect them negatively.

Theme 2: Organisational support

According to Rushton et al. (2015:412) an institution should strive to understand what causes distress and exhaustion in its employees, as this will assist them to develop mitigation interventions. In addition, Norris et al. (2012:37) point out that a collaborative organisational climate that is based on trust, availability and positive relationships gives employees a sense of empowerment as they are able to restructure their cognition.

Trybou, Maaïke, Elke and Gemmel (2016:296) and Bennie (2015:53) also argue that a psychological contract is an important component of the employer-employee relationship as it is about mutual expectations of inputs and outputs. However, the problem arises when the psychological contract gets breached as it affects general wellness and impacts on performance. This applies to rangers as well, because if the organisation can be seen as not keeping its part of the psychological contract, the rangers – as employees – may feel betrayed, with negative effects to their wellbeing.

Based on the information shared by the participants, it would seem that both the managers and the rangers felt that the organisational support was inadequate, therefore the organisation should ensure that comprehensive support services are rendered. It was apparent that the organisational multidisciplinary team, such as the HR Department, was taking an inordinate amount of time to fill posts. The procurement and distribution processes of the tools of the trade are experienced as being inefficient. Amenities are not in a good working condition, and employees did not have adequate opportunities to engage in the recovery activities that they so dearly need to continue being productive at work.

The following are the rangers' responses to questions on organisational support:

“They keep saying the rangers are the backbone of the organisation, but their actions do not confirm that, we feel that they are just saying that. When we complain they tell us there is no money so we continue to do our work, but the conditions are very bad.”

“There is only one car in the main camp, it takes long for the car to get to where we are, we call for help and wait for the one car, but sometimes you find that the car has gone somewhere else, we end up asking for assistance from neighbouring reserves.”

The above responses show that the rangers feel that they are not getting the necessary support from the organisation, and the organisation does not seem to take the needs of the rangers seriously. According to Kurtessis, Eisenberger, Ford,

Buffardi, Stewart and Adis (2015:28), perceived organisational support plays an important role in the employer-employee relationship because if the employees believe the organisation cares about them and values their contribution, their wellbeing and loyalty to the organisation improves. With improved employee loyalty, production increases, which enables the organisation to meet its goals.

Along with the rangers, the line managers also felt strongly that the organisational support was limited. Below are some of their responses on how they perceived organisational support:

“A lot of support is through word of mouth from high levels in the organisation, they always say we stand behind you (rangers), we support you, but when you try to find the budget to actually support these guys, give them the equipment they need, maintain the equipment, make sure that they are living in conditions that are suitable and allow them to do their job as best as possible, that doesn’t necessarily come through.”

“I will make an example, I have been working here since 2003 and since then I had no rhino poached. Then, in 2012, the rhino poaching started happening down south, not here. But when it happened here, the reaction that I got was not similar to the one down there. Instead of looking at the problem, the problem was shifted to me. And that immediately erased everything that I had achieved because I am now being followed, and told that “one day we will get you”. So, that eroded the pride I had all these years and I became somebody else through the good work that I did for the organisation. My love of what I enjoyed doing was eroded. And when I was confronted, the question that I was asked was “why did you let me down?” and I kept on asking myself why didn’t you support me like other people, were you waiting for me to fail and get me, that broke me, I was finished.”

“When the rangers are there in the bush and they encounter the poachers but fail to make an arrest, or maybe fire the shots, instead of being protected they are told that they didn’t do enough.

So they feel guilty for not killing that person or getting that person. One feels he didn't do enough, although he was doing everything he could, so it seems as if you didn't put out your best and to me it is unfair judgment on an individual. It adds stress on the person because he says, "but I tried". So next time he is going to make a mistake, trying to correct the mistake he is said to have done."

"The only thing from my experience is that the face of the organisation should be the same to all of its employees, i.e. the organisation should practise what it preaches and treat people the same and fair."

It could be summed up that the general feeling of the participants suggested that the organisation was not doing enough to support the rangers and their managers, yet they expected them to do more with limited support. The organisation's responsibility is to ensure that its employees are given support that will enable them to diligently do their job. For this reason, the importance of a caring and supportive work environment is emphasised by Bernard (2013) and Henderson (2013:26), as indicated earlier, as to nurture healthy relationships.

In this instance, the organisation needs to make an effort to provide the rangers and their line managers with the care and support they need to maximise efforts towards achieving the organisational goals. The reciprocal support builds resilience as it provides protective and unconditional support, and communicates positive and reasonable expectations that enable success.

In the researcher's view, organisational support will always be critical for the development of resilience in its employees. However, both sets of participants indicated that they received limited support, which is purported to be lip service only. Furthermore, they reported a continuous shortage of staff and unfilled vacant posts as impacting negatively on their normal lives, as they had to constantly work overtime without the expected support. While they tried to adjust to their appalling living conditions and insufficient work equipment, they felt it was disheartening how senior management treated them during poaching incidents. Instead of being supported during that testing period, management came with guns blazing, blaming the rangers for the poached rhinos, which demoralised them.

Subtheme 1: Human resources support

The role of HR in the organisation is to develop, shape and support the organisation to be successful in the effective management of its employees, adhere to legislation, have up-to-date policies and ensure that these policies are communicated to the employees, and ensure that employees are trained, managed and rewarded fairly (Adewale & Anthonia, 2013:128; Kumari, 2012:291). The data collected in this study indicated that there is general dissatisfaction with regard to HR administration and its support services. The participants indicated that they encountered problems that ranged from a shortage of staff, leave problems, transfers, salary and unpaid overtime. This suggested that the poor implementation of policies by HR contributed towards employee unhappiness and inadvertently derailed the good intentions of the organisation, as the administration was failing them. Thus, the organisation has the responsibility to ensure that support measures are put in place and are constantly monitored.

Trybou et al. (2016:301) postulate that productivity is often influenced by the employees' perceptions of the employer's attitude, thus it is crucial for the employer to monitor and balance employees' expectations that may lead to anger and feelings of betrayal.

The responses below shed light on the general experiences of how the lack of support from HR affects rangers' wellbeing:

“Due to the fact that posts are not filled on time, we find ourselves unable to take time off, even if it is necessary at that particular time. You end up not taking leave because you think of the work that has to be done.”

“It is very hard because sometimes you find that your mother is sick and you can't support her and the family has to be patient until you are able to come home.”

“They don’t have enough budget to pay for overtime and we end up working for nothing.”

This study reveals that poor support from HR exposes rangers to working long, unpaid hours that keep them away from their families. It would be better for the rangers to send remarkable amounts of money to their families, even if they are unable to physically go home. This could sustain the hope in their family members that they care about them, even if they are unable to come home regularly.

Similarly, managers were dissatisfied with the way HR implements its policies as they believed it jeopardised them. This means that poor communication and understanding of the processes put HR in a bad light as the custodian of the processes. They further expressed their concern that the situation would worsen because of the moratorium on the filling of vacant posts. The HR Department was seen as a hindrance rather than an enabler, as it takes the department a long time to meet the needs of the employees.

In highlighting their predicament, the following are the responses of the managers:

“HR is a hindrance, I am frustrated by the manner in which the disciplinary system is operated. I’m struggling with substance abuse from my subordinates where people are drinking too much and we as the organisation are struggling to address it properly. I had a guy who on full moon was supposed to be on duty but he went AWOL (absent without leave) and the section ranger called me and he was drunk and we tried to talk to this guy, but he ended up pointing a gun at me and he got his firearm confiscated and he got disciplined, but he got a final written warning and one month suspended pay. How serious is that? Now, he can’t use his firearm anymore and he’s becoming a burden for the rest of the whole management, including his teammates. So I feel that the rest of the organisation has failed us, we have policies in place and I believe disciplinary procedures have to be corrective, but sometimes they have to be punitive in order to draw a line. The reason why we have substance abuse problems is because our disciplinary policy has failed to address this issue effectively.”

“We often have to transfer people because the HR Department does not get to choose people with the necessary attitude, once they (the employees) are employed, they start to have issues, their performance drops and they need to get closer to home. As a manager, I’m not keen to get that person transferred, because I know that I will lose that position and I know it will mean pressure on other staff members. I’m not keen, but I have to do it as I have no choice in the matter.”

“If a person becomes incapacitated and cannot do the work, then, as a manager, or as any organisation, I would remove that person as quickly as possible, whether to another post, as long as they fill that post. Don’t tell me he is taking his post and he is going to a GA (general assistant) position, so he becomes overpaid as a GA. And now I am left with a gap in my team. You know what I mean. As a manager, I would say now how does that work? Now you are thinking about the individual and ignoring the needs of the organisation.

If you want to compensate for both, then by all means take that individual and put him as a GA, but on behalf of the organisation and representing the organisation that you work for, put someone else in his position.”

“We had posts before the moratorium that we wanted to fill, but our HR didn’t come to the party. Our HR delayed the process until we had a backlog and then the moratorium came in and killed us. You know, if we were up to date with our processes, we wouldn’t have a backlog and the impact wouldn’t be as deep as it is now.”

“HR was not filling the positions, there should be a system, a pool system where if someone goes down, there is another ranger to be able to replace him. Or they say this ranger is no longer available, we need to transfer someone from the Drakensburg region or from the coast to come and fill that gap.”

In view of the abovementioned statements, it is evident that the HR Department's function was facing many and serious challenges with regard to service delivery, and this compromised its credibility. In contrast, PricewaterhouseCoopers (2005:45) postulates that HR is a strategic partner that adds value to the organisation if its administrative systems are implemented and working correctly.

It should be noted that, even though there was general dissatisfaction about HR support, some of the managers felt that both the organisation and HR are trying their best to be supportive. The following responses captured the managers' views on HR:

"I think comparatively, we are quite well off compared to other areas, I mean with reference to other areas in Africa, what the guys are exposed to in other countries is different to what we get here, I think we are very well off, we are quite advanced – the fact that I can phone a social worker and say we had a gunshot fired and the guys need to be provided with debriefing as per the policies shows that there is support."

Above all, the HR Department acceded to its inefficiencies. The responses below allude to how HR sees its support to both the rangers and their managers:

"Whether we give them enough support ... and after today's Imbizo, when that man was lashing out, I felt like maybe we are not doing that much to be available to assist them."

"In some positions you'll expect to have five people but we have only two people. And they are not effective, they are overworked, they don't sleep, it's dangerous, so health and safety is already compromised and they are no longer safe. We try so much but I don't think we are doing 100% to support them, so it's not 100% effective."

"We used to have HR road shows, but they're not that active now, we stopped doing them. During those discussions, when we talk to them together, we got to know about their concerns,

and as HR, we would start intervening by talking to the head of the department, we talked to them together, then we got to know about these things.”

The responses indicated that both line managers and rangers felt the support from HR was not enough. HR confirmed this observation. Therefore, the organisation needs to continuously monitor and evaluate its services in pursuit of relevance and excellence. And indeed, the organisation has to put measures in place that will ensure that HR efficiently and successfully manages and communicates its processes to all employees for the betterment of both the employees and the organisation. The largest proportion of participants indicated that HR was not doing their bit.

The researcher’s view is that HR should not only brand itself as a provider of administrative support, but also as a change agent. The response that was given by one HR staff member was that they used to do road shows to have open communication with the rangers. This confirms the need for communication. The researcher is of the opinion that if this could be reinstated as a common practice from the HR Department, much could be achieved.

Subtheme 2: Wellness support

The World Economic Forum Report (2010:3) posits that the health and wellness of employees is of strategic importance to any business that wants to be a leader in a global business world, as it adds value to top-line growth and bottom-line performance. The researcher is of the opinion that the rangers’ wellness is a responsibility the organisation cannot avoid. In spite of this, the data from this study showed that the wellness services are simply papering over the cracks. They are merely responsive, as participants alluded to them as crisis intervention-based services. Thus, the curative nature of the services could be a drawback to their effectiveness as they are not proactive or preventative. The responses below represent rangers’ views on wellness support services:

“We need social workers not to wait for us to be in trouble before they come to see us, but please let them come frequently to support us.”

“We would like to see the social workers often and not only after we killed the poachers or had a shoot-out encounter.”

“We will be happy if the social worker and our nursing sister would visit us not only call us when we are sick and call us to go to the doctor, but come visit us, so we can share all our challenges, they must visit us.”

“At one point I had a problem, but my manager took one month before he reported the matter to the social workers and I had already dealt with the situation myself and I had already provided myself with counselling.”

“It is my first time working in this organisation to hear that we are authorised to contact the social workers and nurses, we don’t know the wellness contact number.”

“We need energy booster to help us if we lose energy, there is nothing to help us boost energy.”

“We have a first-aid kit, but it has bandages only, but no pills for headache while in the bush.”

“The social worker comes and provides counselling for us, the difficult part is when the social worker has gone home.”

A significant number of the participants (rangers and line managers) indicated that they were getting support from the social worker after a crisis. Nevertheless, EAPA-SA emphasises that the EAP is a short-term intervention that is aimed at mitigating employee behaviour and organisational risk (EAPA-SA, 2010:16). This means that employees should be assisted timeously to ensure their safe and effective return to work. This is not practised at this organisation. There are no preventative efforts to empower rangers. They only receive services from the wellness officers (social workers) after they have been exposed to traumatic experiences.

The Framework for Social Welfare Services of the South African Department of Social Development (DSD) (DSD, 2013:27) emphasises that the prevention level of intervention is very important, and, in this instance, could focus on the strengths of the rangers and empower them by increasing their resilience to enable them to better handle the traumatic incidents and not be shattered.

Some of the managers, like the rangers, acknowledged the limited wellness services. Nonetheless, the responses of most of the managers emphasised the need for wellness services to take another look at service provision, as the current services are experienced as being inefficient and ineffective. They felt that the wellness service providers were too far away and were inaccessible. The responses below represent the managers' views on wellness support services:

"They should have a programme where they visit us regularly and are able to see how they (the rangers) are doing and assist with empowering them. They should visit more, not only when there is an incident."

"With the type of work that we do now, the frequency of incursions that we get and the dangers that we face, if I had things my way, after any incursion, whether there was somebody shot or not shot or arrested, where we have engagement with these people, I would like to have post-incident counselling services".

"The frequency with which wellness engages with rangers to help them to unwind after the trauma will go a long way to provide counselling for them and give them enough time to cool off, because another thing is that after the incident, they don't have time to cool off, the wellness officer will come and tell you whatever they tell you and you say "yes" and the following day you're there (patrolling again). It may happen again that in two days you're involved in a shooting again and the wellness officer comes for one hour to talk to you and tries to calm you down, but you're not given time to cool off so that this incident comes off you. You're back in your position and you might hit poachers the following day with even worse consequences."

“The social workers stay very far, Durban and Pietermaritzburg, at times it will take a day or two before they come, we try our best as managers to do the debriefing, we try and talk. But you see, it is a ranger talking to another ranger and we are not trained to do this task.”

The data suggested a need for wellness services to be reinvented through, among other things, retraining the practitioners so that they remain relevant in offering services that meet the needs of their clientele. Moreover Levenson (2017:110) and The Community Tool Box (2016) postulate that interventions can be effective if they take race, gender, economic and social factors into consideration; thus, being culturally relevant eases engagement, which, in turn, contributes to successful outcomes.

On the contrary, one of the line managers had this to say about their social worker:

“It is like they’re reciting a poem, they bring one person and you already know what they are going to say because they have debriefed you before.”

This may suggest that the therapeutic sessions are no longer effective in improving clients’ state of mind and emotions. The researcher views this in the light of the social worker merely ticking the box as he or she failed to actively listen, read the situation and critically reflect on the actual needs of the rangers. Using an interview schedule when providing post-trauma debriefing does not meet the needs of the affected persons, because the aim is just to do what needs to be done and not immerse oneself in the here and now regarding the affected person’s emotions and current issues pertaining to the incident. According to Levenson (2017:111), creating a warm and non-threatening counselling environment that validates the therapeutic alliance is more powerful than a therapeutic framework, professional discipline or even special counselling techniques as it facilitates positive therapy outcomes. The researcher believes that the current wellness services are just mechanical, as they are not meeting the needs of the rangers, thus they are unable to create a safe and trusting environment that would facilitate positive therapeutic outcomes.

The responses from some of the managers suggested that the quality of the wellness services needs to be reviewed to identify the gaps:

“Maybe there is a need for some training on wellness, teaching people what wellness means because one person comes in and says one and the same thing to you after you’ve shot a person, you just listen. If this thing can be taught like a subject so that when it happens, like when you are at church, when they read the scripture it goes into you, because you’re prepared, you’re mentally and physically there. I don’t know how this can happen, this is a far-fetched thing that I’m saying, which may not happen. I think they are doing a stereotyped counselling like ticking the boxes. Whether it reaches the soul or not, I may be wrong, but that’s how I see it.”

“I think counselling should be aimed at helping you to work yourself back to your normality and link you back to your senses, which restores your wellbeing so that you are normal again. They (the social workers) should rotate, not one person doing same counselling over and over again, rangers should be exposed to different counsellors because if they see one face saying the same things over and over it becomes a poem. The trauma can go deeper into the person and if you seldom speak to him, then you can reach him.”

In providing counselling to the rangers, the social worker, as an EAP practitioner, has to ensure that each situation is assessed thoroughly to identify the actual needs and then render an appropriate service, not complete a predetermined schedule. This way of counselling is too detached from the service recipients, hence not meeting their needs. Social workers go through training that equips them to address the biopsychosocial needs of individuals, and this can also be implemented when addressing the issues that are faced by the rangers and not just focusing on the existing schedule.

The Wellness Manager at Ezemvelo KZN Wildlife seemed to agree that they were not doing enough to address the needs of their clients due to limited resources allocated to them. Nonetheless, the social workers' positive attitude was comforting and might assist them to objectively find working solutions, given the current circumstances. As far as rangers' recovery activities were concerned, they indicated that they would be redirecting some of their resources such as Futurelife porridge to assist rangers with energy on their long patrols. The following was their response:

"We have identified Futurelife porridge to be part of our programme, but because of the cost-cutting exercise, we decided that this financial year, rather than providing to everyone who needs the porridge and anyone who comes and asks for it, we divert that to the rangers. Secondly, we had a lady who wanted to do some study in terms of a product for the rangers because they are exposed to fatigue due to long patrols, we said we cannot do a trial on rangers and try something that has not been tested scientifically. What if it has side effects afterwards, rather let us stick with our own porridge."

The abovementioned response shows that the Wellness Department cares about the total health of the rangers, hence the arrangement to provide rangers going on long patrols with porridge fortified with nutrients, which only requires them to add water. This shows efforts to have the rangers' physical wellbeing taken care of. Furthermore, the data revealed that, despite the social workers experiencing a shortage of resources, they continue to be hopeful and to do their best to assist where possible. For instance, continuous long-distance travels means that they are always on the road, which may be strenuous on them, and may also affect their effective provision of services to the rangers. Meichenbaum ([sa]), Norris et al. (2012:41) and Shepherd et al. (2010:282) argue that resilience involves optimism and self-efficacy, and enhances adaptation, notwithstanding coping, adjusting, recovering and the outcome of beating the odds. The social workers who serve as EAP practitioners at HIP and Mkhuze Game Reserve are working under strenuous working conditions and this may be affecting their performance as well. However, they continue to serve.

The following responses captured the wellness practitioners' experiences with regard to their supportive role to the rangers:

"Wellness is visible, but we do more damage control, more reactive than preventive work. The problem is we have a big area to cover, the reserves are scattered with little resources, we have limited travel kilometres allocated, that we can't exceed. If I were to travel from Durban to Tembe it will take 1 000 km in one trip, yet we have a monthly quota of 2 500 km per month. Even if you were to motivate people to do more with little, you're only there for one hour and then you're gone, they remain there in the situation and the environment is very depressing. In fact, your visit does not change anything for them."

"We are under-resourced and we try to push as far as we can in trying to find the resources. For example, the issue of having two social workers for the whole organisation is a limitation in itself, you saw how spread across we are, so you drive seven hours to go and see someone who is having challenges and the need for support and also follow up, we only do crisis management. Even though the organisation is subsidising our petrol, having to travel 1 000 km to Sodwana, another 700 km to Hluhluwe and another 800 km to Mkhuze in one month impacts negatively on the social workers and their cars, as we use our own motor vehicles to travel to these areas".

The above statements show that social workers have resource shortages, but despite that, they are trying their best to deliver services. However, further follow-up responses revealed that there was a conflict between nurses, social workers and the HR division. These sections are caught up in a quagmire of internal politics that may be compromising their operations. It is important to note that, instead of wellness practitioners endeavouring to be "high-quality EAP practitioners", who are strategic partners who work in collaboration with HR and other company stakeholders to promote a happier, healthier workforce, they are focusing on non-essential issues that undermine their status and efforts.

Partnership marketing is one element of robust management support, where committees composed of EAP personnel, HR and management meet regularly to strategise promotion and find creative ways to engage employees (Clark, 2015:44). Thus, it is important for the Wellness Manager to be proactive and to seek a slot during employee engagement forums (“imbizos”) to market their services and be visible by responding to the needs of the employees and the organisation.

The following views are the remarks of wellness practitioners on their current interprofessional teamwork experiences:

“When your wellness team is confused, what happens? These people are the neutral members of the organisation, they are supposed to be the advocates, the protectors of the brand, the protectors of the employees, but when they are caught up in politics, for me that spoils the whole thing.”

“I’ll move Wellness away from HR and let it be an independent department entirely. There is too much politics when Wellness resides in HR and you end up not knowing what to do. We are not supposed to be involved in politics, we are here to help the employer to make sure that the employees perform at their best and employee wellbeing is taken care of, that is the main objective of employee wellness for me. It is not happening, it is caught up somewhere, you think you’re on the right path and move, then you get confused and you wonder what are we doing, we need to stand for something. We need to be there for the wellbeing of the people and make sure that they perform at their utmost for the organisation. Even though people don’t want to hear this, the Wellness Department is the middleman, who advocates, who defuses the situation, who makes sure that everything functions, there are healthy relationships, people work together, who create a workable environment within the organisation”.

Violanti (2012:175) suggests that the organisational climate can empower by allowing employees to exercise judgment and be decisive and do what is right at that moment. In addition, Norris et al. (2012:37) posit that a healthy supervisor-supervisee relationship boosts supervisees' competence and creates a condition for personal growth and a positive organisational culture. Conversely, the above responses from the Wellness Division suggested collaboration problems between HR (supervisor), the nurses who are colleagues and social workers (supervisees), and this may be detrimental to teamwork and organisational relaxation. Therefore, the organisation has to assist these two players to manage stress that could impact negatively on service delivery and undermine the overall organisational goal, specifically impacting negatively on the wellness services that have to be provided for the rangers.

The abovementioned factors suggest that the Wellness Department has challenges not only with resources and the demands of the job, but it is also faced with internal politics. This suggests that many things have broken down, which affects their performance. The main challenge facing the wellness practitioners is limited resources, which affects the services they have to provide, leading to a dissatisfied workforce.

It is almost impossible to provide a satisfactory service when you do not have the appropriate resources and are also working in an unhealthy environment. The position of wellness in the organisation needs to be seriously considered.

Subtheme 3: Emotional problems (APU)

The information from the participants reveals that the APU group members were constantly under pressure because they are the armed response wing of the rangers. This makes their job dangerous. For this reason, Violanti (2012:180) emphasises that highly dangerous jobs are a precursor to acute and chronic PTSD, therefore programmes associated with adaptive and resilient outcomes should be encouraged and supported. A resilience-building model is hoped to assist rangers to cope with their workplace challenges by enhancing coping capacities, thereby minimising stress-related diseases. In this way, the rangers may ultimately be able to deal with their challenges as they come and not keep the stress to themselves, which might lead to PTSD.

The researcher is of the opinion that APU group members have the mettle as they look tough and are resolute in fighting poaching. They are forced to continue being productive in protecting wildlife and, in the process, they become emotionally affected. As a result, they have to develop coping mechanisms for them to do their work on a daily basis, despite all the challenges they are facing. One of the APU participants indicated that his stress level becomes high while looking for poachers, but once he has found and dealt with them, he feels gratified.

The APU participants gave the following responses with regard to their emotional stress:

“In trying to be productive, we always try to separate ourselves a little from the previous incidents and try to focus on what we have to do, but bearing in mind that we might encounter the same situation. What encourages us is the belief that we might encounter them again and kill them, and the impact we are making in protecting wildlife motivates us.”

“Normally, when I am looking for a poacher, that is when my stress level is high, but after killing a poacher, my stress becomes normal and I become happy.”

“We talk together as a group or tell others what happened, and also the organisation gives us the social worker to help with debriefing to de-stress, and when we have to go back to the bush, we focus and forget what happened.”

“The trauma takes a long time to pass, and sometimes you have to protect yourself by justifying your actions to yourself, by saying you killed this person in the line of duty. It’s a slow healing process, when you are patrolling you tend to think about it and avoid the incident area as a way to protect yourself.”

“The other thing is that when you go back to the bush you don’t want to pass the scene of the incident, it takes time because sometimes you have to go through the court case to relive what happened and you find that a case will take the whole year to be finalised and you can’t relax until the case has been finalised.”

“It is disturbing and we don’t like to kill as it hurts us, especially the death of a human being is never easy, it is painful, but if we don’t kill them, they will kill us as they have guns, you ask yourself who is supposed to die, whenever they see rangers they shoot at us.”

“What causes the disturbed emotional state is realising that even if you worked very hard, rhinos are still being killed and when you come across the poacher your adrenaline runs wild. This happens because you feel angry at the poacher because he nullifies all your efforts.”

“Sometimes after killing we stay with a dead body for about three hours or until morning, as you have to guard the body from being eaten by animals and also explain to the police what happened.

The longer you stay with this dead body the more it makes you think of what you did, making you feel sorry for the person, you go through emotions of guilt and you end up thinking that maybe you could have done this differently. We stay too long with a dead body at the crime scene and that is affecting us a lot as we have to wait for the SAPS from Richards Bay or Durban.”

It is evident from the above information that the rangers, specifically APU members, are faced with a difficult situation at work. Having to stay next to a lifeless body that you have killed must be very traumatic, even though you know that you did it because of the demands of your work. Being exposed to these circumstances seems to have forced the rangers to develop a high level of coping, as they have nowhere else to go due to the lack of employment opportunities in the country. Using their teamwork spirit to share their experiences is also assisting them to carry on in their current positions. Furthermore, their comments confirmed that the use of reframing helped them deal with their trauma, thereby avoiding

PTSD and enhancing self-healing. For example, one of the participants from the APU group said:

“The minute you hold your rifle and head to the bush, you forget and leave everything behind and focus on what’s ahead.”

In addition, Greene (2010:114) argues that positive engagements helped holocaust survivors to be resilient, in so doing overcoming their extreme, untoward and traumatic circumstances. This confirms that rangers need to be able to develop an attitude of positive engagement for them to ultimately develop resilience so as to deal with the ordeals of their work environment.

The data further revealed that APU group members, in particular, were exposed to continuous trauma associated with poaching, as they have to guard the dead or injured poacher until assistance arrives, and that toughened them. For instance, one participant from the APU group said he would kick and swear at the dead or injured poacher in retaliation for what he had exposed him to, as confirmed by the following response:

“When the gun goes off, you get a fright, but at the same time you have to change that fright to fight, so that you don’t get killed. And you take that to the corpse, or that ailing body, and you kick the injured or dead poacher and swear at him.”

The researcher viewed this as a displacement of anticipated long and frustrating court processes that the rangers are exposed to after killing the poachers. The ranger has to keep himself sane by retaliating, even though the action was not bringing any benefits. This is confirmed by what is stated by Allan (2014) and Seligman (2011:105), who refer to mental toughness as emotional resilience because it is not only about the tenacity to adapt, but also about looking for alternative ways to solve the problem. In this instance, even if the problem is not solved, there is a level of instant satisfaction on the part of the ranger after retaliating on the dead or injured body. This seems to be more on the psychological level of the person involved.

The following responses showed that the rangers' mental vulnerability is caused by their challenging work environment. The verbatim responses below are from participants from the APU group with regard to killing a person (poacher):

"I don't think anyone is emotionally prepared in a situation where they might end up killing somebody in self-defence or in a hot pursuit or something like that, or if he opens fire. I think no matter who you are, whether you are military trained or a civilian."

"Psychological challenges go along with the mental stress, we have a number of cases where people have been shot at, where people were involved in shooting, where they are seeing people die in the veld and they killed them in self-defence, which created a lot of emotional stress. There has not been a lot of support. We had an incident on 25 December 2014 where three of the rangers were arrested after they chased rhino poachers, they shot and killed one poacher after he pulled a weapon on them. They spent two days in jail and they had no support from SAPS.

We get treated like criminals, even though we are fighting the same fight, we are on the same side with the police in the fight against criminal activities, but the police officers treat us like criminals. So there is a lot of lip service regarding the support for the rangers."

"You are operating at your maximum senses of alertness and that puts a lot of stress on you because anything that moves you have to know exactly what it is, that creates an emotion within you that detaches you from normal life. Your eyes and mind are focusing on the possible danger that might befall you."

"A person becomes like a stone. We lose feelings, we lose reasoning and we sometimes act like robots like I said. We lose a sense of belonging, we say whatever I see I'll shoot because I have to do it."

The data further revealed that rangers are faced with a never-ending battle against poaching, which sometimes feels like they are fighting a losing battle. In addition,

Van Hook (2013:7) maintains that reframing can be used to help re-examine some views that are detrimental, such as self-blame and associating adversity with punishment from the higher being. Having participated in this study by sharing their challenges and needs, it is hoped that the rangers will be assisted to reframe their thoughts with regard to how they view their workplace challenges. For example, the wellness officer may assist rangers to develop a better perspective with regard to their contribution towards wildlife conservation and preservation for future generations. Encouraging them to look at the successful incidents where they made arrests and where poachers were given harsher sentences should evoke positive emotions that will strengthen their ability to respond in a resilient manner.

According to the Secondary Traumatic Stress Committee of the National Child Traumatic Stress Network (2011:2), “secondary trauma refers to the presence of PTSD symptoms caused by at least one indirect exposure to traumatic material”. In the same way, the data of this study showed that poor crime scene investigation exposed APU members to secondary trauma.

Firstly, they have to guard the corpse and wait long hours for the police, secondly, the legal system makes them relive the crime scene months after the crime incident, which is traumatic. This results in APU members feeling aggrieved as they feel that the organisation is not compassionate and is not protecting them. The responses below indicate APU members’ experiences:

“I think everything should be done on the same day and then we forget about it. In one of the cases, some advocates came after two years and we had to walk with them and point out the crime scene and it was bushy at that time. This can be stressful because you were just starting to cope with the situation, it takes you back, which is very traumatic on us.”

“Sometimes the police come at the later stage and they want you to go and point out where the body was lying, and that brings back those bad memories. You are trying to forget and suddenly someone comes and says let’s go there, can you remember how this person was lying, where, can you show us.”

“People who were engaged in shooting incidents should be taken off the operations to cool off a bit as there is a possibility that they may be engaged on the firing line again before they get a chance to digest and deal with the past incident. The frequency of how many times you get engaged on the firing line builds up in you, you end up becoming like what soldiers become in a long run, all they know is firing a gun, killing people and to them it becomes a game and the person within him dies and he becomes something else.”

The data suggested that poor communication among stakeholders has led to generally poor crime scene investigation that causes rangers to relive the traumatic experience. Therefore, there is a need for mechanisms that would ensure timeous investigations, as well as affording APU members time to go home to their support base and cool off. Moreover, UNEP-Interpol (2016:13) emphasises that the collection of information, analysis and sharing should be strengthened in order to enhance enforcement and the adjudication of environmental crime.

This would help in ensuring that the rangers who end up killing the poachers in the line of duty are not constantly reminded of the incident over a period of time. As human beings, they need to deal with the incident and get closure for them to be able to move forward.

Subtheme 4: Remuneration and reward

The information collected suggests that the rangers were not happy with their remuneration and rewards. They indicated that they were being sold lip service by being constantly referred to as the backbone of the organisation, yet their salaries and benefits suggested otherwise. According to Trybou et al. (2016:296) and Bennie (2015:53), when the employees feel that their psychological contract has been breached and violated, they often experience emotional distress as they see that their contribution is not proportional to their reward. The participants in this study were constantly experiencing financial difficulties and most of them found themselves forced to apply for financial loans that they struggled to repay. The following are views of rangers pertaining to their remuneration and reward:

“Our salaries are too little, our jobs are not equal to the salaries we are getting, our overtime is limited to 10 hours only, while in a month you do 30 hours, which means we are forced to donate our labour to the organisation. We find ourselves having to work for nothing as the organisation keeps on telling us that it does not have enough budget to pay for overtime.”

“Poaching has increased, but our salaries remain the same. The rangers from Big Five parks should get more money than the rangers of marine (coastal conservation) sections, as we are not doing the same job and are also not exposed to the same workplace challenges.”

“They keep saying the rangers are the backbone of the organisation, we feel that they are just saying that because if you look at the cook in the kitchen, he or she earns more than the rangers, so we don’t feel appreciated by the organisation. According to the salary scales, the field ranger earns B1 (low job grading), while a cook earns B2 (higher job grading), but you are saying we are the backbone and the foot soldiers of the organisation, where is the appreciation? The organisation needs to adjust the salary scales, we are not here for other benefits, but money. We want more basic salary, so that when we retire, our pension pay-out should be better.”

“We used to have rewards when we arrest a poacher, which was money and a certificate, but now we are getting more pressure instead of being rewarded.”

“The night shift allowance is not compensated properly, they only pay for 60 hours, which we normally do in five days, and we need to be paid overtime for those hours.”

“The organisation does not give us money to pay these traditional healers whom we consult for cleansing after we have killed the poachers, so we use our own money and sometimes we even apply for cash loans so we can go and pay the traditional healers.”

The responses above indicate that rangers felt that their remuneration and rewards were not commensurate with their services. They failed to understand the reasoning from management for them to be the lowest paid employees, whereas they were said to be the backbone of the organisation. They believe that their salaries and rewards are supposed to be an illustration of their value. In support of the above, Narehan, Hairunnisa, Norfadzillah and Freziamella (2014:25), Mukwazvure and Magadza (2012:1066) and Brown and Reilly (2009:12) argue that employees are the organisation's most valued assets, therefore their pay and rewards arrangements should be sufficient. One can conclude by saying that paying sufficient salaries may be the best preventative anti-poaching strategy that would prevent "good guys from going bad" by selling information to the poachers for them to augment their salaries.

In the same way, the managers responsible for the rangers had the following to say on remuneration and rewards for rangers:

"The other challenge is salaries that they complain about, we acknowledge that they are not earning at the level we would want them to and it is all because of the background of the organisation, and it is also what we can afford at the moment and it is also about the structure we currently have. So as much as we would want to give them more, we can't because it has an impact on different levels and not just on them."

"There is a good motto that says people respond to incentives, the rest is all commentary. Incentives are not necessarily monetary compensation, we can say to guys let us have a braai, let us get together, we can't do that anymore as this whole rhino poaching has changed the way we do things completely. We have an incentive system for people who have recovered firearms and made arrests and whatever. Now we have a whole lot that we have submitted, I have a total of nine that I have submitted and up to this far payment was only made for one, this is despite Exco approval, so how does this make people feel? So the systems are there, it is how they are being implemented that matters most."

“We pay informers to give us information that will lead to arrests, the informer can earn thousands of rands because he has given us information that can lead to the arrest. Rangers should not be excluded from that, if the ranger comes with the information that leads to the arrest, he must be paid the same amount as the informer from the outside. It doesn’t matter how the arrest came about or who gave the information, the fact is that he potentially put himself at risk by giving the information and to supply it to the powers that be in a way. They also make some arrests and if there is a conviction, they should get rewarded for that.”

Although the aforesaid responses from managers suggest that the organisation was not doing enough to remunerate and reward the rangers, some managers felt that the rangers were adequately paid and rewarded for their efforts. The following are some of the managers’ responses:

“We have a rewards system when the field ranger has arrested someone and recovered a firearm he used, a badge and possibly a financial reward. When the field ranger saves the life of another field ranger, he or she gets a bravery award, that one doesn’t get easily, but I have put one of my field rangers up for that. One gets a badge and I only know of three people who got it.”

“When they make arrests, when they save each other’s life from the animal or the potential poacher, they get commended for that. They know they have chosen this job and they know the dangers involved, they know the ins and outs of this, when they do their jobs well they get commended straight away.”

“We have excellence awards at an organisational level, but also at reserve level, we also have a floating trophy for rangers who did well.”

“They get paid overtime, night shift and a danger allowance, all those things are in place. If the guys camp, they get a camping allowance. So they benefit from the hard work, but there are obviously limits to these budgets. There are budget limits of how many overtime hours can be paid over a year, that can be a challenge because it is not enough and the guys are willing to work long

hours, but we need to compensate them for that, for night shift and for camping.”

“I have an agreement with Spar, the provincial one, I deal with the director of Spar. He gives us vouchers, or hampers, food parcels, but it is nice and big for the guys to take home. For all the rangers, we have been doing it for three years. So this will be the fourth year at HIP. So you want to say to the guys that I care about you, I acknowledge your hard work. When they win a trophy during the sports day, I give them a full buffalo to enjoy. You see, so we have got those kinds of incentives that we can afford. And we educated a couple of them, we sent them to university to study further. Unfortunately, you can't send everyone. And small stuff, like a positive pep talk when the guys have done well. For instance, two weeks ago they had done extremely well, so I will see them tomorrow and I have got something for them. For me it is more about motivation.”

It would seem from the above responses that some managers were insensitive to the real challenges that the rangers are facing in their line of duty. The small tokens given for a job well done cannot be enough as the rangers have families to fend for and, if their salaries are too small, they will fail to meet the needs of their families after the sacrifice of spending long periods away from home. It could be said that some managers, who were supposed to be supporting the rangers, do not see the need to do so, and this could lead to discouragement, affecting loyalty on the part of the rangers. Hafiza, Shah and Jamsheed (2011:332) maintain that employees are the most valued resource that enables the organisation to be competitive. Therefore, the organisation needs to motivate them and offer the correct amount of rewards to its employees if they are to retain them. The researcher is of the opinion that rewarding rangers sufficiently and consistently would be a good motivation that would make them feel that their efforts are being recognised, even though their remuneration is under par.

It was interesting to uncover in this study that APU members were given extra benefits because of their specialised function, as reported by other managers. The responses below capture their sentiments:

“The members of the APU group get incentives in terms of money, they earn more than the normal rangers in terms of allowances. We give them allowances, we give danger allowance to all our guys. We give them a very specific APU allowance for camping, while the other guys are given normal camping allowances. So they get more in terms of the package. So we want to make them proud and keep them motivated. They are proud because of what we are giving them, which sets them apart from the other rangers.”

“The APU members have allowances such as subsistence and travel (S&T), which the other rangers don’t get, otherwise they all get standby and danger allowance. What is different is the S&T of R1 200, they also assist in other parks if there’s a need.”

These responses suggest that APU members are an elite group of rangers, hence they get preferential treatment. Since rangers are of the opinion that there is unfairness in their payment rates, the organisation has a duty to rectify it or prove to the rangers that they are adequately paid for their services. Nonetheless, the issue of adequate salaries has been a controversial one in the country, as it has always been plagued by compensation-related riots, and rangers are no different.

The above sentiments are supported by what is said by Dube (2012), who argues that 248 rangers who were employed in KNP went on strike in 2012 demanding equal pay to other employees. Owing to this, the Employment Equity Amendment Act, Act No. 47 of 2013 (Republic of South Africa, 2013), maintains that employees who do the same job should be paid the same; that is to say, equal pay for the same work and/or of equal value. It could assist management to ensure that the ordinary rangers are well paid for them not to somehow feel discriminated against compared to the APU members.

Subtheme 5: Training and development

Most of the rangers felt that they were well equipped and have the necessary knowledge and skills to do their jobs. However, few felt that there was a need for continuous on-the-job training to enable them to excel in their jobs, as well as advance them for promotion. In agreement, the survey that was conducted by the WWF and TRAFFIC Wildlife Crime Initiative (2016:20) showed that there is a need to improve the quality and frequency of the rangers' training to improve their effectiveness, which means that there has to be continuous training to refine the skills for improved production, as the tactics used in poaching seem to be improving by the day. The following responses captured their reasons:

"We need more training on night patrols as the poachers are mostly soldiers who have been trained to patrol at night and use night vision equipment."

"The problem is that management takes one person for training and then generalises that they have trained everyone."

"The poachers are more advanced than us in training, especially soldiers from Mozambique, we are unable to match their ever-changing tactics."

"When poachers enter the reserve, it is very difficult to track their footsteps as they know how to cover their tracks, we need training to equip us to uncover their tricks and tracks."

"We need advanced field ranger training opportunities to keep us up to date with new ways of doing our jobs. It will teach us how to cover our tracks. It takes time before we get refresher courses such as a shooting course. We need more practice as we work day and night, shooting during the day is not the same as shooting at night and we need night shooting exposure as well."

"We need advanced training and more academic training to increase our knowledge so we can do our jobs better and one day get promotions and also provide us with bursaries."

Contrary to what the rangers reported, the managers indicated that they afforded rangers the training that they purported to be lacking. For instance, participants indicated that they need training on the use of night goggles and shooting as poachers were always ahead of them and used advanced technology. The following responses represent the managers' opinions:

"We train them on how to use the equipment they use in the field. Equipment such as rifles, night vision goggles, we train them on the techniques of clandestine patrolling, types of patrolling so that they may not be visible to those who might be poachers. We train them on first aid, so that should anyone get shot, they can apply their knowledge to assist the injured person. We train them on how to use the radio for communication so that we know who is where at what time."

"Tactical training is like survival in the bush so we train them on that. They are essential for the operation and to get the job done."

It could be said that rangers were aware that continuous training would strengthen their skills by keeping them abreast of new tactics and help close the gaps that might otherwise compromise their safety and performance. The HR Department should therefore ensure that, in drawing up the organisational training needs, rangers are not left out, but provided with continuous training opportunities that would ensure that they grow personally and professionally. Training that is organised, supportive and efficient improves the morale, satisfaction and productivity, while retaining employees with valued and scarce skills (Jehanzeb & Bashir, 2013:250).

Subtheme 6: Poor or lack of communication

The data showed that there was a concern regarding poor communication between rangers and their managers. Most rangers indicated that they were not informed on time when they would be camping and this caused them to camp with inadequate camping supplies, thereby compromising their health and safety.

On the other hand, managers argued that they didn't tell rangers when they would be camping, as there was a belief that they would give poachers tip-offs that might compromise the anti-poaching efforts. This communication style causes displeasure on the part of the rangers. The evidence in support of this position is found in the USA retail survey by Henly and Lambert (2014:1010), which shows that low-skilled employees have high work-life conflicts because their unpredictable work schedules make them work irregular hours, hence they are unable to manage their personal and work lives.

Below are the rangers' responses on how they view their communication with their managers:

"Management has erected some towers, which are right, but we can't use them because they are too close to the road, they didn't communicate with us on where to put them. It is not safe as people can shoot you while you are up there and no one will know who shot you."

"We want our managers to tell us when we will be camping and not just take us there unprepared."

The issue of poor or a lack of communication yielded mixed responses from managers, while others defended their style of communication with rangers. Others felt that they were doing their best to engage their rangers. These are some of the views from line managers on their communication with the rangers:

"We talk a lot, I see them on a weekly basis and I keep them up to date on what we have seen, what we have found, we don't want to surprise them with anything, but our work is unpredictable and this is sometimes difficult."

"I talk to my staff a lot because communication is a big issue, little things may not be important to you, but to them it means a lot. You don't want to phone them and say: "look, you're going on camping today", they haven't had the time to think or prepare about it you know. You want to tell them maybe in 48 hours that: "listen there's a possibility that I might need you to camp on

Tuesday so be ready for patrol,” and not surprise them because it’s stressful.”

The above views show that some managers acknowledge that there are communication problems between themselves and the rangers, and they are trying their best to keep the rangers informed where possible. However, other managers are adamant that the behaviour of some rangers necessitates them to keep the rangers’ work unpredictable, and the following are their reasons:

“We have challenges trusting each other, working with the field rangers, we know for a fact that some of the field rangers are involved in the illegal rhino horn trade and they are working with us, but are still against us, so that is a huge challenge.”

“It’s a fact that every rhino that goes down, there is information that comes from the inside to the outside. And the guys know that. So for the hard-working guys, to know that one of us is leaking information, it kind of dents everyone. To know that somebody is putting out information and putting us in danger, you know, direct danger, those are the group’s issues with the guy.”

“We need something that will act as a deterrent ... You know, field rangers call me to say that this guy has got R6 000 cash. This guy has got R30 000 cash. And this guy ... when we are working, this guy is sending SMSs and he is putting us in grave danger. So, without a polygraph test, you will never ever manage to arrest that situation.”

On the other hand, most of the managers felt that their communication with rangers was fine, but the problem was how the organisation communicated with them. They cited instances where the organisation took dangerous decisions by bringing students without firearm training to come and work with the rangers without consulting them. Below are the managers’ verbatim responses:

“They brought some students, but it is a very dangerous practice, because they are bringing youngsters who have no firearm training. All they are doing is walking in the bush, and allowing a single field ranger who’s armed to accompany them. What happens if they encounter poachers? Those young students don’t have firearms or any training in handling firearms or anything like that.”

“I think there is a lot of breakdown in communication with HR when it comes to the incapacitation of staff. They are not giving us options, they just tell us that the doctor says that a person can’t walk anymore. Therefore, this guy cannot do patrol work anymore, that means he cannot work, that means he is no longer effective. That means that a field ranger camp that normally has three people, now has two people. That means that if one person is on time off, then there is only one person there. That means that an area of 10 000 ha cannot be patrolled. That means that if poachers come in, they will be free to take out 10 or 12 rhinos without any resistance. That means that the section ranger is going to be stressed out. That means that there is going to be pressure on everyone. You know what I mean? There is a chain effect. The HR Department needs to realise that their duty doesn’t stop at saying that a guy is incapacitated, just tell them to do light duty work, but at least increase the number of rangers so that the ill one can be replaced. In so doing, the work in the field will not be compromised.”

“Lip service has been paid to rhino conservation, while we are saying that we will fight this and we will give people (rangers) all the support, we still sit with vacant positions for three years. I mean, I have been sitting with vacant managerial positions for an extended period and you get constant communication saying “no, you are not going to get those positions, so just carry on operating as it is”. I think a lot of people underestimate the intelligence of our rangers, these guys know what is happening, they see what is happening, they feel the pain because they have to cover up for the shortages, without any extra compensation.”

The data showed that there was generally a problem of communication within the organisation. Poor and limited communication between rangers and management led to unhappiness, as rangers did not understand why some of the decisions were taken, for example, the erection of towers may have been a good idea, but because they do not understand, speculations surfaced and this impacted on the morale of the employees. Managers' lack of consultation with rangers for advice on where to erect the towers was a sign of poor or a lack of communication. Conrad (2014:116) states that communication is the life blood of an organisation that enables productivity. Managers need to be honest and sincere when communicating with employees, irrespective of the type of news, if they want to achieve more. Poor communication between managers and HR led to organisational inefficiencies due to staff shortages, and strained relations because of poor policy implementation. Correspondingly, Norris et al. (2012:45) maintain that a collaborative organisational climate, positive relationship dynamics, open communication and social support were traits associated with trust, growth and empowerment, which were consistent with resilient outcomes. It can be seen from the above analysis that open communication builds trust within the organisation and enhances employees' resilience

Subtheme 7: Cultural sensitivity

Rangers were steadfast in their cultural practices, which contributes somewhat to their mettle. Participants from the APU group indicated that the reason they continue to do their job despite its dangers was the result of their cultural practices. They strongly believe that they protect them from adversities, hence they did not mind applying for a financial loan so that they could pay the traditional healer to perform cleansing rituals that would cast away the spell after an encounter with a poacher. They believe that poachers also use "muti" (traditional medicine) when coming to poach, therefore they too needed to protect themselves. Their misgiving on this issue was that the organisation was paying lawyers a lot of money to represent them in court, but they were unable to assist them with money for cleansing rituals, which was very important to them. Others indicated that the lack of support from the organisation compromised them as they sometimes had to avoid shooting at the poachers because they already owed the traditional healer money for cleansing, or they were still repaying the bank loan for

the money they used for the cleansing. Below are the responses that showed the seriousness and the importance of cultural practices to the APU members:

“After we have captured and killed the poachers, you find that the organisation pays for the lawyer to get us out of jail, but they do not pay for the cleansing ceremony, which is necessary and part of my culture to help remove the burden of killing a poacher and save my life in case the family does something to the body, so we need to perform a cleansing ceremony.”

“In the Zulu culture, we have to do a ceremony, but we do it in our own personal capacity to cleanse ourselves after killing a poacher because we regard that as a misfortune.”

“An APU member has to point out where this person was lying, and when the person has done the cleansing, he cannot go to the very same place because he will pick up the shadow of the killed person and get infected. He has to go back to the “inyanga” for cleansing again and that is costly, and that money comes out of his pocket again because this is his life that needs protection, he is African and he knows that it should be done, but unfortunately the organisation does not see things that way.”

“We go to the traditional healers and they give us medicine, which we use to cleanse ourselves and rid ourselves of the death of this person and then we come back to work. It helps us feel better and to rid ourselves of the death of this person, but you find that the organisation does not give us money to pay these traditional healers, so we use our own money, and sometimes we even apply for cash loans so we can go and pay the traditional healers. This lack of support makes us worry when confronted by the poachers and makes us reluctant to shoot for fear of having to pay the traditional healer again for cleansing. As a result, we end up not doing our job properly, hence jeopardising the safety of the animals. If the organisation can pay for the cleansing ceremony, it will make us relax and focus on our work of anti-poaching.”

“If you don’t perform the cleansing ceremony, you find that you think about the incident more often and have flashbacks of the person you killed and you may end up killing yourself because of the witchcraft that the family of the poacher applied to the corpse to revenge his death.”

“The other problem is if you don’t shoot the poacher, he will shoot you, so there is no removing yourself from the situation, but we would like the organisation to help us with the cleansing procedures by providing money to pay the traditional healers.”

The data attests to the fact that the APU members felt that the organisation was not sensitive to their cultural practices, which strengthened them to be more productive, despite the fact that they end up having to pay for cleansing, while the trouble that led to the uncleanliness emanated from their work activities. This shows the power of belief in the mind of a person, and it has to be respected because the person will not be convinced otherwise.

Both APU members and managers indicated that, even though the organisation was not contributing towards their rituals, improving HR efficiency, such as timeous processing and paying out of rewards, would go a long way in positioning the organisation as a caring employer. A participant from the APU group alluded to having been using the bravery rewards money for the cleansing practices, and the inefficiencies of the HR Department had financially crippled him. Nevertheless, some line managers acknowledged that they are aware of the importance of cultural practices to rangers. The following responses indicated some line managers’ efforts to meet APU members halfway:

“There are beliefs among the black people that whenever such incidents have happened, you have to go through a cleansing process. But in the organisation, there is no money spared for that, sometimes I hear them saying that they had nightmares, it is like they see this thing happening now because I think it affects them.”

“We provide them with the transport to go to the “inyanga”, but unfortunately they have to pay the traditional healer themselves. It is necessary because it is what they believe, and after that cleansing, we find that they start to indicate that they are fine. And you see, it is the African culture, and you cannot run away from it. Every nation has its own culture, we believe in this and it should happen because if somebody dies and you have a hand in it, you remove the shadow of that someone from hanging over your head. That is why I said earlier that you don’t have to take the person to the same spot where it happened because he believes that he has taken the shadow of this person away through cleansing, if he goes there again, then the shadow of this person will get attached to him again, causing him additional costs.”

“The majority of rangers follow the Zulu tradition. Normally, after a Zulu person has engaged in killing somebody, he has to go and be cleansed. If somebody has shot and killed someone, he needs to buy a goat and do some cleansing. If there could be a monetary value attached to cleansing, it will go a long way in alleviating pressure from the person financially. It is part of what is important to the rangers and cannot be ignored.”

It could be concluded that rituals are an important part of the African belief system, hence the South African legal system recognised the role played by healers through the Traditional Health Practitioners Act, Act No. 22 of 2007 (Republic of South Africa, 2007). The Marikana tragedy, where Lonmin Platinum mine employees were killed (34), injured, (78) and arrested for going on strike over wage increase, was but one example of the purported powers of “muti” rituals, where miners felt that the “muti” would make them invisible to the police, but ended up being killed (eNCA, 2014). Some of the managers were culturally insensitive. Below are their responses:

“Cleansing is a private issue, the organisation cannot pay for that process.”

“There was the lady who was organised to come and do massages (reflexology) to help the rangers relax, but some of it is not culturally fit for our people. Because some of our people don’t want to be touched by a woman they are not related to. I’m talking about the deep Zulu men, and older people. People with maybe four wives and they say “it is only my wives who have the right to touch me, I cannot be touched by another woman”. Those were some of the things that were motivated for, but because of the dynamics, then it ended up falling between the cracks.”

The abovementioned responses showed that cultural practices form part of an important protective factor for rangers, which enables them to maintain balance, while doing a difficult and stressful job. Therefore, the rangers’ thoughts of their employer being culturally insensitive might undermine anti-poaching efforts. An activity that does not support the rangers’ beliefs shows some insensitivity from the organisation, because the ritual that has meaning for the rangers is not paid for by the organisation. This suggests that the management of the organisation does not respect the belief system of the rangers, even if this belief system is adding value to the organisation by providing some level of protection for the rangers and increasing their productivity.

Violanti (2012:171) posits that, since resilience is about rallying physical, psychological and other resources to deal with stressful events, there is a need for both individuals and the organisation to explore protective, promotive and coping factors that buffer stress and enable one to maintain balance while doing difficult and stressful jobs. This calls for the organisation to take the belief systems of the rangers seriously, because they form part of who they are, and they are a reality for them.

Correspondingly, Levenson (2017:110) argues that the social workers should be self-aware, that is, be wary of their beliefs and always keep them in check, as this has the potential to hamper their helping relationship and engagement, thus disempowering them.

The researcher believes that the Wellness Section failed to understand the cultural values of its clients, thus became insensitive by assuming that their interventions were effective and would be welcomed, hence their efforts fell flat as their clients became resistive, as shown in one of the responses above. The social worker, as an EAP practitioner, in this instance, has to guard against prejudices when it comes to the cultural practices of the rangers as clients, but advocate for the respect of this cultural background. Imposing one's beliefs on the client shows disrespect of their beliefs and could lead to resistance, which is detrimental to the helping process.

As a result of all these, the organisation should provide rangers with sustainable mechanisms that are culturally acceptable for them to assist the rangers to deal with stressful events in their occupations, in their own way, and not be dictated to on how to do that. In this case, because many believe in traditional cleansing, if the organisation could recognise this and respect it, as well as incorporate it into its support efforts, the rangers could be motivated more. This could also go a long way in helping the rangers increase their coping, leading to resilience. One last reason on culturally sensitive social work practice is that it lessens resistance from clients and has the potential to be effective in reaching positive outcomes, thus the Wellness Section has an important role to play in emphasising the need for the organisation to respect its employees' culture by playing an advocacy role towards its clients, i.e. the rangers.

The social workers have an important role to play in this process by making management aware of the meaning of cultural practices for the rangers, and how they believe that they could strengthen them. This effort has to be geared towards getting the buy-in of management to meet the rangers halfway through sponsoring their cleansing activities, specifically as their income is not allowing them to include this, leading to them being forced to apply for financial loans that they struggle to pay back.

Subtheme 8: Community relations

Rangers felt that healthy relations between the neighbouring community and the protected area are important as they have a shared value, which is employment for the community and the achievement of the conservation mandate by the organisation. However, it was found that, more often, the relationships were soured by poor maintenance of the park fences, enabling the animals to move freely, leading to wildlife from the park killing the community's livestock and the community using their dogs to hunt the antelopes from the park.

The following responses attest to strained relations between HIP and Mkhuze Game Reserve and the neighbouring communities:

"The hyenas get out and kill livestock in the neighbourhood, we don't have fence liners to fix the fence, this causes conflict with the community and the dogs from the community come into the reserve to hunt bucks, so we shoot them, increasing tension between us and the community."

"The problem is that the fence is not fixed, this causes conflict with communities as hyenas eat livestock and people are not compensated for their loss, even when these people know who the poachers are, they don't tell us because of anger over their livestock."

"There are rhino ambassadors who are supposed to build relationships with the community, but their efforts are not working, since people are angry for not being compensated for their livestock loss, the communities are not cooperative."

"Sometimes the community members ask us why we killed a person (poacher) and we have to explain that our job is to protect the rhinos and when you explain the importance of rhino conservation, sometimes they understand."

“Since the poachers are from the community, you find that we don’t feel safe when we go back to the community as the poacher’s family wants to know who has killed their relative and the community does not understand the importance of protecting (“umkhombe”) black rhinos because it is business to them, they make money out of the poached animals.”

On the whole, line managers agreed with the rangers that the relationships with the community were important and needed to be safeguarded for the continuity of conservation. Below are the responses from the managers, which indicated the strained relationships:

“Some of the rangers come from the same community as the arrested poachers and they still have to take time off to go home to meet these people that they have arrested, and this is the challenge that is frustrating. The person you have arrested will hate you because he never understands that what you’re doing is your job.”

“When you arrest your neighbour, there’s some bitterness. I think there should be an awareness in our community so that they can understand what is happening inside the park and that these people are employed. As soon as the community understands exactly what is happening, then we hope there will be cooperation from their side.”

These statements show that if the community members feel that they are not benefitting from the park, this may cause unnecessary unhappiness. The CBD and Nagoya Protocol advocate that the returns from the conservation of biological diversity should bring about environmental, economic and social investment to the local communities (CBD, 2016).

Making an effort to achieve this could go a long way in fostering a healthy relationship between the organisation and the neighbouring community.

Nevertheless, some line managers indicated that they went beyond the call of duty in trying to better the relationships between the neighbouring communities and the park. The following were their responses:

“There’s some social resistance from the communities, especially those people who claim that they were chased away from their land that was taken away from them and turned into the park. We have the community conservation officer who deals with the community outside, including the tribal authority and the schools. He is doing environmental education, I mean, he brings the schoolkids into the park and he educates them. It is not that we are doing nothing, he takes them to the enviro camp, they sleep there for a week, he goes out with them and he teaches them. At the gates, people pay for entering the park and that levy goes to the community trust. So, it helps. I can tell you that today there’s a school up at Hlazarane, the high school that was built by Ezemvelo KZN Wildlife from this community levy.”

“We tried to explain to the communities that we don’t believe in arresting the people, we believe in educating people, we don’t believe in punishing people. As it is now, if we find children in the park, like 10 years, 12 years, 15 years, I mean, we don’t arrest them, but we warn them, we take them to the “induna” (tribal head), there is this thing they call collective justice, we try to build them because taking such a kid to the police will mess up his future. Because fingerprints come whenever you apply for a job when doing the security clearance on you, this could be detrimental to these children, so we try to protect them. Like me as the manager here, we are involved with the police, the government departments like health, science and technology, correctional services and public prosecutions, and sometimes during 16 Days of Activism Against Abuse of Women and Children, we speak about this, we educate the people. We look after these people, we don’t look at the negative side.

We look at the positive side, we believe in prevention, which is why we run around educating these people so that we don’t end up arresting them. The antelope poaching has decreased, the people who were involved in snaring the small animals have been diverted, and they are now helping the rhino poachers. They (the poachers) will come with R30 000 and say, “I will give you R20 000, help take me into the park where you see these rhinos”. Outsiders won’t know what is happening, but the people around the park are the people snaring and assisting and leading these people into the park.

They come into the park to check where these animals are and then they go back to these rhino poachers and tell them where they have seen the rhinos. So this happens through networks.”

The data gave an indication that the relationship between the community and the organisation was not strong enough to derive the community support, loyalty and goodwill that could be mutually beneficial and critical to anti-poaching efforts. The organisation has a role to play to ensure a continuous cordial relationship with neighbouring communities. This is confirmed by what is stated by Anderson and Jooste (2014:2), Cheteni (2014:65) and AWF (2014:7) that community-based conservation strategies are about including communities neighbouring the protected areas in a share of the revenues. The incentives are aimed at building interest in the anti-poaching efforts, and these communities become vigilant, jealously guarding their investment, and confront poachers without fear. The organisation has to continue making efforts to improve their relationships with the neighbouring communities to enhance the trust from the community members for them to be partners in anti-poaching efforts. The community members have to see the protection of wildlife as beneficial to them before they can make an effort to be on the side of the organisation and support it loyally.

Theme 3: Work-related risk factors

Although every job has its own challenges, the data revealed that the risk factors for rangers' jobs have far-reaching effects, as their families get entangled. There were incidents where families were in distress, helpless and their lives were even threatened, with little support from the organisation. For example, the KNP EAP Report of November 2015 (SANParks, 2015c:1), showed that the daughter of one of the rangers had to receive trauma counselling after witnessing a group of men wearing balaclavas threatening her father at their home.

While the community may be a source of support, at times it may be the source of the discomfort. These are some of the issues that need to be considered when building community relationships that are aimed at addressing some of the challenges rangers face.

Subtheme 1: Risk of death

From the data, it was evident that injury and possible loss of life are risks that rangers and their families are faced with in the line of duty. Although there is little that can be done with regard to the issue of possible loss of life of the rangers in their workplace, the organisation can put mechanisms in place to ensure that the rangers and their families are able to deal with the crisis they are faced with. The responses below indicate rangers' perceptions on their possible loss of life while at work:

“Once you step outside your little house, you are facing the danger of either being killed, mainly by poachers, because you can avoid being killed by animals by reading their behaviour, but poachers you cannot because you don't see them, you don't know them, but you know that they are also there looking for these animals, this is the danger we are facing in trying to protect wildlife.”

In addition, below are the managers' views on the perceived risk of death rangers are facing in the line of duty:

“Rangers are facing death because the poachers themselves are armed to the teeth with the latest technology that they get from whatever sources. Our rangers are trained, but because poachers are operating in the dark, in their own world of darkness, and they are sometimes unable to detect them, they can get shot and killed, anytime, anywhere.”

“They face animals and they face human beings, this means that those people that are coming to poach could attack them at any time and also they could be attacked by the animals themselves.”

Except facing death when rangers are executing their duty, they also face harassment from the families of killed poachers and pressure from the police when poachers are released due to dismissed cases as indicated by Sapa-AFP (2014).

The response below shows how rangers' families get entangled in the anti-poaching efforts. One manager had the following to say about the families of rangers being at risk:

"We had incidents where rangers and their families were threatened. We have an incident where a ranger's family was nearly killed, their water was poisoned, fortunately they had two water tanks, one for the animals and the other for domestic use. They poisoned the one for the animals and some of his animals died."

It was deduced from the data that both the organisation and the families of employees were overwhelmed and did not know what to do. At one point, the ranger wanted to uproot his family and relocate, but with the support of colleagues, the organisation and the community, they managed to cope and did not relocate. Indeed, the way employees are supported when they experience a crisis assists to moderate the stress. According to Bernard (2013) and Henderson (2013:24), pro-social bonding is social support offered from the community, which can strengthen one to cope with stress and hardships.

In addition, Gritti (2015:452) argued that organisations can adopt employee care policy strategies that limit risk and encourage resilience. The researcher is of the view that even though it would be difficult to control the above factors, measures could be put in place to ensure that the family is able to deal with the crises brought about by the rangers' jobs. Families should thus be educated about the rangers' jobs and the risks involved for them to be alert and also cope.

Subtheme 2: Environmental risks

The data revealed that rangers are faced with the potential risk of physical injury and illness due to bites and attacks from animals, as well as environmental stressors as they are constantly faced with unforgiving weather.

The new moon phase is regarded as a high-tempo period as it determines the rangers' frequency of patrols, duration of patrols and rest periods.

In accordance with the survey of the WWF and TRAFFIC Wildlife Crime Initiative (2016:4), the poor and hazardous working conditions of Africa's wildlife rangers are known, but little has been done to try and understand their work challenges, rewards and job satisfaction. Correspondingly, Norris et al. (2012:7) argue that a high-risk profession involves an environment where there is consistent exposure to risk, threats and demanding challenges. This could be said about the environment in which the rangers are working. The responses below from the managers indicate the environmental risks rangers are exposed to:

"It is not easy to patrol for seven hours, whether the temperature is at 40 °C or not, whether it is raining or sunshine, it is the same thing, they have to work. They face threats such as the climate, rain, heat, insect bites, mosquitos, spiders and then working those extended hours."

"We have to work the whole full-moon period, the moon rises at 18:00 in the evening and we have to work until 05:00 in the morning, because that's when it sets again. And at the same time, we also need to sweep (search and clear the area) in the morning just to make sure that there are no incursions, which is another three to four hours. Oh, and don't forget that before doing night work again, we must sweep in the afternoon again to make sure that someone doesn't use the last light to shoot. We don't want to lose a rhino because we were sleeping. You want to close all the gaps, but unfortunately that is impossible, and you know it."

"We rather have the guys rest now because we know the moon is coming back during the dark moon or new moon phase. We are going towards the full moon and every day it's becoming bigger and bigger, from Saturday there will be enough light for us to start moving around at night."

The abovementioned assertion suggests that rangers are not only exposed to attack from poachers and animals, but the unforgiving weather adds to their challenges.

The above responses confirmed the assertion of Dr David Mabunda, CEO of Ezemvelo KZN Wildlife, as quoted by Wieners (2016), that the moon period enables poachers to hunt at night. This suggests that the new moon phase is the peak period for rangers. Therefore, any recovery plans should be done with that in mind. Facing all these dangers at work needs the organisation to go the extra mile in supporting the rangers, based on their actual needs and not what is thought to be their needs.

5.4 Summary

This chapter presented the empirical findings of the study, where a detailed discussion of the data collected through focus group discussions with the rangers and individual interviews with the managers was analysed and interpreted. Literature control was also done to verify the findings, while the verbatim responses from the participants were used to confirm the discussion on the findings. It was evident that rangers are faced with different challenges, while doing their daily work. Furthermore, it was noted that the support from the organisation was perceived by the rangers as not adequate, as they believe that their rewards and remuneration do not equate to the demands of their job and efforts. Nevertheless, they continue to serve diligently by protecting the wildlife, despite a variety of risks they and their families are exposed to, for instance, threats from poachers and attacks from animals.

The following chapter focuses on the summary of the whole research report, conclusions and recommendations, based on both the empirical findings and the literature study.

CHAPTER 6: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Summary

The purpose of this chapter is to present the summary of the whole study, the conclusions based on the literature review, as well as the empirical findings and the recommendations drawn from both the literature and empirical parts of the study. An effort is made to illustrate how the study goals and objectives were achieved, including how research questions were answered. Key findings are discussed in order to provide a framework for the formulation of the ranger resilience-building model that is presented in Chapter 7 of this thesis. Recommendations are based on the views and insights of participants.

The study was prompted by a lack of scientific information on rangers' workplace challenges and needs, how they have been coping, and the organisational support that they receive in their efforts to protect wildlife. This information was needed for the researcher to develop a model that could be used to assist the rangers to develop resilience within the context of their job demands. The researcher observed that the services offered to the rangers, especially those exposed to continuous trauma, were reactive. This made the researcher wonder if the services rendered were meeting the needs of the rangers. From this perspective, the researcher aimed to develop a scientific model to help rangers deal with their workplace challenges by tapping into their inner strengths and improving their quality of work life. The achievement of this goal would not only help rangers develop resilience, but also position wellness services as a strategic partner within the organisation.

The key findings and recommendations presented in this chapter are based on the literature review on poaching as a phenomenon (Chapter 2) and the theoretical framework of used in this study (Chapter 3), as well as the empirical findings on rangers' challenges (Chapter 5), which in turn helped with the construction of the model to assist rangers to develop the resilience that is needed in their type of work.

6.1.2 Summary of each chapter

In brief, the following is a summary of each chapter of this research report:

- Chapter 1 gives a broad overview of the conceptualisation of the study. The purpose and framework of the research is established through a detailed discussion of the problem statement, the rationale for the study, and the research questions, goals and objectives. It is concluded by the ethical considerations observed in the study, and a clarification of the key concepts.
- Chapter 2 presents a detailed account of the literature that was reviewed in an effort to understand poaching as a phenomenon, as well as different strategies that global governments are making as efforts to curb the scourge of wildlife poaching and illegal trade in wild fauna and flora.
- Chapter 3 explains resilience as the chosen theoretical framework that is used to guide this study. The theoretical framework of resilience was used to provide a comprehensive understanding of resilience. The different functional elements of resilience models were identified and an effort made to establish their relevance in addressing the challenges and needs of rangers.
- Chapter 4 highlights the methodological framework that was used in the study. This includes a discussion of the research approach, the research design, the research methods, the population, sampling methods, data-collection and analysis methods, and data verification techniques.
- Chapter 5 presents a descriptive data analysis and interpretation of the data that was collected through focus group discussions with the rangers and individual semi-structured interviews with the managers in relation to the challenges and needs of rangers in their workplace.

- Chapter 6 provides a summary of the study, the conclusions reached based on the literature review, as well as the empirical findings and recommendations drawn from both the literature review and empirical part of the study.
- Chapter 7 presents a social work model to assist rangers to develop resilience. It is based on a detailed account of what participants have raised as the challenges and needs of rangers in their workplace.

The next step is the presentation of the goals and objectives of the study:

6.2. Goals and objectives of the study

The goals, objectives and research questions of this study were addressed as follows:

6.2.1. Research goals

The following were the goals of this study:

- To develop an in-depth understanding of the workplace challenges and needs of the rangers located at HIP and Mkhuze Game Reserve.
- To develop a ranger resilience-building model to assist rangers based at HIP and Mkhuze Game Reserve to deal with their workplace challenges.

The goals of this study have been achieved, as illustrated in the detailed account on the challenges and needs that rangers are faced with in their workplace, presented in Chapter 5 of this thesis, and the presentation of the proposed model that is aimed at assisting rangers deal with their workplace challenges, based on the challenges and needs they are faced with at HIP and Mkhuze Game Reserve, as presented in Chapter 7 of this thesis.

6.2.2 Research objectives

The following objectives enabled the researcher to meet the goals of this study:

Research objectives

- To explore the workplace challenges and needs of rangers stationed at HIP and Mkhuze Game Reserve.
- To explore the experiences of rangers as they execute their daily responsibilities at HIP and Mkhuze Game Reserve.
- To explore the challenges and needs of rangers from their managers' or supervisors' point of view, in relation to the existing organisational policy and support structures at HIP and Mkhuze Game Reserve.
- To describe the workplace challenges and needs of the rangers at HIP and Mkhuze Game Reserve.
- To describe the experiences of the rangers in the daily execution of their duties at HIP and Mkhuze Game Reserve.
- To describe the challenges and needs of rangers from their managers' and supervisors' point of view in relation to the existing policy and support structures at HIP and Mkhuze Game Reserve.

Task objectives

- To select two samples consisting of rangers and management (line managers and corporate managers) at HIP and Mkhuze Game Reserve respectively.
- To facilitate focus group discussions with the sample of rangers at HIP and Mkhuze Game Reserve to establish their workplace challenges and needs.
- To conduct face-to-face semi-structured interviews with management members to determine how they understand the challenges and needs of rangers, as well as Ezemvelo KZN Wildlife's policy or strategy on ranger support.

- To analyse the data obtained through the focus group discussions with rangers and individual semi-structured interviews with managers by firstly transcribing the data from the notes and audio recordings, and then coding that information into themes and subthemes.
- To formulate conclusions and recommendations based on the literature study and empirical findings.
- To develop a ranger resilience-building model based on the empirical findings.

These objectives were achieved because the researcher firstly went through an in-depth literature study, presented in Chapter 2, to understand the poaching phenomenon and the general working conditions of the rangers. This step was followed by the interviews with participants at management level and the focus group discussions with the rangers (both general rangers and members of the APU), where six focus group interviews were conducted. Ten managers were interviewed individually on their views regarding rangers' workplace challenges and needs, as well as the support provided by management.

The above objectives were achieved, as the research findings showed that rangers were faced with many challenges that affected not only their work-life balance, but also their families. Based on these, a model to assist them to deal with the challenges is presented in Chapter 7.

6.2.3 Research questions

The researcher endeavoured to unravel the following questions through this study:

- *What are the challenges and needs of the rangers with regard to their workplace environment at HIP and Mkhuze Game Reserve?*

The qualitative data from the participants in Chapter 5 showed that the rangers are challenged by the quality of their work life. Their challenges ranged from staff shortage, working long hours, staying away from their families for extended periods and sometimes not having enough resources to do their jobs, as well as many more testing issues and risks such as attacks from animals and poachers, and poor community relations. In addition, the inadequate organisational support from the multidisciplinary team exacerbated their already stressful and unbalanced quality of work life.

- *What should be contained in a model that is aimed at building resilience among rangers?*

The in-depth literature review in Chapter 3, as well as rich data from the empirical findings in Chapter 5 guided the researcher to identify elements that enabled the development of the ranger resilience-building model in the context of HIP and Mkhuzze Game Reserve.

The data of this study suggests that an integrated approach is needed to address the various challenges faced by rangers. However, the researcher is of the opinion that the Wellness Department should be the custodian of the model.

In conclusion, it could be said that the abovementioned goals and objectives were achieved, and the research questions were answered, as illustrated above.

6.3 Conclusions based on the key findings of the study

The following conclusions were drawn from the empirical study:

- The poaching menace has put a lot of pressure on the conservation industry. The downside is that rangers are forced to adjust and, in some instances, compromise their lives in order to meet the demands and challenges of their job. Notwithstanding this, the compromised quality of the work life of rangers in HIP and Mkhuzze Game Reserve seems to be the central challenge as rangers highlighted that the organisation was not doing enough to support them.

Therefore, the rangers felt unappreciated. This suggests that rangers' plight cannot be ignored anymore if Ezemvelo KZN Wildlife wants its wildlife conservation and anti-poaching efforts to be successful.

- The key challenge that was identified is that of an imbalance between the rangers' work and social life as the continuous demands of their work creates a problem of achieving the desired quality of work life. The evidence from this study showed that the unpredictability of rangers' work demands contribute to conflicts as their non-work responsibilities suffer because they have to be on guard, thereby becoming isolated. The unavailability of rangers at home causes them personal and relationship problems with their families.
- Unpleasant living conditions, coupled with poor amenities, are adding to the rangers' stressful work life. The evidence showed that they stayed in single-roomed rondavels, used as a multipurpose room (bedroom, kitchen, living and bathing room), with limited space to manoeuvre. Even in trying to provide improved accommodation for the rangers, their needs are still not being entirely met as their children are not considered in the improvements. Making the improvements that would allow the rangers' children to visit them during school holidays would assist in meeting the needs of maintaining family relations because the rangers are unable to visit their homes on a regular basis. Providing rangers with all the amenities they need could go a long way in ensuring that they eat well and have contact with their families, as they will be able to store healthy food and charge their cell phones to maintain contact.
- Staff shortages and the failure to fill vacant posts disadvantages rangers as they are unable to take time off to visit their families or have the time to play their parental or spousal role. Their failure to have a sustained, full family and social life disturbs their family life, which they need because when they retire they have to go back to their families. This also leads to some of the participants experiencing marital conflicts as their spouses become suspicious that they are having extramarital relationships because fellow colleagues are going home, whereas they are unable to do so.

Regardless of this, most of the rangers developed coping strategies that enabled them to be mentally tough and adapt to testing conditions, for instance, supporting and not condemning their children and spouses when things go wrong at home during their absence.

- The ripple effects of staff shortage and continuous vacant posts forces rangers to work long hours and unpredictable shifts, resulting in their health being affected negatively. This situation is made worse by the fact that they are not getting paid for all the hours they end up working, due to the stipulated maximum hours that they can be paid for overtime in a month. This is demoralising for the rangers, but they still go on performing their duties.
- Rangers' rest periods and recovery activities are predominantly not structured due to the fact that they always have to be on guard as they could be called to go on patrol at any time. This leads to incomplete rest and recovery to enable them to be ready for the following shift, with adverse impacts on their health, emotional stability and mental alertness.
- The rangers are not happy with being told that they are the “backbone” of conservation, particularly while their remuneration and rewards are not commensurate to their jobs.
- The HR Department is seen by rangers as not implementing the policies, which contributes to employee unhappiness, and inadvertently misrepresents the organisation.
- Rangers' lives are exposed to risk on a daily basis as they could be killed by the poachers or by the animals that they have the responsibility to protect. The weather is also not sympathetic towards them, but they continue to perform their duties.

- Rangers need continuous on-the-job training and development to enhance their knowledge and skills, as they are faced with the challenge of protecting wildlife against very skilled persons.
- The rangers experience the wellness interventions as being altogether superficial as they do not address their individual emotional trauma after their encounters with poachers.
- The wellness services of the organisation are further compromised by being caught up in a quagmire of internal politics.
- The lack of standard practice in terms of the location of wellness services within the organisation does not help the cause of employee wellness, but causes confusion.
- Rangers experience communication patterns as being unsatisfactory, as they are not informed in time of the next patrols, whereas the managers find these patterns to be appropriate as they are aimed at ensuring that information is not given to the poachers.
- Reciprocal relationships and good teamwork are beneficial to rangers' survival when they are in the field trying to protect wildlife.
- Cultural practices, specifically the use of "muti", are used to strengthen them and protect rangers against the adverse after-effects of killing a poacher. Of importance is that the management of the organisation does not recognise this as important to assist by sponsoring the rangers to pay traditional practitioners.

- Lack of support from the organisation in as far as sponsoring the cleansing process compromises the rangers as it puts them in a precarious situation, for instance, they sometimes avoid shooting at the poachers because they already owe the traditional healer the cleansing money or they are still repaying a bank loan for the previous cleansing ceremony, so they avoid increasing the loan. Furthermore, their avoiding shooting the poacher is a risk that threatens their lives as they could be killed.
- The timeous processing of reward claims by the HR Department will ensure that the rangers are able to get their money in time to avoid further loans.
- Unhealthy relationships between the protected areas and the community are detrimental to successful anti-poaching efforts. Therefore, efforts have to be made to establish and maintain healthy relations.
- Despite the challenges that the rangers are faced with in executing their work responsibilities, they maintain a spirit of teamwork that helps them cope.

Based on the above conclusions, a series of recommendations for the policy, practice and future research are presented below.

6.4 Recommendations from the study

The following recommendations have been formulated based on the literature review and empirical findings:

6.4.1 Recommendations for policy

The following recommendations are made for the consideration of the organisation in order to address the challenges faced by the rangers.

- **Cultural sensitivity**

The organisation should make an effort to understand the cultural background of the rangers so as to provide services that are responsive to their needs. Culturally sensitive services to rangers can go a long way in increasing their resilience, as they will be enjoying the support of their employer. Even if the cultural practice of cleansing does not make sense to management, it means a lot to the rangers. Management needs to try to reach the rangers at their level.

The social worker, as the custodian of ranger wellness, should advocate for culturally appropriate interventions for rangers, as this would increase understanding between the parties, leading to dedication to work and increased production. It would mean a lot for the rangers if management was prepared to cover the costs of their cleansing procedures, in the same way as it is prepared to cover legal costs. Consultation with appropriate stakeholders would assist with the process and value estimates. The researcher's support of the rangers' views on this issue is based on the fact that the South African government, through the Traditional Health Practitioners Act (No. 22 of 2007) (Republic of South Africa, 2007), recognises the holistic nature of traditional healing and its psychosocial and spiritual role in the lives of individuals and the community, including employees in a given organisation.

- **Community relations**

The organisation needs to improve its relationships with neighbouring communities as they are important for the survival and continuity of wildlife conservation, for example, bioprospecting policies that would ensure access and benefit-sharing in accordance with the Nagoya Protocol. The organisation's stakeholder relations should ensure that comprehensive and well-coordinated public partnership programmes are visible and supported by the neighbouring communities.

For example, environmental education programmes can be intensified at school and community level to change the communities' perceptions and attitudes about conservation.

6.4.2 Recommendations for practice

The following recommendations are made for practice:

- **Employer-employee collaborations**

There is a need for employer-employee collaborations regarding the best way to improve the quality of rangers' work life. The establishment of a forum needs to be considered that would pay attention to rangers' challenges and needs, where different presentations could be made in pursuit of finding a win-win situation by encouraging open communication between the rangers and their managers.

For instance, a business case presentation that looks at the feasibility of paying rangers a living wage, and an analysis of the quality of rangers' work life, which highlights the impact of staff shortage on their family relations, poor living conditions, as well as the implications of inadequate salaries on rangers' lives. This would encourage the rangers to be motivated to do their best at work because they will be seeing an effort being made to improve their quality of work life.

In so doing, the employer would be allowing rangers to partake in issues that affect them, thereby making them feel valued and responsible for any outcome. In addition, this would address the lack of and poor communication that was indicated in this study. In fact, this is in line with the South African White Paper for Social Welfare (Department of Welfare, 1997:41), which stipulates that people should participate in factors affecting their wellbeing, societal growth and development. This principle of participation will go a long way in empowering the rangers and encouraging them to be committed to the demands of their jobs.

- **The custodianship of the ranger resilience-building model**

The development of a ranger resilience-building model and its custodianship by the Wellness Department could position wellness as a strategic partner in conservation, because of its supportive role, which focuses on maintaining a well-rounded workforce. Furthermore, access to wellness services should be improved to ensure that rangers are provided with resilience-building services. This could be achieved by increasing the workforce so that members could be able to get days off at the appropriate time and not be forced by the circumstances to work abnormal hours.

- **Family-friendly accommodation**

Since rangers live away from their families, their relationships and roles get compromised. For this reason, visitation rights should be explored. The researcher recommends that the organisation should make resources available and mandate the Wellness Department, in partnership with other stakeholders, to come up with an empowering school holiday programme in which spouses and their children could participate while visiting the rangers.

This requires management to pay attention to the accommodation used by rangers to make it suitable for family visits. Through this effort, rangers' psychosocial needs could be met, making them a happy workforce, and leading to increased dedication to work and production.

- **A caring and supportive environment**

In order to foster a caring and supportive environment, there has to be open communication between the managers and the rangers, as this will assist rangers not only to adapt, but will also empower them not to feel intimidated to voice their issues with their managers. Therefore, managers should consult with the rangers to determine the appropriate recovery activities with minimum risks in which rangers can be involved. Secondly, the issue of inadequate resources in the rangers' living quarters that compromises the quality of their work life can be addressed by involving rangers in planning and prioritising critical areas that should be prioritised given the budget constraints.

Lastly, consultation would also include a schedule of agreed time off from work that takes the needs of the employer, as well as those of the employees, into consideration.

- **Financial management programmes**

Financial management programmes should be offered to rangers, not only to minimise the financial pressure they have alluded to, but also to assist them to live within their means as salary increases cannot be done randomly, as well as to encourage them to save for the future. The social worker can arrange financial wellness workshops where rangers and their families are offered skills to assist them with financial management.

6.4.3 Recommendations for future research

There is a need to expand this study to include all the national parks and game reserves in the country so that the challenges faced by rangers could be broadly understood. With this understanding, appropriate interventions could be developed and modified to ensure improved production on the part of the rangers. Due to the fact that the developed model would not be pilot-tested within the scope of this study, it becomes important to pilot test it and evaluate its level of effectiveness.

Future research is needed to investigate the feasibility of family units in the parks and their implications. This would help gauge if they would make any difference in the lives of the rangers. A study is needed to investigate the role a multifaceted team such as HR, wellness services, labour relations and park managers should play in enabling rangers to be resilient.

The following chapter presents the resilience-building model that was developed as part of this study.

CHAPTER 7:

A SOCIAL WORK MODEL TO ASSIST RANGERS DEVELOP RESILIENCE

7.1 Introduction

This chapter provides a detailed account of the model that is aimed at assisting rangers develop resilience, based on what they have raised as their challenges and needs. The content of this chapter is based on the analysis of the information obtained from rangers and their managers or supervisors regarding their workplace challenges, as well as the literature review. Although this model is from a social work orientation, it could be used by any professional in the wellness sector to empower rangers to be resilient and productive. As mentioned earlier, the researcher, as Corporate Manager of Employee Wellness at SANParks, is responsible for enhancing the wellness levels of the employees to enable them to improve production. It was against this backdrop that the researcher found it expedient to embark on this study to uncover the actual challenges from the rangers' world view so that the model could be developed that was responsive to their challenges and needs.

The researcher's other intention, as Corporate Manager of Employee Wellness within the organisation, was to entrench wellness in the conservation industry. This industry is grappling with the menace of poaching, which creates a precarious life for the rangers. As has been highlighted in this study, the wellness of the people who are charged with the responsibility to protect wildlife is not given the necessary attention. This state of affairs has been shown to affect the wellbeing of the rangers, as well as their family relationships. This prompted the researcher to embark on this study, in order to assist them to cope with the adverse realities of their daily workplace environment. It is within this context that the ranger resilience-building model is presented in this chapter.

According to Cohen et al. (2005:13), a model and a theory are sometimes used interchangeably, as both are exploratory devices. However, a model is characterised by the use of analogies to give a graphic or visual representation of a particular phenomenon.

In addition, De Vos and Strydom (2011:40) postulate that a model is constructed when concepts are put together. It is often constructed from the empirical findings and answers the research questions. This model is based on the synthesis of the in-depth literature review, empirical findings that confirmed the rangers' workplace challenges and needs, and the possible solutions to the challenges. Thus, a fit-for-purpose model has been developed to assist rangers deal with their workplace challenges, thereby developing resilience.

Due to the fact that the study was conducted in a particular environment, Ezemvelo KZN Wildlife, the model has been tailor-made in the context of rangers employed by this organisation. Nonetheless, it is important to mention that the model can be adapted to address challenges faced by rangers in other wildlife environments as well. This is made possible by the data verification process that the researcher employed in this study, as highlighted in Chapter 3 of this thesis.

Furthermore, an effort was made to review the contents of existing models, and the relevant information was used in the process of constructing this model. In consequence, the researcher chose to combine components and elements from different resilience models to develop the ranger resilience-building model. These were the Resilience Wheel Model, presented by Henderson (2013:26), the Three-Factor Model, which underpins the survival of Antarctic employees during their expeditions, presented by Norris et al. (2012:40), and the Navy and Marine Corps Four-colour Spectrum Model, presented by Litz (2014:6). These models addressed similar problems to those the rangers are experiencing, although in different contexts, and were beneficial in giving the researcher a frame of reference regarding the development of a model. In concurrence, De Vos, Strydom, Fouché and Delpont (2011:511) claim that a model is a representation of reality, therefore the professional should have a clear understanding of the concepts to be able to build a scientific base for the profession. It could thus be said that the researcher endeavoured to design and develop a practice model that could be used to assist rangers develop resilience at work, enabling the organisation to develop a productive workforce with a balanced quality of work life.

In this instance, the following key concepts are used to embed the ranger resilience-building model: optimism and self-efficacy to assist rangers with high self-esteem to cope better because self-belief will enable them to recover from their daily stress, social support, positive relationships and trusting relationships with their families, colleagues and society, which are key in helping to reduce stress during testing times, and a caring and supportive work environment that offers collegial support and trust, and is aimed at facilitating rangers' sense of control and mastery over their actual workplace realities. These concepts will be illuminated further in this chapter.

7.2 Proposed model

In designing and developing a ranger resilience-building model, the researcher adapted and used the first four phases of the design and developmental research process as outlined by De Vos and Strydom (2011:476). The following phases were followed as illustrated in Chapter 4:

- Analysing concerns or problems identified.
- Setting the goals and objectives for developing the procedure.
- Identifying functional elements of successful models.
- Designing and developing the model.

These phases played an important role in guiding the researcher in the process of developing a model that is aimed at assisting rangers to develop resilience as they deal with their workplace challenges and needs.

7.2.1 Analysing concerns or problems identified

This is the first phase of the design and development of the model, and describes the challenges experienced by the rangers, according to their own world view. These findings formed the empirical part of this study.

According to Fraser et al. (2009:48), design and developmental research emerged as a result of professional self-reflection, where practitioners wanted to improve their service delivery and identify the problem, which forms the first phase of logical intervention. Likewise, the researcher was unsettled by the reactionary services offered to rangers after they had been exposed to trauma, which made the researcher wonder what could be done to proactively avoid the negative consequences of the workplace challenges rangers are experiencing on a daily basis as they execute their work. These prompted the researcher to embark on this study in order to improve the wellness service delivery for rangers in their workplace. In addition, De Vos and Strydom (2011:479) argue that moulding the questions that explore why the problems exist and why the interventions have not been successful will offer a valuable analysis guideline. It should be noted that the literature review revealed that no model has been developed for rangers based on empirical findings. As a result, rangers are receiving support services that are not based on their actual challenges. As indicated in Chapter 5 of this thesis, the identified key problems can be summarised as follows:

- There is an imbalance between rangers' work and social life due to continuous work demands. This creates a problem of poor quality of work life.
- Rangers are often isolated. Because of the unpredictability of their work, they cannot be part of the broader society. This contributes to their work-life conflict. Their non-work responsibilities suffer because they always have to be on guard, away from their families.
- The unpleasant living conditions, coupled with poor amenities that rangers are exposed to, add to their stressful work life, specifically given that they are unable to receive visits from all their family members.
- The shortage of staff and failure to fill vacant posts disadvantages rangers as they are unable to take time off to visit their families, nor are they afforded time to play their parental or spousal role. Therefore, their failure to sustain a full family and social life causes conflicts that impact negatively on their family life.

- The rangers work long hours and unpredictable shifts. These negatively affect their rest periods and recovery activities as they are always fatigued.
- Rangers are unhappy about their remuneration and rewards. They feel that they are not well compensated for the hard work that they do for wildlife conservation, whereas they are said to be an important component in the whole process.
- The rangers are of the opinion that they are not receiving adequate support from HR. For example, HR takes a long time to fill vacant posts, thus requiring them to work long, unpaid hours that keep them away from their families.
- Rangers need continuous on-the-job training and in-service development for effective service delivery. They indicated that this training will enable them to excel at their jobs, as well as advance them for promotion.
- The current wellness interventions are viewed as superficial because the providers (social workers) stay far away and are inaccessible. As a result, their services are merely crisis interventions and mostly proactive, not preventative.
- These proactive services are experienced by the rangers as not addressing their actual individual needs because of the manner in which they are rendered, e.g. the wellness practitioners were said to be “ticking the boxes”, which means that they were simply satisfying the bureaucratic requirements, rather than empowering rangers through therapeutic counselling services.
- Good teamwork among the rangers keeps them going amidst their unfavourable work environment as they support one another. Rangers alluded to depending on one another’s support during testing times, for instance when one got sick during patrols, the other one would help carry the firearm and assist the sick one until they got help.

- Rangers need the organisation to support their cultural practices, which play a protective role during testing times. Since many believe in traditional cleansing, they need the organisation to incorporate this into their support efforts to help them cope.
- The relationship between the community and the organisation is not strong enough to derive positive community behaviour that supports conservation. It was found that the relationships were soured by poor maintenance of the park fences, which caused wildlife to escape and kill the community's livestock. Some community members also use dogs to hunt antelope from the park.

Based on the above aspects of the workplace challenges and needs faced by rangers, it became evident that they need to be supported to develop resilience to cope. The goal of the model is to mitigate the negative impact of the workplace challenges and needs to enable rangers to be productive.

7.2.2 Setting the goals and objectives for developing the procedure

The second phase of the model involves identifying targets for change and key aspects of intervention. Goals are referred to as the desired outcome, whereas the objectives are specific changes to the attainment of the goal (De Vos & Strydom, 2011:479). The goal of the ranger resilience-building model is to ensure that rangers are able to overcome their workplace challenges, bounce back and continue to offer their services in a productive manner. The dangers and other challenges faced by rangers in their quest to protect wildlife are the reality that cannot be wished away. As a result, efforts have to be made to empower rangers to develop resilience so that they can remain positive and productive. Since rangers are the custodians of wildlife and work at the frontline of anti-poaching efforts, they need to be resilient to continue with their noble work efforts.

The goals of the ranger resilience-building model are as follows:

- Portray the organisation as a caring employer that is interested in ensuring the welfare of its employees.

- Inculcate a sense of loyalty in the rangers, which is critical to the organisation achieving its conservation goals.
- Provide psychosocial support that will enable rangers to deal with their challenges, adapt and lead a normal life.
- Assist the rangers to develop resilience.
- Offer the rangers a supportive organisational relationship that is characterised by empowering, open and trusting communication.
- Positively contribute to a balanced quality of work life for the rangers.
- Improve and strengthen the organisational and community relationships.
- Improve and restore family relations between the rangers and their families.

As has been emphasised earlier, ensuring that the abovementioned goals are achieved within the organisation will enable the rangers to bounce back amid a challenging work environment. Furthermore, since the findings of this study revealed that rangers were faced with multiple workplace challenges that affect their quality of life, the desired outcome of this study, as outlined in Chapter 1 of this thesis, was to develop a ranger resilience-building model that would help rangers deal with their workplace challenges in a resilient manner. In order to achieve the development of a ranger resilience-building model, the following objectives were formulated:

- To substantiate the model with literature on resilience as discussed in detail in Chapter 3.
- To incorporate the challenges and needs of rangers from the empirical findings, as alluded to earlier, in the proposed model.

- To propose a model that will ensure that the needs of the rangers are taken care of, based on the findings of this study, which is to empower them to cope with the many challenges they are faced with while executing their daily duties.
- To include wellness services in the organisation as the overall custodian of the model to ensure its implementation.
- To consider integrated organisational support for ranger resilience.
- To highlight the important role played by culture in the lives of the rangers as they deal with their workplace challenges and emphasise its importance in enabling the rangers to continue with their work despite their unfavourable workplace environment.
- To consider governance as the framework that will ensure the successful management and implementation of the model.

The aforementioned objectives were not only critical in setting the parameters for the development of the envisaged model, but also helped structure the next step in the development phase, which is identifying functional components and elements of successful models.

7.2.3. Identifying functional elements of successful models

The third phase involves finding out what others have done and incorporating those successful components and elements into the design and development of the model in order to avoid reinventing the wheel. The synthesis of existing knowledge guides the design and development activities, as stated by Fawcett et al. (in De Vos & Strydom, 2011:482). The researcher used a mixture of components and elements from different resilience models, as already indicated, to substantiate the ranger resilience-building model.

As this study established that rangers have diverse challenges and needs, it is important to highlight the need for interdisciplinary team collaborations, as working together to find solutions will enable rangers to develop resilience.

According to Norris et al. (2012:36), systemic exposure to wide-ranging challenges can create psychosocial disequilibrium, therefore frameworks that identify the factors that reduce vulnerability and develop a proactive model for a resilient outcome are ideal. Based on the findings of this study, it can be said that the rangers should be assisted with coping strategies in order to deal with the negative effects their jobs have on their quality of work, family and social life.

The following components and elements of successful resilience models were incorporated into the development of the ranger resilience-building model:

- Optimism and self-efficacy are among the identified components as positive thoughts enhance adaptation during hardship, thereby assisting one to overcome hardships (Griffith & West, 2013:142; Norris et al., 2012:41). This would assist rangers to remain committed to their work, as being hopeful during testing times will help them adapt and have confidence that things will eventually turn for the best.
- As far as the organisation's role in building resilience is concerned, Norris et al. (2012:37) maintain that a caring and supportive organisation encourages open and trusting communication in its workplace. Creating an enabling and empowering environment is thus vital for positive adaptation and a resilient outcome. This suggests that open and trusting relationships between the organisation and the employees is a resilience-building functional element that may bring about stability, as employees are always kept informed and know that the employer is behind them. This will assist them to cope and be optimistic about the future, amid the challenges they face.
- Thus, the researcher is of the opinion that employer-employee collaborations should be explored to come up with the best way of having open and trusting relationships, as this will drastically improve the quality of rangers' work life. In this case, the establishment of an interdisciplinary team approach was explored.

Correspondingly, Narehan et al. (2014:25), Mukwazvure and Magadza (2012:1066) and Brown and Reilly (2009:12) maintain that employees are the organisation's most valued assets, thus their pay and rewards arrangements should be sufficient. This study, in particular, showed that rangers are not happy with their remuneration and rewards, and for that reason the organisation has a duty to rectify or prove to the rangers that they are truly valued assets by initiating an open line of communication for all the parties to interrogate the pay and rewards aspects. The researcher agrees that feeling that one is being heard as an employee goes a long way in confirming that one is needed within the organisation. Moreover, Norris et al. (2012:43–44) argue that the degree to which information dissemination occurs between the organisation and the employees may facilitate empowerment and adaptation. Therefore, clear, open and empathetic communication offers knowledge and understanding of the situation, and thus builds trust. It could thus be said that trust between the organisation and the employees, in particular, increases productivity and improves wellness.

- A healthy and supportive supervisor-supervisee relationship is another resilience-building element within the organisation that increases trust and promotes competencies, and empowers and brings about feel-good emotions. Undoubtedly, Grant and Kinman (2012:614) and Norris et al. (2012: 41–45) concur by arguing that a collaborative organisational climate, positive relationship dynamics, open communication and social support are positive traits associated with trust, growth and empowerment, which are in turn consistent with resilient outcomes.
- The findings of this study show that, although there is a positive relationship dynamic among the rangers themselves, a positive, collaborative organisational climate is needed. Firstly, the supervisor-supervisee partnership lacked trust, for example unpredictable camping instances are experienced negatively by rangers because they are unable to plan or prepare themselves psychologically and physically, thereby straining relationships.

They just have to go camping immediately when a call is made. Secondly, the rangers' managers feel that they are not getting the necessary support from HR, and this compromises their management of operations.

This frustrates them as they feel they are not in control of their work, which affects their interaction with the rangers, because at times they find themselves not having answers to some of the questions from the rangers in relation to their operational responsibilities. It could be said that the general organisational relationships are marred by suspicions and unhappiness, thereby compromising the general intentions of the organisation. Thus, the organisation can have periodic employer-employee forums where rangers can be offered a platform to voice their workplace challenges and frustrations. This will demonstrate that the organisation is supportive and caring enough to listen to its employees.

- Above all, cultural practices are the functional elements that mainly anchor rangers during testing times. In other words, they view their cultural practices as their protective factor that enables them to maintain balance while doing difficult and stressful work. Ungar (2011) and Norris et al. (2012:2) concur by saying that resilience is not only the capacity of individuals to navigate their way through the psychological, social, cultural and physical resources that sustain their wellbeing, but also to collectively negotiate for resources to be provided in culturally meaningful ways. The general feeling among rangers is that the organisation needs to consider paying for the rangers' cleansing ceremonies as they form part of who they are and how they define themselves, based on their cultural existence. The rangers find themselves rooted in their cultural practices and they use them to sustain themselves in the face of challenges that they face at work. The supportive role of cultural practices cannot be underestimated as it has a normalisation effect for them, and gives the rangers a sense of control over challenges, sustaining their hope that things will be normal again.

- In the same way, the promotion of rangers' wellbeing is a functional element that can be used to build their resilience. The findings of this study showed that the rangers experienced the wellness interventions they received as superficial and not curative, because they were not proactive in nature and lacked the depth to address their actual needs. This confirmed the researcher's assumption of the appropriateness of wellness services to rangers who were constantly exposed to trauma. In responding to the above concern, wellness services can address this by adopting the Navy and Marine Corps Four-Colour Spectrum Model as its wellness strategy to help identify the rangers' functioning level in the face of adversity. This ranges from wellness and thriving, to illness and disability, as stated by Litz (2014:5). This will ensure the timeous attendance of cases, which will improve efficiency levels, thereby promoting rangers' normal functioning and endurance. In adopting the abovementioned wellness strategy, wellness practitioners can improve their service delivery by interfacing with the rangers quite often, thereby offering interventions that are proactive rather than the purported reactive services.
- Moreover, the resilience of rangers can be increased through the encouragement of groupwork and teamwork, where rangers would not only mutually share experiences and realise that their feelings are similar, therefore that they are normal, but will also have the opportunity to determine the best solution to their problems and, in so doing, enhance their coping capabilities and social functioning. Seligman (2011:105) argues that teamwork helps minimise personal weaknesses as problems are tackled from different perspectives, thereby strengthening the likelihood of achieving set goals.
- Positive social support and good relations with their families and society are particularly resilient elements that are key in helping to reduce stress (Bernard, 2013; Henderson, 2013:24; Henderson, 2007). In concurrence, The University of Minnesota Extension Center for Community Vitality (2008) refers to these as social bonds that offer a safety net during difficult times, and enhance the belief that one can make a difference in one's social environment.

The US soldiers in combat recognised the importance of pro-social bonding in their work performance, and were encouraged to use Skype, cell phones, email and Facebook to keep in contact with their families, thereby building trusting relationships and managing possible conflicts (Seligman, 2011:104).

- The evidence from this research showed that, although some rangers kept in contact with their families through mobile technology, they were unable to take time off to visit their families or play their parental or spousal roles. As a consequence, their failure to sustain a full family and social life brought about dissatisfaction as this affected their relationships. The interdisciplinary team approach, in particular, may explore non-threatening ways to enable rangers to keep in contact with their families, thereby allaying the negative effects of absence from home that is compounded by geographical distance. For instance, the interdisciplinary team can arrange with the local mobile service provider to erect mobile towers to improve network coverage that will enable rangers to communicate with their family and friends with ease. In this manner, rangers' relationships with their significant others may improve, thereby increasing their wellbeing, which is essential for them to become more productive at work.
- In summing up the importance of good social relationships, Norris et al. (2012:44–45) maintain that trust facilitates adaptation and builds resilience. It is the predictor of one's ability to deal with complex and high-risk events, especially when relying on others to provide information and/or assistance. The findings in this study indicated that the relationship between the community and the organisation was not strong enough to derive the positive community behaviour that would support conservation efforts. Since trusting relationships between the organisation and the neighbouring communities are critical to the success of wildlife conservation efforts, the interdisciplinary team may come up with measures to strengthen these relationships by encouraging the neighbouring communities to act as fortresses for the park. Lastly, the organisation should ensure continuous monitoring and evaluation of these collaborations in order to determine if they achieve the desired outcomes.

On the whole, rangers should be encouraged to believe in themselves and have a “can do” attitude. This will enable them to be resilient to their workplace challenges and needs. In addition to this, the organisation should not only encourage open and trusting communication in its environment, but should also be sensitive and supportive to the diverse culture of its employees. This builds organisational stability as there are no surprises. Thus, employees become happy and productive. Lastly, wellness practitioners should be able to recognise the gap and adapt their services to respond to the needs of the employer and the employees if they are to be considered strategic partners.

7.2.4 Designing and developing the model

In the fourth phase, the recommendations of the study and the mixture of suitable components and elements from the different resilience models alluded to throughout this study were used to design and develop the ranger resilience-building model. The abovementioned models were chosen due to the fact that they address the challenges of rangers, as conveyed in the findings in Chapter 5. Secondly, they offer pertinent and effective solutions to the challenges raised by the participants. Thirdly, they are replicable, simple and practical. Lastly, it is hoped that they will positively contribute towards the promotion of quality of work life, thereby building and enhancing the development of resilience in rangers.

Having considered the components and elements of the abovementioned models as a framework for the proposed ranger resilience-building model, it is pertinent to look at the process of designing and developing the model. According to The Community Tool Box (2016), an action plan helps turning vision into reality, and increases efficiency and accountability. In addition, Fraser et al. (2009:33, 47) argue that the formulation of a procedure assists in clarifying the logical process of a model, which is how the model is effected to produce the desired change. Furthermore, Openshaw, Lewellen and Harr (2011:40) and Fraser et al. (2009:57–58) postulate that the benefits of a logic model lies in planning and using measures to assess the effectiveness of the intervention, such as defining the goals and resources needed and how those resources will be used to achieve the goals.

Thus, the researcher chose to formulate the delivery procedure for the proposed ranger resilience-building model on the logical process of the logic model, conceptualised by Weiss and Wholey (1970), because it depicts the relationship between the resources, activities and outcomes (Openshaw et al. 2011:41; Fraser et al., 2009:184).

Figure 7.1 provides a graphic representation of the ranger resilience-building model that was developed to assist rangers deal with their workplace challenges:

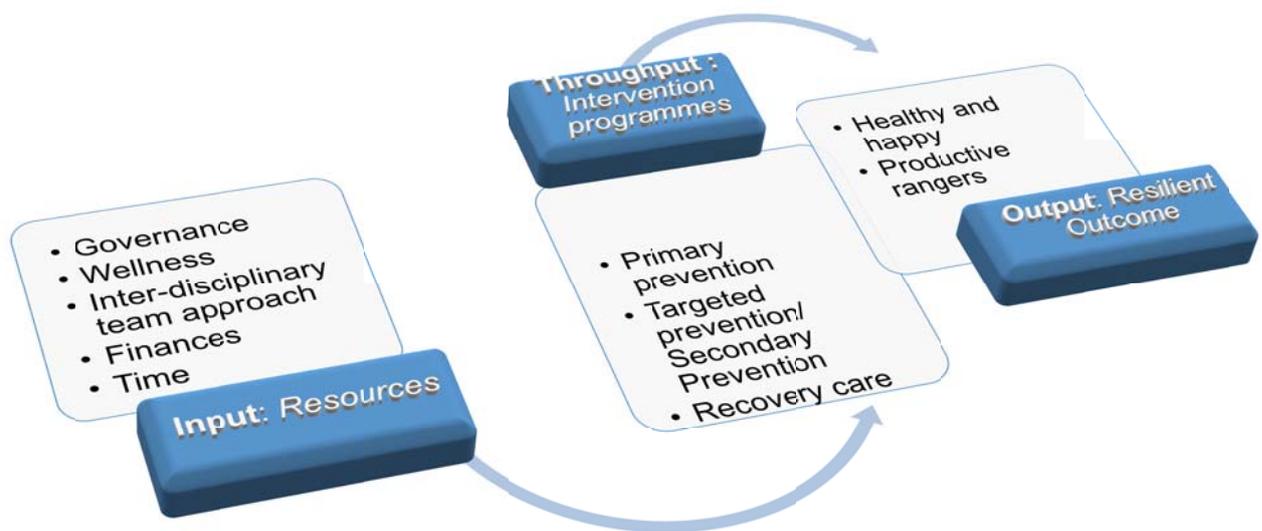


Figure 7.1: The ranger resilience-building model

7.2.4.1 Components and elements of the ranger resilience-building model

Identifying and selecting components from the previous studies that are practical, conceptually fitting and effective in addressing the problems in question will lead to a testable framework that can be replicated (De Vos & Strydom, 2011:481; SAMHSA, 2009:4). Since this model is embedded in the challenges and needs of rangers, its components and elements have to be about providing a comprehensive plan that will address the challenges and needs of rangers in relation to the conditions that cause them, including the possible solutions and alternatives.

The Substance Abuse and Mental Health Services Administration (SAMHSA) (2009:9) and The Community Tool Box (2016) concur by arguing that a model that does not address the risk and coping factors of the underlying problem is unlikely to produce the desired change and expected outcome. Hence, the components and elements chosen have the prospect of addressing the expressed workplace challenges and needs of rangers, and encouraging them to cope with those challenges, thereby becoming resilient. The following three sections guide and summarise the ranger resilience-building model that is envisaged to help rangers cope with their workplace challenges, thereby achieving the desired quality of work life.

In short, the proposed model consists of three sets of functional elements as shown in Figure 7.1. The first phase is the input phase, which refers to the resources needed for problem solution, such as governance and supportive interdisciplinary role players. The second phase is the throughput phase, which refers to the activities that have to take place, such as the integrated programmes that focus on the promotion of resilience, as well as prevention interventions that reduce or remove barriers to resilience. The final phase is the output phase. If successfully implemented, it is hoped that the model will lead to resilient rangers who are productive because they feel valued by their employer. The discussion of the abovementioned elements is as follows:

- ***Input phase: resources***

According to Openshaw et al. (2011:40) and Fraser et al. (2009:184), the input process is about identifying the resources that are needed to bring about the desired change, such as staff, training, equipment, time and finances.

- *Governance*

Governance is defined as the processes and structures of planning, implementation and monitoring that need to be established to ensure organisational accountability (Khanna, 2016:33). Governance, in this instance, is about the organisation supporting ranger resilience policies and ensuring accountability and commitment by allocating resources such as staff and budget for the effective implementation of the model to achieve the desired results.

Contrary to this, the central challenge highlighted by the rangers was that the organisation was not doing enough to support them. Therefore, they felt unappreciated. Nevertheless, ranger resilience is key to the organisation achieving its conservation efforts, as it enables rangers to deal with their workplace challenges in a resolute manner. Similarly, the organisation needs to put guidelines and proper measures in place to deal with risks and uncertainties that may disrupt employee adaptation and the achievement of organisational goals.

In achieving the abovementioned goals, the Wellness Department, in particular, should be mandated with the custodianship of this model. For that reason, it should coordinate the development of a policy to ensure that the programme is properly implemented and managed. Furthermore, the Wellness Department should be charged with the coordination of the interdisciplinary team approach meetings, where the interdisciplinary team will meet to discuss and advise on various workplace issues that hamper the wellbeing of rangers and impact negatively on their production and loyalty to the organisation, come up with possible solutions and alternatives, and ensure proper feedback mechanisms to the target group. The interdisciplinary team must make an effort to foster well-functioning communication between the organisation's management and the rangers to ensure that they are well informed about the efforts made at management level to ensure their wellbeing.

It is also important for top management to make resources available to the interdisciplinary team to enable the team members to reach out to the rangers and render a comprehensive service that is responsive to their needs. For instance, the study findings showed that rangers were exposed to many risks, which ranged from probable injury to possible loss of life and unforgiving weather patterns. Poor work resources and the lack of communication exacerbated the situation and caused discontent as rangers felt that they were not valued. The researcher is hopeful that, with this effort, the rangers will feel needed and not just used by the organisation for its selfish benefit at their expense.

- *Supportive interdisciplinary role players*

According to Ferguson (2014), an interdisciplinary advisory team engages in teamwork. Its emphasis is on an integrated approach where members build on each other's expertise to achieve a shared goal. The ideal situation would be an interdisciplinary advisory team that meets on a regular basis to discuss operational challenges that may hinder rangers' productivity. For example, line managers are of the opinion that the HR and Wellness sections have a tendency to move sick rangers to other posts without considering the impact on operations, thus compromising other rangers as they have to work extended periods due to the staff shortage created by the transfer. As a consequence, each unit uses its expertise to develop a solution to the problem and does not work as a team, to the detriment of both the organisation (poor productivity) and the rangers (unhappiness). In addition, evidence from this study pointed to the diverse challenges that rangers are faced with, such as poor quality of work life, unpleasant living conditions, coupled with poor amenities, superficial wellness interventions, the poor management and implementation of policies by the HR Department, poor community relations, and a disregard of rangers' cultural practices. These aspects need an appropriate intervention by the interdisciplinary team. It is important to note that ranger resilience is the responsibility of the organisation. Therefore, establishing an interdisciplinary team that meets on a regular basis to ensure that different aspects of rangers' workplace challenges and the quality of their work life are addressed will certainly benefit both the rangers and the organisation.

Due to the abovementioned factors, it is suggested that the following interdisciplinary advisory role players be established to add value to interventions geared towards building ranger resilience. Their respective roles are illustrated as follows:

Table 7.1: Interdisciplinary advisory role players

Stakeholder	Roles
<i>Wellness Manager</i>	<ul style="list-style-type: none"> • Custodian of the ranger resilience-building model • Coordinator of the interdisciplinary team • Consultant who will offer advice on all matters related to ranger wellness • Responsible for overall organisational employee wellness • Ensure a bespoke ranger wellness programme that attends to the wellness needs of rangers both at the individual and family levels • Empower rangers to take ownership of their wellness by participating in wellness activities and accessing counselling whenever necessary
<i>Ranger representative</i>	<ul style="list-style-type: none"> • Accountable to rangers • Represent the views of rangers within the team • Monitor the implementation of agreements and compliance • Influence the team to promote healthy employee-employer partnerships, (e.g. encouraging rangers to participate in recovery activities)
<i>HR Manager</i>	<ul style="list-style-type: none"> • Chairperson of the interdisciplinary advisory subcommittee as HR is responsible for the overall management of employees in the organisation • Give guidance based on organisational policies • Ensure that the decisions made within the team are geared towards promoting harmony between rangers and the organisation • Ensure adequate HR capacity within the organisation, taking the plight of rangers into

Stakeholder	Roles
	<p>consideration (e.g. staff shortages that negatively impact on the rangers' wellbeing as they do not get time off)</p>
<i>Reserve manager</i>	<ul style="list-style-type: none"> • Provide the necessary resources to the rangers to attain the organisational goals of wildlife conservation • Ensure that decisions taken within the team promote the sound management of the park in accordance with the government mandate (effective management of wildlife conservation) • Ensure that the needs of rangers are addressed and their quality of work life is continuously improved • Advocate and form a link between the rangers and top management. (e.g. ensure that living conditions of rangers in the staff quarters are suitable for human habitation)
<i>Line manager</i>	<ul style="list-style-type: none"> • Safeguard the interests of the operations as they interface with rangers (they have influence on rangers' job satisfaction and the engagement of rangers) • Advise on the corrective actions that will ensure operational success • First-line counsellor (lay counselling) of rangers as they know the joys and pains of rangers, based on the fact that they are the first ones to know about the negative encounters of the rangers in the process of executing their duty
<i>Partnerships: community member and tribal authority (ad hoc member: comes on</i>	<ul style="list-style-type: none"> • Help bridge practical and cultural barriers that may exist between the organisation and neighbouring communities

Stakeholder	Roles
<i>invitation when there is a need for public involvement)</i>	<ul style="list-style-type: none"> • Strengthen relationships between the organisation and neighbouring communities, advocate for the needs of community members in relation to the operation of the organisation • Mobilise the community to support the park's efforts using their advantage as community members who are knowledgeable about what is going on in the community
<i>Stakeholder relations/communications manager</i>	<ul style="list-style-type: none"> • Ensure consultation between the park and the neighbouring communities on issues that affect both parties • Advance the agenda of the park in conjunction with the conservation legislation • Promote stakeholder relationships by developing a communication protocol that will detail who should know what, when and how to avoid ambiguous messages • Ensure that everyone is informed of what is going on • Be the link between the organisation and the community

McCoy (2015) maintains that utilising an interdisciplinary approach is the best way to harmonise the workplace as different stakeholders work together to share their expertise and skills, thereby bringing a well-rounded view to solve diverse individual and organisational problems that may cause employee dissatisfaction, especially as there is a correlation between satisfied employees and productivity. Rangers may benefit from such collaboration as their issues will be attended to from a holistic perspective, which will make them happy and productive, thereby enhancing their resilience.

In summing up, the varied input process is critical for the achievement of the ranger resilience-building model. For that reason, the organisation should provide resources such as governance, manpower, finances and time to turn this into a reality. Furthermore, the members of the interdisciplinary team should work together to ensure that the needs of rangers are addressed in a manner that will assist them to be happy and productive, thereby becoming resilient to adversities.

- ***Throughput phase: intervention programmes***

The second step in the process is the throughput phase, which involves intervention programmes such as primary prevention, targeted prevention and recovery care interventions. The researcher found it important to explore the elements of the intervention programme that are necessary in the process of developing resilience in the rangers. Hence, she chose to use the abovementioned three-pronged intervention approach to effect the desired change. According to Bailey, Pignata and Dollard (2014:102), the determining factors that affect organisational and interpersonal relationships in the workplace assist management to focus the interventions and measure their effects. Furthermore, Bailey et al. (2014:103–105) postulate that primary prevention interventions are initiatives embedded in employee engagement, and are aimed at eliminating and reducing work-related stress, such as reducing workload and increasing social support. Secondary prevention interventions are targeted prevention initiatives that aim to reduce the effects of work stressors and modify stress responses before they lead to illness. Activities may include health promotion and coping interventions like relaxation, exercise and diet. Tertiary interventions are recovery care initiatives that are closely related to secondary prevention interventions, but focus on when an employee receives treatment, either counselling or medical care. It is about softening the impact that may have a lasting negative effect on the employee.

- *Primary prevention interventions*

According to Ajunwa, Crawford and Ford (2016:475), the wellness programme has evolved from being an EAP that helps employees with stress-related issues to one that includes prevention interventions and interventions that promote healthy behaviour at work.

Since this level of intervention is about promoting a healthy lifestyle and preventing risks that may disrupt rangers' quality of work life, rangers will be capacitated with wellness skills that will nurture and promote their quality of work life. This includes recovery activities and thus improves rangers' self-efficacy, which is important for resilience. In achieving a primary prevention, the following intervention strategies can be explored:

- Health risk assessment, sponsored by the employer, where rangers are given the opportunity to know their health status by being exposed to free lifestyle disease screening, for instance, testing for ailments such as high blood pressure, cholesterol levels, eye and ear health, tuberculosis, body mass index and HIV. These measures have shared positive outcomes because rangers will be aware of their individual health status and the organisation will be aware of their health risks, and thus intervene in time before there are negative consequences for either the organisation or the rangers. This is confirmed by Rameswarapu, Sai and Kamineni (2015:40), who maintain that a health risk assessment at work plays a pivotal role in assisting employees with lifestyle modification to combat risky and unhealthy behaviour that may have long-term, undesirable results on their lives.

- According to Qalinge (2015:141), groupwork is a social work method of working with a group of people for self-development, personal growth and self-reflection in order to enhance one's social development. The wellness practitioner may arrange pre-scheduled educational support groups where varied topics, ranging from how to prepare a nutritious diet to exercising regularly under specific circumstances, are explored. Furthermore, rangers may be encouraged to participate in financial planning, as well as explore the latest technology so that they are not left behind, especially in respect of gadgets that may improve their quality of life. A wellness practitioner may also offer therapeutic group sessions with those who experience similar concerns to help them cope. To keep these regular educational sessions interesting, rangers may suggest any topics that are of interest to them, and also suggest the frequency of those sessions.

This will enable rangers to suggest measures that could address their workplace challenges, thereby achieving their desired quality of work life.

- Sociocultural interventions that have shared value should be explored, for example, initiatives that nurture and enhance the relationship between the community, rangers and the organisation. For instance, offering rangers opportunities to be altruistic, like escorting and guarding community members during harvesting periods in the park when they collect thatch grass or mopani worms or even doing voluntary work on days like Mandela Day. This will make them feel they are still part of the community, despite their anti-poaching tasks, which isolate them from the community. This will serve as a protective factor that safeguards them against incidents similar to the incident where a ranger's drinking water was poisoned to avenge the death of a poacher.

- *Secondary prevention interventions / Targeted prevention*

Secondary initiatives use targeted prevention activities as they entail the identification of risk factors and the development of intervention strategies that will enhance employees' coping mechanisms, thereby assisting them in building resilience. Bailey et al. (2014:101) argue that psychosocial risks refer to the interaction between individuals, as well as a range of workplace factors that can have a detrimental effect on the health and productivity of an employee. In this instance, risk factors would be workplace challenges and their impact on the rangers, thus the identification of coping mechanisms may be appropriate intervention strategies to improve the situation before it becomes dire. For example, some rangers indicated that they use alcohol as a way to relax. However, the risk may be that their reaction and processing of information may be impaired, which may affect their response should a shooting incident occur and they are called to go on patrol immediately. Rangers should be assisted in figuring out enjoyable activities they may engage in without compromising the organisation's safety or their own health and safety.

According to The Community Tool Box (2016), certain categories of risks and coping factors should be considered when planning targeted interventions. These include personal and environmental factors.

➤ Personal factors

The Community Tool Box (2016) maintains that personal factors encapsulate physical needs that include health and recovery activities, such as recreational and dietary essentials. Additionally, emotional and aspirational needs are influenced by the heart and mind, and are about fulfilment, a sense of belonging and self-worth. Social capital is also regarded as a pivotal shielding factor to resilience because it increases self-esteem and confidence. As a result, the rangers' relationships with their significant others, such as family, friends and acquaintances, are imperative (The Community Tool Box, 2016). Rangers should be encouraged to keep in contact with their families and communities, as they are important support systems, especially during trying times. For example, when there is a tragedy, the community often rallies around the family to offer support. Their importance can therefore not be underestimated.

➤ Environmental factors

According to Naharuddin and Sadegi (2013:66), workplace environmental factors that may affect productivity and performance involve the total support employees receive from the employer in terms of knowing what to do, supervisor support and an enabling physical environment. This suggests that determining issues that affect employees and create a platform for discussion may create a positive work environment, thereby improving performance and productivity. Since the environmental risk factors to which rangers are exposed involve poor living conditions, inadequate and sometimes poor communication with authorities and poor amenities, the interdisciplinary team approach may be used to scrutinise the policies and come up with a strategic plan to address the identified barriers, such as housing and finances, among others. Consulting rangers on their work life issues would mean that the organisation is supportive of rangers' right to self-determination. This may have positive ramifications on their performance, and consequently on the organisation, as they will be fulfilling their conservation mandate.

Nonetheless, rangers were found to be each other's support system, which enables them to soldier on amid hardships, and needs to be encouraged at all times.

In conclusion, one can say that secondary prevention initiatives are supportive, solution-based processes, as identified risks are attended to on time before they become chronic, thereby enhancing employees' coping mechanism.

- *Tertiary or recovery care interventions*

Tertiary interventions that involve recovery care initiatives refer to non-medical support where the wounded or ill employees and their families are assisted to recover with a view to reintegrating them back into the world of work (Military Health System (MHS), [sa]). Recovery care initiatives are thus reactive services where rangers can be provided with post-incident care that is aimed at assisting them to re-energise, thereby avoiding the negative effect of the incident, for instance, a recovery strategy may include counselling to help rangers who are struggling with work-life balance cope with those challenges. Financial support by the organisation is another initiative that can be made available to assist rangers who have killed poachers in the line of duty to access legal and ritual cleansing services. In addition, giving rangers who were involved in a shooting incident with poachers a set time off to recover and re-energise at home in the company of friends and family may assist in restoring them to their normal state. However, wellness practitioners, in particular, should monitor rangers' recovery and re-energise the process by doing periodic family visits to assess how they are doing following the poaching incident, as well as to evaluate their social capital (family and community support), which is key to resilience.

In short, primary prevention is about initiatives that promote healthy behaviour at work, while secondary prevention initiatives are about mitigating the identified risks. Tertiary interventions are offered after the incident, and can thus be used to support rangers to recover, regroup and refocus.

- ***Outcome phase: resilient outcome***

The final phase of the process specifies the output of the programme, which is the desired outcome of resilient rangers who are healthy, happy and productive. Sullivan (2015:90), Freedman (2014:14), Litz (2014:3) and Rutter (2012:335) highlight that achieving resilient outcomes is a process of countering and preventing situations that cause stress, and protecting oneself against the negative effects of adversity. In addition, Violanti (2012:180) and Love (2009) argue that highly dangerous jobs are not only precursors to acute and chronic PTSD, but are also associated with adaptive and resilient outcomes. Thus, supportive programmes will enable employees to grow personally, within their families, and to thrive in their communities, thereby becoming resilient.

A resilient outcome for rangers can be achieved through the implementation of the abovementioned interventions, which are about the identification of risks and the promotion of protective factors that assist rangers cope with their workplace challenges. The researcher is of the view that open and honest communication between rangers and management is core not only to the success of the organisation, but can also boost ranger resilience, thereby harnessing a trusting relationship where both parties are able to share ideas and concerns in a meaningful way. This has the potential of facilitating the achievement of favourable outcomes, which are satisfied employees and a productive organisation.

An equally significant aspect of a resilient outcome is staying flexible as, according to APA (2011), maintaining flexibility and balance during stressful periods determines one's resilience.

7.3 Conclusion

In conclusion, the ranger resilience-building model is ideal for addressing the challenges experienced by rangers. Therefore, its implementation will assist the organisation to achieve its conservation mandate, while also assisting rangers to deal with the challenges that hamper their quality of work life, as well as their work performance.

As has been indicated earlier, the implementation of this model, and the evaluation of its effectiveness is beyond the scope of this study.

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ANNEXURES

Annexure 1: Ethical clearance letter from the Unisa Social Work departmental Research and Ethics Committee

DEPARTMENT OF SOCIAL WORK RESEARCH AND ETHICS REVIEW
COMMITTEE

18 January 2016

Ref#: DR&EC_2015_006¹
Name of Applicant: Mathekga, L
Student#: 57681074

Dear Mrs Mathekga

DECISION: ETHICAL APPROVAL

Name: Mrs L Mathekga

Address & contact details: PO Box 58653, Karenpark, 0118
Tel Number: 012 4265277

Supervisor: Dr J Sekudu

Title of Proposal: *TOWARDS RANGER RESILIENCE: A SOCIAL WORK
MODEL TO ASSIST RANGERS IN DEALING WITH WORKPLACE
CHALLENGES*

Qualification: Doctor in Social Work

Thank you for the application for research ethics clearance by the Department
Of Social Work Research And Ethics Review Committee.

The application was reviewed in compliance with the UNISA Policy on
Research Ethics by the abovementioned Committee at a meeting conducted
on 19 November 2016.

Final approval is granted for the duration of the project.

¹ Note: The reference number [top right corner of this communiqué] should be clearly indicated on all forms of communication (i.e. Wehmail, E-mail messages and letters) with the intended participants as well as with the Department of Social Work Research and Ethics Review Committee.

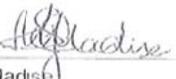


The proposed research may now commence with the proviso that:

- 1) The researcher will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
- 2) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the Department of Social Work's Research and Ethics Review Committee. An amended application could be requested of there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the participants.
- 3) The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, insitutional guidelines and scientific standards relevant to the specific field of study.

Kind regards,

Signed by: 
Professor AH Alpaslan 18/01/16
Chair: Department of Social Work Research and Ethics Review Committee
alpasah@unisa.ac.za

Signed by: 
Prof MPJ Madise
Manager Postgraduate Studies: College of Human Sciences

Annexure 2: SANParks empirical study regret letter

To develop and manage a system of national parks that represents the biodiversity, landscapes, and associated heritage assets of South Africa for the sustainable use and benefit of all.



South African
NATIONAL PARKS

Memorandum

To: Ms Lize McCourt
Acting Chief Executive Officer

Date: 23 February 2016

Re: REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN KRUGER
NATIONAL PARK

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golden gate highla

karoo

Ms Laurencia Mathekga requested permission from your office to conduct research in Kruger National Park (KNP) towards her studies in Doctoral Degree. Her study is titled: Towards ranger resilience: A social work model to assist rangers in dealing with work challenges.

kqalagadi transton

knysna lake area

kruger

Due to the sensitivity of the KNP environment and challenges regarding rhino poaching, you requested Legal Services to draft a confidentiality agreement between SANParks and Ms Mathekga. The intention of the confidentiality agreement is to bar Ms Mathekga from disclosing sensitive information that she may gather during her research work with the rangers in KNP.

mapungubwe

marakele

mountain zebra

namaqua

The doctoral candidate's work must be presented in a dissertation or thesis prepared under the supervision of a tutor so appointed by the University. The candidate is required to demonstrate in the dissertation or thesis truthful and original contributions to his or her specific field of knowledge. The dissertation or thesis is then reviewed by a Doctoral Committee and the academic degree of Doctor is received after a successful defense of the candidate's dissertation. A copy of the dissertation or thesis is then made available in the relevant University's library and may be published by the candidate for her peers to review the work in the relevant journals.

table mountain

tankwa-karoo

tsitsikamma

lal-jairs/richtersveld

vaalbos

west coast

wilderness

643 Leyds Street
MUCKLENEBK
0002

P.O. Box 787
PRETORIA
0001

Tel: 012 426-5000

centralreservations: 012 426 9111
reservations@sanparks.org
www.sanparks.org

A confidentiality agreement in this instance will not serve the purpose as Ms Mathekga will not be able to fulfil the requirements of her doctoral studies. Most of the information gathered during her research will not be included in her dissertation and the confidentiality agreement cannot be enforced against her supervisor as well as the Doctoral Committee that will dissect her dissertation.

It is recommended that Ms Mathekga be afforded an option to select any other national park to conduct her research. I am of the view that her study will immensely contribute toward conservation in general and in particular, may be used to shape SANParks' workplace policies.

We annex hereto a draft letter offering Ms Mathekga an option to select any other national park as recommended, for your consideration and if approved, your signature, please.

Sincerely,



Delsey Monaledi

Acting General Manager: Legal Services

Recommended / Not Recommended



Ms Wanda mkutshulwa

ME: Corporate Services

Date:

23/02/2016

To develop and manage a system of national parks that represents the biodiversity, landscapes, and associated heritage assets of South Africa for the sustainable use and benefit of all.



South African
NATIONAL PARKS

Tel: 012 426 5076

Fax: 012 343 0155

Email: fahlza.monaledi@sanparks.org

Ref No: 8/1/1 – 15 GRO064

Memorandum

To: Ms. Laurencia Mathekga
Corporate Manager: Wellness

Date: 23 February 2016

Re: **REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN KRUGER
NATIONAL PARK**

Dear Ms. Mathekga,

Your letter dated 20 January 2016 has reference.

You requested permission to conduct research in Kruger National Park (KNP) towards you studies in Doctoral Degree. Your study is titled: Towards ranger resilience: A social work model to assist rangers in dealing with work challenges.

SANParks has aligned its Strategic Plan and associated initiatives with government's Medium Term Strategic Framework and the 12 Outcomes so identified by government. SANParks' approach to capacity building is one which ensures that all core areas of the organizational operations are not only occupied by appropriately qualified employees, but such human resources are further developed and retained within the organization.

SANParks is honoured and pleased with your chosen field of study that will immensely contribute toward conservation. As you are aware KNP is under great pressure in the fight against poaching and SANParks is currently introducing security features in an endeavour to stop poaching.

addo elephant

agulhas

augrabies falls

bontebok

golden gate heights

karoo

kgalagadi transfront

knysna lake area

kruger

mapungubwe

marakele

mountain zebra

namakwa

table mountain

tankwa karon

tsitsikamma

uja-juis/nichtersveld

vaalbos

west coast

wilderness

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P.O. Box 787
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0001

Tel: 012 426-5000

central reservations: 012 428 9111
reservations@sanparks.org
www.sanparks.org

I am therefore unable to grant you permission to conduct the proposed research in KNP. However, I hereby offer you an opportunity to select any of our other national parks to conduct your research.

I look forward to hearing from you.

Sincerely,

Ms Lize McCourt
Acting Chief Executive Officer
Date:

PO BOX 58653

Karenpark

0118

20 January 2016

The CEO of SANPARKS

643 Leyds Street

Pretoria

Request for permission to conduct research in Kruger National Park

Dear Mr Mketeni

I am an employee of SANPARKS and a social work doctoral student from UNISA under the supervision of Dr Sekudu. I hereby request your permission to conduct my study titled: **Towards ranger resilience: A social work model to assist rangers in deal with workplace challenges**. The study will be conducted at Kruger National Park which has turned into the battle field between poachers and rangers therefore interview with rangers and management will contribute to new body of knowledge in ranger wellness both in conservation and social work fraternity.

The purpose of this study is twofold, firstly is to understand challenges faced by rangers in Kruger National Park as well seek to establish current strategies and policies that promote ranger support. Secondly is to use the information obtained from the participants to develop a practice model that is aimed at developing resilience in rangers. The study will not only contribute towards completion of my degree but will also assist rangers to be resilient in their workplace.

The ethical clearance has been obtained from the Department of Social Work Ethic and Research Committee and the confirmation letter is attached. I also undertake to send SANPARKS a bound copy of research findings upon completion of this study.

Please feel free to contact me for further clarification on 012 426 5277 or laurenciam@sanparks.org

Kind Regards

Laurencia Mathekga

Approved / Not Approved

Fundisile Mketeni

CEO: SANPARKS

Annexure 3: Notification of change of research site

PO BOX 58653
Karenpark
0118
02 March 2016

The Chairperson

Dept. of Social Work research and Ethics Review Committee

University of South Africa

Pretoria

Dear Prof AH Alpaslan

Notification to change research site from Kruger National Park (KNP) to Ezemvelo KwaZulu-Natal (KZN) wildlife

Student: **Mathekga HL.** (St No: 57681074)

Degree: **Doctor of Social Work**

Supervisor: **Dr J Sekudu**

Study Title: **Towards ranger resilience: a social work model to assist rangers in dealing with workplace challenges.**

Please be informed that the site for the abovementioned research has changed from SANParks' Kruger National Park (KNP) to Ezemvelo KZN wildlife. SANParks has indicated that rhino poaching in Kruger has become a sensitive matter that put them under tremendous pressure therefore they are unable to grant the permission to conduct the study in Kruger, however, they advised the student to consider conducting the study at another park within SANParks.

It should be noted that KNP is only park in SANParks that will give rich experiences of rangers who are continuously exposed to trauma from animals and poachers therefore choosing another park within SANParks and hoping it will work would be illusive.

Seeing that Kruger was inaccessible, the student then contacted Ezemvelo KZN wildlife the second largest conservation organisation in the country with rhino's population and poaching challenges. The CEO of Ezemvelo KZN wildlife Dr Mabunda was quoted by Weiners (2016) asserting that fortification of South Africa/ Mozambique borders has diverted poaching from Kruger to Ezemvelo KZN wildlife. This suggests that their rangers are having similar experiences to Kruger National Park rangers, therefore conducting the study in Ezemvelo KZN wildlife would still contribute to the rich body of knowledge as the study will still meet its objectives. Ezemvelo KZN wildlife is more willing to accommodate the research as they believe this study will be part of the multi-pronged approach in the war against poaching and attached is the letter of approval.

Thanking you in anticipation.

Kind Regards

Mathekga HL.

Annexure 4: Ezemvelo KZN Wildlife empirical study approval letter



CHIEF EXECUTIVE OFFICER

04 April 2016

Ms HL Mathekga
PO Box 58653
Karenpark
0118

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN HLUHLUWE-IMFOLOZI PARK

Your letter requesting permission to conduct research in Hluhluwe-Imfolozi Park at Ezemvelo KZN Wildlife dated 02 March 2016 has reference.

As Ezemvelo believes that the study will be of benefit to them, I hereby grant you permission to conduct such study at the above mentioned park within Ezemvelo KZN Wildlife. You will be accommodated at Ezemvelo facilities as a Guest of the Board.

Ezemvelo understands that the study will involve interviewing Field Rangers and Management amongst other things. This permission is granted with the understanding that Ezemvelo will receive a bound copy of research findings upon the completion of this study.

I wish you well in your studies.

Kind Regards

A handwritten signature in black ink, appearing to read 'MD Mabunda', is written over the printed name.

Dr MD Mabunda

CHIEF EXECUTIVE OFFICER

Annexure 5: Consent letter to assist with further counselling for participants

PO BOX 58653

Karenpark

0118

4 May 2016

Employee Health and Wellness Manager

Ezemvelo KZN Wildlife

Cascades

3202

Dear Smangele Simelane

Consent letter to assist with further counselling for participants

I am a social work postgraduate student from UNISA and part of the degree requirements is to conduct a research project. I am under the supervision of Dr Sekudu and my research topic is: **Towards ranger resilience: a social work model to assist rangers in dealing with workplace challenges**. I would like to know if you will be willing to assist with counselling participants who may be found to be in need of further intervention after participating in my study. The purpose of this research is to understand challenges faced by rangers in Hluhluwe–Imfolozi Park as well seek to establish current strategies and policies that promote ranger support. The study will not only contribute towards completion of my degree but will also assist rangers to be resilient in their workplace.

This request is informed by professional ethical responsibility, which prescribes that the researcher has to ensure that participants are not harmed in any way. I will be providing participants with debriefing session immediately after conclusion of every data collection sessions. However, I have to ascertain that participants who are not coping after their participation are restored to their prior emotional state to through further counselling.

Any questions about this study will be honestly answered, or should you need further clarification please contact me at 078 803 6616 or laurenciamathekga@yahoo.com

If you agree to assist with counselling please sign this consent letter.

I have read the information provided and would like to participate in the study

Thanking you in anticipation

Regards

Laurencia Mathekga

Name: -----

Signature: ----- Date: -----

Annexure 6: Informed consent letter – rangers and management

Dear Participant

TITLE OF THE RESEARCH PROJECT

TOWARDS RANGER RESILIENCE: A SOCIAL WORK MODEL TO ASSIST RANGERS IN DEALING WITH WORKPLACE CHALLENGES

PRINCIPAL INVESTIGATOR

Laurencia Mathekga

PO BOX 58653

Karenpark

0118

CONTACT TELEPHONE NUMBER

(012) 426 5277

DECLARATION BY THE PARTICIPANT

<p>I, the undersigned-----the participant of (Address) -----</p> <p>A. HEREBY CONFIRM AS FOLLOWS:</p> <p>1. I the participant was invited to participate in the above research project which is being undertaken by Laurencia Mathekga, the Department of Social Work at the UNISA, Pretoria, South Africa.</p>	Initial
<p>2. The following aspects have been explained to me:</p> <p>2.1 Aim: To develop an in-depth understanding of the challenges and needs</p>	Initial

<p>of the rangers stationed at the Hluhluwe–Imfolozi Park and develop a ranger resilience model to assist rangers to deal with their workplace challenges and needs.</p> <p>The information will be used to position social work profession and wellness as a strategic partner in anti-poaching environment.</p>	
<p>2.2 I understand that the study is embedded on qualitative approach therefore interviews as a data collection method will be used. Focus group interviews with the sample of rangers at the Hluhluwe–Imfolozi Park in order to establish their psychosocial workplace challenges and needs. Face to face interviews with management will be used to obtain understanding of the policy/strategy the Ezemvelo KZN Wildlife has on ranger support.</p> <p>I have been made aware that I’m required to participate in one of the two interviews which will be conducted on the-----day of ----- -----2016 Between -----and-----pm and on the day of-----2016 respectively.</p> <p>I further understand that following described data gathering, if Ezemvelo KZN Wildlife Hluhluwe–Imfolozi Park is selected to form part of the participants to pilot test and evaluate the proposed resilience model that I may again be required to participate in the study.</p>	Initial
<p>2.3 Risks: The risks that are likely to occur by participating in the study include psychological and economic risks. Psychological in a sense that as I share information pertaining to the phenomenon there is likelihood that some responses may be emotionally charged, Therefore to ensure psychological harm does not occur, the researcher will brief me about the study prior to data collection and have also been assured that thereafter I will also be debriefed. Wherein I require further emotional support, arrangements to that effect have been made with an Employee Health and Wellness Manager: Ms Smangele Simelane, employed by Ezemvelo KZN Wildlife who is a qualified social worker. I have also been informed that I can also consult a practitioner of my choice in this regard.</p> <p>Economic risks may involve threat to my job. I am aware that should I share</p>	Initial

<p>information criticising or be offensive to my employer and they accidentally heard about it then my job may be threatened. To avert this from happening, I have been assured by the researcher that permission to conduct the study has been obtained from my employer and that all management structures, have comprehensive knowledge about the purpose of the study. Further to that I have been informed that all participants who will be involved in the session, including myself, will be sworn to confidentiality ensuring that all comments made will not be shared beyond the setting. The researcher has also assured me that she will also hold all information shared by all the respondents confidentially.</p>	
<p>2.4 Possible benefits:</p> <p>The benefit of participating in this study is that I will be afforded an opportunity to give my own personal account of rangers' workplace challenges in a protected environment, where I will not be judged. The findings of the study will contribute to the development rangers' resilience model and conversely also benefit Ezemvelo KZN Wildlife in ensuring its rangers are healthy and productive. Further to that, I will also contribute to the generation and promotion of indigenous knowledge of green social work as a strategic partner in anti-poaching environment.</p>	Initial
<p>2.5 Confidentiality: I have been assured that as I consent to participate in the study by signing this informed consent form with my details in it that the form will be kept in a safe and lockable cabinet. Furthermore, I have been assured that that the information I will give will be used for research purposes only and that my identity will not be revealed in any discussion, description or scientific publications by the researcher and that to ensure my anonymity symbols will be used to refer to me instead of my name.</p>	Initial
<p>2.6 Access to findings:</p> <p>As a form of gratitude for my participating in the study, I have been informed that a seminar will be held wherein the researcher will share the findings of the study with all participants including relevant conservation community.</p>	Initial
<p>2.7 Voluntary participation:</p>	Initial

Annexure 7: Semi-structured questions guideline

Prompts for rangers:

The following prompts were asked to stimulate responses from rangers:

- Tell me about your experiences as a ranger in HIP/Mkhuze Game Reserve?
- Tell me about the challenges you experience while executing your duties as a ranger in this park?
- Describe your needs as a ranger on a daily basis as you execute your duties?
- Share with me how you have been coping with challenges in your daily duties?
- What kind of support has been offered to you to help you deal with the situation?
- Please describe your view regarding the support you are given?
- What would you like wellness services to assist/help you with in order to lessen the effect of the challenges and needs on your daily life, e.g. contact with loved ones?
- Tell me more about your relationship with your peers/co-workers?
- What do you do when faced with adversity in the line of duty?
- How would you like to be supported by management to cope with the daily challenges and needs you come across in your line of duty?
- Thank you for the valuable information. Is there anything else you would like to add before we end?

Guidelines for individual face-to-face interviews with management:

- Tell me about your ranger management strategy/policy in HIP/Mkhuze Game Reserve?
- Share with me what you regard as the workplace challenges facing rangers in this protected area?
- Kindly share with me what you regard as the needs of the rangers in their daily work in this protected area?

Please explain the strategy/policy used to support the rangers in this protected area?

- Could you kindly explain how the above strategy/policy is meant to support the rangers?
- From your observation, in what way would you say this strategy/policy is effective in supporting rangers? Please elaborate?
- Please share with me how you believe these rangers cope with their daily work within this strategy/policy you have explained?
- Which elements within the current strategy/policy take rangers' wellness into consideration?
- Share with me your suggestions on how to improve this strategy/policy for it to meet the needs of the rangers?
- Thank you for the valuable information. Do you have anything else to share before we end?

Annexure 8: Editor's confirmation letter



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fax: +27 080 080 2200

128 Annie Botha Avenue
Riviera
Pretoria

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Sinoville
0129

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14 July 2017

Language editing

This serves to confirm that the thesis, "Towards ranger resilience: a social work model to assist rangers in dealing with workplace challenges", submitted by Laurencia Mathekga for the PhD in Social Work at the University of South Africa, was edited for language use, spelling and grammar by a qualified language editor. The final document was provided to Ms Mathekga in track changes, and it was Ms Mathekga's responsibility to accept or reject the changes. Suggestions were also made with regard to missing references.

Kind regards



Janine Smit

Bachelor of Arts (University of Pretoria – 1983)

Postgraduate Diploma in Translation (University of South Africa – 1990)

Practising language practitioner since 1989

Conducting publication excellence