Lived Experiences of Emergency Medical Personnel in Capricorn district: Towards the Development of User-Led Model

By

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DECLARATION

I, Manganyi Patricia Siphiwe, declare that this thesis, submitted to the University of Limpopo, for the degree, Doctor of Philosophy in Social Work titled: **Lived Experiences of Emergency Medical Personnel in Capricorn district: Towards the Development of User-Led Model,** is my personal work. All materials used (either printed or from internet) have been cited and acknowledged by means of complete references. This work has not been previously submitted by me for a degree at this or any other institution.

Manganyi P. S

2021

………………………… ………………………………

Signature Date

DEDICATION

This study is dedicated to my parents, especially my mother, who has been a constant source of support and encouragement to me, without which this research study would have been much more difficult. You did not offer me financial richness instead I am abundantly blessed because of the prosperity of knowledge you shared with me. To my boys, Irvin, Junior, Jesse and my daughter Yolanda, you were the force behind the energy and hard work throughout the study, I always wanted you to be proud of me. This is for you. I also devote this study to my current employer, the University of Venda for the financial support.

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LIST OF ACRONYMS

AEA	Ambulance Emergency Assistant
ALS	Advanced Life Support
APA	American Psychological Association
ATA	Ambulance traffic accident
BAA	Basic Ambulance Assistant
BLS	Basic Life Support
BTEMC	Bachelor's Degree Emergency Medical Care
CBT	Cognitive-Behavioural Therapy
CCA	Critical Care Assistant
CID	Critical Incident Stress Defusing
CTT	Contemporary Trauma Theory
CISM	Critical Incident Stress Management
DoH	Department of Health
DSM-5	Diagnostic and Statistical Manual of Mental Disorders *(Text Revision)*
EAP	Employee Assistance Programme
EAPA	Employee Assistance Professional Association
ECG	Electrocardiogram
ECO	Emergency Care Officer
ECT	Emergency Care Technician
ILS	Intermediate Life Support
NDEMC	National Diploma Emergency Care

PTG	Posttraumatic growth
PTSD	Post Traumatic Stress Disorder
SA	South Africa
SFT	Solution Focused Therapy
TIC	Trauma Informed Care
TREC	University of Limpopo Turfloop Research and Ethics Committee
WHO	World Health Organization

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ABSTRACT

An Emergency Medical Service (EMS) is considered one of the most stressful work environments. Copious literature has demonstrated that emergency service work has an undesirable impact on the health and wellbeing of personnel. In South Africa, research findings described that emergency services personnel are among the highest group of professionals at risk of suffering from job-related stress. In spite of the fact, previous studies have examined the association between critical incidents and Post Traumatic Stress Disorder (PTSD) symptoms including the psychological influence of trauma, a minority studies have explored the EMS personnel's traumatic experiences and the subsequent coping strategies applied. This study sought to explore and describe the lived experiences of Emergency Medical Personnel in Capricorn District and to develop a user led model for mitigating occupational stress among EMS personnel. The principal aim of this study was achieved through the following objectives; to profile work related stress and the lived experiences of EMS personnel in Capricorn District, to Identify and appraise coping strategies employed by EMS personnel, to establish how accessible and user-friendly EAP services are to EMS personnel, to determine the nature of social support (colleagues and supervisors) EMS personnel receive and to develop a user-led model for EMS personnel.

This study was rooted in three theories, namely; trauma theory, resilience theory and the strengths perspective theory. The three theories were appropriate in this study to offer a perspective of situation and to analyse the situation under study to provide an understanding into the way in which EMS personnel make sense of their situation of the challenges they come across and make use of the available resources. The three theories interlaced together played a critical role in this study as they both align with building resilience, recognise individual's innate strengths and coping in the face of hardship. Owing to the inimitability role of the emergency personnel and the services' work context, the study adopted a qualitative approach. The purpose of the study was exploratory-descriptive in nature. Exploring both their experience of critical incidents and the coping strategies employed by them to mitigate work-related stress and traumatic incidents from this qualitative perspective allowed the researcher to employ phenomenological research

design for this study. A sample size of 21 emergency employees comprising 7 station managers and 14 EMS personnel) was obtained through purposive sampling technique. Thematic analysis was used to analyse data.

- The findings suggest that life in the emergency field can possibly have an undesirable long-term effect on employees' overall health and welfare and higher risk of PTSD. The distressing incidents were those in which the participants experienced feelings of vulnerability and had no control of the situations. The study established that emergency personnel find it most hard to deal with incidents involving children and colleagues. Emergency personnel suffer from emotional and physical stress owing to high job demands and repeated exposure to traumatic incidents. Regardless of the traumatic nature of emergency work and the inimitable role of emergency personnel, this study discovered that fact several stressors originate from organisational failure such lack of involvement in decision-making process, lack of training and shortage of staff. Unsupportive work environment, Lack of personal and job resources were found to be the extensive contributory factors to the job pressure experienced by which lead to compassion fatigue and exhaustion. It was also discovered the current EAP programme in the Department of Health (DoH) is not known and inaccessible to EMS personnel. The coping strategies utilised by emergency personnel were not adequate to prevent the aftermath of critical incidents. However collegial and social support from supervisors were found helpful in dealing with work-related stress. The study findings revealed that emergency personnel were unaware of the available support services within the DoH in Capricorn District. Collectively, the findings confirm that there is a need for an extensive marketing strategy of the EAP services and the user-led model which will be implemented by the organisation. The researcher recommends that EAP policies should form part of package given to new recruits during induction or orientation programme and diverse marketing strategies should be adopted to familiarise employees with EAP services available to them. The DoH should consider decentralisation of EAP services to enhance accessibility.

Keywords: *EMS personnel; Occupational stress; Post-Traumatic Stress Disorder (PTSD); Coping; Job resources; Employee Assistance Programme (EAP).*

CHAPTER ONE

GENERAL ORIENTATION OF THE STUDY

1.1 INTRODUCTION

This study endeavoured to profile work-related stress and the lived experiences of Emergency Medical Service (EMS) personnel in Capricorn District towards the development of User-Led Model. Emergency Medical Service is considered one of the most stressful work environments (Donnelly, 2012). The aim of EMS is to maintain public safety and health by providing and supporting individuals in numerous emergency cases. Owing to being inundated with calls, EMS personnel are obliged to act and make swift decisions and administer effective aid regularly without reassurance or support. Emergency personnel regularly experience adverse incidents such as shooting injuries, car accidents, cardiac arrests and paediatric trauma/death (Mac Ritchie & Leibowitz, 2010). Literature has scrutinised the emotional effects of exposure to distressing occurrences. Emergency personnel are not shielded from the critical incident exposure, which may generate health and emotional problems for themselves and the organisation. These occupational stressors are further exacerbated by the obligations that emergency service providers must render experienced, proper and multifarious life-saving interventions (Akhavan et al., 2017). Iranmanesh, Tirgari and Bardsiri (2013) established that emergency workforces are more susceptible to suffer from Post-Traumatic Stress Disorder (PTSD) compared to other professionals. Literature has scrutinised the emotional effects of exposure to distressing occurrences. Findings differ from non-harmful consequences to the bursting growth of PTSD. Furthermore, regular contact to hostile conditions exposes them to levels of emotional distress similar to the recipients of emergency care services. These occupational stressors are further exacerbated by the obligations that emergency service providers must render experienced, proper and multifarious life-saving interventions (Akhavan et al., 2017). The circumstances they work in together with lack of support or appreciation and the risk for personal injury often undesirably affects physical, emotional and social wellbeing of emergency personnel.

In the past years, research studies have shifted from simply fixating the attention to individuals who experience adverse events to comprise an inquiry of the stress encountered by those who have assisted the wounded (Carver & Connor-Smith, 2010). In a study conducted in Australia, the researchers found that experience towards hazardous environments had a harmful effect on the psychological, social and physical wellbeing of this population (Paterson, Sofianopoulos & Williams, 2015). It was also found that physical and emotional signs related with their experience to stressful situations encompassed emotional reactions of increased suspicion, grumpiness, guiltiness, infuriation, hopelessness and anxiety. Physical complications varied from dizziness, chronic fatigue, diabetes, hypertension and migraine headaches (Paterson et al., 2015). When emergency personnel encounter problems but are unable handle their emotional triggers of stress, it might result in chronic stress including social problems. Rebutting the distressing experiences and failure to acknowledge stress is a maladaptive coping method that is linked to burnout or fatigue (Yoshida et al., 2014). The ideal organisational health and wellness programmes need to consider a holistic approach when dealing with a person, taking into cognisance the impact of psycho-social aspects on individual wellbeing.

1.2 BACKGROUND TO THE STUDY

Traumatic events and violence are regular manifestation in many South Africans' lives. The type of the work of EMS professionals is entrenched within South African characteristic of high crime rate (Schwab, 2015; Subramaney, 2010). For the previous five years, South Africa as a country has been agonised and witnessed incidents such as the Marikana massacre, violent students' unrest at several teaching and learning institutions, and voting stations across the country, extensive xenophobic attacks, frequent sexual abuse and rape cases (Banchani & Van der Spuy, 2013; Bendile, 2016; Nkomo & Felton, 2016); Stolk, 2015). According to Statistics South Africa (2018), the crime rate has increased by 5%; robbery, cash in transit heist, violence against women and children while murder is at 6.9%. South African EMS professionals are exposed to various unpredictable work environment and dreadful life-threatening situations on a regular basis. They encounter events in which they must respond to several casualties,

suicide cases, injuries and death of individuals and fatal motor vehicle accidents. Research on experience to adverse events established that anti-social and self-destructive behaviour might also be engendered after exposure to a personally distressing event (Bowen, Edwards, Lingard & Cattell, 2014). Bowen et al., (2014) also found that the nature of trauma experienced by the emergency personnel were concentrated enough to demand professional intervention.

In South Africa, research findings established that emergency services personnel are among the highest group of professionals at risk of suffering from occupational stress (Akhavan, Nantsupawat & Martin, 2017). When EMS personnel are not able to cope with critical incidents, they regularly experience undesirable emotional and somatic outcomes that could lead to PTSD and burnout which results in many personnel leaving the job (Porter, 2013). The researcher argues that even though emergency work is both rewarding and demanding, it is very stressful at the same time. Hence, the need for psycho-social appropriate workplace-based prevention and intervention programmes or model that infuse social aspect among emergency workers is vital. Therefore, the researcher deduces that specific protective factors protect some emergency professionals from the detrimental effects of experience to life-threatening events. It is therefore essential for such individuals to have effective coping resources and strategies. The emergency personnel need to use various coping strategies to deal with the emotional and physical indicators linked with experience to stressful situations. Responding to the obligation to support emergency medical personnel to manage their increasingly hard-hitting professional and private lives, there is a need to embark on using organisational support strategies such as an Employee Assistance Programme (EAP).

1.3 MOTIVATION OF THE STUDY

The motivation for undertaking the study derives from the personal involvement of being employed in a health setting as a social worker at the Department of Health (DoH) for 17 years. Interacting and observing emergency workers on duty motivated the researcher to undertake this study. The understanding that protective factors are necessary to shield EMS personnel from traumatic stress also stimulated the researcher to undertake this study. From the past 20 years, research on stress has shifted from only pay attention to

individuals who experience adverse events to also embrace an investigations of the stress encountered by those rendered support to the victims.

Despite the fact that previous research studies have scrutinised the relationship between dreadful stress events and PTSD symptoms including the mental effects of trauma, Few studies have explored the EMS personnel traumatic experience and the subsequent coping strategies applied (De Beer, Pienaar & Rothmann, 2013; Porter, 2013; Macauley, 2015). The negligence given to the coping strategies employed by EMS personnel also motivated the researcher to undertake the study. There was no research conducted on the lived experiences and coping strategies utilised by EMS personnel in the DoH. Even though previous studies have been done, there has not been a remediation. Therefore, the researcher argues that there is a necessity for social and organisational support services to be in place and understand how a variety of coping strategies might be utilised to reduce levels of occupational stress effects after experiencing a particular distressing event. It is in response to this perception that the researcher aimed at exploring the lived experiences of EMS personnel with the intention of promoting health and wellness by developing a user-led model that will assist both the employees and the organisation. There is a need for EAP practitioners to have a broader contextual understanding of EMS employees' occupational problems in the DoH. The researcher notes that availability of adequate preventative strategies to combat work related stress is of paramount importance and would not only diminish the suffering of the employee but would also benefit the whole organisation. Currently, there is no EAP that infuses social aspects strategies in various institutions. This research informs treatment and departmental policies improves access to services and gives voice to what emergency personnel would find the most beneficial after critical incidents. Therefore, the study assisted in developing a user-led model that imbue social aspects to give social support in the employment industry.

1.4. OPERATIONAL DEFINITION OF KEY CONCEPTS

For the purpose of this study, the following concepts have been operationalised for simplicity on the focus areas of the investigation.

1.4.1 EMS personnel

EMS personnel refers to professionals registered under section 17 of Health Professional Act 56 of 1974 as paramedics, ambulance emergency assistance including non-professional assistants to these experts. In the context of this study, it refers to Emergency Care Officers (ECO), Basic Ambulance Assistants (BAA), Intermediate Life Support (ILS) and station managers.

1.4.2 Occupational stress

Rizwan, Waseem and Bokhara (2014:5) view this as “work demands that exceed the worker’s coping ability”. At a broader level, they state, “it involves interactions of work conditions with work traits that change the normal psychological or physiological functions or both”. In the context of this study, the researcher considers job stress to be a harmful physical and emotional response that can happen when an employee lose or lack of control over work performance and the inability to cope with high job demands.

1.4.3 Post-Traumatic Stress Disorder (PTSD)

PTSD refers to an anxiety disorder produced by a common, extremely stressful event such as death, serious injury or a threat to the physical integrity of self or others. It is characterised by (i) re-experiencing the trauma in painful recollections or recurrent dreams or nightmares; (ii) diminished responsiveness (emotional numbing), with disinterest in significant activities and with feelings of detachment and estrangement from others; and (iii) including symptoms as exaggerated startle response, disturbed sleep, difficulty in concentrating or remembering, guilt about surviving when others did not, and avoidance of activities that call the trauma (American Psychiatric Association, 2013; Levin, Kleinman & Adler, 2015:147). For this study, this definition was adopted to the context of the official diagnostic manuals focusing on the indirect exposure to aversive details of the trauma, usually in the course of professional duties by emergency personnel.

1.4.4 Coping

Hirsch et al., (2015:68) define coping as “a process whereby an individual effectively deals with challenges and life circumstances, which indicates “goodness of fit”. For this study, coping refers to employees’ ability to master, minimise or tolerate job stress in order to deal successfully or contend effectively with critical incident or situation.

1.4.5 Job resources

This refers to the psychological, physical, organisational and social aspects of the job that (1) decrease the job stresses and consequently the related physical and emotional impacts, or (2) are efficient in accomplishment of work goals, or (3) inspire individual development and learning, such as autonomy, feedback, social support and job security (Tummers, Bekkers, Vink & Musheno, 2013). In the context of this study, it refers to the collegial, supervisory and organisational support for the EMS personnel to cope with daily occupational stress.

1.4.6 Employee Assistance Programme (EAP)

An EAP “is an organised, employer-sponsored programme that is designed to support employees and, sometimes, their families as they adopt and sustain behaviours that reduce health risks, improve quality of life, enhance personal effectiveness, and benefit the organisation’s bottom line” (Berry, Mirabito & Baun, 2010:17). In the context of this study, it refers to the workplace-based programme that infuses the social aspect in the process of assisting EMS personnel deal with occupational stress.

1.5 RESEARCH PROBLEM

Literature on how emergency personnel cope with stressful experiences from social work perspective is scanty, and from what exists, the majority of research studies in South Africa with EMS populations have largely focused on pathological symptoms of stress (Jacobson, 2012; De Beer, Pienaar & Rothmann, 2013; Bowen, Edwards, Lingard, & Cattell, 2014). Few studies have investigated the emergency medical personnel experience towards critical incidents on a regular routine shift system and the subsequent coping strategies utilised (Minnie, Goodman & Wallis, 2015; Heightman & McCallion, 2011; Shepherd & Wild, 2014). These studies focused on cognitive behavioural theory

and cognitive-behavioural therapy (CBT). The two coping strategies utilised by emergency service providers were suppression and repressive coping. These methods have apparently worked as shielding aspects and might be the source of individuals' coping (Wagner & O'Neill, 2012). Lack of social aspect in this sphere creates room for a holistic approach that includes social coping strategies being incorporated in the workplace. The researcher contends that suppressing feelings and repressive coping following exposure to critical incident or a stressful event might result in more social and health problems. Even though literature appears to depict inconsistent information on which coping strategies are useful following exposure to adverse events, there appears to be concurrence on the necessity to investigate coping strategies that exhibit potential for managing occupational stress related with experience to adverse events. Little is known on the effectiveness of the coping methods they use to deal with the social and emotional impacts these events have on their lives. In support of this, Subramaney (2010) observed that those in the helping profession, including emergency service workers, are usually ignored during and after intervention in a rescue call.

Government is increasingly becoming aware of the impact of job stress and the need for support services; hence, the introduction of EAP programmes to support employees exposed to occupational stress (Grobler & Joubert, 2012). EAPs are perceived as an ideal integrated approach for work-related stress management and are hastily developing into benefactors of holistic employee wellness programmes in the workplace. Although research evidence is completely supportive of EAPs, there is also much debate and concerns about its accessibility (Schreuder & Coetzee, 2010). The Limpopo DoH introduced EAP services in 2007 with one EAP professional. The services are being centralised at the provincial office, providing services to all employees within the department in Limpopo Province from the lower level up to the senior management level. Therefore, the researcher notes that the services are inaccessible to the employees who need it most. In the South African context, EAPs have been studied more extensively which can be proven for by the amount of publications and theses which are examining this field of study (Govender, 2009; Rakepa, 2010; September 2010; Ndhlovu, 2010). Various EAP models suggest that the location of the EAP influences its accessibility (Jacobson & Attridge, 2010). These researchers have absorbed their focus on the

experiences and perceptions of employer and employees. However, the available data fails to consider the impact of programme accessibility and user-friendliness to the service users.

Herbert (2013) reported a robust sense of teamwork among a small sample of Irish fire service personnel (N=6), whereby supportive and effective team leadership, solidarity and friendship were reported to be significant in appropriately managing occupational stress. The researcher found that social support and collegial relationships have been accentuated as helpful when dealing with trauma. Lack of support from those in management positions has been found to envisage emotional exhaustion. Emergency service providers who lack adequate job and personal resources to deal with occupational stress are at greater risk for burnout or mental exhaustion (Collopy, Kivlehan & Snyder, 2012; Lorinc, 2016). Literature has generally emphasised the existence of a heroic and a stigmatisation of assistance seeking behaviour among rescue workers (Collopy et al., 2012). These types of conclusions emphasise a critical necessity to guard against the negative outcomes of work-related effects of stress among emergency professionals by rendering destigmatising and suitable methods of organisational and social support in the workplace.

The researcher deduces that since the Limpopo DoH has employed emergency personnel, there is a vast need to explore their lived experiences of occupational stress and the coping methods that are intrinsic and modified to manage the effects of stress exposure. The researcher also endeavoured to explore the organisational and social support services offered towards counselling, and to understand how coping approaches are employed to reduce levels of occupational stress following exposure to a personally disturbing event.

Most studies in this field have largely been quantitative and concentrated on the types of trauma that professionals come into contact with rather than specific coping strategies (Bourassa, 2012; Riolli & Savicki, 2012; Zander, Hutton, & King, 2010). There is a need to shift research from only focusing on the victims who encounter life-threatening episodes to embrace an understanding of the stress encountered by those who have assisted the victims (Wagner, McFee & Martin, 2010). Social support is a vital necessity

to the workers to avoid occupational stress and their physical health from being affected after rendering services. Currently, there is no available data on the social coping strategies utilised by EMS personnel in Capricorn District. Therefore, investigating both their experience of occupational stress and the coping methods to mitigate work related stress will similarly give a profound consideration of recommendations for future consideration. There is a need for EAP practitioners to have a broader contextual understanding of EMS employees' occupational problems in the DoH. The researcher deduces that availability of adequate preventative strategies to combat work related stress is of paramount importance and would not only diminish the suffering of the employee but would also benefit the whole organisation. Currently, there is no EAP that infuses social aspects or strategies in various institutions.

1.6 AIM OF THE STUDY AND THE RESEARCH OBJECTIVES

1.6.1 Aim of the study

The study sought to explore the lived experiences of emergency medical personnel in the South African DoH towards the development of a user-led model in mitigating occupational stress. It sought to enlighten and contribute to the scarce data on the adaptive coping strategies employed by emergency personnel after critical incident exposure.

1.6.2 Objectives of the research study

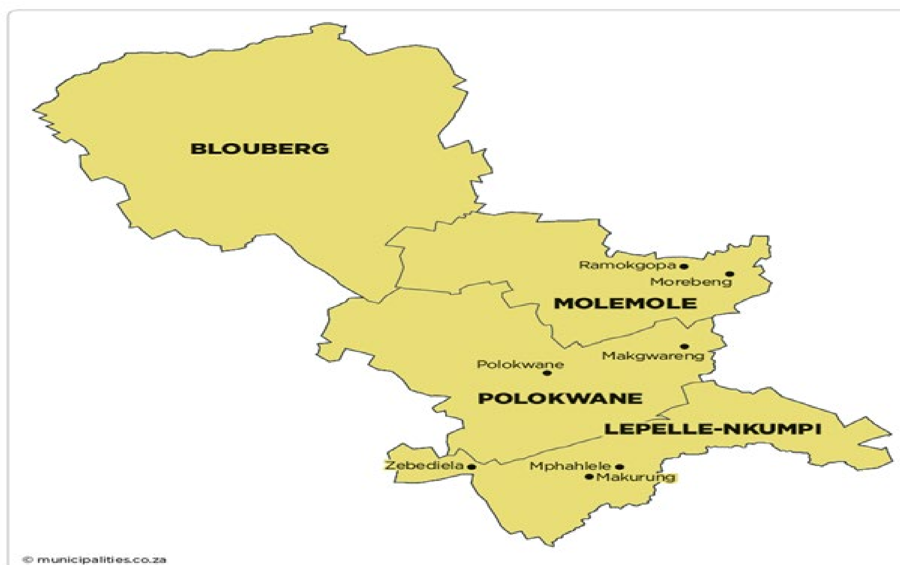
The following research objectives guided the focus of the study:

- To profile work-related stress and the lived experiences of EMS personnel in Capricorn District.
- To identify and appraise coping strategies employed by EMS personnel.
- To establish how accessible and user-friendly EAP services are to EMS personnel.
- To determine the nature of social support (colleagues and supervisors) EMS personnel receive.
- To develop a User-Led Model for EMS personnel.

1.7 PROFILE OF THE STUDY AREA

The study was conducted in Capricorn District Municipality. Here refer to the map below to connect the text with the figure.

Figure 1.1 Capricorn District map



The Capricorn Municipality is located in the Limpopo Province. The municipality is located as a layover between Gauteng and the northern areas of Limpopo, the north-western areas and the Kruger National Park. It forms a gateway to Botswana, Zimbabwe and Mozambique. It consists of the following four local municipalities: Blouberg, Lepelle-Nkumpi, Molemole and Polokwane. It stems its name from the Tropic of Capricorn, along which is situated Limpopo's capital, Polokwane (previously Pietersburg), lies in the heart of the Capricorn region.

Capricorn District covers an area of about 21 705km² and surrounded by the following cities; Alldays, Dendron, Morebeng (Soekmekaar), Polokwane and Zebediela. The district has an internal international airport, and it is connected to Gauteng by one of the best stretches of the N1 in South Africa. It has the third-largest district economy in the province,

and is largely rural in nature with a population size of 1 330 436 (Statistics SA, 2016). There is a total number of eight hospitals and 13 EMS stations in Capricorn District.

1.8 SIGNIFICANCE OF THE STUDY

What remains uncertain is how EMS personnel who frequently experience occupational stress cope. The study is intended to assist both the employer and employees of the Capricorn EMS to be more aware of the available coping resources and strategies that can be used by employees. Further, individual workers will be in a position to identify those resources that are more effective for them, while the latter will enable employers to meaningfully support the workers whenever necessary. It is also envisaged that the study findings could enable and motivate the DoH in designing and integrating the psychological and social intervention strategies and support programmes in addressing challenges faced by emergency workers. The research findings may enhance to a more holistic perception of EMS personnel coping methods and to contribute towards the development of the user-led model for employees who work within a highly stressful environment. Finding suitable approaches intended at averting stress and other employees' problems is vital and will not only reduce the amount of unnecessary suffering for the employee, but would also benefit the organisation as a whole. This will close a gap in contextualising the services to squarely fit the emergency workers and humanising the workplace.

This study is of value predominantly to the social work profession. Social work profession is in its early stages in its direct work with emergency response personnel and organisations. A social work goal can be achieved by working with EMS personnel. The practice could possibly influence the organisations in maintaining and enhancing the health and wellbeing of EMS personnel. The research will also assist as path to further review and appraise the work in which the profession is presently addressing the needs of EMS personnel and further developments assessment approaches and methods that are more proficient to meet their needs may emerge due to these research efforts.

At a mezzo level, the research is appropriate for further review of policies and programme development to further support the work, the effect and the recovery of these individuals who render their assistance at a flash's announcement. Notionally, the current study is

significant as it will further contribute to the data that support the positive resilience and strengths perspective framework when considering the response of emergency personnel as they are repeatedly exposed to hazardous and disturbing incidents. The researcher contends that addressing job stress can therefore not be a secluded matter with which the individual employee has to deal with alone and in seclusion. Subsequently, the study will inform a prevention and intervention model in relation to the health and wellness of emergency personnel.

1.9 ORGANISATION OF THE THESIS

This thesis contains eight chapters.

Chapter one: General orientation of the study

The main aim of this chapter is to introduce and provide a significant background to the study. The definitions of key terms that this research explored are elucidated. It provides the rationale and significance of the study. It also delineates the problem statement, aim and objectives of the study. The study area was also described.

Chapter two: Theoretical frameworks

This chapter discusses theoretical frameworks employed in this study. The following three theories were explored: Trauma, strengths perspective and resilience theory. The chapter also critiques each theory well as brief deliberations of how it informs social work practice.

Chapter three: Workplace stress and trauma in the emergency medical services

This chapter provides discourse on the nature of occupational / workplace stress in the EMS field. It also explores previous and current literature, which is pertinent in the framework of the current study, crucial areas explored comprise: the philosophy of trauma, occupational stress; South African work environment and stress in the emergency services.

Chapter four: Coping with experiences of trauma in emergency services
This chapter is dedicated into an in-depth discussion of coping strategies both adaptive and maladaptive employed by in emergency personnel.

Chapter five: Workplace intervention programmes to support EMS personnel

This chapter explored programmes to support stress management intervention at the workplace.

Chapter six: Research methodology

This chapter presents, in detail, the methodological approaches that were employed in the study as well as other pertinent data. It provides a detailed outline of the research approach, design, population and sample size quality criteria ethical considerations population and sample size. The chapter also presented all procedures that were followed in data collection and analysis process.

Chapter seven: Presentation and interpretation of findings
This chapter looks at the presentation, thematic analysis and interpretation of data. It also provides key findings, valuable and imperative context for the study.

Chapter eight: Summary of the major findings, conclusions and recommendations

This chapter outlined the summary of major findings, conclusions, implications for social work practice and recommendations towards the development of a User-Led model.

Chapter nine: A proposed user-led intervention model for emergency personnel

This chapter introduced a proposed EAP intervention model for emergency personnel in Capricorn District.

1.10 SUMMARY

This chapter focused on the introduction of the study background, research problem as well as the research approach. It also offers a synopsis of the motivation, aim of the study and research objectives. Despite the fact that earlier explorations having scrutinised the relationship between dreadful stress events and PTSD symptoms including the

psychological effects of trauma, few studies have explored the EMS personnel traumatic experience and the subsequent coping strategies applied. The negligence given to the coping strategies employed by EMS personnel also motivated the researcher to undertake the study. There was no research conducted on the lived experiences and coping strategies utilised by EMS personnel in the DoH. Even though similar studies have been conducted in the past, there has not been a remediation. Therefore, the researcher realised that there is a necessity for social and organisational support services to be in place and understand how a variety of coping strategies might be utilised to reduce levels of occupational stress effects after experiencing a particular distressing event. How best an individual is able to cope positively with hardship has a comportment on his performance. This study is of value predominantly to the social work profession. Social work profession is in its early stages in its direct work with emergency response personnel and organisations. A social work goal can be achieved by working with EMS personnel. The practice could possibly influence the organisations in maintaining and enhancing the health and wellbeing of EMS personnel. At a mezzo level, the research is appropriate for further review of policies and program development to further support the work, the effect and the recovery of these individuals who render their assistance at a flash's announcement. Notionally, the current study is significant as it will further contribute to the data that support the positive resilience and strengths perspective framework when considering the response of emergency personnel as they are repeatedly exposed to hazardous and disturbing incidents. Addressing job stress can therefore not be a secluded matter with which the individual employee has to deal with alone and in seclusion.

CHAPTER TWO
THEORETICAL FRAMEWORKS

2.1 INTRODUCTION

This chapter offers a contextual for the understanding of how the theories apply to emergency medical personnel as they work under stressful situations. A theory provides a framework within which a social phenomenon studied is understood and the findings are interpreted. It provides the researcher with a backcloth and rationale for the research that is being conducted. It also provides additional insight by categorising key elements within the data which might or might not support the theoretical framework (Bryman, 2012). Though the social work profession has historically identified itself as a profession that focuses on client strengths, there has always been a capacity-building aspect to problem-focused frameworks. Mabvurira (2016) postulates that social work is a field seems to lack its own theories. He further argues that nearly a century after its inception, social work practice and research continue to borrow from other social sciences disciplines such as anthropology, sociology, psychology and African studies. The notion of resilience and strength perspective has philosophical roots in social work, although social work enquiry related to these concepts application is objectively new (Social Work Policy Organization, 2011). Trauma theory is embedded in the discipline of psychology.

The current study was underpinned by three theories, namely; trauma theory, resilience and strength perspective. These theories were found to be relevant in relation to their capability to inform the study which looks into the lived experiences of emergency personnel and their subsequent coping strategies from a social work perspective. It is proper to ponder the process of coping with occupational stress in the background of positive trauma theory, resilience and strength perspective as it affords the prospect and autonomy for individuals to maneuver their way towards emotional, social, physical and cultural resources available to them. Such possessions will afford them substantial ways to boost their reliance. These three theories are entwined in a way that there are many characteristics in common with regards to how individuals learn through hardship and

trials and with support they can yield skills and psychological resources that empower them to endure through adversities.

Fundamental to social work is the practice of empowerment which takes place in several forms to meet clients' needs and the goal is to build on the intrinsic strength of individuals and let them realise their own strength, remain there for them in case of a critical event that they need support (Pulla, 2014). Social work, similar to psychology for a long time prefaced itself to work with deficit-based methods, overlooking the strength and experiences of individuals. For the past 15 years, social workers have been encouraged to adapt themselves into, asset creating, solution-focused, capacity building, strengths-based, inspiration enhancing and enablement experts (Pulla & Kay, 2016). This represents a dramatic departure from conventional social work practice. An inclusive range of philosophies influence contemporary social work practice which takes pride in its work with individuals in their recovery and their assistance through crisis. In this study, these theories will allow the researcher to classify, predict and conceptualise facts about the lived experiences of emergency personnel and the subsequent coping strategies. The philosophies, strengths and weakness for each theory will be delineated in relation to the study.

2.2 TRAUMA THEORY

During the twentieth century, combats and its dreadful effects on humankind have had a substantial influence on the development of ideas surrounding trauma. The trauma theory emerges from the writings of the father of psychoanalysis, Sigmund Freud. In Freud's writings, the term "trauma" is known as an injury of the mind, which, unlike the injury of the body, is a wound that cannot be cured, but that enforces itself again upon the mind of the survivor (Esterhuizen, 2017). Freud developed trauma notions by treating female cases of manic episodes. His novel theory hypothesised actual sexual experiences during infancy and early childhood as the cause of all trauma and the source for psychosis. In his advanced work with combat veterans, Freud recognised the role of real experiences in the onset of psychosis and distinguished between traumatic neurosis and anxiety psychoses based on whether a neurosis was caused by an actual incidence or an unreal experience (Shapiro, 2012). The key essentials of the trauma theory are (1) trauma is a

common response to an uncommon circumstances, (2) a particular experience is viewed as distressing as understood by the explicit denotation ascribed to it by the individual, not by external incidents alone, and (3) the salvage process from the trauma is realised to be sluggish and not time restricted but rather is related to the building of skills and self-worth assets before managing the processing of recollections of the trauma (Shapiro, 2012). Trauma theory provides a context for apprehension the influence of traumatic experiences. The theory efforts to comprehend the diverse conducts by which distressing incidences are revealed, confirmed, repressed, and managed. In the context of this study, trauma theory offers a theoretical framework in examining the ways in which critical incidences are processed by emergency personnel.

Based on trauma theory it is evident that traumatisation happens when both interior and exterior possessions are insufficient to deal with an exterior threat (Bloom & Harrison, 2011; Smyth, 2013). Central to trauma theory is the perception that the distressing experience crashes the individual's ego in intolerable ways. The ego is regarded as the core of emotional bustle and plays a critical role in categorising the denotation of experience. The trauma therefore assumes an unconscious connotation which tests and destabilises an individual's self-worth and is allegorically characterised in the symptoms of trauma. Within trauma theory, a critical point emphasised is that a distressing event affects an individual holistically, their worldview is deeply transformed by the traumatic experience. Trauma theory guides and outlines a comprehension of the compound and extensive effect of adverse occurrences. Explicitly, this theory assists in understanding the significance of dealing with the multifaceted effects of trauma and life-threatening stress. Trauma theorists are fascinated not only in how trauma experiences are processed and displayed by various individuals but also on how they might try to negotiate and resolve their own personal ordeals (Bloom & Harrison, 2011). In relation to this study, this theoretical approach serves to offer a deeper understanding regarding how emergency workers cope with traumatic events. Trauma theory attempts to assist survivors recognise that trauma can be managed, overcome and incorporated into a healthy sense of self. Trauma theory does not certainly focus on whether an individual is operating well after the incidence but rather those periods when the individual is stressed.

It is during these moments that trauma theory strives to assist the survivor re-count and comprehend the symptoms that are associated to the critical incident.

2.2.1 The limitations of trauma theory

As a notion fashioned out of wound linked to combat-time wounding, railroad accidents, or devastating natural disaster, philosophies of class, gender and sex, ethnic background have all been fundamental to the foundation of popular ideas about whose emotional response can be disturbed by near-death experiences, whose courteousness can be troubled by the dreadful incident, and who can be overwhelmed. In an eloquent comparison, Freud envisaged the mind as a single cell with an exterior membrane that does the work of filtering material from the external world, deterring toxins, processing nutrients, and retaining the integrity of its borders just as the conscious mind did (Connor, 2004). From Freud's trauma theory, a traumatic event was seen as rather extraordinary that bursts open the crust and deluges the cell with foreign substance, leaving the cell engulfed and trying to restore the impairment. In this regard the traditional trauma theory is criticised for perceiving trauma as a pathology, while simultaneously ignoring individual strength and factors that can promote resilience. In this theory, trauma was described as any innervations from external which are influential enough to break through the defensive armour. As such, there is no longer any possibility of preventing the mental apparatus from being flooded with large amounts of stimulus. This biologization and original sense of trauma which was presented as a wounding intrusion from outside and another problem arises instead, in fact helped produce the very term 'PTSD', and certainly its key symptom clusters. The burdened term was used on the war front to codify experiences of emotional stress that comprised blindness, loss of reminiscence and palsy. Ultimately, the scientific basis for PTSD was incompatible with psychoanalysis (Levenson, 2014). Therefore, while archivists and historians exploded the myths of the origins of psychoanalysis, the reorientation of psychiatry had also marginalised Freud. Freud's pervasion of certain parts of the humanities and his effective absence in the social and natural sciences has led to strands of trauma theory that continue along parallel tracks with only the vaguest (usually contemptuous) awareness of each other. The original trauma theory undervalued and misconstrued resilience, seeing it as well as a

pathological state or as something seen only in uncommon and extraordinarily healthy individuals.

McNally (2003) argues that people recall dreadful experiences all too well and that victims are rarely unable of recalling their trauma. In other words, psychological stress does not weaken memory, but may essentially improve and reinforce it. McNally (2003) further reveals how bystanders to viciousness normally fail to encrypt impartial or exterior details, concentrating instead on fundamental facts, and that psychological stress improves memory for the dominant aspects of the traumatic experience. There is a need for diverse models of trauma to be developed for better comprehension of the complicated history and incomprehensible advanced scope of design that is an inherently inter-disciplinary rooted. Without a multi-disciplinary knowledge, there can only be an unappetizing competition between disciplines to impose their specific conception of trauma. The limitations and the critiques of trauma theory led to the development of contemporary trauma theory.

2.2.2 The paradigm shifts of trauma theory

Much has changed in the century since the publication of Freud's works, where trauma appears to be considerable more than a pathology, or the elementary illness of an injured psych. While research in the field of trauma has conventionally been approached in a medical method through the utilisation of an ailment philosophy. The foundation of contemporary trauma theory (CTT) signifies a paradigm modification in how social workers perceive and treat survivors of trauma. The advanced trauma-based paradigm refrains from seeing survivors' poor functioning as resultant from faintness, illness, or insufficiencies in ethical character, and re-frames seeing survivors as emotionally and physically injured, and instead, in need of assistance and therapeutic (Lizeretti, Extremera, & Rodriguez, 2012; SAMHSA, 2012; van der Kolk, 2014). The CTT offers a theoretical basis for comprehension of the psychological physical and social effect of trauma. Contemporary trauma theory provides the foundation for trauma informed care in social work practice. In relation to the study, the CTT provides a theoretical framework in understanding the lived experiences of emergency employees and the influence of trauma on their daily functioning. For Stulman (2014:178), the emergent field of

contemporary trauma studies signifies a substantial alteration in the academic setting, a uprising of some kinds. The shift and development from traditional trauma theory to contemporary trauma theory focuses on wellbeing, communication and distress regulation, attachment work, interactive relational work, posttraumatic stress lessening, and self-work group.

A contemporary trauma framework is a philosophy, not a treatment. These theoretical backgrounds provide a contextual foundation within which trauma and the impact of trauma can be understood (Mac Ritchie & Leibowitz, 2010). The CTT is based on the following fundamental effects:

- *Dissociation*: Consist of a division of a person's character which is of the psychological, physical and social system as a whole that regulates his or her distinguishing emotional and behavioural actions (Nijenhuis & van der Hart, 2011; van der Kolk, 2014). Dissociation is the foremost defence strategy employed by an individual to endure the dreadful stressful experience.
- *Attachment*: Childhood trauma influences an individual's capacity to cultivate healthy relational associations and to establish trust, resulting to the inability to develop safe connection with others and to disruptions in personal relations (Siegal, 2010; Tarren-Sweeney, 2013). This might result into poor or unhealthy relationships.
- *Re-enactment*: A situation in which an individual search for relationships and exhibit behaviours that re-enact the original distressing incident. (van der Kolk, 2014; Courtois & Ford, 2016). Re-enactment evokes a concentrated psychological state that releases strain or nervousness and affords an individual with a sense of control and connectedness.
- *Long-term effect on later adulthood*: Unsolved childhood trauma may have overwhelming influence on human functioning later life. Trauma that is faced by a child prevents proper growth and disposes the child to undesirable re-emergence in adulthood, as well as comorbidity in emotional and physical health problems (Courtois, Lewis, 2012; Ringel & Brandell, 2012; Shapiro, 2012; van der Kolk,

2014). Subsequently, childhood trauma reduces the basic ego and results to obliteration of personal and interactive abilities.

- *Impairment in emotional capacities*: Psychological dazing and the interruption of the self-controlled system are direct effects of trauma on the brain and on the flexible functioning of the limbic system, the part of the brain that supports a diversity of activities, including the psychological life (van der Kolk, 2014). Critical incidence, specifically continuous experience of distress during, childhood result in hyper-arousal indications that include tension, hyper alert, nervousness, night horror, and somatisation (Shapiro, 2010; Van der Kolk, 2014; Van der Kolk). Victims of childhood trauma exhibit compromised capability to control their tempers and their emotional reactions as adults (Levendosky & Buttenheim, 2010; Mészáros, 2010; 2011; Shapiro, 2010). The inability to recognise their emotional state and of others may lead to detachment and disengagement identity disorder in life-threatening cases of abuse or highly traumatic workplace.

The contemporary theory of trauma underpins coping literature. While trauma theory has primarily focused on person's sense of having unsuccessful to live up to a faultless sense of self. The significant influence of this approach is the modification in the individual's sense of distinctiveness and strength to one of helplessness, dependency, worthlessness and welfare. Counsellors and organisations that function from this context recognise the occurrence of trauma and comprehend the wide-ranging influence of suffering on people's lives.

Contemporary trauma theory provides the basis for trauma informed care in social work practice. Trauma has been perceived and defined in different ways over the years, contingent on the development of knowledge and the understanding of the impact of traumatic experiences on the individual, family, community, and society (Van der Kolk, 2014). Recently, the definition of trauma has been consistently inclusive of the following elements: (1) an identified event or series of events, that is (2) experienced by the individual as emotionally or physically harmful, overwhelming, or threatening, and (3) has lasting and holistic effects on the individual's functioning (Ringel & Brandell, 2012).

Trauma studies created awareness that the influence of trauma whether it is felt directly or indirectly can be experienced by an individual or by the collective. A trauma-informed approach views presenting problems and symptomology as a maladaptive coping with unresolved traumatic experiences (Levenson, 2014). Ringel and Brandell (2012) note that the restorative and the salvage course must determinedly combat to overcome in the mind falsifications that yield feelings of insignificance and vulnerability Therefore, social networks and supportive environment are vital aspects in the prevention and treatment of post-traumatic stress. However, if there is a lack of support and the social network is depleted or unavailable, traumatic memories are more likely to continue to prey on the victim's minds and to be expressed as withdrawal, anger, and disrupting behaviour.

The contemporary trauma theory put more emphasis on organisations and employers to provide Trauma Informed Care (TIC) to all individuals looking for treatment or intervention (van der Kolk, 2014; Courtois & Ford, 2016; Levine, 2010). Contemporary trauma theory does not encourage unreasoning, unquestioning hopefulness that is consistently and generally applied in all situations and at all costs.

2.3 RESILIENCE THEORY

Resilience theory has its origins in the study of hardship and an attention in how hostile life experiences influence destructively on individuals. Resilience is defined as a human capacity (individual, group and community) to deal with crisis, stressors and normal experiences in an emotionally and physically healthy way; an effective coping style (Pienaar, 2012). Generally speaking, resilience is the capability to 'bounce back' when coming across the prosecutions that are an unavoidable part of life. The researcher argues that resilience is the ability to bounce back to a previous normal functioning or not showing any negative effect from some form of disruption. Therefore, promoting resilience is critical as it contributes to prevention of negative outcomes for people challenged by stressors such as EMS personnel. Gayton and Lovell (2011) found a positive association between resilience and wellbeing in paramedics, suggesting that by enhancing resilience, emergency personnel may find their health and coping improved. The work environment presents a wide-range of stressors to personnel, triumph depend on a person's ability to survive and even flourish when confronted with stress.

Rubin, Malkinson and Witztum (2012) contend that there are three factors that affect resilience: factors internal to an individual, environmental factors, and a product of the interaction between the person and the environment. Pienaar (2012) asserts that resilience can be seen as having four main determinants: external realities that function as stressors and challenges and which initiate risk and resilience process, external supports that promote resilience, inner strengths that develop over time, and interpersonal problem-solving skills. These resilience factors provide a cushion or protection against negative and harmful influences (Pienaar, 2012; Rubin, Malkinson & Witztum, 2012). Even though some individuals seem to be born with more resilience than others, those whose resilience is lower can learn how to increase their capability to deal with trauma, survive and thrive when the going through trials, resilience can be enhanced. Pienaar (2012; Rubin, Malkinson and Witztum (2012) argue that personal resilience can be reinforced and improved by developing a diversity of functional approaches that decrease susceptibility and frailty to stress. While substantial consideration has been absorbed to individualised resilience processes, even the most primitive resilience investigations highlighted the importance of relationships.

Studies have been consistent in presentation the centrality of an early caregiving rapport for developmental results through infant and into maturity areas. Relationships are part of a larger set called the 'social environment'. Resilience processes are not so much within individuals, but within networks of social relations with family, co-workers, associates and organisation. Some resilience scholars are drawing on the contextual social work concept of the person-in-environment (PIE) to construct a more comprehensive picture of resilience processes (Van den Berg, George, Du Plessis, Botha, Basson, De Villiers & Makola, 2013; Ebersöhn, 2012). Werner (2013:94) notes those who by midlife displayed better-than-expected results "relied on sources of support within the family and community that *increased* their competence and efficacy, *decreased* the number of stressful life events they subsequently encountered, and *opened up* new opportunities for them." Not only early infant relations, but also associations individual's current life, as well as adult life, are significant intervening aspects in the face or wake of hardship.

Van Breda (2017) classifies resilience processes into those that are distinct or personal (the P in PIE, such as religiousness and hopefulness), those that are in the social environment (the E in PIE), which consist of social relationships (with family and associates) and the environment (such as community safety and family financial security), and those that are interactional (the I in PIE, denoting to processes that link person and environment, such as camaraderie and compassion). Ungar's social ecologies of resilience takes this a step further. Ungar (2012:15) argues that while the resilience of individuals is a result of a combination of personal and environmental factors, "resilience is as, or more, dependent on the capacity of the individual's physical and social ecology to potentiate positive development under stress than the capacity of individuals to exercise personal agency during their recovery from risk exposure."

Within the social ecologies of resilience, attention is given to family relationships, communal structures, services (wellbeing, health and education) and culture as the fundamental and utmost influential resilience assets (Ungar, 2012). As a result, resilience-building interventions focus not on the individual, but on the social environment. These innovative advances give far superior weight to the social environment than the earlier psychologised resilience theory. Critical in the study of resilience is the concept external supports that promote resilience.

2.3.1 The importance of resilience at the workplace

Resilience is a fundamental life-skill that has its origins in the key to humankind's endurance. The capability to manage stress and unanticipated hardships, and even to flourish in such circumstances, is adaptive. Resilience is an individual, group or community capacity to deal with calamity, hardships and ordinary circumstances in a mentally, physically and socially constructive way; an effective coping style (Pienaar, 2012). There are specific aspects that influence resilience: individual aspects, ecological influences and the results of the relationship between the individual and his surroundings (Rubin, Malkinson & Witztum 2012). Resilience can be understood as comprising four crucial determining factors: the inner strengths that mature periodically, external supports that induce resilience, external influence that act as hardships and trials which stimulate risk and resilience process, and interpersonal problem-solving skills. These resilience

aspects function as a shield or security against adverse and detrimental effects (Pienaar, 2012; Rubin, Malkinson & Witztum (2012). Work settings are entrenched with stress; work-related stress influence personal and performance outcomes (Rees, Breen, Cusack & Hegney, 2015). Additionally, workplace stress is linked with high levels of depression, nervousness and fatigue. Resilient personnel are better able to deal with stress, and less likely to suffer from fatigue. Resilience has been associated with numerous positive states, including hopefulness, enthusiasm, inquisitiveness, vigour and openness to experience. These optimistic emotional state lead to 'thought-action repertoires' which then result in an impulse to reason or act in a certain manner. The experience of positive emotions (fostered by resilience) can expand activity, open an workers' eyes to a variety of opportunities and upsurge the probability of more inventive solutions for workplace behaviours. Positive sentiments also serve as a 'buffer' against work-related stress, optimistic feelings enable individuals to make constructive judgements of what otherwise may have been a taxing circumstances. Also, those who experience optimistic effect are more likely to utilise problem-focused coping which is of great assistance in the work environment (Pienaar, 2012; Rubin, Malkinson & Witztum, 2012). When people feel more positive, they tend to also understand apparently normal events and experiences as positive. Therefore, optimistic sentiments foster positivity in the workplace. Resilient employees build strong acquaintances and relations with others. These high-quality relationships can be characterised by a number of aspects. Acquaintances are branded by effective communication in which an individual pay attention and is responsive to their co-worker and their feelings (Laak, 2014). In positive work environment relations, a hardy employee will do what they can to support another individual to achieve success in the workplace. The hardy worker is a team-player who aims for a win-win with their fellow workers. Laak (2014) note that social support plays an imperative role in workplace resilience. It is useful to develop personal as well as professional relations, which can be a source of guidance and assistance during times of distress or merely to offer a nurturing association. It is also beneficial for personnel to have interaction with co-workers outside of their own immediate work environment. These people can offer validation to the employee and can possibly be reachable to the individual when accessing support within their own work setting would make the employee resilient. Resilience is not only

significant for its influence on emotional factors such as fatigue, adaptive workplace behaviours and cushioning against workplace stress. Resilience has also been implicated in physical wellbeing. Hefferon (2013) deduces that the emotional mindset involved with resilience is replicated in the body as well. Consequently, enhancing resilience is significant as promotes deterrence of undesirable consequences for individuals confronted with stressful conditions such as EMS personnel.

To develop and fostering skills for lessening the effect that hardship in the work setting has on employees to build personal resilience, Rees et al., (2015) propose the following:

- **Positivity**

By captivating a positive attitude at work, workers are more able to acclimatise to hardship and also grasp on to a sense of control over their work situation. Putting oomph and enthusiasm into work, or, having 'vigour' is also associated with building personal bounciness.

- **Emotional insight**

Alternative way of building personal resilience at work is by developing and solidification emotional insight. Perception is closely related to emotional intelligence. Individuals with a level of insight have a level of consciousness about the wide-range of feelings they experience, from 'negative' through to 'positive'. They will also consider the consequences of their own responses and conduct and the influence their own actions or behaviour have on others. Resilient individuals can be described as emotionally intelligent.

- **Balance**

Individuals can build personal resilience at work by attaining a healthy work-life balance. This is particularly thought-provoking in the world in which we live. To be able to bounce back from traumatic circumstances, employees need to have the vigour that cannot be easily depleted if a healthy work-life balance is not in place. Employees need time to relax, let everything go and recover.

- **Spirituality**

Having a sense of religiousness has been connected to developing resilience at the workplace. This may be linked to reducing susceptibility and the influence that hardship in the workplace has on employees. Finding meaning in work and feeling that this work is contributing to a superior virtuous, can shield against the influence of stress. It may also be because spirituality may lead personnel to view even demanding situations as having positive aspects or purpose, and appreciating potential benefits.

- **Reflection**

Becoming more reflective is another way individuals can build resilience at work. In other words, being in tune with one's emotions and emotional responses can serve to cushion against the negative effect of stress. Being aware of possible 'triggers' to stress can provide individuals with the opportunity to prepare and gather resources so they are better able to 'bounce back'. If an employee knows that a particular situation will be specifically problematic, they can then implement coping approaches, such as seeking support.

2.3.2 The role of resilience in occurrence of positive changes

It is recognised that employees in the emergency services such as emergency workers, firefighters and police officers are at risk of experiencing stressful events as part of their occupational duties (Riolli & Savicki, 2012. Potentially stressful circumstances involve numerous undesirable outcomes, relating primarily to the psychological, physical and social wellbeing of the individual, as well as the symptoms of PTSD. Research conducted in recent years have shown that the experience of the distressing incident may also foster the development of post-traumatic growth (PTG), a phenomenon thought to encompass the occurrence of constructive changes in self-perception, relations with others and gratitude of life (Hoffman, 2013). These changes do not happen because of the trauma or simply with the passing of time, but as a result of efforts to deal with the experienced traumatic event (Gayton & Lovell, 2011). In this way, some of those who have experienced trauma become sturdier and more mature. They notice an augmented capability to manage and thrive in tremendously harsh situations, identify new opportunities and possibilities in life and allocate themselves new purposes. Their study also concluded that enhanced resilience is associated with the number of years'

experience as a qualified Australian Queensland Ambulance Service (QAS) paramedic, having found that paramedical students showed considerably lower resilience levels than qualified paramedics regardless of their amount of work experience. Therefore, the researchers consider experience gained on the job to be one of the strongest resilience building factors for emergency personnel. The most fundamental take-out from this research has been that individuals are capable of learning skills that enable resilience, and that surroundings can be organised in ways that foster resilience (Gillham, Abenavoli, Brunwasser, Linkins, Reivich, & Seligman, (2014). Teaching features of resilient thinking and behaviours one can encounter are particularly distressing or regular, and engulf the levels of resilience we generally depend on day-to-day. The researcher deduces that the development of constructive changes succeeding the trauma can be regarded as a result of functional coping. Among the aspects affecting the occurrence of positive posttraumatic changes, particular significance has been ascribed to the individual resources and strategies adopted for managing stress. Ungar (2012:15) argues that while the bounciness of individuals is a result of a combination of individual and ecological factors, "resilience is as, or more, reliant on the of the individual's physical and social ecology to potentiate positive growth under stress than the ability of individuals to exercise personal agency during their recovery from risk exposure"'.

In a study of medical rescue workers, Ogińska-Bulik (2013) found active coping, planning, turning to religion, seeking psychological and social support and self-distraction to be approaches positively associated with PTG. However, research on gene-environment interaction (Rutter, 2013) shows that certain genetic features, in interaction with environmental circumstances (such as regular adverse life events or child abuse), contribute to the development of psychopathology. Additionally, it is anticipated that genes may also interact with optimistic surroundings to bring about more constructive results. The study indicated that both resilience and the choice of coping strategy were associated with the appearance of PTG, with this relationship being of either a direct or indirect character. In the case of the latter, it can be expected that resilience, as a personal resource stimulated chiefly in conditions of life-threatening stress, will support the adopted coping approaches, therefore, further influencing the manifestation of positive changes. Remarkably, it can be concluded that that resilience has regularly indirect influence on

posttraumatic constructive modifications changes through coping approaches. A critical fact to keep in mind is that resilience is not a solo, static personality characteristic, asset, trait, or characteristic. This suggests that individuals are not born hardy, but their resilience grows as they co-operate with the surroundings. Agents of socialisation such as the family, the institute and the public also increase resilience.

2.3.3 Significance of resilience theory in social work practice

Social work is a practice-based profession and an academic discipline that promotes social change and development, social cohesion, the empowerment and liberation of people (IFSW, 2014). In other words, social work is a change-oriented discipline. Vulnerability, risk or adversity is an important stage of the assessment phase in social work practice. A substantial proportion of a rigorous assessment is understanding the challenges clients face, and the history and context of those challenges. But there is more to a client than just their challenges, and therefore, a good assessment addresses not just the problem, but also the person of the client; it is the whole person that is of interest to the social worker. The clients' coping resources, strengths and efforts to deal with their challenges is an imperative part of understanding a whole person within their social environment (Van Breda, 2015a). If social work is sincerely concerned with the dignity and rights of individuals, then attention should be given to the full spectrum of human experience, both positive and negative, both strength and vulnerability. Similarly, resilience theory has a major concern with the mediating processes that enable systems to achieve better-than-expected outcomes in the face or wake of adversity. The adversity is most definitely fundamental in resilience theory. Promoting resilience is crucial as it contributes to prevention of undesirable effects for people facing hardship.

Gayton and Lovell (2011) have found a positive relationship between resilience and wellbeing in paramedics, suggesting that by boosting resilience, emergency personnel may find their health and coping improved. It indicates flexibility and adaptability using internal and external resources and problem-solving strategies. Relationships are part of a larger set called the 'social environment'. Some resilience scholars are drawing on the foundational social work notion of the person-in-environment (PIE) to construct a more comprehensive picture of resilience processes (Van Breda,2017b). This attestation,

which is copious in resilience research, locates resilience processes within not so much within individuals, but within social networks such as family relations, co-workers and the environment (De Villiers & Makola, 2013). Resilience theory is of utmost significance in social work, rationally and disparagingly applied, can help to open up new considerations of how people in the resource-constrained environment of South Africa work for their growth and development, and how social structures of disparity and opportunity can be mobilised to nurture a society that treasures social thriving in a workplace. This proposes that individuals are not born resilient, but their bounciness matures as they interrelate with the environment.

2.3.4 THE WEAKNESS OF RESILIENCE THEORY

Concurrence on a meaning of resilience has been hard in coming as different authors put a diverse spin on the concept. Descriptions are remarkably significant to safeguard that we talk or write in accord with each other. The term resilience has, to at least some extent, become an empty word that can be filled with almost any meaning. This superfluity of meanings for the same term has led to severe criticisms about the validity of resilience theory (Fletcher & Sarkar, 2013; Kolar, 2011). Resilience theory has its ancestries in the study of hardship and curiosity in how hostile life experiences impact negatively on individuals. Kolar (2011) has signified to this as a 'pathogenic' focus, meaning a focus on the origins of disorder or (in the social work context) a collapse in social wellness and functioning, which he contends has subjugated the medical and social sciences. Social environment such as crime or war repercussion, poverty were commonly fixated on mental health, as many of the researchers were psychologists or psychiatrists, but Werner's outcomes were more comprehensive, including intellectual, social, and physical development (Werner, 2013). Therefore, a feasible meaning of resilience should integrate all three components and focus on the mediating processes. Resilience research includes three interrelated components: hardship, consequences and intermediating factors. It is not possible to ponder or study resilience without considering all three components (Ungar, 2012. Nonetheless, the intricate with the outcome definition of resilience is that it simply affirms the observation of constructive results in the face of hardship; it does not explain them. A pronouncement without an description has restricted use and for this

reason the process definition of resilience is to be preferred. Theoretically, resilience is a process that leads to an outcome, and the fundamental emphasis of resilience research is on the mediating processes. Both the optimistic modification and the exposure to risk are considered central to the definition of resilience.

2.4 STRENGTHS PERSPECTIVE

The foundation of strengths perspective has been the snowballing of humanitarian philosophy, the ecosystem and the empowerment theories. The strengths perspective is a concept and a practice model developed within social work discipline. The strengths perspective is an ecological perspective that recognises the significance of individuals' surroundings and the numerous situations that impact their lives (Scerra, 2011). Strengths perspective has shifted attention from individual imperfections to the detection of qualities or potentials, identification of hazardous and shielding aspects. Strengths-based practice emphasises the following: the right and power of the individual to heal with the assistance of the environment and the need of an association with the optimism that that life might be better (Pulla, 2012). The researcher contends that strengths perspective is grounded on the principle that all individuals possess strengths, means and abilities. Individuals typically exhibit strengths when confronted with hardship.

Health and human services are progressively moving from a medical deficits-based model of practice toward an orientation that emphasises individual strengths and capacities. In the United States (US), the strengths perspective was developed in response to criticism of the deficit-oriented psychotherapeutic medical model that dominated social work practice (Guo & Tsui, 2010). Two fundamental components of the strengths perspective are liberation and oppression. Liberation, according to Saleebey (2009:7), is the idea of unlimited possibility, "the opportunity for choice, commitment and action". This is the notion that all individuals have capabilities to overcome hardship, change, grow, and contribute to the betterment of society. The antonym of liberty is oppression. It is crucial to comprehend the influences that obstruct individuals, groups, and publics (Saleebey, 2009). In social work discipline, the strengths perspective has emerged as a substitute to the more common deficit-oriented method to helping clients. As an alternative, the strengths perspective centres on individual's capacities, capabilities

and resources instead of concentrating on clients' difficulties and weaknesses. It is constructed upon the notion that all human beings have inborn abilities and a life-force, or inscription, which energies them towards their natural end point and the circumstances of their own thriving through use of their purpose and distinctive capabilities (Gray, 2010). The strengths perspective gives pride of place to philosophies of autonomy, liberty, and accountability. A social worker practicing from this approach concentrates wholly on identifying and eliciting the client's strengths and assets in assisting them with their problems and goals. Strengths-based interventions have a positive social impact, particularly in enhancing individual wellbeing through development of hope. Pulla (2012) argues that this perspective has changed focus from personal defects to the discovery of strengths, identification of risk factors and protective factors. Strengths-based approach honours two things: the power of the self to heal and the right of itself with the help of the environment, and the need of an alliance with the hope that life might be otherwise (Pulla, 2014a). The strengths viewpoint identifies that when individuals face hardship, they become hardy, progressive, resourceful and to overcome their hardships. Individual enablement and community empowerment are inter-reliant and also are collaborative phenomena. Pulla (2017) postulates that personal enablement recognises the client's individuality and remains comparable to self-rule. Societal empowerment provides their resources and opportunity to participate in significant roles in their environment and in determining what sort of setting they would like to be in or work with. This usually happens as an individual attempts on his or her journey of managing stress and becoming hardy.

The strengths perspective has the following assumptions:

- individuals have many talents and have the ability to continue to learn, mature and transform ;
- emphasis of intervention is on the abilities and ambitions of the client;
- social environment is seen as full of resources;
- service provider co-operates with clients;
- interventions are based on the client's autonomy;
- there is an obligation to empowerment; and

- difficulties are realised as the interaction between individuals, groups or organisation rather than weaknesses within individuals, groups or structures (Miley, O'Melia & DuBois, 2011).

Bhadra and Pulla, 2014) contend that there is cumulative attention in recognising and building on the capabilities and strengths of those supported by services, as a method to help them manage their difficulties and deliver their own resolutions. Strengths-based perspectives focus on the intrinsic assets of individuals, relations, structures and societies, positioning individual assets to support enablement and salvage. Fundamentally, to focus on health and wellbeing is to embrace a strength-based approach where the objective is to inspire the individual's own ability to resolve problems.

The following principles of strengths perspective are outlined by Pulla (2012):

- *Capacity for change and growth:* This approach emphasised that individuals have the ability to grow and change.
- *Knowledge about one's situation:* The strengths perspective believes that individuals have information that is significant to give meaning about their own circumstances.
- *Resilience*: In the strengths perspective framework, individuals are resilient. Resilience is perceived as the capacity and opportunity for people to survive through demanding conditions by a way of societal, emotional and personal resources that may support them conquer those frustrating situations and afford them with capacity and opportunity, independently, and jointly, to expressively approach life subsequent the hardship.
- *Membership:* The strengths approach considers that individuals have a need to be members of the society. Additionally, they ought to be accountable and respected affiliates in a feasible cluster or civic.
- *Strengths and interventions:* According to strengths perspective, people are connoisseurs in their lives and are also responsible to improve their own circumstances.

This theory assumes that individuals' strengths make them resilient in time of misfortune and that people who struggle to acquire knowledge and grow strengths and characters that turn to be assets to continue with life.

Strengths-based perspectives can work on an amount of different levels from individuals, groups, families and societies (Foot & Hopkins, 2010). The crucial goal of the strengths- or assets-based approach is to assist individuals reach their aims and ambitions associated with their wellbeing and quality of life (Anderson & Heyne, 2012. The emphasis of this perception is to better comprehend the use of a strengths perspective for transforming associations between service providers and recipients or beneficiaries of the services. The perception will also offer an overview of the evidence of the approaches that align most closely to this focus and will present designated descriptive illustrations.

Solution Focused Therapy (SFT): concentrates on what individuals want to accomplish rather than on the problems that made them seek assistance. Motivating individuals who are supported by services to focus on determining their own pathways and resolutions to achieve their purposes can lead to intensely diverse activities and opinions than when pursuing answers to problems.

Strengths-Based Case Management: combines an emphasis on individual's assets with three other principles: encouraging the use of casual supportive systems; providing self-directed community participation by practitioners; and accenting the association between the client and practitioners. It is a method that helps individuals achieve specific anticipated results.

Narrative: has been employed by professionals to help clarify strengths of individuals and societies. Professionals using this method assume that concealed inside any problem, narrative is a story of strength and resilience. This will normally necessitate re-framing of the circumstances to highlight any unique occurrences of strengths into a narrative of resilience.

The practice of narrative originated on the belief that individuals live their lives by stories or narratives that they have shaped through their experiences, and which then serve to

profile their further life experience. Professionals using this approach will often never deal directly with the problem being presented but will find means to fortify the capability of the individual to be hardy in the face of the problem, thereby reducing it. A crucial part of this approach is recognising that some individuals may think of a problem as a fundamental part of their character. Separating this problem from the person by externalising, it permits them to begin to deal with it in a positive way.

Family support services: regularly associated with preventative services presented to families before their problems become too severe, responding in a helpful way to families enhancing family life and enhancing existing strengths. Professionals using this approach believe that strengths-based practice benefits families by prompting their commitment in the programme, by increasing family effectiveness and enablement and by enhancing their social support systems. Even though strength-based perspectives offer an interesting substitute to traditional expert, ailment-based models, the evidence about the success of these practices is just beginning to emerge.

By building on the skills of local people, the power of social relations and the supportive functions of local organisations and amenities, strengths-based community development approaches draw upon existing strengths to build stronger and more sustainable societies. Coping strategies such as spirituality, prayer and meditation are documented as significant resources in times of hardships. Foot and Hopkins (2010) have found that by inspiring pride in accomplishments and a comprehension of what individuals have to contribute, societies generate augmented confidence in their capability to be inventers not beneficiaries of growth. Strengths-based theories take advantage of people's potential within the naturally occurring supports of their surroundings such as social support, high potentials for performance, natural consequences and empower people to lead with their strengths to attain a greater sense of wellbeing.

Similarly, Mclean (2011) underscores the significance and effect of building networks within societies that result in individual, groups, families, and the inclusive public building a 'resilience' which leads to a sense of health and wellbeing, and improved quality of life.

On a personal level, strengths-based professionals often build on family and community connections and familiarity. This method is based on the recognition that networks often

have more effect over an individual accomplishing a goal than any external person, including the Professional. Supporters of this model emphasise that individuals within social networks can provide supreme perception into the assets, aptitudes and trials of a loved one, and provide guidance about how best to connect with that individual. This perspective aligns with building resilience of clients and their loved ones.

2.4.1 Critique of the strengths perspective

While originating from sound theoretical foundations, the strengths perspective is criticised on the grounds that it is in threat of running too close to modern neoliberal philosophies of self-help and self-responsibility and glossing over the organisational disparities that hinder individual and social development (Baines, 2011). Moreover, there is a clear lack of empirical support for the claimed triumph of these strengths-based perspectives. Though its strength lies in its humanising potential, more than an emphasis on individual and community capacity is required to deliver the transformatory agenda it promises. Even though the strengths perspective uses the language of social justice and empowerment, the solutions it proposes are basically grounded in (neo) liberal concepts of individual accountability, which have their origins in Kantian ethics and utilitarian means–end justification. Like liberalism, it upholds independence as a superseding ethical ideal, a belief in people's ability to choose with informed consent as the "standard liberal procedure by which agents manifest their autonomy" (Kristjánsson, 2007:45). Liberalism encourages a small core of morals, inflating self-directed choice and "the benefits of high self-esteem which fosters the current self-help and therapy culture" of which social work, and especially the strengths perspective, is a part (Kristjánsson, 2007:178). Kristjánsson (2007:179) claims that there is little evidence to propose that high self-confidence on its own produces better, more stable human beings, or that it prevents social problems. It promotes self-understanding, self-control and self-interest while contemporary multiculturalism suggests the need for a much larger common core of non-individualistic values "by virtue of the fact that human beings are a single species, sharing the same basic virtues and vices and action and emotion". While the strengths perspective claims to avoid individualism, its view of the rational determining independent self is essentially individualistic. It carries this to extremes in its unquestioning acceptance

of the individual’s view of the world. While appreciative of the value of the strengths perspective, it is not wise to be excessively ambitious in claims about its potential.

To address these limits, the strengths perspective could benefit from a wider understanding of its doctrines and claims within contemporary social work practice contexts and seek to distance itself from the stricter, impersonalising processes of neoliberal welfare reform. It needs to be more guarded about overly optimistic claims about the strength of social capital, group and community development (Wendt & Seymour, 2010). Greater empirical evidence for the success of strengths-based interventions is required beyond descriptive case studies of its effectiveness.

2.6 JUSTIFICATION OF THEORETICAL FRAMEWORKS

The strengths perspective and resilience theory are closely woven with the strength perspective in a sense that most individuals’ strengths are sources of resilience. More importantly, the strengths perspective also believes that individuals are resilient in the face of adversity. This approach is built on the concept that all people have capacities, strengths and resources. It emphasises that resources for work are the strengths, capacities and adaptive skills of the individual. Individuals generally exhibit strengths instead of pathology in the face of misfortune. Trauma theory emphasises the relevancy of coping and resilience as curative factors to negate the effects of trauma. Furthermore, the resilience philosophy searches for understanding on how people survive ecological and social trials. Practicing in the field of social work requires a shift in understanding to embrace a consistent comprehension of the global impact of trauma to be able to integrate trauma-based knowledge and theory into policies and practices, and an active seeking to avoid re-traumatisation of individuals.

Both theories state the fact that internal and external shielding aspects results from individual, groups, ecological and organisational strengths. It is crucial to understand human beings within their social environment for the purpose of enhancing resiliency (Rankin, Lundberg, Woltjer, Rollenhagen, & Hollnagel, 2014). As noted earlier, resilience is defined as a phenomenon or process reflecting relatively positive adaptation despite experiences of significant adversity. Hence, resilience necessitates the efficient and

effective use of resources to variable demands. Emergency medical personnel are expected to possess the ability to perceive what is currently taking place to comprehend what such occurrence actually means, and to anticipate what may happen and decide what to do about it (Anderson & Heyne, 2012). Notably, human experience, both negative and positive, both vulnerability and strength are of vital importance more especially when exploring how individuals cope with adversity. Such aspects are vital in gaining more insight on the lived experience of the emergency workers.

Against this background, the researcher notes that if social work profession is sincerely concerned with the dignity and rights of individuals, then attention should be given to the full variety of human experience, both negative and positive, both weakness and strength. It is also vital to incorporate trauma-informed practices into prevention, assessment and intervention in work with vulnerable and medical populations.

2.7 SUMMARY

Strengths-based approach has an internal component, which is therapeutic in nature, and which includes positioning, enunciating and building upon person's assets or capabilities. It also aims to support with finding resolutions for current problems based on currently available resources. Strengths proponents believe that anything that assists an individual in dealing with the challenges of life should be regarded as a strength. As a result, working to enhance an individual's awareness and understanding of their own strengths and capabilities has been shown to promote an increased sense of wellbeing. Trauma theory underpins coping literature. One of the essential concepts of trauma theory is the identification and use of character strengths, the desired outcome of strength-based practice is resilience. Both trauma theory and resilience theory in relation to emergency personnel encourage individuals to share their personal experiences of dealing with trauma. Having individuals share their experiences of trauma recovery validates their insight and stories and simultaneously aids to provide a deeper understanding regarding the many scopes of recovery from those incidences. The strengths perspective involves analytically exploring individual’s endurance skills, knowledge, capabilities, resources and requirements that are essential in the helping process. Emergency personnel may take their experiences home and also seek help from peers, families which could

necessitate their spouses and family’s involvement in assisting them to function better or cope with daily occupational stress. A detailed literature review follows in the next chapter, as well as a discussion on the pertinent notions significant to the research topic, providing a detailed interpretation of the identified subject matters.

CHAPTER THREE

WORKPLACE STRESS AND TRAUMA IN THE EMERGENCY MEDICAL SERVICES

3.1 INTRODUCTION

The current chapter reviews existing national and international literature to provide the background and context to the study in number of relevant areas such as the training and the scope of practice of emergency personnel, the philosophy of trauma and trauma in South African context, occupational/ workplace stress and trauma and the extent, subjective experience and impact of stress on emergency personnel.

In the past years, investigations have shifted from simply fixating attention to individuals who experience adverse events to comprise an inquiry of the stress encountered by those who have assisted the wounded. A crucial feature of the EMS professional role, which must be considered when scrutinising the prospective influences of profession on the overall health and welfare of employees, is stress.

3.2 HISTORY OF EMERGENCY MEDICAL SERVICES

According to the South African Oxford School Dictionary (2010:438), the term 'paramedic' simply refers to an individual qualified to support medical practitioners and to provide emergency medical treatment. Paramedics are trained to offer emergency care to sick or wounded individuals in need of urgent assistance. The necessity for an individual specially qualified to offer prompt emergency medical care to the ill and wounded persons in the pre-hospital setting might possibly be traced back from the period war. Paramedics, instead of medical doctors who were perceived as too valuable, assisted wounded militaries on the war zone and hence it was unjustified to place them in the forefronts. Studies piloted on survivors from those traumatic incidents instigated an effort to emphasise the fundamental links between swift medical intervention and survival (Vincent-Lambert, 2012). The World Health Organization (WHO) declares that EMS globally forms a fundamental and significant part of any state's healthcare system (WHO, 2008). Therefore, patient care should be vested in what have been established to make a difference in patient outcomes in the pre-hospital setting.

3.3 THE TRAINING AND SCOPE OF PRACTICE OF EMS

Prior to 1980 no professional qualifications were offered for emergency care providers, nor did a professional board for emergency care workers exist. Emergency care training was fragmented and varied from province-to-province. While numerous EMS personnel have been trained in the past 30 years, the lack of a regulated training structure resulted in substantial discrepancies in EMS teaching and scope of practice in various countries and provinces.

3.3.1.1 EMS training

The teaching and scope of practice of emergency medical workers differ enormously between diverse states and even regions within the same state. A comparable circumstance was identified in rural USA during the 1970s (RSA DoH, 2011). In South Africa, emergency services were not constantly perceived as a fully developed service. Subsequently, this resulted in the emergency medical and rescue services being placed under control more broadly recognised departments or sections within the public services, such as traffic control or fire services (RSA DoH, 2011).

Though several modifications have transpired in the EMS environment in South Africa over the past 20 years, the association between emergency medical care, firefighting and rescue workers remains well reputable and an amount of enormous joint services still exist, which provide these three tasks both national and international (Christopher, 2007). EMS structures and systems, though similar, differ from state-to-state with respect to the level of teaching and training provided to emergency workforce.

Historically, in South Africa, EMS training included a number of short courses offered together with formal higher education diplomas and degrees. These short courses ranged from a four-week Basic Ambulance Attendant (BAA) course and a 12-week Ambulance Emergency Assistant (AEA) course. Most developed countries have phased out short courses because the duration of the short courses and the scope of practice not meeting the demands on EMS to excel in an emergency pre-hospital situation. Emergency workers transport wounded and critically ill patients that at times necessitate advanced life support intervention and the short courses did not appear adequate in preparing the

emergency personnel for their enormous duty (Christopher, 2007). The EMS training courses in South Africa are as follows:

Short Courses None NQF

- Basic Life Support (BLS)
- BLS Register
- Intermediate Life Support (ILS)
- ILS Register
- Advanced Life Support (ALS)
- Critical Care Assistant (CCA)

Tertiary Courses NQF 5-10

- Emergency Care Technician (ECT)
- ALS Register Paramedic
- National Diploma Emergency Care (NDEMC)
- Bachelor's Degree Emergency Medical Care (BTEMC)
- ECP Register
- Master’s degree and PhD degree in EMC

(HPCSA, 1999a:4; HPCSA, 1999b:4; HPCSA, 1999c:5)

The diverse training prospects, as described, result in EMS workforces within these services having various levels of education or training and consequently they offer different levels of interventions.

3.3.1.2 The scope of practice of emergency personnel

It worth indicating that the scope of practice and the related medical skills or techniques that describe and demarcate basic, intermediate and advanced life support remain vague and subjected to different elucidation. Diverse echelons of teaching and training lead to range in scope of practice in emergency care (Vincent-Lambert, 2012).

The scope of practice and operational of emergency personnel who completed short courses are associated to strictly demarcated clinical procedures and clinical regulation provided by medical doctors. Ambulance Emergency Assistants are competent to

practise several intrusive procedures according to their protocol such as intravenous fluid therapy (IVI), needle cricothyroidotomy (the inserting of a needle into the trachea to create an alternate airway) and needle thoracentesis (the inserting of a needle into the pleural space accumulated air), as well as electrocardiogram (ECG) interpretation, manual external defibrillation, and administration of various drugs. ECTs offer clinical care of a suitable standard, but their qualification also aims at imparting an indebtedness for research and professional academic growth and development (HPCSA, 1999: 45-46; RSA DoH, 2011:48; SAQA 2009c:1). The scope of practice of an ECT is at the level of an advanced life support provider.

3.4 THE INIMITABLE ROLE OF EMERGENCY PERSONNEL

Emergency personnel have an exceptional role in a community. They repeatedly deal with occupation pressures similar to most workforce like demanding administrative work and not getting appreciation from managers. They also have infrequent and persistent work pressures such as working in hazardous settings while attempting to stabilise bleeding and get a patient into an ambulance. Unlike most professionals, emergency personnel are constantly exposed to distressing incidents such as accidents, fires, natural catastrophes, violence, massacre, and child abuse (Berger et al., 2012). These events are commonly referred to as critical incidents. Critical incidents are defined as unpredicted events that are recognised as life threatening or in which loss is experienced (Declercq, Meganck, Deheegher & van Hoorde, 2011). One of the most distinguishing features of emergency services is the reality of constant exposure to trauma; they see the devastation, smell the loss of life and hear the screams and cries of victims and families. Emergency employees, including firefighters and paramedics, must cope with a variety of work-related stressors including exposure to traumatic incidents and they tend to be exposed to stress, trauma and adversity on a regular basis (Declercq, Meganck, Deheegher & van Hoorde, 2011; Kleim & Westphal, 2011). Similarly, Hegg-Deloye et al. (2014) argue that the distinctive workload of emergency workers is trademarked by both emotional and organisational challenges. It is a fine line for emergency workers to walk between looking out for themselves and their client's best interests and allowing them to discover their own path, which is one of the many reasons why emergency work is a

demanding and strenuous profession. Every day when they approach their workstation shift, they go to work not knowing what situation they will encounter or what decisions they need to make swiftly. Kirby, Shakespeare-Finch and Palk (2011) note that emergency work is often characterised by little control over patients because life or death decisions have to be dealt with at a swift pace. Emergency personnel need to function in challenging and multifaceted situations to undertake extremely demanding responsibilities while simultaneously negotiating an inclusive array of health and social issues (Sofianopoulos, Williams & Archer, 2012). The nature of their job affects them physically, emotionally and psychologically. The result of repeated exposure to traumatic events and psychological stressors are hidden risks in this field of work (Berger et al., 2012. In spite of the astonishing role, emergency workers remain ordinary citizens subjected to the pressures and tensions of everyday life and the influence of experience to critical incidents. Substantial data suggests that most emergency workers receive an ample of appreciation for their professional role particularly those from the fire service (Cocker, Martin, Scott, Venn & Sanderson, 2012. There has been a cumulative inquisitiveness from social scientists in emergency personnel, specifically, the role and the influence, which their profession and associated lifestyle have on their social, psychological and physical wellbeing. The heart-breaking incident of the twin tower bombing, 11 September 2001 or ("9/11" as it is generally known) also contributed to mounting attention on the influence of relentless trauma on emergency employees in New York City (Cocker, et al., 2012). The noble bravery of emergency employees was highlighted in the aftermath of this traumatic event. It is broadly recognised that continuous exposure to excessive work-related trauma can lead to absenteeism and lower productivity and can have negative impact on employees and the organisation.

3.5 THE PHILOSOPHY OF TRAUMA

The concept of trauma originated from the Greek word 'wound' and the assessment of traumatic reactions led to the inclusion of a distinct PTSD diagnosis (Reuther,2012). Reuther (2012) notes that Freud was one of the utmost renowned intellectuals who brought trauma into the psychological realm and in theorising its influence on the person's growth, emotional and social functioning. In Freud's writings (for example, Beyond the

pleasure principle), the term “trauma” is understood as an injury of the mind, which, unlike the injury of the body, is a wound that cannot be cured, but that imposes itself again upon the mind of the survivor. Trauma is therefore not locatable in the simple vicious or original event in an individual’s past, but rather in the way that its very unassimilated nature the way it was precisely not known in the first instance returns to haunt the survivor later on (Caruth 2016:4. Turnbull (2011) in pondering emotional trauma traces its roots back to Herodotus (Ancient Greece), Homer in the Iliad and later in Shakespearean works. Turnbull concludes that because of its prevalence throughout history, it is “part of the human condition” (2011:83). As Rambo (2017:3) states, “Trauma is suffering that remains”. This abridged description articulates the fundamental part of a traumatic experience. The devastating nature of shocking incidents impedes the human processes of acclimatisation and the force of the ferocity causes an incapability to both adapt and assimilate this experience into a new framework of meaning. Isaken and Veling (2018) note that from Freudian psychoanalysis, traumatisation happens when both interior and exterior assets are inadequate to deal with an outward hazard. However, the nature and ruthlessness of the trauma exposure must be considered (Bloom & Harrison, 2011). After World War I, Freud, who conducted psychoanalysis with some of the militaries returning from the battle zone, made a simple but philosophical statement that the past does not remain in the past, but always returns (Rambo, 2010). Consequently, the noteworthy dialogue on the definition of trauma and the fundamental criteria of PTSD led to the revision of the PTSD diagnostic criteria. Hence, the fifth version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) comprises of substantial changes, which encompasses the restructuring of ‘Trauma and Stressor-Related Disorders’ into a new grouping. This brought a significantly more across-the-board description of trauma which defined trauma as, ‘the individual has been exposed to a traumatic event, in which both the following were present: the person witnessed, experienced or was confronted with an event or events that involved actual or threatened death or serious wound, or a danger to the physical integrity of self or others; the person’s response involved concentrated terror, vulnerability or horror’. (American Psychiatric Association [APA], 2013; Jones & Cureton, 2016). Young, Koortzen and Oosthuizen (2012) define trauma as deeply distressing or disturbances experience. Therefore, the word trauma, in the field of Social Work and

Psychology, is now commonly used to comprise responses to both man-made violence and natural disasters such as hurricanes or volcanos. Nevertheless, the precise fundamentals of stress or trauma are hard to classify, as individuals react to trauma differently. There is also a diversity of personal factors that determine how individuals respond to critical incidents. These factors include their own opinion about the viciousness of the incident, personality, the type of symptoms that will be experienced and specific circumstances such as social support (Benjamin, 2011). Comprehending the influence of trauma is not just conceptualising the incident but realising the individual's subjective meaning of the incident. Therefore, what possibly will, or will not, be considered as traumatic or distressing is highly subjective.

The concept of trauma exposure, irrespective of single or several numbers of encounters, is normally defined as past and finite in trauma theory and practice. There is a constant mounting cognisance and discourses around the intricacy and unceasing experience of trauma in South African (SA) EMS personnel. In many SA communities, persons who experienced trauma live in constant threat of trauma (Tallodi, 2015). The risk and the constant endurance of ordeal have a negative influence on how individuals survive and deal with trauma, both independently and communally. Subsequently, the less noticeable, but still important, few visible signs of trauma comprise of; blunders in decision-making in both person's private and occupational life, unhealthy personal or social relations, less passion creativity, absenteeism, unsatisfactory job-findings and a deteriorated state of health and wellness (Tallodi, 2015). Possible constant experience of brutishness from public level and personal involvements in critical incidents is the reality for South African emergency staffs who care for the wounded individuals and fatalities (Eagle & Kaminer, 2013; Straker, 2013; Benjamin & Crawford-Browne, 2010). In investigating and understanding trauma in the EMS field, it is essential to discuss the signs and responses to shock.

3.5.1 Symptoms of trauma

In South Africa, most individuals suffer or encounter incidents directly or as secondary victims. Robison, Smith and Segal (2014) postulate that the significant fundamentals of a critical incidence comprise of following: it is unpredicted; the individual is not ready; and

it is about the person’s meaning and reaction to the incident. However, this could not be the best explanation in terms of constant stress; there is continuous fear that something bad could happen. Few weeks after a distressing occurrence, majority of individuals’ experience shock and anxiety responses which are considered to be part of ordinary and adaptive reaction to critical incidence. Common symptoms of trauma include:

- invasive symptoms (re-collections of the incident in thoughts, images, memories, distressed or worried when reminded of the incident; being vigilant for threat;; experiencing sleep disturbances; difficulty concentrating being tense and easily frightened);
- avoidance symptoms (avoiding places, thoughts and people associated with the incident; feeling detached other people; problems with remembering some parts of the incident;);
- physical symptoms (eating disturbances, sexual dysfunction, low energy, enduring and unexplained discomfort);
- emotional symptoms (nervousness, anxiety, feeling out of control, short-tempered, furious, emotional impassiveness, withdrawal from normal practices and associations);
- psychological symptoms/response (shock; feeling disorganised, feeling suspicious; feeling miserable, fatigue but unable to relax; grieving for loss of security and safety in the less and potentially grieving if someone has died in the event);
- behavioural symptoms/effects (substance abuse; pain medication use, overwhelming reactive feelings; self-destructive or impulsive behaviour; feeling damaged;); and
- spiritual symptoms (disturbing existential interrogations; altered worldview; a loss of a sense of meaning in life; a loss of optimism and sense of connection (Robinson, Smith &Segal, 2014; Bosch & McKay, 2013).

Robinson et al (2014) note that the impact of shock crashes persons' normal hopes about life and the individual must accept that world is volatile, unfair and dangerous place to live in. Bosch and McKay (2013) state that severe shock warning signs which could be displayed even ages far after the ordeal include: recurrent invasive 'recollections' of the incident (might comprise remembrances or hallucinations); severe withdrawal (from societal systems); extreme detachment (emotional state of continuous withdrawal from self or environment); devastating nervousness (extreme manias or horrors); severe hopelessness (numbness and continuous absence of desire and contentment in life) and risky usage substance (extended and extreme use of painkillers of liquor to deal with pain as a way of surviving) extreme hyper-arousal (suffering from terror; incapable to focus). This is in accord with Janzen (2012:28) who states in this regard "In *Beyond the Pleasure Principle*, published two years after the war, Freud refers to the 'traumatic neurosis' observed in those exposed to combat, and notes that it involves intrusion into the dream lives of the victims. Just as in the case of those who suffer from hysteria, Freud points out the repetitive return of the trauma in dreams causes the patient to become 'fixated' to the trauma, thereby upsetting the normal healing nature of dreams".

Yoshida et al, (2014) found that physical and emotional signs related to experience with stressful situations encompass emotional reactions of increased suspicion, grumpiness, guiltiness, infuriation, hopelessness and anxiety. In addition, Yoshida et al, (2014) also found that physical complications varied from dizziness, chronic fatigue, diabetes, hypertension and migraine headaches. If an individual presents with any of these symptoms, it is vital for that person to be referred to a professional service provider for psychological, social and spiritual therapy or assistance. Stress that is not managed does lead to ill health, at its worst it can be incapacitating and be costly to the individual worker, the organisation and the family.

3.6 EXPOSURE TO TRAUMA AND VIOLENCE IN THE EMS FIELD

Traumatic occurrences, violence and death constitute a substantial part of day-to-day life of the of EMS personnel. Violence is multifaceted and complex; majority of South Africans encounter various traumatic events in their lives. Viciousness does not only affect an individual on a person level but can also have negative impact on the person offering

assistance such as emergency personnel. When exploring the exposure to violence and trauma in the emergency field, one cannot leave out unexpected and vicious deaths, generally from suicides, accidents, or murders (Blix, Perski, Berglund & Savic, 2013; Benjamin, 2011; Clark et al., 2011). The normalisation of viciousness as a part of daily life in South Africa, at both home and workplace, has contributed to a public discomfort and feeling of uncertainty. Going through an ordeal is to some degree unavoidable in life; be it losing the love of your life, witnessing or being involved in an accident or natural disaster. Majority of individuals will come across a single or more disturbing incidence throughout their lives.

South Africa is a country with an atrocious history of conflict, crime and violence that can be traced back from the cruelty of the European colonisers; to the resentfulness of British statute and the South African warfare to the apartheid period of constituted segmentations and discriminations by ethnic groups, government service delivery, community engagement and the use of brutishness to institute it. There are studies that indicate high rates of domestic violence, vicious crime and sexual violence in post-apartheid. These events have intensely shaped societal characteristics and continuous community dissections among ethnic groups. Twenty-five years later, the discriminations from years of disunion and cruelty still manifest within the nation. There are moves and substantial transformations, but the disparities of dissection should be cautiously considered when living and employed as emergency worker in South Africa. (Le Roux, Curren, Zengele & Mukamana, 2013; Benjamin, 2011). More awareness into the South African environment will be discussed in the next section with the aim of positioning the study within a specific background.

3.7 THE LABOUR SETTING OF EMS PERSONNEL

To fully understand how the work environment impacts emergency workers' stress level, the impact of job demands needs to be considered. The labour setting of South African emergency personnel creates an exclusively thought-provoking subject concerning what causes occupational stress and what inspires individuals to continue doing their jobs.

3.7.1 Job demands

Job demands denote those physical, mental, social, or organisational characteristics of the job that demand constant physiological, psychological or emotional effort. Investigation on the health impairment progression has persistently revealed that job strains are robustly linked to fatigue and, eventually, to physical and psychological health problems. Generally, high job demands lead to hostile effects that deplete workers' physical and psychological resources (Angelo & Chambel, 2015; Bakker & Demerouti, 2014; De Beer, Pienaar & Rothmann, 2013; Nahrgang, Morgeson & Hoffmann 2010).

Emotional labour is inherent in the emergency services field. Emotional weights refer to the emotionally thrilling relations at the workplace, and emotion-rule dissonance, including the inconsistency between emotion rules and felt emotions, are considered important experiences of emotional labour. Job demands and job resources may cause two different, but linked processes, specifically a health-impairment and a motivational process (Bakker & Demerouti, 2014). The prior process is zealous and emotional weariness and possibly results in exhaustion, trauma and ultimately in poor health. The latter process is a motivational one. Nonetheless, job demands may become stressors in circumstances that necessitate great effort to withstand a projected performance level, which appears probable for South African workforces. There are several predecessors of stress, namely, personal and situational variables. It was proven that job demands were more remarkable predictors of fatigue than a lack of job resources (Bakker & Demerouti, 2014; Xanthopoulou, Bakker & Fischbach, 2013). Emotional strains may not only have hostile effects for a worker; it might have a constructive influence on personnel, especially when job resources are easily accessible. In emergency services, the amount of trauma in South Africa could be ascribed to the central role of witnessing or a traumatic incident exposure in the public environment. South African emergency personnel are expected to deal with and bear these stressful events daily, which is a substantial cause to their workload (Angelo & Chambel, 2015; Atwoli et al., 2013; Santos et al., 2016). Almost in all twenty-first century jobs, inclusive of emergency services and considering the unsteady economic climate in South Africa, it appears reasonable that the most employees

experience feelings of job insecurity. Job insecurity has even been coined a "psycho-social hazard" and it is anticipated to deteriorate in the forthcoming (Bakker et al., 2014).

It is undisputable that job insecurity leads to poor mental health and wellbeing, as well as hostile impacts for employment organisations. Job-insecure employees are likely to experience high levels of nervousness, uneasiness, anger and frustration, eventually leading to poor performance, staff turnover, fatigue, and trauma. Hence, in accord with the research findings of Adriaenssens et al., (2015), it is theorised that, as job insecurity upturns, so will a worker's stress levels. Therefore, job demands are linked with physical (hypertension) and emotional hazard (fatigue). Constant experience to high job demands may cause workers to become relentlessly weary and to emotionally detach themselves from work. Subsequently, they may experience fatigue or stress (Adriaenssens et al., 2015; Bakker et al., 2014; Wolkow, Ferguson, Aisbett & Main, 2015). Obviously, the long working hours, low-income status, inadequate credit and support of emergency personnel especially influences these susceptible viewpoints.

Research demonstrates that job demands were recognised as main reasons of emotional stress, comprising work overload and poor physical work settings. Both job demands and resources have a substantial effect on employees' wellbeing (Fan, Blumenthal, Watkins & Sherwood, 2015; Roll, Siu, Wai, De Witte, 2015; Schaufeli, 2016; Wang, Lu&Siu, 2014). Equally, work overburden is recognised as one of the major job strains triggering job-related stress. Being a member of a professional cluster at the forefront of stress, (emergency personnel, rescue workers, police officers, firefighters) work overburden has textured as one of the most constant stress influences, given the innate job requirements (Altaf & Awan, 2011; Shemueli et al.,2015). Moreover, scientific investigations emphasised that emergency personnel from various countries executing the same job may vary in their level of occupational fatigue. For instance, Japanese nursing personnel reported lower levels of individual fulfilment, higher levels of emotional fatigue and depersonalisation as compared to nurses from Canada, Germany, New Zealand, United States and the United Kingdom.

Consequently, it is postulated that the more challenging the occupation, the higher the emergency employee's stress levels will be because of feeling burdened with job demands (American Psychiatric Association, 2013; Angelo & Chambel, 2015; Cieslak et al., 2014; McGowan & Kagee, 2013; Nahrgang et al., 2010). This is an exceptional reflection given South Africa's high crime rates, which results in emergency personnel suffering from higher levels of fatigue when in compared to other countries with lesser crime rates. Hence, this proposes that emergency employees may be excessively loaded and might result in their experience of stress.

3.7.2 OCCUPATIONAL STRESS

Basically, current work settings are branded by daily difficulties, where workers are subjected to life-threatening burden to attain their core performance indicators in order to retain their jobs, which is significant in the present unbalanced financial environment. Fast-paced, challenging and continuously fluctuating work situations are what individuals in any type of employment are faced with in any nation globally (Cieslak et al., 2014). There is a wide-ranging of data on work-related stress and its influence on general health and welfare of people. Remarkably, there is an optimum level of pressure at which productivity is improved but this chapter narrates job-related stress levels that surpass ordinary ideal pressure.

Literature has established that occupational stress and trauma exposure might put people in jeopardy of developing depressive symptoms (Wang et al., 2010; Yoshida, Yamada & Morioka, 2014). Professional role has been associated to physical health, with possible extended duration of complications. In accord with this, the Health and Safety Executive (2014) reported that in 2012/2013 in the United Kingdom (UK), 1.2 million individuals suffered from sickness that resulted from, or deteriorated by their employment, with 23.5 million days lost owing to occupational stress or ailment. Abundant investigations have provided evidence for the concept that job stress has an impact on health and wellbeing across a diversity of professions. The disproportionate workload, either in an occupational or personal life, results to an extensive decrease in life gratification (Bowen, Edwards, Lingard & Cattell, 2014; Kotowska et al, 2010). Work-related stress has also been linked to other biological problems such as deteriorations in brain muscle proportions and

advanced occurrence of bladder and other lower urinary tract infection warning signs. The body reactions to trauma provided an appropriate context for the association of trauma and chronic diseases. A cumulative amount of data proposes that signs associated to those produced by a distinct shocking incident can manifest because of prolonged experience to demanding work circumstances such as high occupational demands (Blix, Perski, Berglund & Savic, 2013; Zhang et al., 2013; Ruotsalainen, Verbeek, Mariné & Serra, 2014). Considering the possible adverse effect of work-related stress, it is essential to consider that not everybody is fascinated by professions with extensive stress settings. Hence, it is possible that there is a degree of individual selection in extensive pressure careers, which depending on personal physiognomies such as hardiness and receiving gratification of high adrenaline circumstances (Sang, Teo, Cooper & Bohle, 2013; Adriaenssens, De Gucht & Maes, 2013). This is consistent with the 'person-environment fit model' that pronounces that personal and ecological characteristics should match.

3.8 WORKPLACE STRESS IN THE EMERGENCY SERVICES

Stress or trauma are not usually well comprehended when accepting the job as EMS personnel. As alluded previously in chapter one, data clearly indicated that South African EMS personnel are strained (Sirsawy, Steinburg &Raubenheimer, 2016; Stassen, Nugteren & Stein 2012; Subramaney, 2010). The prevalence of stress in emergency services might be recognised to the central role of witnessing a critical incident in the community environment of high violence prevalence and consequent life-threatening experience. Moreover, South African emergency personnel are expected to deal with and survive these disturbing experiences daily. This seems to be a substantial determinant to their workload stress. Consequently, by the nature of profession they are in, most individuals are at a bigger threat of developing PTSD. It is broadly acknowledged that EMS personnel suffer from illnesses more than the public (Angelo & Chambel, 2015; Atwoli et al., 2013; Santos et al., 2016). The circumstances they work in together with lack of support or appreciation and the risk for personal injury often undesirably affect physical, emotional and social wellbeing of emergency personnel. Furthermore, regular contact to hostile conditions exposes them to levels of emotional distress similar to the

recipients of emergency care services. These occupational stressors are further exacerbated by the obligations that emergency service providers must render experienced, proper and multifarious life-saving interventions. Various investigations documented a high incidence of hypertension, heart attacks and risk of tumour in emergency workers (Hansen & Stevens, 2012; Haus & Smolensky, 2013). Their occupational environments are culpable for the levels of trauma they undergo on a regular basis.

EMS personnel are exposed to volatile work circumstances and distressing conditions such as witnessing human grief and agony of persons who are tremendously wounded or dying. EMS workers also encounter events that are mostly acknowledged to be out of ordinary human experience, handling decomposed corpses, assisting badly battered individuals and involvements with general distressed sufferers are almost the circumstances they deal with daily. Owing to the unpredictability of calls, they are required to make quick decisions and administer effective aid, often without support or reassurance (Fjeldheim, Nöthling, Pretorius, Basson, Ganasen, Heneke, Cloete & Seedat, 2014). The disturbing, demanding and dangerous circumstances, which EMS personnel repeatedly encounter, has a negative impact on their physical, psychological and social life. (Subramaney, 2010). Because of demanding occupational conditions, EMS employees regularly experience organisational stress or trauma, stressed response to alarm bells, sleeping disorders. The extensive psychological weights of the job remain a momentous determining factor of trauma amongst EMS personnel (Van der Velden, Kleber, Grievink, & Yzermans, 2010). Grill and Zygowicz (2011) affirm the influence of trauma on the emergency worker when on the scene of a suicide, for illustration, as “each one leaves a small mark on your soul”. Being a participant of a professional crew at the forefront of trauma (rescue workers, paramedics, and firefighters), the distinctive type of the work could be a significant determining factor of trauma or stress and PTSD. There is sufficient literature to support that job-stress is professed to be the cause of occupational related illness (American Psychiatric Association, 2013; Angelo & Chambel, 2015; Hargrove, Nelson & Cooper., 2013). In the same vein, Tallodi (2015) notes that 40% of industrial related sickness were linked to workers in Great Britain losing 10.4 million working days in the years 2011 and 2012. Equally, Donnelly (2012) explored

occupational stress and PTSD in EMS personnel (N=1633) and discovered that critical incident stress, institutional and operative types of chronic stress and alcohol use all remained substantial predictors of PTSD symptomatology.

Several inducements have been found to be linked with fatigue as well as long duration in EMS; less occupation fulfilment; regular involvement to critical incidents; a lesser amount of recovery period between events particularly in individuals who witnessed a specific distressing episode in the six months prior to the investigation. In the United States, PTSD in general population was found to be 3% but the rate of PTSD in EMS personnel is about 10% and for firefighters, it ranges between 10-30% (Tanja, Streb, & Häller, 2016). A methodical analysis of the literature conducted on PTSD occurrence global among EMS personnel discovered the percentage to be equally 10% (Berger et al., 2012). Given all of these factors, it is evident that the inherent work-place stress can take a momentous toll on the biopsychosocial health of EMS personnel. Evidence for the influence of work-related stress on psychological and physical health has been built upon by many trustworthy scholars in the field. Research has established that work-related stress and trauma exposure may place employees at a greater risk of developing PTST symptoms (Cocker, Martin, Scott, Venn & Sanderson, 2012) (Wang et al., 2010; Yoshida, Yamada & Morioka, 2014). Studies indicate that exposure to critical incidents is often related to poor emotional outcomes; emergency work and being exposed to traumatic events may be the source of their deterioration in their physical ill health, and susceptibilities in their psychological wellbeing (Boals, Riggs, & Kraha, 2013). Significantly, a greater level of work-related stress has been related to increased staff turnover rates signifying the individual, as well as organisational impact of work-related stress (Adriaenssens, De Gucht & Maes, 2013). Certain aspects can put emergency employees more or less at risk for suffering stress. The following are personal and professional risk factors delineated by Bonach and Heckert (2012).

- History of individual distress and unresolved of any past challenging critical incidence exposure;
- Insufficient orientation and training for role;
- Lack of professional training in trauma;

- Less years in the occupation or lesser level of familiarity with distress;
- Maladaptive coping strategies;
- Employee/Organisation incompatibility;
- Lack of professional supervision and support structure; and
- High job demands in caseload.

Notably, the possible adverse effects of trauma are more prevalent among emergency workers as the negative impacts are accumulated by the extensive strain nature of the profession.

3.9 EMS RESPONSE TO CRITICAL INCIDENTS

Some individuals may experience early instability in response to critical incidence and progress to a complete repossession whereas others might experience recurrent mental and emotional problems, or other classification of warning signs, which worsen overtime, resulting in lifelong symptomatology. People respond differently to traumatic events.

3.9.1 Secondary trauma

Secondary trauma refers to the critical influence of trauma or an incidence a person may have indirectly experience during the helping process (Mildenhall, 2012). During this process, an individual internalises the feelings, experiences and memories, of the traumatised person, as their own, which could influence them to espouse parallel symptoms (Dekel & Monson, 2010). Most EMS employees suffer from secondary trauma that results from assisting a distressed person; feeling the density of a distressing incident through the distressed sufferer; or by witnessing the incident. Because of the exposure to critical incidents and the nature of the job, emergency workers are tremendously susceptible to the detrimental, destructive impact of pressure (Mildenhall, 2012). Trauma reaction to critical incidents varies from individuals, and each person is influenced by stress in a unique way. This process does not only necessitate learning how to handle trauma but also allowing a person to reflect and make sense of their life experience. A study conducted in Australia found that experience towards hazardous environments had a harmful effect on the psychological, social and physical wellbeing of EMS population (Bowen, Edwards, Lingard & Cattell, 2014). Several studies on experience to adverse events established that anti-social and self-destructive behaviour might also be

engendered after exposure to a personally distressing event (Bowen, Edwards, Lingard & Cattell, 2014. A study conducted from the Department of Labour (DOL), Bureau of Labour Statistics in the United States with the aim of exploring injuries and mortalities amongst (EMTs) and paramedics, the findings established that 89 fatalities occurred among (EMTs) and paramedics, in both private and public sector, of which 51 (86%) were road accident-related; 5 (8%) were assaults; and 33 (56%) were classified as several traumatic injuries. This investigation concluded that emergency employees have three times rate of injury than the general average for all professions in the United States (Maguire & Smith, 2013). Bowen et al. (2014) found that the nature of trauma experienced by the emergency personnel was concentrated enough to demand professional intervention.

Most emergency personnel may experience secondary trauma as part of their occupation. It might not certainly lead to development of any psychological disorders, but they may exhibit various signs of trauma reactions as presented earlier. These typical stress responses would disappear in a month after the distressing event. Nonetheless, if these signs last for more than a month it might progress to a severe trauma response such as PTSD or another severe psychological ailment (EUOSHA, 2011). When emergency personnel encounter problems but are unable handle their emotional triggers of stress, it might result in chronic stress including physical and psychological illness. Similarly, Meyer et al. (2012) established that the experience of critical incidents and the rates of stress were higher in South Africa than in developed countries. Consequently, it is worth postulating that the pooled evidence confirms the possible harmful influence of EMS job on both emotional and physical health of emergency personnel.

3.9.2 Physical health

The influence of work-related stress in emergency service professions was highlighted by Betlehem et al. (2014) who stated that EMS personnel who felt more inclusive stress in their professional role reported 2.1 times of poorer quality health and 1.9 times of poorer quality physical fitness than those with lower stress levels in their occupation. The most regularly reported physical health symptoms were stiff pain in the limbs, collar and back possibly attributable to the physical nature of the job. EMS personnel have been proven

to have a higher rate of musculoskeletal problems when compared to the general working population (Sterud et al., 2011; Betlehem et al., 2014). Physical stresses and time pressure have been proven to be the contributor of both psychological fatigue and.

A study conducted in Ireland has shown that emergency personnel who had experienced traumatic events, reported, among other things, a wide-ranging of psychological and physical health problems, such as sleep disturbances, illogicality and irritated eruptions Significantly, sleeping difficulties and sleep disorders and have also been recognised across the literature as a shared grievance among emergency employees (Hegg-Deloye et al., 2014). Work in the emergency field, by its nature, is quite substantially challenging. The sternness of challenging occupation-related tasks was also shown to predict lower job fulfilment thereby highlighting the potential substantial influence of the stresses placed upon emergency employees and further highlighting the challenging nature of the environment within which they work. Sterud et al. (2011) also stated that emergency employees, when compared to the general working population, have a higher rate of fatal accidents and of accidental injuries.

The poor health of South Africans was further established by the DoH's declaration that the country's healthcare remains an area of concern (South Africa Yearbook 2013/14, 2015). A good quality health care is a requirement to safeguard the general health and wellbeing of community (D'Emiljo, 2015; Van Wingerden, Derks & Bakker, 2015). Nevertheless, access to such suitable health care is reliant on the availability of experienced emergency employees, therefore, demanding that the health and wellbeing of emergency service workers be made a top priority.

In an Irish context, the NASSS (2008) study found that Irish emergency workers (93%) have been exposed to trauma, with the most frequently reported traumatic incident being a predominantly distressing suicide. Significantly, the subjective influence of an incident has been revealed to have a remarkable consequence on PTSD symptoms (Declercq et al., 2011). Research has established that the most traumatic events for emergency workers to deal with were incidents involving minors, body mutilation and suicides (Herbert, 2013). Similarly, the international literature has highlighted the particularly disturbing type of incidents involving death or severe injury of children, victims known to

the professional, youths and multiple deaths (Declercq et al., 2011; De Soir et al., 2012; Minnie et al., 2015).

3.9.3 Mental health

There is a mounting attention on critical incidents and their consequent negative mental health influences. Pertaining to workplace trauma an inadequate sleep has severe negative consequences on the mental health emergency workers (Donnelly, 2012). Shift work sleep disorder (SWSD) is a quite common condition in the emergency field but under-acknowledged and under-treated. The potential adverse effect on mental health of shift work is more substantial in emergency service workforces as the effects are exacerbated by the high stress nature of the profession. Similarly, assessment on the occurrence of trauma exposure in emergency employees revealed that, regardless of differences through studies, it was constantly stated that most individuals would encounter at least one shocking episode in their lifetime. The necessity to confront critical incidents events often result in a remarkable load for EMS employees. For instance, it has been contended that EMS is a high-risk profession in relation to experiencing distress (Kazantzis, Flett, Long, MacDonald, Millar, & Clark, 2010; Zhang et al., 2013). Sterud, Hem, Lau and Ekeberg (2011) established that stress predicted psychological fatigue and mental distress, among emergency personnel. Remarkably, occupational stress has also been shown to be the cause of emotional health problems in the emergency field (Wagner & O'Neill, 2012). Halper, Maunder, Schwartz and Gurevich (2012) note that constant exposure critical incidents in the emergency field was associated with depression symptoms and burnout.

Mental health seems to be compromised by emergency service work. Hence, constant traumatic event experience can be detrimental, not only to the person involved, but also to their co-workers (Wagner, MacFee & Martin 2010). Herbert (2013) revealed that emergency everyday duties within the fire service had a higher level of distress experience owing to persistent labour burdens and trauma, therefore resulting to severe emotional suffering. Consequently, though some investigations indicate higher increased risk of emotional health problems, others postulate high hardiness as a consequence of critical incidence experience (Declercq et al., 2011; Meyer et al., 2012). Berger et al.

(2012) appraised 28 studies comprising a total of over 20,000 rescue labour force; a rescue employee was defined in the study as any individual who willingly or occupationally conducts actions dedicated to: providing of outpatient critical medical care; transportation of persons in need of care; and salvaging individuals or wildlife from hazardous incidences such as arson, violence, floods, volcanic activity, and disastrous other circumstances. The study established that the risk of PTSD was 10% considerable higher than in the general public. Fascinatingly, it was also discovered that PTSD rate was higher in EMS employees than in other professional group (Berger et al., 2012) The findings are consistent with those of previous research (Chamberlin & Green, 2010; Wagner & O'Neill, 2012).

3.9.4 Post-traumatic stress disorder

Studies have consistently established that work-related stress and the experience of trauma might place employees at a high risk of developing PTSD (Yoshida, Yamada & Morioka, 2014). Other scholars contend that man-made disasters or incidence lead to a higher risk of PTSD than other types of disturbing experiences. Emergency personnel regularly experience adverse events such as shooting injuries, car accidents, cardiac arrests and paediatric trauma or death (Mac Ritchie & Leibowitz, 2010). Literature has scrutinised the emotional effects of exposure to distressing occurrences. The findings differ from non-harmful consequences to the bursting growth of PTSD. The latter is a typical reaction to a tremendously disturbing incident, followed by a normal recovery. PTSD progresses after the usual salvage fails and the distressed person is unable to control the emotions whereas the severe signs continue to amplify (Dekel & Monson, 2010). Porter (2013) postulates that high incidence of PTSD indicators in emergency workers shows an incapacity to deal with the influences of the occupational trauma. Katsavouni, et al. (2015) postulate that fatigue and trauma are common in emergency field and that PTSD is a centre of significant apprehension among emergency employees. Adults who were exposed or experienced their utmost stressful shocking incident during childhood presented with lesser levels of personal contentment and more severe PTSD signs when equated to individuals who experienced their greatest painful ordeal in adulthood. These findings attest the durable nature of the influence of trauma exposure

and its continuous effects (Ogle, Rubin & Siegler, 2013). Figley (2012) deduces that emergency workers' involvement in critical incidence can have both negative and positive effects. The positive outcomes will be discussed in the next section.

3.10 POTENTIAL POSITIVE STRESS OUTCOMES

3.10.1 Eustress

Hardly debated is the positive or beneficial part of stress or eustress either physical or psychological. Eustress refers to an optimistic reaction an individual has to a stress, which rest on person's current emotional state of control, desirability, the timing and setting of the stressor. Health workers who have demanding jobs and working under stressful environment exhibited eustress, signified by vigorous engagement with their work and hope that the following day things will be better. Among the employees witnessing trauma and deal with death of patients on daily basis; those who found meaning in their work, enthusiastic, remarkably involved, still experienced positive changes and its benefits (Hargrove, Nelson & Cooper, 2013).

Other investigations found that eustress after critical incident have emerged in emergency workers, firefighters and police officers (Subramaney, 2010; Taku, Cann, Calhoun & Tedeschi, 2008; Sattler, Boyd & Kirsch, 2014). Consequently, it is vital to ponder that trauma may be conceptualised as both dysfunctional distress, and as functional in the form of positive changes.

Although a plethora of studies have established that previous traumatic experience can expose individuals to future trauma, further research have revealed that past ordeal may serve as a shield to the effect of any subsequent trauma or suffering (Ogińska-Bulik & Kobylarczyk, 2015; Kontio, Korvenranta Salanterä, 2011). Arguably, it is unlikely for an individual to get used to the cumulative effects of witnessing or experiencing critical incidents. However, there are certain factors that serve as protective shields to facilitate the development of posttraumatic growth in emergency workers. These factors include attending debriefing sessions, collegial and social support, job satisfaction, available resources, and individual characteristic.

3.10.2 Post-traumatic growth

The effect of trauma comprises undesirable changes but, in some cases, it may result in eustress in the form post-traumatic growth or resilience. Scientifically, the awareness that life predicaments or ordeal can lead to positive change ascended in the study of philosophy, religion and ancient literature. This perception has only been scrutinised in social sciences since the mid-1990s (Prati & Pietrantoni, 2009). Changes in behaviour may arise as part of the modification process to new judgments or decisions. When these adjustments comprise a positive change in schema, this is referred to as post-traumatic growth. Post-traumatic growth comprises an improved growth of mental and spiritual wellbeing and it is a common human predisposition to make life modifications subsequent to any abnormalities in life, and not only in the face of adversities or suffering. Experiencing trauma is a usual part of life; the undesirable impacts of constant experience have been well documented. Regardless of the negative impact, the psychopathology only happens in a minority of individuals exposed to critical incidents. Remarkably, the attention until recently was on the undesirable effects rather than positive adjustment as a result critical incident exposure. Definitely, the prospect of post-traumatic growth may enlighten why some people opt to work in an extensive stressful settings or professions trauma such as the EMS, owing to the possibility for their own development and meaning making (Bakker & Demerouti, 2014; Xanthopoulou, Bakker & Fischbach, 2013). Most individuals adjust and successfully recover stress through the passage of time. PTG in emergency workers has been found to be linked with numerous aspects including gender (being female); individual distinctive resources; attending critical incident stress debriefing; organisational support and job fulfilment. Positive outcomes of traumatic incidents consist of new coping strategies, a spiritual conversion and perceived self-growth (Sattler, Boyd & Kirsch, 2014). These coping strategies will be discussed in chapter 4.

3.11 SUMMARY

This chapter discussed the literature review conducted to gain insight into comprehending trauma and violence within the South African context and explored the concept of work-related stress, the environment in which the emergency personnel work and scrutinised

the possible impact on emergency personnel and organisations. Mutually, the conclusions from the local and global literature propose high levels of work-related stress and trauma in this professional group.

In conclusion, based on the scrutinised literature on work-related stress or trauma, it is evident that emergency workers are exposed to an extensive level of job-related stress owing to the inimitable nature of their professional role with a consequent prospective adverse effect on health and wellbeing. Remarkably though, majority of emergency employees intentionally opt for this type of job and may be drawn to the high-adrenaline nature of the occupation. These conclusions emphasised a significant need to protect emergency staff from trauma by providing suitable approaches of professional and social support. Literature on coping, trauma informed care and coping strategies employed by EMS personnel will be discussed in the next chapter.

CHAPTER FOUR

COPING WITH EXPERIENCES OF TRAUMA IN EMERGENCY SERVICES

4.1 INTRODUCTION

This chapter seeks to explore literature which deals with diverse coping strategies both adaptive and maladaptive utilised by emergency personnel. Individuals through life experience and their surroundings have learnt numerous approaches to deal with life circumstances. To ascertain what shield EMS personnel from the experience of critical incidences, this chapter engages different literature on coping, trauma informed care, spirituality, and religious factors critical in building resilience. In emergency services environment, the significance of an individuals' understanding of trauma, functional coping or managing stress and associations is of great importance. Based on the background of emergency services, uniqueness and the innate role of the personnel, as well as the apparent ill-health in this occupation, it is essential for emergency employees to strike a balance between their work-related distresses, personal and organisational resources or support systems. This chapter also gives a synopsis of emergency personnel's inherent or adapted coping approaches to manage the experience of trauma. People without essential resources to cope with normal work pressures are more susceptible to experience work-related str1ess than those with workplace resources. The various features of coping promote comprehension understanding the incident's influences and an individual's capabilities in dealing with the critical incidents.

4.2 NOTIONAL PERSPECTIVES ON COPING

Even though majority of explorations have fixated on the detrimental effects of stress on emergency personnel, numerous researchers have investigated how this population group cope with critical incidents (Nydegger et al., 2011; Kirby et al., 2011). Dealing with stress endeavours to moderate the impact of stresses. Before appraising data on how emergency personnel cope with traumatic events, it is critical to understand the word *coping*. Emphasis in writings has been on numerous sorts of coping; what it is and what it is not. Folkman Lazarus, Gruen and DeLongis (1986) contributed immensely to the

earlier literature on stress and coping. They define coping as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of a person" (Lazarus & Folkman, as cited in Green, Choi & Kane, 2010: 733). Numerous descriptions of coping since 1980 continue to contain explanations that comprise interior and exterior approaches utilised to change mental and physical features of stress or suffering and some descriptions have gone further to include handling of the undesirable reactions related to stress (Benight, 2011). Hirsch, Barlem, Almeida Tomaschewski-Barlem, Figueira and Lunardi (2015:68) define coping as "a process whereby an individual effectively deals with challenges and life circumstances, which indicates "goodness of fit". For an ordinary individual, managing stress denotes an explanation of what individuals do to circumvent being distressed by life pressures and refers to the things that should be done to maintain life at a rational level of fulfilment. Collins (2008) postulates that coping is the manner of implementing an emotionally conceived reaction to perceived hazard to the ego.

Scarpa, Haden and Hurley (2006) describe coping as the mental and behavioural tactics that a person employs to reduce distress and pressure and to deal with inner or outer strains that are perceived to surpass the individual's personal resources. It does not matter whether the stressors are imposed externally (occupation, associates, or family members) or within (struggling with an emotional battle). From this description, the researchers contend that coping seems to have two purposes, namely, the primary function is to resolve or modification of the issue that is causing distress and consequently modify the circumstances. The subsequent purpose is to normalise the related psychological stimulation or stress. After appraising an enormous body of literature, Rice (1999) also referred to a related definition of coping which consist of any exertion, functional or dysfunctional, cognisant or incognisant, to avert, eradicate or deteriorate stress and to endure the impact at the minimum painful way. The latter description of coping specifies the point that individuals at times employ surviving approaches that lead them into further trouble or distress.

The coping preferences and coping approaches of emergency personnel have also received far-reaching consideration focusing on aspects such as organisational culture

and resources, the availability social support, individual personalities, gender and social differences. Some researchers also considered individual dispositions and their association with psychopathology in emergency personnel (Wagner & O'Neill, 2012; Halper, Maunder, Schwartz & Gurevich 2012). Personal aspects can upsurge the probability of PTSD including previous experience consequent traumatic life circumstances. This was illustrated by the association between the coping style, dysfunctional coping, lesser communal support, physical stimulation, and inactive recovery after critical incident.

4.2.1 Coping styles

One of the features that contributes in mitigating the relationship between life stress and psychological, physical and social functioning is the coping style. However, the descriptions of different styles are not always agreed upon. It is difficult to identify 'coping' as it is more of an organisational construct that is used to describe a number of actions engaged in by an individual, rather than a once-off behaviour. What is crucial to note is that there are individual differences in the way people react to and cope with traumatic events. Tummers, Bekkers, Vink and Musheno (2013) viewed coping as a reaction to job stress, especially in emergency services or front-line work. They describe it in three main ways: worker modifies the client/patient demand (use available resources to manage service delivery); or modifies their objectives of the job (focusing on their job or choose to not manage certain cases) or they modify their perception of their clients/patients.

The transactional model of stress developed by Lazarus and Folkman (1985) is a beneficial process to comprehend how individuals' processes threat. The primary assessment determines the level of threat, the possible harm or discomfort and the extent of determination that will be required to deal with the situation. If no danger is perceived, no stress or trauma is experienced. However, if a threat is perceived, a person will go through the secondary appraisal process in which he/she examines the available resources to cope with the problem. These processes are not always conscious, but the assessment of the situation is often based on experience and perceived ability to cope (Park, 2010). A perceived sense of the powerlessness will increase the stress and overwhelming experience of the circumstances.

The most broadly acknowledged styles of coping, which were initially formulated by Folkman and Lazarus, are problem-focused and emotion-focused coping styles. These are valuable concepts that either focus on the responsibilities or the process of support that a person might need, with or without support from others. Problem- concentrated on coping on finding a resolution to the problem at hand and consist of approaches, such as learning new skills to confront the problem or altering one's enthusiasm levels (Porter, 2013). The approaches might include changing inner and/or external aspects to deal with the problem and modify the source of stress (Mashigo, 2010). Porter (2013) asserts that the two strategies are interdependent as an individual could be attending to problem-solving while dealing with psychological pain concurrently.

Owing to the nature of emergency work research, conclusions demonstrate coping strategies employed by emergency employees tend to be more problem-focused than emotion-focused. The findings further suggest that factors such as, job training, age, marital status, individual qualities, work experience, coping styles, organisational resources and strategies have an influence on the coping approaches of emergency workforces (Mashigo, 2010). Eventually, problem-focused coping behaviours and emotional focused coping were more adaptable and encouraged growth that enhanced resilience and closure from the critical incident (Barbee et al., 2016). Based on the deductions, with longer service in the emergency field, resilience will develop over time.

Emotion-orientated coping includes the use of cognitive and behavioural approaches to manage demands, feelings, and emotional reactions to stress. This type of coping style has been linked with an increased anxiety response, and therefore could be considered less effective in coping with traumatic labour circumstances. (LeBlanc, et al., 2011). In terms of emotion-focused coping, there is an effort to control the feelings and this could be active or avoidant. Active emotional coping (expressing psychological distress and cognitively reframing the situation) is perceived as a functional response whereas avoidant emotional coping is viewed as dysfunctional as an individual may use denial or self-distraction to avoid the source of the stress (Lim, Bogossian, & Ahern, 2010). Nevertheless, it is eminent that individuals may employ both styles, reliant on the

circumstances or the nature of the stressor. Although, problem-focused coping in the absence of active emotional coping may be challenging.

4.2.2 Coping resources

The resilience theory postulates that there are significant proportions of personhood along which individuals can be ranked or rated and such evidence is vital for comprehending how they manage stress or deal with critical incidence. The possibility of emergency personnel to develop PTSD can be reduced by obtaining resiliency characteristics through social and organisational support. Resiliency is regarded as a personality trait (Gunderson, Grill, Callahan, & Marks, 2014; Ogińska-Bulik & Kobylarczyk, 2015). Personal traits consist of positivity, self-confidence, self-efficacy and insight of authority. Reasonably, few academics have also highlighted that individual characteristics form part of subjective coping resources and the significance of individual variances in dealing with distressing events more especially in the emergency field (Camelia & Ioana, 2015; Pienaar, Rothmann & van der Vijver, 2007). Personal traits comprise individual self-concept, which is formed by previous incidences but strongly influenced by how people deal current stressors. It profiles the prospects for forthcoming victory.

Previous adversity tends to feed a destructive self-concept. How human beings respond to trauma may have resilient trait-like qualities, particularly when it is obligatory for an individual to cope with persistent stresses, for example as in emergency services. Furthermore, there is an extensive consensus that certain individual personalities and coping reactions such as problem-solving are commonly functional and shielding, whereas others, such as being overdependent on alcohol are generally dysfunctional (Camelia & Ioana, 2015; Pienaar, Rothmann & van der Vijver, 2007; Gunderson, Grill, Callahan, & Marks, 2014; Ogińska-Bulik & Kobylarczyk, 2015). Another aspect significant to the discussion of individual qualities is an individual's perceived coping self-efficacy, which was established to be a possible moderator to critical trauma reaction. Coping self-efficacy is described as a person's perceived competency to deal with the aftermath of critical incidents. Self-efficacy has been used to delineate distressing reactions that occur during and shortly after distressing event or altering over time after critical incident exposure (Gunderson et al., 2014; Ogińska-Bulik & Kobylarczyk, 2015). These authors

further contend that self-competence plays a noteworthy role in the development of alertness or readiness towards prospective stresses, adaptation of coping behaviours and management of emotions. Minnie et al. (2015) contend that severe trauma reaction, such as somatic and emotional dissociation responses to critical incident has been proven predictive in an individual's consequent capacity to deal with distress.

4.3 DEALING WITH THE AFTERMATH OF CRITICAL INCIDENTS

Research conclusions from the local and global literature propose high levels of work-related stress and trauma in this professional group, even though these seem to be influenced, to a greater or lesser extent, by aspects such as the nature of the incident, age at time of exposure, resilience, hardiness, and acclimatisation (Sang, Teo, Cooper & Bohle, 2013). For EMS personnel, a high level of work stress has been linked to high job demands with often insufficient time to recover, lack of professional skills or lack of social support, and this has an undesirable effect on their physical and mental health (Ruotsalainen, Verbeek, Mariné & Serra, 2014). Another feature that is extremely related to a person's susceptibility to distressing incidents is their coping approach. Regardless of the occupation or experience, witnessing to brutal murder can produce further victims in those who help during and afterwards. It is therefore crucial for such persons to have essential resources and utilise functional strategies to manage the aftermath of trauma experience.

Disturbing events and death constitute a critical part of emergency personnel daily routine. Studies suggest that emergency personnel experience several responses after exposure to a critical incident, yet acknowledging to being emotionally affected is considered as difficult as it may lead to being seen by their peers as not strong enough for the occupation (Sang, Teo, Cooper & Bohle, 2013; Ruotsalainen, Verbeek, Mariné & Serra, 2014). The boldness of 'no one dies on my watch' during critical incident is very common among emergency workforces. Subsequently, emergency employees regularly suppress their reactions and emotions to live up to this image of being tough and brave. They are, for that reason, unwilling to look for assistance in the course of emotional crisis. Beyond the negative influence that the occupation setting has on EMS employees' stress levels and engagement, investigations established that employees furnished with the

essential individual resources might be able to manage such traumatic working conditions (Herbert, 2013). Remarkably, it is associated with less PTSD symptoms in emergency medical personnel.

An individual's ability to acclimatise to life after a critical incident guide us in comprehending their coping capability (Benight, 2011; Park, 2010). Coping strategies affect an individual's physical, mental and social wellbeing and it is vital to determine the quality of their acclimatisation subsequent exposure to a distressing event (Dahlan, Mearns & Flin, 2010; Paterson, Sofianopoulos & Williams, 2014). Individuals through life experience and their surroundings have erudite numerous diverse strategies both functional and dysfunctional to deal with life circumstances.

Plenteous literature postulates that emergency personnel are a resilient group of persons with distinctive traits that enable them to manage their occupational related stress (Santos et al., 2016; Patterson, 2014; Prati et al, 2011). Personal resources that might cushion the influence of a challenging labour setting consists of mental toughness, determination, robustness, emotional intelligence, and resilience. The coping strategy chosen is eventually a reflection of how much control individuals perceive they have over the stressful situation (Patterson, 2014). Transversely, the literature uses diverse expressions to describe the nature of coping strategies employed by emergency personnel as continuous enduring increasing experience can also have a detrimental effect of disturbing stress recollection build-up, just necessitating the tiniest trigger to reach a tipping point. The variety of effective coping strategies include approach coping, functional and constructive. Examples of effective coping are seeking support, cognitive and behavioural strategies (problem focus / emotion focus), spirituality, foster positive attitudes and humour. Inversely, the fewer effective strategies are referred to as avoidant coping, undesirable and dysfunctional; examples include substance abuse, distraction, detachment or dissociation, self-blame, psychological venting (Nydegger, Nydegger & Basile, 2011; Prati et al, 2011). The use of dysfunctional coping approaches, mainly psychological and behavioural evasion were found to be associated with higher levels of stress and in some cases increased PTSD symptoms in emergency personnel (Prati et al., 2011). Prati et al. (2011) also maintains that the constructive result of funtional coping

approaches was only partly supported. Another thought-provoking discovery by Nydegger et al. (2011) established that years of experience as an emergency personnel were not related to the use of more constructive coping strategies. Emergency employees are at most risk of being challenged with numerous critical incidents. Therefore, the levels of self-competence also diminished over the years of service owing to continuous exposure to critical incidents (Nydegger et al., 2011). Research on defensive or shielding factors indicate two levels of influence. The first level is at the level of an individual employee. The shielding features at this level are meditation practice, peer support, spirituality, and religion. Interpersonal relationships with colleagues and supervisors were proven to be beneficial in reducing workplace stress in the emergency field (Herbet,2013). Colleagues may serve as an extended family. This may be particularly true in emergency medical services where collaboration is vital and EMS workers form robust ties because of common experiences such as saving lives or dealing with death. The opportunity to build relationships at work can promote a sense of camaraderie belonging and a collective undertaking and may offer assistance in facing life trials. When emergency personnel are furnished with individual resources, such as robustness, sense of unity and emotional hardiness, they may be better able to deal with challenging circumstances.

The second shielding factors at the organisational level comprise of providing emergency workers with mentoring infused with trauma education, anticipation and preparation for the work, personal therapy and self-care coping skills, continuing trauma-informed trainings, and professional peer supports groups as the secondary victims of trauma (Nydegger et al., 2011). The following organisational protective factors have been recognised to be the main promoters that enhance resilience for emergency medical personnel; job independence, access to data, managerial support, innovative environment social climate. Organisational support and growth opportunities also consist of items such appropriate duty variety, education prospects. Organisational support describes the role clarification, movement of information, communication participation in decision-making and remuneration, career prospects and training opportunities (Angelo et al., 2015; Bakker et al.,2014; Nahrgang et al., 2010). Therefore, personal and organisational protective factors to shield emergency personnel are central.

4.4 COPING STRATEGIES

Coping strategies are distinctiveness or any form of behaviour that augments an individual's adaption (Wegener et al., 2017). According to Camelia and Ioana (2015), coping strategies are mainly ideas and approaches that individuals employ when they are attempting to manage the aftermath of critical incidences (Camelia & Ioana, 2015; Bonanno & Mancini, 2008). Individuals develop various means to cope with distress, it is fundamental to note that coping strategies may be functional or dysfunctional (Mildenhall, 2012). Functional coping strategies enable cognitive acclimatisation through thinking adjustment methods and it has improved emotional outcomes as it enables emergency workers to thrive physically, psychological, and socially under traumatic circumstances (Mildenhall, 2012). Dysfunctional coping strategies that are often used by emergency personnel involve means of cognitive avoidance and numbing, distraction and withdrawal from others. Such strategies are used as an attempt to supress feelings associated with critical incident it. Though they avoid numbing, and withdrawal was reported as common coping strategies are also linked with increased PTSD indications rather than an approach to eradicate the influence of traumatic events. All human beings have defence mechanisms such as suppression, denial or avoidance that they often utilise. Some individuals evade thinking about the stressful event while others suppress their feelings. People do this at some point and the conditions around them influence how they decide to deal with distress during a particular period. It was established that the coping strategies employed by emergency workers were not appropriate for prolonged period coping within their demanding and stressful occupation (Minnie et al., 2015). Some individuals develop unconstructive ideas about what could be the basis of their stress whereas others evade the basis of trauma. Nonetheless, the common uses of problem-focused coping approaches are linked with improved psychological health and wellness, but regular use of emotion-focused coping mechanisms are commonly related to poor psychological health and wellness as regarded as dysfunctional coping (Lim, Bogossian, & Ahern, 2010). The functional and dysfunctional coping strategies will be elucidated in the next sections.

4.4.1 Functional coping strategies

Functional coping approaches appear to have a constructive impact on psychological health and include problem-focused coping efforts envisioned at altering the current state (direct action, support seeking) or (positive reappraisal) the understanding of the circumstances (Lim, Bogossian, & Ahern, 2010). Mashigo (2010) established that emergency employees utilised both functional and dysfunctional coping strategies. The study conclusions propose that with functional coping strategies, emotional, collegial, social, family support stood out as the most useful approaches. The deductions be in accord with Porter (2013), that peer and social support as well as the emergency staffs' capacity to relate to one another. The following coping strategies will be discussed.

4.4.1.1 Resilience and adaptation

Resilience and adaptation to critical incidents experience are often aspects of life in the emergency field. It requires suppleness or flexibility using internal and external resources and problem-solving approaches or strategies (Lim, Bogossian, & Ahern, 2010). Emergency personnel require a high level of resilience to deal with daily work stressors and the necessary personality traits such as positivity, emotional steadiness and inner strength. Flexible behaviours of hardy individuals is described as "'cognitive hardiness" (Declercq et al., 2011:) An additional explanation of this is that cognitive resilient individuals consider that they can normalise or have control over incidents, have a commitment to activities and their social associations and do not perceive life as a hazard, but reasonably a test (Declercq et al., 2011; Meyer et al., 2012). Therefore, resilience can be recognised as a manner of acclimatising well in the face of hardship, ordeal, disaster, pressures or remarkable causes of trauma such as severe health complications, financial and occupational stress or domestic and interpersonal problems. Resiliency is a process that can be acquired by any person as it includes opinions, conducts, and beliefs (APA, 2013). Gunderson et al. (2014) note that resiliency can even be acquired in a lecture hall. Emotional resilience is a human characteristic that works together with coping in a way that it benefits individuals to return to their optimum functioning by bouncing back from distressing or traumatic events. An individual's ability to acclimatise to life after a distressing episode directs us in comprehending their coping capability.

Sterud, Erlend, Lau, and Ekeberg (2011) provided data that did not support the idea that emergency workers, specifically emergency medical service personnel, display high levels of nervousness and hopelessness symptoms than the general working population, signifying a possibly high level of resiliency in emergency service employees. Gayton and Lovell (2011) have established a positive association between resilience and wellbeing in emergency personnel, proposing that by enhancing resilience, emergency employees may find their health and coping improved. This also leads to improved coping levels and prevent despair. Their study further established that augmented resilience is linked with the years of experience in service as an emergency worker. They also found that emergency personnel students presented substantially lesser resilience levels than qualified emergency personnel regardless of their amount of work. Therefore, Gayton and Lovell (2011) consider professional experience gained to be one of the strongest resilience contributory factors for emergency staffs. This also leads to probe whether professional experience results in emotional or physical improvements, besides resilience, for emergency employees. Minnie et al. (2015) established that with emergency personnel, factors such as marital problems, existence of psychological disorders in the family history, unreceptive rather than spirited coping contribute to poor resilience.

Ungar (2012) defines resilience as the ability of both the individuals and their surroundings to cooperate in ways that enhance changing processes. Ungar's definition inspires individual agency yet, with the ecological viewpoint. It does not blame the individual for not effectively managing a hostile incident, particularly when there is inadequate access to support and resources. Hence, social contexts are seen as multifaceted and dynamic that will create an environment in which an individual is more or less susceptible to injury. Resilience is renowned to be complex. At times, it is likely to see survivors of critical incidents as both suffering and surviving in the early stages. Personality and coping style also play a role in building resilience. Being cognisant of the impact and role that social and circumstantial mediators play a role in influencing traumatic reactions and resilience (Diamond, Lipsitz, Fajerman, & Rozenblat 2010). Ungar (2012) elucidates that through diverse studies on resilience, it has assisted in recognising that resilience is a set of processes that are related to emotional and positive

spiritual functioning. Furthermore, Herbert (2013) reports that the mutual accord among Irish fire service personnel was that most incidents encountered on a daily basis did not affect the workforce. Resiliency against post-traumatic symptoms can also be enhanced through pre-incident training and preparation for work. Stress management interventions have been proven to improve staff morale and coping. The training process leads to, educational desensitisation, meaning that EMS personnel are taught to interpret horrific scenes as nothing more than ordered protocols to proceed through in case of emergency (Ungar, 2012). Training encourages the managing of feelings while on duty and able to continue working. Therefore, part of would seem to be having the proper training, knowledge and proficiency to perform duties.

Herbert (2013) established that unremitting experience of trauma leads to an improved capability to manage and positively overcome critical events, thereby signifying that there is adaptation to trauma over time. More research studies proposed that the process of acclimatisation or adaptation might be more effective in people who have high levels of hopefulness and feel a strong sense of accomplishment from their role. It was established that while older firefighters experienced overall distress, they did not experience additional symptoms of post-traumatic stress (Chamberlin & Green, 2010). Similarly, Declercq et al. (2011) and Meyer et al. (2012) found no evidence that the regular experience of traumatic events led to an increased probability of developing PTSD symptoms. Generally, these conclusions propose that only a minority of events result in trauma and that there are commonly high levels of acclimatisation among emergency employees. The adaptation process may vary from individuals. For instance, it was found that emergency employees felt that even though they managed well in the initial repercussion of a traumatic event, it was more challenging for them to survive in the lengthier period (Minnie et al., 2015). It was established that the following aspects were linked with lesser PTSD symptoms: fewer earlier ordeal experience, less critical incident exposure, better self-confidence social support and social adaptation (Yuan et al., 2011). Generally, these deductions suggest that only a minority of events result in suffering and that there are generally high levels of acclimatisation among emergency workers.

4.4.1.2 Social support

The most crucial basic human need is an individual's need for basic associations. In African communities, social support is usually offered by community members during funerals, disasters or calamities. Relationships at the workplace can be considered safe after a critical incident. Social support can have a caring and shielding feature to an individual's experience (Park, 2010). Furthermore, social support is acknowledged as an important and notable form of external support, which determines how an individual responds to trauma. Numerous studies established that there is better coping and hardiness when there is a social support system available for the person and that in the post-trauma situation, individuals who are provided with higher levels of social support are less probable to suffer from PTSD than those with low levels of social support (Beh & Leap ,2012; Benight, 2011). Social support is usually accessed from family, groups and colleagues and is sought for looking for guidance or information, emotional reasons, receiving compassion and acceptance. Ungar (2012) illustrated that even when there are numerous critical incidents and lack of safety in the vicinity, if the community is cohesive, this could intercede the consequence and destructive influence of the distressing experience. Consequently, this links the significance of social support in alleviating and managing hostile situations. LeBlanc et al. (2011) postulates that the coping approaches of the emergency workers are typically informal and built on optimistic collegial support.

Coping offers the impression that an individual is doing well and more than just surviving the situation. Furthermore, the significance of association with others is emphasised as well as the understanding that they have some power over events, even if it is just over their own response (Halper et al., 2012). Herbert (2013) reported a robust sense of solidarity among fire service employees whereby support, friendship and effective team leadership were proven to be significant to the constructive management of trauma. Significant associations have also been made between social support and both physical and emotional health; for instance, a lack of collegial support has been established to predict emotional distress and physical pain in emergency service workforces (Sterud et al., 2011). Social support and collegial associations have also been emphasised as useful when dealing with stress and trauma and preventing post-traumatic stress disorder.

4.4.1.3 Hope

Hope is the individual's capability to view a future during distress and sorrow. Coping literature provide hopefulness for the sufferers of combat and refugee. It repudiates death and devastation, and it generates a language of hope that survivors of war and trauma can imagine a new future (Stulman & Kim, 2010). Ackerman (2014:47) indicates that ''we are confronted to keep on hoping in those situations that cause us to despair''. Hope is known as part of personal characters, which influence the effect of distressing situations and how individuals respond to trauma. Hope is related to coping and resilience-building edifices such as critical thinking skills, positivity, and efficacy. Hope comprises a trail to the anticipated result and faith that the expected outcome will materialise. Similarly, the absence of hope is linked with dysfunctional coping in emergency personnel (Riolli & Savicki, 2012). High levels of hope induce functional coping to distressing circumstances. Riolli and Savicki, (2012) found that physical, psychological emotional and social wellness is enhanced through hope, and that optimistic emergency personnel are better at dealing with work-related stress and instituting attainable objectives compared to hopeless staff with who lack the ability to activate their competencies.

It is worth indicating that resilience in the face of hardship also relies on hope. Hope is the basis for coping, and it is normally connected to a person's spirituality. Wellbeing is enhanced through hope. People pick up their bits and pieces and rebuild hope for the future. While hope is similar to coping and resilience building stratagems such as efficacy, problem solving skills and optimism it stands apart in that it, "specifically includes a pathway to the desired outcome in addition to the belief that a positive outcome will occur" (Riolli & Savicki, 2012:9).

4.4.1.4 Meaning-making

The influence of trauma, response and the coping strategies is associated with the writings on meaning-making and the effects it has on distressing life circumstances. While 'meaning' is a notion that is quite complex to define, it is a fundamental concept when investigating the influence of distressful incidents on emergency personnel (Park, 2010). Meaning-making coping is comprehended as producing methods to transmute the appraised meaning (regularly considered as acclimatisation) or modify the over-all goals

or beliefs (regularly termed accommodation). Moreover, meaning-making coping can be described as, using optimistic judgement, reviewing goals, stimulating spiritual beliefs and understandings (Park, 2010). This description is linked with religious coping or spirituality and was found to be a common strategy utilised by emergency personnel.

Meaning-making reframes the impact of a critical incident in an exertion to reduce the emotional effect. The philosophies that make up the meaning-making model include two substantial rudiments: global meaning and situational meaning (Park & Guttierrez, 2012). Global meaning denotes to a “context where individuals recognise and comprehend themselves, their direct behaviour and their setting.” It comprises goals, personal feelings of purpose and principles, which consist of opinions of impartiality, fortune, authority, uprightness and expectedness, which forms the crucial depiction on how people understand and interpret their life circumstances. Situational meaning defines the exact appraisals that people have of precise encounters and events in their lives (Park & Guttierrez, 2012; Park, 2010). Therefore, the connotation is not constantly related to the real episode or involvement but how the distressful incident defiled the global meaning and principles of the individuals in their capability to control themselves, their situations or surroundings. Thus, it is significant not to consider the incidence and the direct understanding given to it but to also pay attention the subsequent occurrence connotation.

Meaning-making persistently changes and develops throughout all the way as it mirrors different cultural principles, morals and beliefs reinforced through the social discourse (Ungar, 2012). Global and situational meanings share an inter-reliant association that shapes the existing and future goals of an individual and their comprehensive worldviews. Therefore, analysis of one type of meaning without the other would be inadequate (Park et al., 2012). The comprehension of these two kinds of connotations could assist with exploring techniques that emergency employees utilise to manage the aftermath of critical incidents in their lives, and how they comprehend their own setting. Meaning-making is associated with positive and better adjustments in traumatic circumstances.

4.4.1.5 Beliefs and Values

Beliefs and insight an individual has of the world is vital in the emergency services. Indigenous African belief systems are robust and well rooted within cultures across the vast continent. These normally co-exist in conjunction with the major world religions of Islam, Judaism, African traditional religion is ancestor worship and Christianity. Beliefs are individual patterns, which arise from experiences, and form a considerable portion of knowledge or principles that direct judgements and current experiences and are subjected to disruption if defied. Values are “a person’s own moral judgement about his or her morality” (Altun, 2002:270).

Coping literature regularly pays more attention on understanding the impact of trauma hazard and damage which highlights that one’s morals, either beliefs or body are compromised or have been challenged or injured (Benight, 2011; Park, 2010). Presently, there is no considerable data about the use values in emergency personnel or other medical occupations, possibly owing to the distinctiveness and subjectivity of both beliefs and values, apart from a single study by Altun (2002) which explores the association between individual and occupational values and burnout in nurses. Individuals form a complex of ideas and opinions during their lives, which intentionally or unintentionally influence their judgement, approach, thoughts or views.

Post Traumatic Growth (PTG) may be accomplished if beliefs and values are employed to make sense of the situations subsequent a life-threatening event. Altun (2002) upholds that values may shield individuals from clashed choices preventing stress or allow them to modify their values in accord with their behaviour and choices, as such it is significant for values to be deliberately recognised. This is mostly significant emergency workers who can positively change improve their coping means by being aware of their values through intensified critical thinking skills and decision-making, self-recognition and endurance. Altun (2002) established the importance of values such as self-sacrifice, human dignity, impartiality and honesty in his study. Clashed beliefs and values were perceived to result in fatigue concluding that an excessively stern observance may attest maladaptive.

4.4.1.6 Religious coping or spirituality

Spirituality and religion are regarded as a source of resilience and is acknowledged as an important part of life by most individuals (Cascio, 2012). Religion and spirituality overlay in that both are concerned with the search for meaning. People often run to religion and spirituality to cope with stressful circumstances. Spirituality includes fundamentally significant life-orienting beliefs, ethics and practices that may be articulated in religious and non-religious ways (Canda, 2010). However, spirituality is not restricted to a set of beliefs but the spiritual lives within an individual's heart as it is grounded on fundamentals of experiences (Cascio, 2012). Religious and spiritual beliefs can provide meaning and determination in time of calamities and they can be sources of strengths that individuals resort to in times of hardship.

Gilliland et al. (2010) found that spirituality in emergency workers was a common coping strategy and came to positively affect the interpersonal relationships and care for patients. Religious coping or spirituality represents the conviction in a sovereignty apart from one's own being and entails a connection with a universal force surpassing ordinary sense-bound realism (Connor, 2004). This explanation can be labelled as activating divine powers. Religious coping is commonly used in universal and situational meaning making and it is associated with individual characteristics such as connectedness, ethical principles, views and inner strength about one's purpose in life. (Park, 2010). Therefore, this recount well with meaning making and it gives a basis of positivity, complete purpose, and meaning for the environment in which a person is employed or living. A person's spirituality differs from religion in that spirituality is a consciousness of a greater supremacy while religion represents a systematised structure of worship with laws and regulations (Figley, 2012). Figley (2012) maintains that when individuals go through distressing circumstances, their philosophies, beliefs and hope are shaken. A spiritual connection depends on a basis of trust in the superior sovereignty, subsequent in the faith that the person will be shielded by it. This conviction, though, may be confronted when individuals are exposed to erratic and difficult circumstances. The battle to deal with this new conviction structure might result to rage, guiltiness and desperateness. However, spiritual growth is also probable, consequent from a necessity for new connotations and defence (Park, 2010). Trauma research brought cognisant that the effect of trauma,

irrespective of whether it is felt directly or indirectly it can be experienced by a single person or by the collective cluster. O'Connor (2012) employs perceptions from trauma and adversity explorations to scrutinise how devastating brutality and excruciating tribulations affect the emotional, physical and spiritual wellbeing.

Spiritual people practice their faith to give meaning and persevere during hostile circumstances that may arise in their lifetime. This rich context benefits them in making meaning of these situations, which aid in the adaptation and managing distress. Acceptance and positive spiritual thoughts were related to better adaptations in distressing situations. Critical incidents and spirituality have always been linked together in trauma studies, as they intermingle and influence each other. While former investigation on trauma and spirituality concentrated on the post-traumatic opinions of patients, a mounting attention has newly developed on the effects of spirituality on emergency workers (Park, 2010). This might show growing consciousness for the emergency service occupation and entail how stress experienced by the personnel would influence their daily lives. Academics exploring trauma in health settings have designated connectedness as the concept with which to appraise spirituality as it describes individual's relationship with their environments, ego, and greater reigns. It was established that spirituality was a common coping strategy and a substantial influence in managing workplace stress and strongly linked with employee wellbeing and resilience. (Gilliland's et al., 2010). However, the principle of client self-government remains vital. Social workers work with individuals with different value systems and philosophical viewpoints; they should be sensitive and have information of several spiritual standpoints. Spiritual development promotes human compassion; it can be beneficial to create a spiritually conducive atmosphere more especially in a high stressful working environment such as emergency field (Chopko, 2011). Social workers should never try to impose their own beliefs on clients.

A significant role in PTG seems to be played by turning to religion and spiritual interventions, which is in line with the findings of earlier studies carried out on representatives of the emergency services which revealed that spirituality played a vital role in the rise of constructive post-traumatic modifications Moreover, research on prayer

and post-traumatic growth indicates that those who pray report more PTG (Dwyer, 2010; Jacobs, 2010; Young, Koopsen & Oosthuizen, 2011). The findings are supported by previous research (Rosmarin & Pargament, 2010; Wiesman de Mamami et al, 2010) asserting that certain spiritual and divine practices have been found to improve positivity and optimism among human beings. They have been proven to improve public and social support for clients (Jacobs, 2010). Therefore, it is imperative to recognise the religious and spiritual needs of clients dealing with trauma.

However, the findings poorly correspond with those of an Australian study which established that the main predictive role for PTG in emergency personnel was fulfilled by functional coping strategies (Patterson, Sofianopoulos & Williams, 2015). It is worth indicating that terms functional and dysfunctional are indecisive. Strategy usefulness is reliant on context of the experienced incident. It suggests that dysfunctional strategy may be useful in dealing with some specific circumstances, such as experienced disturbing incident or trauma. Most notably, diverse coping approaches appear to nurture diverse scopes of PTG. The level to which PTG is developed rest on much on how one survives during shock or hardship (Young, Koopsen & Oosthuizen, 2012). PTG is associated more to coping skills than even social support and character variables. The most operative coping skills in the growth of PTG are constructive reappraisal, acceptance coping and religious coping (Prati & Pietrantoni, 2009). The coping skill of planning (thinking ahead of how to actively manage the situation) upsurges the level of PTG, particularly in the area of gratitude of life. The constructive coping skills of diligence, psychological steadiness, approach coping, and turning to religion were associated with low suicide ideation (Ogińska-Bulik & Kobylarczyk, 2015). Avoidance and emotional-focused approaches such as turning to religion and self-distraction play a direct role in the solidification of PTG.

4.4.2 Dysfunctional coping strategies

Not all coping styles are probable to minimise suffering. Therefore, literature has been established to embrace obstructive or dysfunctional coping strategies and less beneficial coping techniques that might include denial, substance abuse, venting of emotions, social and emotional withdrawal which are recognised as vulnerability (LeBlanc et al., 2011). It

was established that some of the emergency personnel employed dysfunctional coping strategies such as substance abuse and they are likely to withdraw from family after life-threatening events, which leaves them without the necessary support they greatly need.

4.4.2.1 Disassociation or emotional detachment

The term dissociation denotes to the "derialisation, memory disturbances, depersonalization and altered body image and time sense experienced at the time of trauma" (Laposa & Aden, 2003:50). Dissociation in trauma "entails a division of an individual's personality, that is, of the dynamic, bio-psychosocial system as a whole that determines his or her characteristic mental and behavioural actions (Nijenhuis & van der Hart, 2011:418). Disassociation or emotional detachment is regularly considered as dysfunctional way of coping. By disassociation from trauma, emergency personnel are at risk of impeding the rational process used to integrate emotional and logical responses to the trauma into an overall recollection system. Research accentuated the association between disassociation and development of PTSD (Maia & Ribeiro, 2010. However, mild forms of disassociation can be functional as it permits a person to cope with the current distress. Mild disassociation is a tactic of emotional deadening. The benefit of this strategy is that it provides emergency personnel with some structure during a chaotic event and enable them to respond to fellow colleagues in an effective manner.

However, it was observed that some individuals might undergo horrendous incidents without experiencing substantial disruptions in functioning (Torres, Synett, Pennington, Kruse, Sanford, & Gulliver, 2016). As stated above, not all coping approaches are constructive and some coping strategies are more helpful in psycho-social acclimatisation than others are. Some individuals use a negative way of trying to manage stress such as attacking other people, making them feel uncomfortable, avoiding the place or things that cause stress. Some people become defensive or even find self-destructive ways to handle stress. Moreover, there are individuals who linger in renunciation after a traumatic situation. For example, avoiding feelings pain after a critical incident might lead individuals to stay in denial and denying acknowledging what is real can be detrimental if it lasts for a long period. In addition, among the harmful coping strategies is suppression, active hostility, passive hostility, and being manic. These may present in the form of outbreaks

or fits of temper. Not any of these are helpful or valuable to the health and wellness of human being (Galor & Hentschel, 2012). Mashigo (2010) also established that emotional detachment comprises lessening one's efforts to manage stress, even losing hope in attempting to accomplish goals with which the stressor is meddling. Such emotional detachment is known as hopelessness. It arises when circumstances prevent the person to acclimatise. It involves isolating oneself using wide-ranging techniques of escaping activities that will divert an individual from thinking about the essential behavioural reactions such as substance abuse and excessive alcohol consumption.

4.4.2.2 Substance use and abuse

The challenge that emergency organisations are facing is substance abuse among its workers as coping method. Substance abuse and excessive smoking are typical unhelpful coping strategies used by emergency personnel, which may have an undesirable effect on their physical, emotional and social wellbeing (LeBlanc et al., 2011). The discoveries further propose that with dysfunctional coping approaches, sedatives and alcohol were helpful shortly after a critical incident, but the partakers were also aware of its adverse effects. They were still experiencing flashbacks, being destructive and hostile to others and loss of emotional control. It is well recognised that substance abuse leads to impaired functioning. However, to suppress the physical and emotional effects of a distressing events, some EMS personnel self-medicate through the use of drugs and alcohol. Fundamentally, the coping strategies they have invented may be futile for preserving their biopsychosocial wellness. Interestingly, an association between occupational stress, traumatic event and substance abuse has been found in the EMS personnel. Though substance abuse is of serious concern, it is recognised as a short-term coping method by some emergency employees (Mashigo, 2010; Feldman, Grudzinskas, Gerhenson, Clayfield & Cody, 2011) Donnelly and Siebert (2009) established that there is 40% rate of substance abuse among South African emergency employees.

4.4.2.3 Denial or Avoidant coping

Denial is another coping strategy that is considered as debatable. It is occasionally perceived as supportive in reducing grief and enabling surviving or it can be debated that it produces further difficulties except if the stressor can be successfully overlooked.

Additional belief regarding denial is that it is beneficial in the early stages of a traumatic incident or encounter but can hinder functional coping at later stage. It is often understood as the contradictory of acceptance as it consists of a denial to acknowledge stress and an individual's effort to behave as if the stressor is not non-existent. Denial or avoidant coping can assist in managing daily activities, but dependence on this coping approach leads to poor inclusive physical, psychological and social wellbeing (Mashigo, 2010; LeBlanc et al., 2011; Ménard & Arter, 2013). This may be through self-harm behaviour, which in turn will decrease their resilience in upholding a healthy lifestyle.

4.5 SUMMARY

Inclusive, the presented data shows that distressing or adverse events have a negative impact among emergency workers which, is often related with general psychopathology. Suicide calls were described to be among the extreme anxiety and stress exasperating occurrences for EMS workforces, such calls usually result to both personal and occupational problems as well as their organisations. Furthermore, in terms of human behavioural ecology, features of an individual's occupational life influence the other parts of that individual's life. However, emergency employees commonly have a typical high level of resilience regardless the large number and effect of critical incidents. Their high levels of bounciness serve as an important shield. Consequently, coping happens in all spheres of a person's life that is; physical, psychological, personality, spirituality and socially. Literature also demonstrated that not all coping strategies employed by emergency personnel are supportive and individuals might resort to coping methods that are detrimental for them and others. It is evident from the literature concerning the need for prevention and intervention programmes to alleviate the effects of occupational stress and to enhance the physical, emotional and social wellbeing of employees. The organisational culture also has a shielding effect on employees. Hence, it is critical in the following chapter to explore workplace intervention programmes to support emergency employees in managing critical incidents.

CHAPTER FIVE

WORKPLACE INTERVENTION PROGRAMMES TO SUPPORT EMS PERSONNEL

5.1 INTRODUCTION

Emergency personnel serve on the front lines of emergency medical care in demanding and occasionally life-threatening situations which have a negative impact on their quality of life and their service provision. The emergency workers are usually left alone to manage the aftermath of critical incidents, either due to lack of operative organisational-based programmes or a culture that discourages its utilisation. It is significant to explore the workplace interventions that are available to assist emergency personnel to manage occupational stress. The key element of any EMS organisation is its workforce. Though, in the past 40 years, the occupational stress experienced by this workforce has dominated the research literature, with little attention paid to the organisational support that provided to the workforce (Mac Ritchie & Leibowitz, 2010). The capability of an EMS organisation to provide high quality pre-hospital emergency care services vitally depends upon a trained and competent personnel.

This chapter discusses organisational strategies and the role of occupational social work and EAP in response to the needs of emergency personnel. The focus will be on what has been done, its effectiveness, as well as what should be done as commendations for future direction in this challenging profession. Professional workplace intervention strategies were used in the late 1980s to support emergency personnel to manage the effects of critical incidents. It is critical to have emergency personnel that will thrive and be a driving force for accomplishing integrated, community-based emergency care services. It is noteworthy to indicate that organisational support or lack thereof have an influence on their psychological health and wellbeing. Due to the impact of workplace stress among this professional group, organisational support or workplace intervention and enhancing teamwork or solidarity within this workforce would be beneficial. Hence, the health and wellness of the emergency personnel should be prioritised.

5.2 ATTRIBUTES OF A WORKPLACE THAT SUPPORTS WELLNESS AND RESILIENCE

The day-to-day challenges of emergency work, the ill-timed duty calls, the changes of shifts and plan, changing team employees, and dealing with the randomness of overtime all destructively influence on both health and wellness of emergency personnel. Emergency work demands more from personnel (Mac Ritchie & Leibowitz, 2010; Porter, 2013). Research has been conducted to explore the workplace culture of the EMS systems to determine if emergency workers need support of their organisations to manage work-related stress (Armstrong et al., 2016; Halpern, Gurevich, Schwartz, & Brazeau, 2009; Setti, Lourel, & Argentero., 2016; Shakespeare-Finch & Daley, 2017). Mutually, the findings from these investigations established that there is a serious need for workplace interventions to support the emergency personnel. A supportive culture of wellness and resilience starts through a consciousness of healthy lifestyles in the workplace. EMS organisations can achieve this by offering workplace interventions such as educational opportunities, programmes and practical skills to address a great range of health and wellness related subjects for workers. The following section will discuss the attributes of a supportive organisation as outlined by Armstrong et al., (2016); Halpern, Gurevich, Schwartz, & Brazeau, (2009); Setti, Lourel, & Argentero., (2016); Shakespeare-Finch & Daley, 2017).

5.2.1 Opportunities for socialising among teams

Social support is linked with resilience, and the workplace is generally a source of social support among colleagues. Colleagues typically serve as an extended family; staff members normally share work-related stress and experiences at the workplace. This might be mainly factual in the emergency field, where solidarity is crucial and emergency workers form healthy ties as an outcome of common experiences such as dealing with death or critical incidents. The coping approaches of emergency workers are typically casual and built on effective communication and constructive collegial support (LeBlanc et al., 2011). Destructive associations can result in emotional state of humiliation or self-blame, which normally lead to central to PTSD (Treanor et al., 2011). The opportunity to build relationships and bonds at the workplace can contribute to a sense of belonging, camaraderie and a collective assignment, and may offer support and assistance for

emergency personnel to deal with the aftermath of critical incidents or generally face life trials. Therefore, in emergency systems employers have the responsibility to offer employees the right and opportunity for socialising and networking with one another in a diverse setting to strengthen bonds and create relationships (Shakespeare-Finch & Daley, 2017). The workplace creativities should also provide prospects for peer-to-peer and the chance to offer credit and commendation benefits both the employee and the organisation. Shakespeare-Finch and Daley (2017) established that workplace solidity could predict wellbeing among emergency employees. The findings further stated that workplace belongingness is characterised as a high shielding aspect that meaningfully decreases depressing signs whereas solidification resilience, health and wellness among emergency employees. Individuals who have constructive associations at work are more likely to enjoy being at work and become productive when they reach the workplace. Teambuilding days, workplace social activities and employee appreciation programmes can assist to boost employees' morale.

5.2.2 Supports good physical health and wellness

Physical health is connected to psychological health and resilience. Getting necessary diet and workout and sufficient sleep can blow off chronic ailment, enhance the temperament and provide defence from depression**.** Individuals who are physically healthy are well able to manage the physical and psychological challenges of working in the emergency field. Organisations ought to initiate strategies, policies and guidelines that promote a healthy lifestyle at the workplace such as exercise sessions, team building exercises, fatigue mitigation, smoking cessation, and weight loss programmes (Riolli & Savicki, 2012; Lehmannn & Sanders). Physical training has extensive benefits. Attaining satisfactory physical suitable standards has been proven to decrease hypertension increase strength and increase oxygen-carrying capabilities (Bledsoe et al*.,* 2005). These aspects might upsurge the body's fighting for illness and injuries. A wellness and resilience programme should also identify other sources of support to assist employees deal with the repercussion distressing conditions, ensure that personnel know where and how to access those services if they are stressed or get assisted with any other personal or work-related matters.

5.2.3 Nurtures positivity

Positivity and hopefulness have been proven to boost resilience and enhance adaptive coping to stressful situations (Riolli & Savicki, 2012). The work setting should foster positivity and be one in which workforces receive credit and gratitude for their work companies and organisations should take into consideration the morale of their employees (Riolli & Savicki, 2012). Managers can show personnel that they are appreciated by providing constructive feedback and acknowledgement for their performance. The functional coping services to enhance positivity include acceptance, spiritual coping and positive reappraisal (Ogińska-Bulik & Kobylarczyk, 2015). The coping skill of rational planning on how to effectively manage the situation upsurges the level of positivity, particularly in appreciation of life. A significant attribute that emergency workers can develop is the capability in fostering themselves. This skill is essential to self-care. Self-care activities comprise prayer, attending yoga or meditation sessions, reading books, jogging, listening to a song, and enjoying time alone (Rippstein-Leuenberger et al*.,* 2017). Fostering the emotional and social self through interest, sports, and recreational activities promote a healthier self-care stance and allow the emergency personnel the chance to renew their energy levels.

5.2.4 Assist personnel acclimatise to change

Transformation can be very demanding, whether it is a new staff establishment or an innovative way of executing a procedure during a critical incident. Resilient individuals acclimatise well to change. In an organisation, transparency and an obligation to keep personnel up-to-date will create a setting in which people are well able to accept transformation**.** Organisations have an obligation to offer support for personnel in acclimatising to change by receiving comments prior to initiating a change. There should be clear communications about the benefits of the transformation, and by providing appropriate job training on applying the change (Lehmannn & Sanders, 2007). Organisations or employers should request personnel ideas and inputs for solving problems or improving conditions in the organisation. Employees should be informed on how their comments are fused into new organisational strategies or guidelines.

5.2.5 Empowers personnel to identify solutions

Collins (2008) proposes that individuals with strong critical thinking skills tend to be more resilient and often use problem-focused coping methods to manage distressing events. Having autonomy over one's surroundings also improves resilience which is also associated with improved mental health and wellness (Collins ,2008). Therefore, it is of greatest significance for emergency settings to support personnel develop their own problem-solving skills. As stated earlier, problem-focused coping represents efforts to deal with a traumatic situations such as looking for information, planning and taking action (Kirby *et al.*, 2011). Conceivably, the superlative approach would be to develop programmes or trainings promote functional coping for emergency personnel. EMS personnel should also be challenged to make worthwhile contributions**,** be involved in setting organisational goals, mission and visions and support those goals.

5.3 WORKPLACE INTERVENTIONS

There is an extensive literature which advocate for workplace intervention in the emergency field (Fjeldheim et al., 2014; Minnie et al*.,*2015; Atwoli et al., 2013; Donnelly 2012; Mashigo, 2010). To accomplish work at optimum levels, EMS professionals generally develop their own individual coping strategies to lessen or avert the adverse effects of distressing events in their daily lives. The employee's self-care incorporates individual physical, psycho-social health and the professional wellbeing. The personal strategies need to be augmented by organisational support strategies. There are diverse workplace intervention strategies that might assist emergency personnel to cope with the nature of the emergency work. The wellbeing of emergency personnel includes support from supervisors, the organisation, as well as colleagues, working as a team daily. Different strategies have been adopted by different organisations over the years. The strategies will be discussed in the next section.

5.3.1 Organisational culture of care

Employees might be more stressed and traumatised after traumatic events depending on the organisational culture which influences the organisational expectations and support of its workforces. Pienaar et al. (2007:255) argue that "confinement to degraded and impoverished environments for extended periods may foster helplessness and despair".

Globally, research established that work-related stress can be costly to the employee as well as the organisation. For the organisation the results are interruption of normal processes, disorganisation, unsatisfactory job performance and output and lower profit in a profit-making company (Anderson & Heyne, 2012).

The organisational culture of care denotes the level of accessibility and openness that occurs between employees, supervisors and top executives. Informal discussions in a neutral space between co-workers, supervisors and top management fulfil a significant support purpose. The organisational culture of care consists of an open-door policy commonly characterised by a down-to-earth manager and executive team; those are individuals that you can have conversation with about everything, in the cafeteria and passages. Organisational support is acknowledged to lessen unwanted physical, emotional and behavioural reactions (Barnett & Bradley, 2007). Research established that organisational support could lead to staff obligation, reduce psychological fatigue and improve organisational teamwork behaviour which can result in reduced staff turnover and improved job fulfilment. (Barnett & Bradley, 2007). Organisational social responsibility behaviour happens when the attitude of personnel encourages the active operations of the organisation without expecting official prize. Organisations have accountability to safeguard that employees have suitable assessment and continuous professional development opportunities. These include prospects to build upon and broaden their distinct interests, to change work roles if required, after a lengthy period in a position, to frequently assess professional growth in order to reflect the altering desires of individual employees (Collins, 2008; Bittner, Khan, Babu, M., & Hamed, 2011). This already creates moral support mechanism.

5.3.2 Debriefing and Critical Incident Stress Management

Trauma debriefing and Critical Incident Stress Management were also established to be beneficial coping strategies (Christopher, 2015). Their scope has been stretched to embrace settings such as universities, air corporations, industrial and mass catastrophes (Everly & Mitchell, 2000). Despite the fact that rendering and encouraging the use of post incident counselling services, several EMS organisations do not provide such programmes (Newland et al., 2015). The benefits of those services will be outlined below.

5.3.2.1 Debriefing

Debriefing is a phrase that is generally used to refer to a method of assistance and defusing of emotions and emotional responses after a critical incident. This could be any sort of incident such as natural disasters. However, Kristensen, Weisaeth and Heir (2012: 86) note that "debriefing is contra-indicated for those who are recently and traumatically bereaved". Debriefing has been established to be the utmost helpful and acknowledged technique of intervention at the workplace. The formal debriefing technique aids to alleviate the stress influence after exposure to a life-threatening incident, through ventilation of emotions and reactions, along with educational and informational mechanisms. It produces a healing effect and accelerates the recovery path by permitting members to comprehend their own stress reactions and to realise that others have similar reactions (Kristensen et al., 2012). A formal debriefing is usually held between 48 to 72 hours after the critical incident.

5.3.2.2 Critical Incident Stress Management

Critical Incident Stress Management is an adaptive, short- term emotional procedure that concentrates exclusively on an instant and detectable challenge. The purpose is to empower employees to return to their daily routine more swiftly with less likely hood of experiencing PTSD (Eagle & Kaminer , 2013). CISM was never meant for primary victims and should only be used for secondary victims such as emergency service employees. CISM include numerous mechanisms. The key mechanisms of CISM comprise the following:

- Pre-incident preparation;
- Education and training;
- Policy development;
- Crisis assessment;
- Strategic planning and individual crisis intervention;
- Large group interventions; and
- Demobilization and Crisis Management Briefing.

Small group interventions (Critical Incident Stress Defusing)

- Family support services;
- Spiritual crisis intervention;
- Follow-up sessions and meetings;
- Referral services;
- Post-incident education pre-incident forecasting and training for the next crisis; and
- Other relevant significant support services.

CISD is occasionally termed psychological debriefing and is linked to group psychotherapy. Nonetheless, as a process of support and supervision for emergency employees at the workplace, this strategy or scheme of coping is beneficial in verbalising emotions and worries. Through the social and collegial support, CISD affords emergency personnel with skills, gain perspective and being able manage on problematic or distressing circumstances (Eagle & Kaminer, 2013; Gilliland et al., 2010). In Australia, role play and simulations were utilised to train emergency personnel on how to manage passer-by struggle. Those trained stated an upsurge in proficiencies and self-confidence, which in turn lessen job-related stress (van Erp *et al.*, 2018). It also lessens loneliness and permits members to gain from one another about what is expected, what is beneficial and how to deal with critical incidents.

5.3.3 Supervision

Lehmann and Sanders (2007) documented the significance of supervision in the workplace intervention programmes yet emphasised that this is typically the frailest link. It is acknowledged that supervision is a beneficial support service which develops employees' skills for practice, decreases seclusion and upsurges concentration and inspiration to perform tasks in the workplace. In the context of emergency field, supervision is a critical component to enable emergency workers deal with the aftermath of critical incidents (Daniels, Clarke, & Ringsberg, 2012). Therefore, in an emergency service profession, an imperative component of supervision appears to be capacity building for employees to enable cope with distressing events and daily trauma which they are exposed to.

5.3.4 Peer support team

Peer support team consists of experienced emergency personnel who are competent as peer supporter staff to attend constant peer support training; topics cover themes such as how to provide emotional first aid and debriefing. They offer front line support and education to other emergency workers more especially the new recruits. If required, the peer support leaders also provide their equals with their contact particulars encourage them to access ongoing professional support at any time. There are many emergency workers trained as peer support employees and they work on a circling schedule. An individual is registered on as the main peer support worker for period of a one month and is accountable for responding to co-workers who recently experienced distressing circumstances. The peer support employee usually makes calls to co-workers or drives straight to EMS stations. This individual is accountable for debriefing emergency employees who have experienced a 'hard-hitting job' within the previous few days. Identified employees are contacted by the peer support individual and given a chance to casually discuss features of the known incident and explore any emotional responses they may have experienced. On the other hand, the peer support individual may visit the station where employees have recently dealt with one of these hard-hitting incidents, for a casual conversation (Essex & Scott, 2008). The emergency worker who recently experienced the incident is also given an opportunity of looking for further support from trained and qualified psychologists or social worker, if required.

Regardless of these support services being in place, research evidence has indicated that though emergency personnel know the peer support programme exists, they are less probable to voluntarily use it. Majority believe that the service is not safe when it comes to their personal matters. Confidentiality is a real issue for emergency personnel. Some interrogate where the information collected by the peer support employee would end up. Rather, they prefer that they talk to a reliable co-worker or someone they had worked with or work with frequently rather that somebody who they think might breach confidentiality by sharing the information with others (Donnelly & Bennett, 2014). It is vital for EMS systems to ensure confidentiality and utilise a just culture framework. There is a belief of macho, an ironman or heroic culture in the emergency service field, which might be contributing influence for emergency personnel not to seek out assistance.

5.3.5 The role of occupational social work and EAP

Occupational stress is a problem that lead to further other personal, health, work organisational and social problems that can affect both performance and productivity. The consequence is a disruption of the employee's work-life balance. In some instances, employees, through utilisation of personal resources and workplace intervention are able to rectify the imbalance in their work-life and restore order. Occupational social work is very critical in assisting employees deal with workplace and personal problems. Occupational social work is the practice specialisation in which programs and interventions are targeted specifically to the population of the workplace (Patel, 2016). Workers are the most important asset of any organisation and it is significant to safeguard their health and wellbeing. The primary goal of the occupational social worker is to meet the needs of individual employees. The mission is the promotion of employee health and wellness in relation to the impact of high job demands. However, the occupational social worker can also be able to assist both the employee and the organisation by implementing programmes that can benefit the organisation by increasing employee's productivity and commitment to the organisation. Williams (2016:130) confirmed the above view when referring to the responsibility of occupational social workers as specialists who are "able to balance and assimilate organisational, work-person, promotive and restorative interventions that contribute to the optimal functioning of the organisation". For their seamless functioning and operational success, effective work organisations such as EMS require employees managing and working together and to their optimum. The humanistic aspect of work environment is determined by the over-all desire to support personnel and to lessen the destructive effects of the work setting through workplace programmes such as EAPs.

Employee Assistance Programmes (EAPs) are arranged, employer-funded programmes that are tailored to support employees and, sometimes, their families as they adopt and sustain behaviours that reduce health risks, improve quality of life, enhance personal effectiveness, and benefit the organisation's bottom line (Berry, Mirabito & Baun, 2010:17). From available records, EAPs were initial announced in the United States of America (USA) at Akron, Ohio in 1935 (Dewe, Leiter & Tom, 2000; Csiernik 2011; Zastrow, 2015). These programmes were exclusively intended to provide services to

substance abuse dependent personnel and assisted to offset their discharge from work (Buon &Taylor, 2007; Ranjin, (2012). They emerged in South Africa in the early 1980s. Local South African programmes mimicked American models and were announced to local work environment by social workers and psychologists who either followed American literature on such programmes or had studied about them in the USA. Work-related stress was described to be one of the reasons why EAPs were announced in workplaces.

EAPs have undergone a fundamental alteration over the past two decades with the focus classically being a "broad-brush" in addressing a wide range of individual concern. EAP services are regularly integrated with work-life balance, behavioural, health and wellness or other programmes. EAPs have transformed continuously to stay well-informed of tendencies in a workplace. EAPs have come a long way from their inventive focus on their traditional work-related challenges and their importance on substance abuse. Programme innovation in EAPs have come in response to employers' desire to integrate EAP services with the needs of employees outside the workplace, such as wellness and quality of life concerns. Therefore, EAPs are currently intended to recognise and resolve "personal concerns, including but not limited to health, marital, family, financial, alcohol, drug, legal, emotional, stress or other personal issues" (Employee Assistance Professional Association, 2011).

Public institutions (namely, state departments and state-owned enterprises) and private business organisations in South Africa have recognised the importance of EAPs in humanising the workplace. Presently, government departments are investing resources in EAPs to both serve the employer and the employees' needs and make the work setting as free of hazards as possible (Kirsten, 2010). There are now thousands of EAPs that are staffed by individuals with a diversity of professional backgrounds such as social work, psychology and counselling (EAPA-SA, 2011; Zastrow, 2015). The rationale for implementing EAPs is to assist increase employees' work commitment and performance through life management knowledge, social skills, as well as improved mental and physical health. EAP is broadly acknowledged as one of the main strategies for managing work-related and are swiftly developing into providers of comprehensive health and wellness programmes in the workplace (Manganyi, 2016).

Employers have the responsibility to offer EAP services with practitioners who comprehend the background of the EMS industry and inimitable roles of emergency personnel. Emergency systems have an obligation to establish a comprehensive wellness programme, inclusive of physical, psychological, spiritual health, that promote the overall health and wellness of emergency personnel and promote a work-life balance within the organisation. Prevention-focused programmes assist emergency workers to build resilience so they can well manage work-related stress and prevent undesired reactions such as depression and PTSD. Employee health and wellness programmes should comprise initiatives to upsurge social networks, which studies have established the constructive influence on employees' psychological health and are recognised by personnel as an essential workplace resource (Porter, 2013; Rajin, 2012). The main premise behind introducing an EAP into the workplace is usually the notion that it increases productivity and promotes social functioning of the employees. Organisations implement EAPs with a specific goal and objective in mind. Programme objectives that organisation set to accomplish are to:

- To adhere to the commitments and shared responsibility of care.
- To retain and improve employees' productivity.
- To humanise work environment and support the employees' wellbeing.

EAPs are also intended to inspire personnel to seek assistance before their work or personal challenges reach the levels that they negatively affect or decrease their job performance. Literature suggests that employees furnished with essential job and personal resources might be in a better position to survive such harsh working environments. EAPs are perceived as the superlative approach for implementing work-integrated programmes to handle employees' work and personal problems (Santos, Chambel & Castanheira, 2016). It, therefore, make sense that work and employing organisations such as government departments and institutions stand to benefit from the services of EAPs. Sieberhagen (2011) recommend that EMS systems should address problems in an organised manner which concentrates on both employees and the organisation. Supervisors and directors can be furnished with skills identify the primary warning indications of distressed personnel as well as the detailed referral measures

(September, 2010). Subsequently, an EAP can intensify management competence in adopting proactive approach to manage work-related stress and support employees to work more effectively and attain healthier work-life balance. Irrespective of numerous investigations conducted to establish how EAP can boost job performance, minority evaluations of the impact of EAP services in EMS organisations exist (Sharar, Pompe & Lennox, 2012; Annandale, 2012). Social responsibility is another key motive for organisations to implement EAP services at the workplace. EAPA-SA (2011) outlined a broad band approach that can be adopted by agencies in implementing EAP services which consist of the following:

- Psychological health or family counselling;
- Education assistance;
- Substance abuse treatment referrals;
- Legal aid and financial counselling;
- weight loss or nutrition training; and
- Trauma management sessions.

Health Risk Assessment (HRA), which might include a health survey about health behaviours and medical surveillance, namely; height, weight, blood pressure, glucose and cholesterol).

5.3.5.1 Benefits and impediments of EAPs

Literature encourages the usage of EAPs as commonly profitable ways to improve job performance and humanising the work environment (EAPA-SA, 2011; Csiernik 2011). Other benefits are documented as follows:

- Building solidarity and increased cooperation;
- Improved morale;
- Increased alternatives and options to problem solving;
- Improved psychological wellness;
- Lessened absenteeism;
- Improved resilience;

- Work-life balance;
- Improved organisational relations;
- Reduced work-related stress;
- Reduced hopelessness;
- Feeling cared for as an individual;
- Stigma reduction;
- Reduced health care expenditures; and
- A drop in injuries on duty.

EMS organisations should ensure the provision EAP services to the extent finances and resources permit for the benefit of the employees and organisation (Newland, Barber, Rose & Young, 2015) established that emergency personnel who attended EAP sessions, they found the sessions to be tremendously supportive. However, EAPs can have its own limits. Various authors, for example, list several impediments against utilisation of EAPs by targeted employees (EAPA-SA, 2011; Manganyi, 2016; Mogorosi, 2009). These impediments of programme utilisation, which would contribute to their success include:

- Uncertain programme policies and procedures;
- Inadequate programme service components;
- Lack of commitment and support by organisational management;
- Poor programme service physical location or accessibility;
- Poor programme service visibility;
- Poor or no marketing of programme services; and
- No buy-in by employees and unions.

The belief in efficacy and awareness of what EAPs have to offer can all pose barriers to employees using EAP services. It is not unusual for emergency personnel to be disillusioned by EAP programmes. Emergency personnel often mistrust assurance of privacy and confidentiality, and they worry that discussing their occupational challenges may risk losing their job. It was established that some emergency personnel feel that EAP

counsellors without experience in emergency field might not really comprehend the root of their stress (Newland et al., 2015; LeBlanc et al., 2011). When confronted with mental or emotional problems or substance abuse, people often or constantly deny that there is a problem instead of voluntarily seek professional assistance from EAP practitioners.

5.3.6 Trauma Informed Care

Trauma Informed Care (TIC) is fundamentally an organisational strategy designed to alter the whole organisational culture, taking into consideration the type and sternness of the trauma experienced by EMS personnel (Bloom & Harrison, 2011). Owing to acknowledgement that critical incidents are common among the emergency responders and that the influence of such can be undesirable, Trauma Informed Care is becoming popularised and adopted by various organisations as a method of assisting individuals manage the aftermath of critical incidents. Trauma Informed Care is more than a therapeutic approach or philosophy; it is an informed service delivery. The Trauma Informed perspective is distinctive. However, from trauma specific treatment practises, in that it is more explicitly a lens rather than philosophy (Carello & Butler, 2015). Although trauma and TIC are complex, comprehension them well permits helping professionals (social service professionals, psychologist and counsellors) to care for the desires of individuals from a profoundly comprehensive viewpoint. Trauma Informed Care instigated a modification in thinking about how therapists view individuals and their experiences or challenges, and it can be added to any existing treatment within the organisation. TIC, at its core, seeks to understand human behaviour, coping approaches (both adaptive and maladaptive) and any challenges that result by examining critical incidents throughout life. TIC aims to comprehend one's current functioning considering former incidents and does not see presenting challenges as necessitating to be fixed, but rather tries to recognise why these difficulties exist in the first place (Briere & Scott, 2014). A Trauma Informed perspective integrates this inclusive description of trauma and offers the lens for comprehending how ferocity, discrimination, catastrophe, or other critical incidents have influenced the individuals involved. The Trauma Informed perspective affords a context to create systemic responses that are helpful and nurture speedy recovery.

Wilson, Pence, and Conradi (2013) identified guiding principles essential to Trauma Informed approaches. These are:

- Physical and emotional wellbeing of the employee;
- Corporation and teamwork;
- Identification of trauma-related needs of the employee;
- Improvement of individual wellbeing and resilience;
- Improvement of organisational wellbeing and resilience of those employed in the system; and
- Partnership with agencies, service providers and networks that interrelate with employees.

TIC stresses that the type and harshness of the trauma experience must be taken into consideration. It is not intended to treat specific indications or signs of trauma; but, rather, to provide services in a way that is warm and suitable to the special needs of trauma survivors. Recommended treatment for trauma includes encouraging independence, choices, control, prevention of re-traumatisation, and collaboration of treatment planning (Prescott, 2011). Interest is steadily growing in applying Trauma Informed approach within institutions such as emergency care systems, private companies and community wellness. Prescott (2011) outlined the following five necessities to creating a trauma informed system:

- Organisational obligation for transformation;
- Use of a collective assessment instrument through the organisation;
- Training and education for employees of the organisation about the trauma and its undesirable impact;
- Adopting practices that favour employees and sensitive to their history of trauma; and
- A review of organisational policies and guidelines to safeguard that they are intended vigorously to circumvent unintended re-traumatisation of employees.

It should be highlighted to employees that trauma is a normal reaction to uneven circumstances and with assistance they will do well, and such an approach, known as psychological workplace first aid, has been proven to yield hopeful outcomes (Prescott, 2011). The responsibility to TIC commences with evaluating employees' care and the organisation, evaluations, remedial trauma interventions, training, treatment assessments, management, and organisational support are imperative aspects in TIC treatment. Trauma-focused treatment refers to treatment intervention programmes or approaches intended at lessening trauma indicators in employees (Courtois, 2014). TIC interventions programmes are created with the following guiding ideologies; an organisational crisis management plan with a qualified team will safeguard that employees obtain support and information which can enhance their swift recovery, and aid hasty return to workplace. Subsequently, health screening of health might be suggested whereas mandatory debriefing can be imbued into the helping process.

TIC is a preventive method. Through the methodical assessment and treatment of trauma, it is assumed that future critical incidents may be circumvented. Trauma assessment can happen within the organisation without extra resources. Regardless of being protective, TIC is intrinsically strengths-based. Functioning from a trauma-informed standpoint all individuals are viewed as unique with all the resources necessary to recuperate healthy functioning. TIC necessitates that all individuals at the workplace, regardless of the nature of the job, must be trained on trauma. They must comprehend trauma indicators and triggers, even if they are not constantly involved in critical incidents to minimise any chance of secondary trauma during service delivery. In the field of social work, there is a mounting consciousness of the impact of trauma on emergency workforces and service settings (Toker, Tiryaki, Ozçürümez, & Iskender, 2011). The need for Trauma Informed Care and resilience-enhancing services is enormous. Though an employee's trauma experience might not be the presenting problem, service providers are progressively acknowledging the effect of past trauma utilising TIC models. In the TIC approach, service providers take into thought how trauma affects the lives of employees, and services are intended to be supportive and to prevent re-traumatisation (Wilson et al., 2013). TIC changes the focus from fixing undesirable experiences to building optimistic potentials and understanding how people survive in spite of some

difficult circumstances they come across in life. As a field of practice, it focuses on the application and measurement of interventions that are performed with the intention of bringing about change to increase wellbeing, life satisfaction, physical health, and other conditions that lead to human flourishing at the individual or group levels (Gleitman, Gross, & Reisberg, 2011; Seligman, 2011). The influence of exposure to trauma through victims or clients and its subsequent secondary traumatic stress is now being regarded as a work-related risk for emergency settings and personnel that work with children and adults with fatal injuries or complex circumstances (Abrams & Shapiro, 2014). The TIC is intertwined with the innovative Seligman's theory of wellbeing, which postulates that wellbeing results from a combination of contributory aspects that are generally known as the PERMA model: positive emotion; engagement, positive relationships; meaning, and accomplishment (Seligman, 2011). One of the foundational notions of treatment informed approach is the identification and use of individual strengths. This notion explores and emphasises the characteristics of individuals' personality which include essential competences for thinking, feeling, and behaving to the benefit of oneself and others (VIA Institute on Character, 2015). Character strengths are considered overall abilities that manifest through choices, opinions, feelings and manners (Niemiec, 2013). Consequently, how one attends to and deals with the negative experiences that occur in a full life is character strengths are considered present in everyone to a greater or lesser degree; those strengths that come most naturally are considered "signature strengths" (Seligman, 2011). However, any of the strengths can be developed and applied individually or in combination as a pathway to greater levels of wellbeing.

Pawelski (2014) highlights the necessity to ponder that constructive and undesirable conditions coexist in life; that undesirable emotional state can lead to constructive results, and vice versa; and that feelings, whether positive or negative, can have both benefits and costs. Taking into consideration the nature of emergency personnel, it is therefore necessary to take into cognisance the influence of trauma and the role of trauma informed care into their daily lives. Generally, life takes place in a setting that consist of undesirable aspects and dealing successfully with those adverse features certainly may assist to achieve a good or quality life. Within the trauma informed care framework, the intention of this study is not to exclude negative experiences but to explore optimal coping of EMS

professionals as conceptualised in the contemporary trauma theory. The trauma informed care can assist emergency personnel to retain their optimism, hope, meaning, improve their resilience and the courage to carry on despite the hardships they endured. The Substance Abuse and Mental Health Services Administration (SAMHSA, 2015) published six key guiding principles that enlighten the essence and the application of working with individuals who experienced trauma. These values are: (1) security; (2) honesty and openness; (3) peer support; (4) teamwork and empathy; (5) enablement, power of speech and decision-making; and (6) social, historical, and gender issues. These six principles mirror and outline a resilience-based approach that can be adopted by emergency settings to enhance coping.

5.4 SUMMARY

From the reviewed literature it is eminent that EMS personnel that receive organisational support and good interpersonal relationships from their peers are more resilient and have greater life satisfaction than individuals who do not receive support organisational support is acknowledged to lessen unwanted physical, emotional and behavioural reactions. Building solidarity and teamwork is critical in an EMS field. Organisation should ensure that training opportunities and education about trauma management are available and easily accessible by all emergency personnel. Occupational social work intervention does have an important role to play in assisting emergency personnel to deal with work-related stress and any challenges that can negatively impact job performance. Organisations or EMS system should adopt various intervention strategies to enable employees deal with the impact of daily trauma and enhance their resilience. Through reinforced collective teamwork and service delivery could contribute and improve emergency personnel coping by providing a validation that the duties they perform is effective and of value. Organised peer support, such as a buddy system might inspire EMS personnel to reach out to one another and serve as additional support. Furthermore, the chapter discussed about providing facilities and encouraging activities that provide emergency employees with opportunities to detach themselves from the workplace for short periods such as fitness centre or spiritual sessions which could enhance their coping with critical incidents. The following chapter will discuss research design and methodology.

CHAPTER SIX
RESEARCH METHODOLOGY

6.1 INTRODUCTION

Following a brief synopsis in chapter one, this chapter is a central reflection of how this study was conducted which focuses on the scientific method, type of tools and the processes employed in order to achieve the aim of this research. The scientific methodology presents specific tasks and research steps employed by the researcher (Babbie & Mouton, 2012; Theron, 2013). It provides rationalisation of the methodological approach and exploratory-descriptive design chosen, it also elucidates the population and sampling method of the study. This chapter outlines the manner in which data collection, quality criteria, analysis and interpretation were conducted in this endeavour. It also gives an indication of the ethical considerations for the study particularly in considerate to the subjective nature of qualitative study. In this chapter, the confines of the study are also discussed.

6.2 RESEARCH APPROACH

The study adopted a qualitative approach. This approach is appropriate when the researcher is pursuing a sensitive and an emotional depth subject. Qualitative research is an interpretivist approach that affords a way of ascertaining in-depth data particularly regarding under-researched areas, sensitive topics or group that are not easy to reach (Nell, 2015; Dahlberg & McCaig 2010). Babbie and Mouton (2016) define a qualitative approach as a method that deliberates more on human experience and produces theoretical observations that cannot easily be reduced into numerical figures. Nell (2015) deduces that the weakness of qualitative research is that data collection usually takes longer, and data analysis is time-consuming as compared to quantitative research. The inductive nature of qualitative approach has made it the most suitable approach in this study. The proponents of qualitative and contextual approaches give access to a valuable information such as profound and more affluent understanding of individuals' lives and behaviour involving knowledge of their personal experiences. Significantly, this permits

for a flexible approach. The significant part of human experience is the personal connotations that individuals attach to themselves, their actions and to the environment around them. An in-depth comprehension can only be acquired through a qualitative approach (Monette, Sillivan, DeJong, & Hilton, 2014). Hence, it is crucial to understand and to interpret the circumstances from the perspective of the individuals themselves considering how they give meaning to their personal experiences (Monette et al., 2014). In this case, the qualitative approach is being used to obtain a comprehension of daily trauma experienced by emergency personnel, its influence on their health and wellness and their coping strategies. The qualitative approach permitted the researcher to make sense of the lived experiences or own stories as well as comprehend and construe how emergency personnel perceive and construct their own world. Examining both their experience of critical incidents and the coping strategies employed by them to combat work related stress and distressing incidents from this qualitative perspective, also give a deeper understanding of the potential impacts that necessitate intervention.

6.3 RESEARCH DESIGN

Babbie and Mouton (2012:74 define a research design as “a blueprint of how you intend conducting the research”. Bryman (2012:46) postulates that a research design “provides a framework for the collection and analysis of data”. When selecting a research design, it is vital to acknowledge its limitations. An exploratory-descriptive research purpose was adopted. Descriptive studies aimed at describing the natural phenomenon, which arises within the data in question. In this study, this method assisted the researcher to describe expressed interpretations resulting from interviews. A phenomenological research design was adopted in this study, this design was appropriate in this study as the researcher derived to a philosophical perception of the complexities of the circumstances and how the participants make meaning of the phenomenon under investigation. It aided the researcher to employ in-depth interviews to gain insight and astonishing comprehension of the lived experiences of emergency personnel. The exploratory method also empowered the researcher to decide on the extensiveness and scope of the research. The objective of this research method is to obtain an extensive perception of circumstances or incidence (Bless, Higson-Smith & Sithole, 2013;Yin, 2014; Dahlberg &

McCaig, 2010). There is not only unfolding of individual experience in phenomenological research; there is also the discovery of shared experiences across the participants. It is for these reasons that a phenomenological design for this study was selected. This allowed the researcher to attend to each participant's experience and how they make sense of their story and to look for shared perceptions across participants. This allowed the researcher to attend to each participant's experience, how they make sense of their story and to look for shared perceptions among participants.

6.4 TARGET POPULATION

A study population is a collection of all units of the study from whom the research wishes to make specific analysis and conclusions. Denzin (2015) asserts that a population is the totality of individuals, events, organisations components, case archives or other sampling units with which the research problem is concerned. Population represents a target group, which is the set of rudiments that the researcher focuses upon. The population of this study allowed the researcher to pull a group of individuals studied to draw deductions (Bless et al., 2013; Babbie & Mouton, 2012). It also supported the researcher to consider and to decide on the complete set of individuals who served as an interest of this research and who had particular physiognomies. For inclusion and exclusion in the current study, Emergency Care Officers (ECO), and Intermediate Life Support officers (ILS) station managers from Capricorn District constituted the population for this research. Although the emphasis of this study was on lived experiences of emergency medical personnel with the goal of developing a user-led model, the focus of the study permitted station managers to be part of the study considering their supervisory role of identifying, supporting and referring troubled employees for further assistance.

6.5 SAMPLING

Sampling allowed the researcher to select representative members of the population that served as an interest of the study (Babbie & Mouton, 2012). It empowered the researcher to select a subgroup of the entire population, which was actually interviewed and whose characteristics were generalised to represent the whole population (Bless et al., 2013). In this study, purposive sampling was employed as it permitted the researcher to select the

participants because of their defining characteristics or distinctive qualities (Etikan, Musa, & Alkassim 2016). Strydom (2011) asserts that purposive sampling is a thoughtful process of selecting participants based on their capability to offer desirable data. In purposive sampling, consideration is given to individuals who can offer pertinent data. Purposive sampling allowed the researcher to recruit participants who have the knowledge and experience to provide rich data on the subject being studied. The central focus of purposive sampling is on data saturation rather than generalisation of results (Etikan, Musa, & Alkassim, 2016). Fourteen emergency personnel and seven station managers partook in the study. The current sample was chosen based on expediency and their characteristics which met the criteria for the goal and focus of the study (Strydom, 2011). The study purposely excluded shift leaders because they spend most of their time performing administrative tasks such as managing, coordinating the departmental budget and expenditures as well as projecting future expenses and implement policies and procedures. They also inspect emergency vehicles and ensure that all equipment comply with rules and regulations, as well as making sure that workers are complying with all department policies and applicable laws. Therefore, the researcher thought shift leaders will not give much-needed information of distressing experiences and the coping strategies utilised. However, due to shortage of staff, some of the participants were in acting positions of shift leaders and also attended to emergency calls.

The following criterion was used for selecting participants for the study:

- Only participants with more than five years in service, these participants provided recent profound information about their experience to critical incidents and the coping strategies they utilised.

Purposive sampling also empowered the researcher to acquire broad understanding on the lived experiences emergency personnel. To understand the occupation stress that EMS experience, it is also important to explore how management have responded to complaints of EMS or address their concerns. Therefore, including station managers in the study was beneficial as the researcher intended to develop a user-led model that is informed by the emergency personnel and the supervisors. Seven station managers formed part of the study. Hence, the proposed EAP intervention

model will not only be useful to EMS personnel but to the administrators who manage EMS personnel and the organisation.

6.6 SAMPLING SIZE

A query that regularly plagues emerging researchers is how large their sample size should be. There is no accurate answer to this question (Cohen, Manion & Morrison 2011). The precise sample size depends on the aim of the research, whether the research design is qualitative or quantitative in nature, the type of the population under enquiry, the desired level of precision and the number of variables comprised in the study. In the current study, the sample size was grounded on the principle of saturation which specifies that the researcher should finish the process of data collection when there are no knew themes emerging (Pellerin, 2012). The goal of qualitative research can be stated as “in-depth understanding”. As such, the goal in qualitative studies is to obtain a large enough sample that a range of opinions will be represented, but not so large that the uncovered data is repetitive (Fusch & Ness, 2010). Saturation was reached after the 14th interview of emergency personnel. Therefore, there was no need to conduct the fifteenth interview. If data saturation had not been reached on the 21 interviews for both emergency personnel and station managers, more participants would have been selected according to the inclusion criteria and more interviews would have been conducted.

6.7 DATA COLLECTION TECHNIQUES

The aim of the study was to explore and describe lived experiences of emergency medical personnel, and subsequently develop a user-led model. Therefore, direct interaction with these professionals would have been the utmost viable option but it was not possible because 11 March 2020 marks the day when the World Health Organisation (WHO) declared the novel Corona Virus commonly known as COVID-19 a disease of Public Health Emergency of international concern. In line with the country’s response to the COVID-19 pandemic, which has been risk based, evidence lead and informed by scientific research, it was mandatory to observe public health guidelines published by the NDOH. To comply with protocols of COVID-19, the researcher utilised telephone interviews to collect data instead of face-to-face interviews or focus group discussion.

6.7.1 Telephone interviews

The qualitative nature of this research permitted the use of semi-interview schedule as data collection technique without limiting responders to responses. This allowed the researcher to probe and follow up on responses. It is worth indicating that there are advantages in the utilisation of semi-structured interview. The advantage of this method is that it allows the researcher to acquire richer and deeper data and yield an utmost valuable own interpretation. The questions were clearly outlined and engrossed participants' attention on their lived experience of working within a setting branded by distress and current coping strategies. The semi-structured interviews schedule allowed the researcher to discover new aspects of the study by exploring in detail the explanations supplied by participants.

A few but emergent writings have recognised the potential of in-depth telephone interviews as a feasible possibility for qualitative study (Trier-Bieniek, 2012; Holt, 2010). Qualitative research permits the use of telephone interview schedule as data collection technique without limiting responders to responses. It allows probing and follow-up on responses. Interviews also encourage the building of relationship and empathy; it permits flexibility in the course of the interview produces profound information (Heider, 2014). This method was used to obtain an exhaustive perception of the phenomenon under investigation. Consequently, the data collection technique permitted the researcher to acquire an intense comprehension of the denotations from participants' rich descriptions of critical experiences. The expediencies and practical benefits of telephone interviews include greater access to geologically isolated participants, enhanced flexibility for forecasting reduced cost (Cachia & Millward, 2011). Numerous scholars accentuate the methodological strengths of conducting qualitative interviews by telephone, such as increased confidentiality, reduced distraction and perceived anonymity for participants (Cachia & Millward, 2011; Lechuga, 2012; Trier-Bieniek, 2012; Saura & Balsas, 2014).

Qualitative data apprehend sensitivities of meaning and understanding that statistics do not convey. The interviews were audio-recorded and precisely transliterated to obtain textual information. The transcriptions were reserved in a safe place.

However, it is significant to note that the process was time consuming and quite high costly. Almeida and Monteiro (2017) noted the following limitations of telephone interviews:

- Participants have to really answer the call and can hang up at any time due to other distractions;
- Conduct and body gestures cannot be noticed;
- Discussions tend to be briefer than face to face interviews; and
- Recording data generally influence the pace of the discussion, the type of the answers and the quality of the investigation.

In this study, the major challenges were network instability and interview disruptions where participants were expected to respond to emergency calls.

6.7.2. Pilot study

A pilot study is a preliminary study on a small sample that aids to recognise any possible difficulties with the study design, as well as the research tools. Before the main data gathering commenced, the researcher conducted a pilot study with the goal of assessing the weaknesses and credibility of the data collection or interview guide, and to make amendments where necessary (De Vos et al., 2011). The real interview schedule was utilised, and the data were analysed for any gaps, discrepancies, or errors in the data gathering process. The pilot study was conducted on two participants (one station manager and one emergency personnel) who volunteered to participate in the study. The interview took place within the participant convenient time. This gave the researcher an opportunity to refine questions and obtain a richer understanding of the phenomenon under investigation. The researcher also removed some of the question that were found not relevant to provide rich data.

6.7.3. Preparation of participants

Before commencement of each interview session, the researcher ensured that the participants were well equipped for the interviews. In the current study, the researcher considered De Vos et al.'s (2011) guidelines. Before setting up appointments, attention was given to the participants' work programmes and suitability. The researcher directed

each participant through the study's ethical issues, clarifying their rights to voluntarily participate or withdraw from the study at any time, anonymity, confidentiality, and debriefing in case the interview led to emotional or psychological distress. This information assisted the participants to comfortably make informed decisions. The interviews were conducted telephonically at the participants' suitable times to ensure that there are distractions during the interviews. Additionally, consent to record the session was also telephonically obtained from the participants.

6.7.4 The course of interviews

The interviews were conducted in English and lasted roughly 30-45 minutes. The researcher directed the interviews, allowing the participants to do most of the talking. The researcher used open-ended questions, which did not assume a response but permitted detailed responses from the participants. During the interview, participants were requested to elaborate more in some of their responses in order to obtain further information on the specific matter. During the interviews, the researcher intended to have a discussion with the participants to ensure that the interview did not become a query and response sitting. In this study, the researcher considered empathetic considerate of the participants' circumstances through attentive listening skills, which comprised rephrasing and summarising some of the participants' descriptions. Relevant information was collected from the participants until data saturation was reached. The researcher took notes during the interview, non-verbal cues and body language could not be documented as it would not have been apparent when listening to the audio recordings.

6.8 RESEARCH PROCEDURE

The process of data collection comprises a number of intersected steps such as sampling, obtaining the approval, gathering data, recording and managing the data collection. Data collection addresses the questions being asked in the study (Creswell & Plano Clark, 2011). Data collection in this study followed sequential steps of getting endorsement from the research ethics committee, obtaining permission to conduct study, acquiring informed consent forms or pronouncement of consent and having data collection techniques. (Bothma, et al., 2010).

The research procedure commenced by requesting and obtaining approval from the DoH at provincial and district level. The study participants were identified through station managers who served as informants. Consequently, obligatory documents comprising all the relevant information, evidence and ethical approval from the University of Limpopo were submitted to the provincial office to meet their departmental standard operating procedures and processes for research. For the rest of the data collection process, the researcher was permitted to communicate with specific individuals to ensure confidentiality and lessen any conceivable pressure. The researcher made prior arrangements with the participants and equipped them with specifics of the study. The researcher read the consent form for participants who accepted to participate, and their recorded voice notes were used as a permission to voluntarily partake in the study.

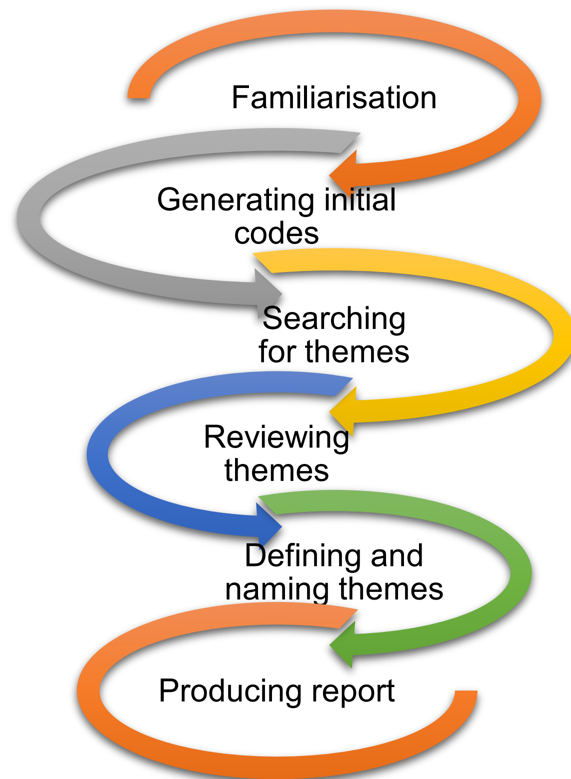
6.9 DATA ANALYSIS

This research followed thematic analysis as it focuses on lived experiences and aims to give power of speech to research participant's voice and interpretations (Larkin & Thompson, 2012; Joffe, 2012). Thematic Analysis is the process of categorising themes or patterns within qualitative data (Rosenthal & Wilson, 2016). Data analysis consists of having a clear meaning of manuscripts and images (Creswell, 2014). In the current study, data analysis permitted the researcher to organise data, stirring into profound comprehension, representing the data, and elucidation of the finer meaning of the data. In thematic analysis, a theme apprehends something imperative about data in relation to the research question. Explanations were clarified, feelings and meaning were assigned to themes. Data were categorised according to the sequence of data collection per participants, from participant one (R1) to (R14) and (M1) to (M7) as a technique of identification.

6.9.1 Stages of data analysis

This study followed an outlined systematic guide that is characterised by six stages of the thematic analysis process (Clarke & Braun 2013).

Figure 1: The qualitative thematic analysis process.



6.9.1.1 Familiarisation

The researcher read and re-read the transcripts to familiarise herself with the collected data to note remarkable concepts. The audio recordings were listened to several times before and while transcribing the interviews. Subsequently, the researcher arranged the data in a meaningful way by reducing data (data reduction) to address the aim and objectives of the study.

6.9.1.2 Generating initial codes

Data were coded to form various groups and subgroups of the main themes from the raw data. The transcripts were read again and at this period the researcher used a colour coded system to highlight specific codes organised into groups. The researcher recorded notes along the way as she explores the data.

6.9.1.3 Searching for themes

Thematic analysis that includes classifying themes from the main patterns in the data was used to analyse data (Kyle, 2014). For data management, the researcher put similar

responses together, i.e. break the data into parts to get a sense of the general response by all participants.

6.9.1.4 Reviewing of themes

This stage comprised the re-reading and refining of themes. This was very useful as it ensured that main themes emerged from the data sets. Themes that were not supported by appropriate codes were removed.

6.9.1.5 Defining and naming themes

At this stage themes were identified, subsequently classified and data was were then interpreted, for example finding meaning of the data in terms of the researcher's own understanding of the emergent themes, and linking these to theory from the literature reviewed. Braun and Clarke (2006) propose that it is imperative to establish whether themes comprise sub-themes, which are considered beneficial in providing order of meaning in the data. In this study, interrelation between themes and sub-themes were made.

6.9.1.6 Producing report

Finally, the last step in this stage was to compile a report (Maree, 2012). This is the final stage of thematic analysis at which a report is compiled on a composite subject, in a form that will please readers regarding the quality and validity of the research methods used.

6.10 QUALITY CRITERIA

In the current study, the researcher ensured the quality of data by addressing trustworthiness. Addressing trustworthiness in qualitative research is more significant. It is closely linked to the quality and reliability of the study (Engelbrecht & Kasiram, 2012; Connelly, 2016). Botma, Greeff, Mulaudzi and Wright (2010) invented a set of four criteria upon which to determine the trustworthiness of qualitative research, namely; credibility, dependability, conformability, neutrality and transferability. To ensure trustworthiness of the study findings, the following criteria were applied:

6.10.1 Credibility

Credibility is one of the substantial constructs aspects in ensuring reliability. To enhance credibility in this study, the researcher had to familiarise herself with the culture of participating organisations. Credibility allowed the researcher to select emergency personnel at Capricorn District who experience daily stress as part of their job and use different methods of collecting data. In this study, telephone interviews were used to collect data, participants gave consent and voluntary participated in the study. Field notes and audiotape were used during sessions to clear capture all the information from the participants. The informants were well-informed of all engagements during the study.

6.10.2 Dependability

Dependability refers to the stability of data over time and under different conditions (Connelly, 2016). To ensure dependability in the current study, the researcher elucidated the research process for future research in the similar context. To ensure the quality of data, dependability requires the use of research methodology that are logical, feasible, well studied and recorded (De Vos et al., 2011). To attain this, the researcher reviewed literature from other academics who researched about subjects similar to the topic under study. The researcher ensured dependability through prudently conducting and recording the research process of the study. Furthermore, the researcher kept a comprehensive track record of the study method, data collection and analysis in sequence as they were conducted. The interview process was also reported in full to ensure stability of data over time and under different conditions.

6.10.3 Conformability

To ensure the conformability, the researcher listened to the recorded interview, did the transcription and listened repeatedly to the recordings; revisited the transcripts and recited through the response; and identified the main themes and grouped the themes to ensure that the research findings are accurate and the product of the participants experiences in spite of the researcher preferences (Botma et al., 2010; Cameron, 2011). Conformability allowed the researcher to ensure that the results of the study were drawn from the participants' raw data and literature form other researchers in the field.

6.10.4 Neutrality

To reduce biasness in the current study, the researcher achieved neutrality by focusing on gaining knowledge from the participants' lived experiences and not attempting to manipulate or control them. The researcher also allowed both genders to be part of the study to ensure that the research did not favour a specific gender. The interviews were audio-recorded and took notes to safeguard that the data obtained were not lost and be included during data analysis process. The researcher provided background data on research context and research topic thereafter the findings.

6.10.5 Transferability

Transferability necessitates the researcher to provide adequate data and context to allow the viewers to critic whether the findings can be practical to other circumstances and settings beyond the scope of the current (Connelly, 2016; Drury, Homewood & Randall, 2011). To ensure transferability, the researcher provided background data on research context. Providing a detailed account of information in relation to the study findings enhances transferability. However, because the findings of a qualitative research are built on a small sample, it might be challenging to validate that the discoveries and deductions are pertinent to other circumstances.

6.11 ETHICAL CONSIDERATIONS

Historically, scientific studies have been moulded by ethical matters involving principles of conduct or one‘s morals. Ethics emerged as a theoretical branch in research, which deals with tolerable conduct during research processes with a prominence on morality (Fouka & Mantzorou, 2011). Ethics are related with principles that deal with matters of right and wrong (Rubin & Babbie, 2012). Ethical research can be described as a subtle process whereby great carefulness should always be considered and maintained. It is of paramount importance for scholars to consider ethical issues when conducting research not to harm research participants. Bogolub (2010) postulates that social work academics have a moral obligation to protect individuals any harm when conducting research. Therefore, the quest for information and the importance of the wellbeing of study

participants should underprop social work research. In the current study, the researcher observed the following ethical issues:

6.11.1 Permission to conduct study

In this study, the researcher did not commence with data collection until she obtained an ethical clearance certificate from permission to conduct the study from relevant organisations or authorities. Ethical clearance and permission to conduct the study was obtained from the University of Limpopo Turfloop Research and Ethics Committee (TREC) and the DoH Provincial office. The key role of the ethics committee is to protect both the researcher and study participants. In South Africa, the research ethics committee which grant permission must review all research involving human participants.

6.11.2 Informed consent

In this study, informed consent indicates that the participants were provided with sufficient information concerning the research topic, aim, objectives, processes and they understood the information. Leedy and Ormrod (2014:107) postulate that individuals recruited for involvement in a research study should be informed about the nature of the investigation to be conducted. They also had a freedom of choice or right to decide whether they want to partake in the study or not (De Vos et al., 2011). Therefore, it was compulsory for participants to give consent. Accordingly, the consent form specified that participants had freedom to withdraw from the study should they want to do so before their involvement in the study (Strydom, 2011). The researcher ensured that the following was outlined in the informed consent form:

- The type, aim, and procedures of the study;
- Participants’ rights and confidentiality; and
- The most possible predictable aspects expected during the research, including likely risks and discomfort the participants might experience.

6.11.3 Avoidance of harm

The utmost vital basic principle of research is the avoidance of harm to participants while participating in the research project (Rubin & Babbie, 2013). Emotional harm to participants is usually more difficult to envisage and to control. hence, the researcher has

an ethical responsibility to shield them. The researcher anticipated that those who have been exposed to critical incidents might have post-traumatic stress. The participants were informed in advance about the possible impact of the study; such data empowered the participants to withdraw from the study if they wish. The researcher shielded the participants from any form of emotional and physical uneasiness that may have occurred from the study. More importantly, current research did not harm the participants emotionally and physically or persuade them to execute unacceptable acts, or to lose their self-confidence (Bryman, 2012). Debriefing forms a fundamental part of the research process. It offers participants the opportunity to deal with any undesirable emotions and address the uncomfortable experience that might have occurred during their participation in the study. In this study, the researcher became thoughtful of the participants feelings and experiences. Therefore, the researcher arranged with the Department of Social Work and Psychology in Polokwane tertiary hospital for counselling services to the participants in case emotional and psychological harm occurs but not any of these occurred.

6.11.4 Confidentiality / anonymity / privacy

Confidentiality is an ethical prerequisite for the researcher. In this study, the data shared by participants were delicate in nature. Particularly, personal and sensitive data were protected and not shared with anyone other than the researcher. The researcher ensured confidentiality by making sure that there was restricted access and the data provided by the participants was kept private. The researcher chose to store data in a secure lockable cabinet to keep it private and safe from the public after use. Anonymity is associated with confidentiality. participants' Participants' data should not be connected immediately and clearly with their names. In the current study, participants were never identified. The researcher respected and protected the participants' rights of privacy by ensuring that their identity or names are not disclosed. In this study, the researcher assigned a number to participants such as (R1) instead of names or identity to safeguard that the information remains anonymous and it was not recorded in the study. The researcher shredded all records with participants' names and kept the interview archives safe, as it is a moral and ethical obligation of researchers to destroy data to protect the privacy of participants.

6.11.5 Publication of findings

Research findings and publication, where feasible, should be made available in the country where the research took place in order to enhance to the body of knowledge. The study findings must be presented to the reading public in a written form; if not, it will mean very little and will not be regarded as research (Shamoo & Resnik, 2015). The findings of this study will be presented the findings to the Executive Management of Capricorn District at the DoH. The findings will be presented in a form of a research report, which can be accessed by the participants and public at the DoH Library in Polokwane Hospital. The findings of the study may also be presented in a form of articles, book chapters or conference papers.

6.11.6 Actions and competence of the researcher

Researchers are obligated to ensure that they are capable and appropriately skilled to take on the proposed enquiry. The well-intended and well-organised research can flop or yield invalid results if the researcher is not sufficiently competent. Researchers should be familiar and have essential skills for the explicit investigation to be conducted and be conscious of the parameters of individual capability in research (Shamoo & Resnik, 2015). The researcher is a qualified social worker with master's degree in social work with 19 years' experience in the field of social work in health care. She is currently employed as a Lecturer fieldwork coordinator at the Department of Social Work, University of Venda.

6.12 POSITIONALITY STATEMENT

As a black female growing up in a village with no practical experience in health setting, I was appointed as a social worker in health care and I was placed in a rural hospital. As a new graduate, being alone in the office attending to domestic violence, bedridden, neglected and HIV patients was very traumatic. In some cases where I witnessed death of patients in ICU or dialysis machines, attended to rape cases of minors, cases unclaimed of corpses and going to the morgue worsened the situation. I still vividly remember a case where I failed to control my emotions after breaking the news to a patient who spent the entire month in hospital after a gruesome accident. She did not have full recollections of the incident, owing to her condition; the nursing staff could not

disclose the news until she was better. I was called to break the news that she is the only survivor; all her family members died in that horrific accident and were buried while she was in hospital. Her agony cries penetrated the bottom of heart, I spent sleepless nights crying as I could not share my experiences with anyone owing to work ethics and my supervisor was at the sub-district office and not easy to reach. Being in the same environment for 17 years without psychological and social support had a negative impact on my emotional and social wellbeing. I felt like a tool of trade; I could not take it anymore. To rescue myself, I had to search for a job opportunities in another industry. While I was working in health setting, I had an opportunity of witnessing emergency personnel on duty and get to understand their work better, their goal of saving lives and the belief that mistakes are never an option during calls. Drawing back from my personal experiences, one thing that kept troubling my mind was: how do emergency personnel cope in such a traumatic field? The more I reflected on this, it generated more questions such as how to they deal with the experiences of continuous responding to ghastly calls or loss of life? Do they have support from the employer to shield or help them cope with the aftermath of critical incidents? My study started from this angle. Now I understand the lived experiences of emergency personnel.

6.13 LIMITATIONS OF THE STUDY

De Vos et al., (2011) saw limitations as margins that unavoidable and obstruct progress are to any study. Nonetheless, what is imperative is the way in which the researcher deals with each restriction. There were no major limitations regarding conducting this research. Nevertheless, it is significant to highlight the following confines regarding the scope of the study. Owing to the nature topic, shame and sensitivity attached to the ordeal, the researcher came across some difficulties in getting participants for the current study. Consequently, some prospective participants were hesitant to take part and kept on changing the appointment which delayed the data collection process. The researcher used her own discretion to determine the suitability of participants to participate in the study. Participants with less than five years' experience in the field were excluded from the study, although they might have shared valuable data owing to their current experiences of critical incidences. Therefore, the findings of the study might have been

compromised. Owing to COVID-19 pandemic, the researcher had to use telephone interviews to collect data, which stood as limitation from lack of visual access which prevented the researcher from gathering key contextual data and other distraction elements such as network problems. Participants had to answer emergency calls during the interview. This might have influenced the results of the study to obtain quality data from the participants.

Nevertheless, every exertion was made to ensure that unnecessary influences on the quality of the study were controlled to attain quality findings in spite of the confines. The data collection tool also stood as restraint as the interview was only conducted in English. Individuals express themselves better in their own language. Some prospective participants could not participate in the study as they were not comfortable with the language used.

6.13 SUMMARY

This chapter presented the research methodology employed in the study. The researcher adopted qualitative approach with the goal to explain the subjective experience and meanings of the participants. Data were collected using telephone interviews. The positionality statement was also discussed in this study. The limitations of the study were also discussed. However, the researcher managed to interview 21 participants who met the selection criteria. Thematic analysis was utilised to analyse data. Research findings will be presented in the next chapter.

CHAPTER SEVEN

PRESENTATION AND INTERPRETATION OF FINDINGS

7.1 INTRODUCTION

This study aimed at exploring the lived experiences of emergency personnel in Capricorn District. This chapter will present findings obtained from the interviews with emergency workers and station managers. The research findings are presented and construed in relation to the leading objectives of the study summarised as, firstly, to profile work-related stress and the lived experiences of EMS personnel in Capricorn District. After profiling the EMS personnel work-related stress or lived experiences, it was deemed essential to identify the coping strategies employed and to determine the nature of social support they receive from colleagues and supervisors, and finally, to develop a user-led model for EMS personnel. In thematic analysis, it is essential that the researcher presents rich data on a few themes rather than endeavouring to fit all that was provided by participants into numerous themes.

7.2 DESCRIPTION OF STUDY PARTICIPANTS

Data were collected from seven station managers and EMS personnel, categories consists of Emergency Care Officer (ECO), Basis Ambulance Assistant (BAA), Intermediate Life Support Officer (ILS) who participated in the study. The length of experience in the emergency field ranged from eight to 30 years. To ensure anonymity, participants were assigned as shown from Table 7.1.

TABLE 7.1: DESCRIPTION OF STUDY PARTICIPANTS

Pseudonym	Gender	Designation	Length of experience (in years)
R1	Female	Intermediate Life Support Officer	8 years
R2	Female	Emergency Care Officer	11 years
R3	Male	Emergency Care Officer	16 years
R4	Female	Intermediate Life Support Officer	18 years
R5	Female	Emergency Care Officer	13 years
R6	Male	Emergency Care Officer	13 years
R7	Female	Emergency Care Officer	12 years
R8	Male	Emergency Care Officer	15 years
R9	Male	Basis Ambulance Assistant	11 years
R10	Male	Basis Ambulance Assistant	14 years
R11	Male	Emergency Care Officer	17 years
R12	Female	Emergency Care Officer	11 years
R13	Male	Emergency Care Officer	10 years
R14	Female	Emergency Care Officer	14 years
M1	Male	Station Manager	30 years
M2	Male	Station Manager	20 years
M3	Male	Station Manager	11 years
M4	Male	Station Manager	14 years
M5	Female	Station Manager	11 years
M6	Male	Station Manager	23 years
M7	Male	Station Manager	24 years

TABLE 7.2: SUMMARY OF THEMES, SUBTHEMES AND SUB-SUBTHEMES

Objective	Themes		Sub-themes	Sub-sub themes
	Work related stress	Lived experiences		
1. To profile work related stress and the lived experiences of EMS personnel in Capricorn district	Emotional stress		Burnout	Anger and frustrations Poor interpersonal relationships Self -isolation
			PTSD	Re-experiencing trauma Guilt and shame Hyper-arousal Emotional numbness
		Helplessness	Depression Suicide Loss job satisfaction	

	Physical stress		Compassion fatigue Exhaustion	Feeling hopeless Absenteeism from work Poor concentration Reduced job performance
		Factors promoting stress among EMS personnel in Capricorn District	Unsupportive work environment Lack of education and training	Lack of organisational support Inadequate job resources Lack of involvement in decision-making Poor emotional intelligence Lack of supervisory skills
2. To Identify and appraise coping strategies employed by	Coping strategies amongst emergency personnel		Functional coping strategies	Collegial support Family support

EMS personnel.			Dysfunctional coping strategies	Physical exercise (sports and hobbies) Religious coping or spirituality Mental toughness Emotional detachment Use of alcohol
3. To establish how accessible and user-friendly EAP services are to EMS personnel.	Accessibility of EAP services Employees' awareness of the EAP		Lack of policy directives Lack of interest in the health and welfare of employees Lack of managerial incompetence in implementing the EAP programme Lack of employees	

			familiarity with an EAP Inaccessibility of EAP services Poor marketing of EAP services	
4. To determine the nature of social support (colleagues and supervisors) EMS personnel receive.	Social support from supervisors		Casual talks Lay counselling or emotional support Informational support Informal referral	
5. To develop a user- led model for EMS personnel.	The model will be presented in Chapter 9			

7.3. EMOTIONAL STRESS

- The adverse effects of trauma affects all sides of individual’s life especially the one who deals with victims of direct trauma. The influence can be displayed in different conducts which is threefold; it might be physical, emotional and social. Owing to

the distinctiveness nature of emergency services, South African emergency personnel are likely to deal with distressing experiences on a day-to-day basis. This was established to be a major source to their emotional level of stress. Normally, the daily duties of emergency personnel comprise routine such as patient transportation and attending to minor injuries. Such responsibilities are not considered as stressful or traumatising. Nevertheless, there are occasions when the emergency personnel must react to critical incidents where there is intense human suffering or death (Angelo & Chambel, 2015; Atwoli et al., 2013; Santos et al., 2016). Emergency personnel receive unpredicted ghastly calls which they need to respond such as road traffic accidents and vicious crimes which include murder, suicide and sexual assaults constitute an extensive part of daily stress experience of emergency workforce. In this context, work-related stress is seen as the consequence of a conflict between the role and needs of an employee and the job demands of the traumatic work setting. Participants in this study viewed such calls as traumatic and psychologically disturbing which resulted to different types of workplace-related of stress.

The following emerged as types of work-relate stress experienced by the EMS personnel:

7.3.1 Burnout

The notion of "burnout" was originally introduced by Freudenberger in 1974 to describe signs of emotional exhaustion and loss of inspiration among employees resulting from job overload (Freudenberger, 1974). In this regard, it is evident that burnout is more prevalent in a highly traumatic, risky, challenging and emotionally taxing profession such as emergency services. Stress is inherent in the emergency field; emergency personnel are continuously exposed to critical incidents. The aftermath of critical incidents and the high level of stress experienced by first responders can have an adverse effect on their occupational and personal lives. This was revealed by the following excerpts:

R8, *"Dealing with traumatic incidents on daily basis is emotionally exhausting, I sometimes hate my job.''*

R14,reported "'Some days you just feel like you can just lock yourself and not report to work".

An emergency officer is the key person on the scene. In most cases emergency personnel are the first to arrive on the scene as they are first responders. In this study, MVAs were described as the utmost distressing work experience by the participants, predominantly where victims suffered severe injuries, with visible broken bones. Hearing anguishing screams from the victims and seeing dismembered body parts is traumatising for most emergency workers. Emergency workers are further traumatised and become more vulnerable when attending to a scene involving a colleague and children. The traumatic nature of MVA's which contribute to burnout among emergency personnel were also revealed by the following excerpts:

> R10, reported *"The most recent traumatic incident I responded to occurred at Gilead road next to Maupye village. The car hit a cow at 3am. There were four passengers, one died as a result of head injury, the brain was all over the road''.*

> R13, recalled *"Mmm…the most gruesome one I responded to it was an accident involving the truck and the sedan, the whole roof of the sedan was chopped off, the deceased's head was also hacked off, the surviving patient I had to assist had an incision from the sternum to the lower left side of the chest I could see the lung and the heart".*

The harshness of the trauma they experience when carrying mutilated bodies is intensified by the dreadfulness of the wounds that resulted in death. These findings are supported by Alexander and Klein (2001:79) who note that the experience of certain natures of events "may be more psychonoxious than others, and regular exposure may compromise the emotional wellbeing of emergency workers". However, burnout among emergency personnel has become a central subject not only relating to the influence their health and wellbeing, but also concerning the level of work engagement which could affect the quality of the services they provide. These findings are consistent with Zygowicz and Grill (2011) who describes the effect on the first responder when on the scene of a suicide, as "each one which leaves a small mark on your soul". This was also supported by M1 who said, "*I am still traumatised by suicide calls and cases involving children. Some*

individuals commit suicide by cutting their throats while others use guns or hang themselves".

The study findings are supporting the earlier writings of Sigmund Freud on trauma theory and the adverse effects of trauma. It is evident from the study participants that trauma is the wound of the mind resulting from an individual traumatic experience. Emergency personnel experience parallel reactions when dealing with ghastly calls and particularly when it resulted in death, even when the sceneries of each event were unrelated. This validates the influence of trauma on human beings. Consequently, when there is a lack of support, depletion or unavailability of coping resources traumatic recollections are more probable to continue to prey on the victim's minds. The study findings are in contrast with the origins and biologisation of trauma which included key symptoms such as memory loss. Participants from this study were able to share their traumatic and lived experiences. The study findings supports those of McNally (2003) who contended that individuals remember traumatic experiences all too well and that victims are rarely unable of recalling their ordeal. However, accumulated stress which has not been acknowledged, managed or dealt with, debriefed formally or informally, can lead to emotional exhaustion. In this viewpoint, it is apparent that regularly experiencing trauma is detrimental to the health and welfare of emergency employees and could result into feelings or anger and frustration.

7.3.1.1 Anger and frustrations

The calling of emergency personnel and other helping professionals is to save human lives. The SA high rate of crime also contributes to the frustrations experienced by emergency personnel. As first responders, they instantly react to injuries and murder cases resulting from car hijacking and armed robberies.

Hence, they find it difficult to comprehend vicious crimes resulting in death. This is shown from the following quote:

> R3 reported, *"The scary two separate incidents I responded to involve a young lady and a man who were brutally murdered and dumped in the mountains. Their bodies were badly decomposed I felt so angry as I could not understand how one could commit such brutal act to a fellow human being''.*

R2 mentioned , "I was very angry when the nursing staff did not take me serious when I was requesting an ambulance to assist my colleagues at an accident scene, they continued with other working activities".

Certainly, the emergency personnel's opinion that the patients' lives are in their hands and their goal is to save human lives put them in more pressure when responding to gruesome calls. Emergency workers often perceive death of a patient on their watch as a failure on their part. Hence, they have pressure to circumvent death of a patient, even if death was inevitable. This is evident from the excerpt below:

R14, *"The incident happened while I was transporting the patient to Polokwane Hospital. The patient died inside the ambulance. I was very frustrated and angry because the ambulance door could not open''.*

Generally, death affect people, even the death of unfamiliar person can evoke several adverse responses, which may include distress, grief and anger. The high occurrence of crime in South Africa places enormous weight on emergency workers. Emergency work is often characterised by little control over the circumstances the personnel find themselves in. In addition to daily painful experiences EMS encounter, the ordeal is further aggravated when one has to assist a badly injured fellow co-workers. Data collected in this study confirm that South African emergency personnel are deeply touched and frustrated by death of co-workers as shown in the following extract:

R2,*"It was on Sunday when I responded to call where my colleagues were involved in an accident There was no ambulance at our station. The nursing staff did not take me serious they continued with other working activities. I was very angry and frustrated''.*

R2, further said, *"It was very painful to watch my colleagues leave in an ambulance and I had to remain at the scene as I could not leave the government vehicle on the scene. The most painful part was when the towing vehicle came, I just comforted myself because they were still breathing when they left. I am still disturbed by the incidence because every time when I look at their office chairs I*

become emotional; they were part of my team now we are left being two I feel deserted''.

The researcher could hear that the participant was crying when recalling details of the accident scene. She became very emotional; words were hardly audible. She requested not to continue discussing about the incident. From this quote, it is evident that emergency personnel find themselves in a very difficult circumstances. Their frustrations further intensified by lack of job resources. Employees might display signs that can be misinterpreted as being rude or arrogance as highlighted by some participants of the study who are at managerial positions. Emotional stresses may not only have adverse effects for a worker. It might have a constructive influence on personnel, especially when job resources are easily accessible. Losing a co-worker in the line of duty often provokes the thought of "what if it was me" among emergency personnel. It may also result in anxiety; potentials of hazard and injury including feeling of betrayal and guilt that one could not assist the co-worker during critical incident (Mitra-Ganguli et al., 2017). This decreases enthusiasm and might result in poor interpersonal relationships at the work which leave employees feeling isolated and depressed. Consequently, the potential effects of exhaustion and frustration on the job could result to increased medical slipups.

7.3.1.2 Poor interpersonal relationships

Interpersonal relationships play a significant role in a human life. Nevertheless, failure to manage or have a healthy relationship at home or work has a negative impact on individual employees and the co-workers. The experience of trauma can influence several aspects of a person's life, including individuals' emotional stability and personal associations. Owing to trauma regularly experienced in the emergency field and in the course of providing care to victims, disappointments, annoyance, impatience and frustrations are more common among emergency personnel. This was revealed by the following extracts:

M7, reported that "When she revealed that she frequently deals with subordinates who are angry and stubborn at the workplace".

M1, "Majority of employees display negative attitude toward their work and co-workers".

An emergency personnel who returns home after repeatedly responding to critical incidents in their daily responsibilities may experience family relational problems, such as lack of involvement with families whereby their spouse and children might feel lonely or neglected. Bloom and Harrison's (2011) assertion who contend that inability to regulate emotions might result in destructive behaviour such as anger and violence which is consistence with PTSD symptoms as outlined in trauma theory.

This was supported by M4*, "Due to high level of work-related stress the love and time spend I spend with my family has been reduced I am always exhausted."*

The study findings also revealed that emergency work has negative influence on the employee; their relationships with co-workers and significant others. A lack of solidity among colleagues can arise where there is unacknowledged anger and frustration which can be displaced onto their managers and significant others. Socially, an employee suffering from stress might be susceptible to aggression, abrupt verbal outbursts and even workplace violence.

7.3.1.3 Self-isolation

Regular exposure to trauma and workplace stress can lead emergency employees to act in a manner considered being irrational, rude and out of character. This was evident from the previous quote as reported by M7. The emergency personnel's family may be badly affected by the domestic discord and emotional withdrawal or isolation which is which is a result of burnout. Isolation serves as a coping method which is dysfunctional for emergency personnel. In this study, participants revealed that they do not feel normal like other people. This might result is in isolation and emotional withdrawal. This is revealed by the following quotes:

> R10 mentioned that *"Since I am struggling with psychological problems; I do not feel interacting with other people, so I prefer to spend time alone at home with my children".*

R13, "Suicide cases seriously disturbed me for years when I joined EMS a I did not have anyone share my experience with, I am still traumatised by such cases. I prefer spend most my time alone trying to deal with my work experience" .

Owing to the continuous impact of trauma, emergency personnel might develop strong and devastating undesirable emotional state and try to escape from trauma unease frustrating environment. Emergency employees might isolate or detach themselves from colleagues and their family as a way of protecting themselves from pain. Subsequently, continuous exposure to distressing incidents can be unfavourable, not only to the emergency personnel but also to their colleagues and families. The study findings are in line with Seňová and Antošová (2014) who classified self-isolation as an emotional symptom of stress. When emergency personnel isolate themselves as a method of coping with work-related stress; it might affect the teamwork, their relationship with their partners or friends and also minimise chances for work relations among personnel.

7.3.2 Post-traumatic Stress Disorder

The effects of work-related stress remains a substantial concern in the emergency field. Critical incidents are random and emergency officers are often not equipped on how to react to trauma. The experience of distressing events expose emergency personnel to vicarious trauma, or compassion fatigue. People respond differently to traumatic events. The reactions and signs differ from person-to-person and the nature of distressing experience is a leading inducing factor on how emergency personnel respond to trauma. Research shows that the occurrence of PTSD is considerably higher among emergency personnel than other professions (Mildenhall, 2012; Boffa et al., 2017; Yoshida et al, 2014). Continuous exposure to traumatic events contributes to the onset of PTSD among EMS employees. The findings of this study are consistent with previous literature. In this study, PTSD symptoms are characterised by four key categories of indicators. These are guilt and shame, re-experiencing the trauma, hyper-arousal and emotional avoidance.

7.3.2.1 Re-experiencing trauma

Acute stress response is normal to people frequency confronted with high level of stressors. Even though such responses are considered normal, given that emergency personnel are constantly exposed to critical incidents, work-related threat may be

intensified during their professions, placing even the hardy individuals at increased risk for PTSD. Some individuals might later develop severe biopsychosocial problems such as nightmares frustration and disturbing thoughts.

Re-experiencing the trauma arises through invasive feelings and disturbing recall of the incidents. In this study, these indicators were experienced by participants as described below:

> R5*, "Due the nature of critical incidents that I am exposed to, some are still stuck on my mind,*
>
> R9, *"I am traumatised as I can still recall disturbing events which happened in 2009; it is more intense when I am at home alone, when I open my eyes I still find myself on accident scene". This was also supported by M1 who said, "I am still traumatised by suicide calls and cases involving children,*

Without critical incident debriefing, it is very difficult for emergency personnel to manage the aftermath of critical incidents. The study findings revealed that the risk factors associated with PTSD comprised gruesomeness of the critical incident and the perceptions of emergency personnel about the trauma. Further contributory factors included the lack of social support, poor or limited access to workplace intervention and functional coping strategies. Emergency personnel may be hesitant to discuss their PTSD indications or to acknowledge the impact of disturbing incidents in their lives because of the stigma related mental health. As such, the beneficial effect of sharing and disclosing distressing experiences of trauma with a qualified empathetic professional should not be underrated.

7.3.2.2 Guilt and shame

The feeling of 'I should have done more' was left with most of the participants in this study. Some of the emergency personnel wrestled within themselves thinking maybe they ignored something which might have led to a different or positive result. The findings accord with Holmes et al. (2017) who deduces that the desire to save human life is associated with psychological stressors experienced by emergency personnel.

The feelings or memories of *guilt and shame* were reported by participants as follows:

R14, *"Only if could have managed to open the ambulance door, the patient would have lived; I felt like a failure".*

R1, *"Even after I have done everything and whatever I know to assist, the patient died I felt very bad and helpless; I wished should have done more."*

Certainly, the participants' goal to save lives, their opinion that the patients' lives are in their hands and that errors are not an option intensify the feeling associated with PTSD more especially when there is a loss of life. The study found that emergency workers often perceive death of a patient on their watch as a failure on their part. Hence, they have pressure to circumvent death of a patient even if death was inevitable which might result into negative response to trauma. The study findings are supported by Tallodi (2015) who construes that the costs of stress include physical mental illness and fatigue. Without the essential job and personal resources, emergency personnel become frustrated and this negatively influence their health and wellbeing as most of them felt like they did not do justice to victims of trauma, while they are proficient to do so, but the limits regarding job resources is failing them. It is evident that the lack of job resources, the hostile working settings adversely contribute to the stress levels experienced by emergency personnel.

7.3.2.3 Hyper-arousal

Hyper-arousal is a warning sign of PTSD. Generally, it manifests when the body abruptly goes into a state of high concentration as a consequence of thinking about the disturbing events in absence of real danger (Joseph Murphy & Regel, 2012). Hyper-arousal signs such as high alertness, being easily annoyed and furious were revealed by the participants of this study and it is evident from the following extracts:

R10, "Due to the impact of the critical incidents involving children, I end up holding my children hostage by not allowing them to go and play outside because I sometimes feel like what if such bad things happen to them''.

R2, "I easily get irritated, I remember an incident when I called the nursing staff did not take me serious when I was requesting an ambulance to assist my

colleagues who were involved in an accident scene, they continued with other working activities; I was very angry.

Owing to the gruesome nature of incidents and high levels of stress experienced by emergency personnel, they displayed signs of PTSD, such as high alertness and easily angered in the absence of danger. Exposure to critical incidents negatively affect the employees who assist the victims of trauma and lack of coping resources can lead to mental health problems. Furthermore, they are likely to have persistent hypervigilance. These symptoms might create tension with partners and family members. It might also result in workplace such as constant disagreement with co-workers and managers. These aspects show the importance and the role of a wide-range workplace intervention programme.

7.3.2.4 Emotional numbness

Emergency personnel try to minimise the impact of critical incidents in their occupational and personal lives. Consequently, emergency personnel frequently engage in emotional numbness or avoidance and risky behaviour or substance use as a way of coping. *Emotional numbness and avoidance* occur when emergency personnel avoid or escape the feeling, thoughts or discussions about the critical incidents (Joseph *et al.*,2012). In this study, emotional numbness or avoidance was evident as expressed by participants in the following quotes:

R3, "I no longer feel like other people; I am no longer sensitive to patients pain".
R9, "I just try very hard to forget about the critical incidents and concentrate on my work to save life that's what matters''.

Emergency personnel may try to escape, avoid thoughts and places that might remind them about the critical incidents. Avoidance might present as absenteeism from work and result in early resignation among emergency personnel. The likelihoods for early retirement were evident from the following quote:

R12, " I sometimes feel like I can just pack my bags and not continue working''.

The emotional labour of emergency personnel also takes its toll on their personal lives and may result in emotional fatigue and emotional numbness. The emergency personnel are expected control their own emotions of fear or anxiety and project a feeling of calm and professional confidence during calls. Suppressing inappropriate emotions is central part of the emotional labour of an emergency personnel. When the call is for a frightening or dreadful event, they cannot sound horrified or distressed but he influence of critical incidents has a negative impact to the biopsychosocial wellness of employees. However, emergency workers need to function in demanding and traumatic situations to perform extremely demanding responsibilities at the same time negotiating a broad of health and social issues. The study findings coincides with Fried and Fottler's (2010) who noted that that emergency personnel who lack organisational support are inclined to suffer from work-related stress.

7.3.3 Helplessness

Stress has become an ever-increasing focal point in emergency field. Emergency personnel find themselves in a helplessness state. Having this experience that they cannot control events around them; they often lose enthusiasm and job engagement. Even if an opportunity might arise that can allow them to change their situations, they might not take action and the greater their susceptibility to stress. Helplessness can increase an individual risk of depression and become submissive in the face of trauma.

7.3.3.1 Depression

As highlighted earlier in the findings, emergency personnel suffering from burnout. As a result, some individuals are more prone to suffer from depression. The failure to cope with work-related stress or deal with pain and anger over injury or loss during the critical incident indicates that the ordeal can continue to influence their behaviour. Depression is often a result of a failure to manage distressing emotions. The long shift hours, exposure to critical incidents repeatedly and other organisational aspects have an adverse effect on the welfare of emergency workers. Sleeplessness might also be a risk factor for depression, this might be the case with emergency personnel as they experience sleep alteration specifically when they are night duty.

This might lead to the onset of depression more especially when employees lack appropriate support services which allow them to share and express emotion related to trauma. The study participants exhibited signs of depression and some are still struggling with psychological problems.

The following extract bear evidence:

> R10 reported *"Since January till October 2019 I did not report to work. I am struggling with psychological problems, I suffered from depression, I find it difficult to deal with rape cases and incidences involving children as they always trigger my emotions. It is not easy to get rid of the thoughts of such traumatising cases as make me think about the safety of my own children''.*

The "what if it was my child" feeling commonly overwhelms emergency personnel who are parents, when they attend to tragedies involving children. Being a parent also brings in another perspective to the difficulty of managing incidence involving suffering of children or death, as revealed by the following quote:

> R4, *"It is very traumatic for me when I respond to calls of assault or sexual molestation and only to find that the victim is a child of same age group as my children. It makes me think about my children at home, it is too difficult to deal with such incidents". I am always emotional when I think of those incidents.*

The emotional price of emergency work on employees was evident from the study findings. Lack of debriefing services and support services after repeated exposure to critical incidents contribute to the level of stress experienced by emergency personnel. If the stress is short-lived, the body usually returns to normal. But when stress is chronic depression can result. Losing a co-worker while they are at work or witnessing children's sorrows were described by the participants as hard circumstance to be in. The ordeal is further aggravated when one has to recover the bodies of fellow co-workers. Emergency personnel struggle to deal with the aftermath of critical incidence involving colleagues and children on their own, which increases their chances to suffer from depression. This was

highlighted by R2, "*I am still disturbed by the incident which involved my colleagues because every time when I look at their office chairs I become emotional''.* Similar to Chiu et al. (2018) who established that the death of co-workers was the second most traumatic circumstance for emergency to handle, this study revealed that responding to an incident involving co-worker is typically more disturbing than attending an unfamiliar or unknown individual.

7.3.3.2 Suicide

Emergency personnel often shift from one critical incident to another, within a short space time to process the consequential traumas or to involve in self-care which intensify the risk of suicide ideation. Progressing from suicide ideation to suicide attempt is more likely in individuals suffering from PTSD. The incidence of suicide among emergency personnel is generally high. Owing to regular exposure to traumatic events, agony and grief, the likelihood for the loss of one's own life in the fulfilment of emergency work is unescapable and it can be recognised risk of the profession. Even though one participant mentioned his involvement in a colleague suicide case, it is important to report about this as this indicates the impact of emergency work on mental health which can lead emergency personnel wrestling with their own death compared to the general public. This might give rise to the ability for hopeless among emergency personnel. In this study, the prevalence of PTSD was evident from the following quote as the suicide victim was an emergency personnel.

> R9, *"It was 8h45 when responded to a suicide call of a co-worker who hanged himself, I was very disturbed by that incident, such incidence stays in your mind for a period of more than 3 years.*
> *M6, "My colleague committed suicide two years back, it really disturbed me, we were very close, It took long to forget the incident''*

The study findings suggests that EMS personnel may be more likely than the general population to think about and attempt suicide. As indicated earlier the organizational and personal factors contribute to severity of depression which might lead to suicide.

This was consistent with Lorinc (2016) findings of who reported that in 2015, 39 emergency workers committed suicide. Emergency personnel are further traumatised by dealing with cases where their co-workers take their own lives. It seemed that it is not only the ordeal of suicide or its consequences, but also the handling of the deceased and certifying the victim dead have a negative impact for emergency workers. Zygowicz and Grill (2011) describe the consequence on the emergency personnel when on the scene of a suicide, as "each one which leaves a small mark on your soul". Suicide cases are particularly overwhelming. Emergency personnel find it problematic to deal with death as a result of suicide. The sternness of the trauma encountered when responding to suicide scene is intensified by the ghastly manner the victims committed suicide.

7.3.3.3 Loss of job satisfaction

Job demands without job resources might lead health problems instead of a motivational process. However, the motivational process can be activated by making job and personal resources readily available which might lead to higher levels of work and organisational commitment and lower levels of job satisfaction related to burnout.

The emergency field is branded with high emotional job demands. This study, consistent with earlier studies, a positive association was established between job stresses and job resources. In this study, it was revealed that the excessive workload and lack of job resources leads to a substantial decrease in life and job fulfilment. Disturbingly, emergency workers are often confronted with organisational stressors such as shortage of equipment and transport which in turn affect their morale and are at higher risk for burnout and loss of job satisfaction.

> R2, reported that *"Ambulances are not in good conditions for the roads that we are using. The department should provide the employees with work adequate equipment and job resources. Employees are also not satisfied with their salaries. The job demands do not match the remuneration. The department should provide human resources to lessen the burden''.*

The participant in the above extract is clear regarding the departmental flaws which result to employees' job unfulfillment. Similar sentiments were raised by

> *R1, who mentioned that "Since 2010, there have been no new recruits or replacement for deceased staff and those who resigned in the department, we are working under pressure, the ambulances we are using are not in good conditions for the roads that we travel".*

From the study findings, it is evident that overloaded personnel and lack of job resources contribute to unfulfilled and unhealthy workforces. Considering these sentiments, it would be of value to implement recruitment and retention strategies, to attract and develop employees in order to enhance job satisfaction. This study has established that the depletion of resources essential to sustain a personnel meaningful contribution to the workplace result in poor work engagement or commitment. Emotional exhaustion and individual fulfilment have a substantial adverse effect on engagement and job satisfaction dimensions. The findings accords with Bakker and Demerouti (2014) who established that organisational policies, administration, salary, job resources and organisational culture are of significance in a workplace, it can either positively or negatively affect personnel.

7.3.4 Compassion fatigue

Compassion is commonly regarded as a criterion to pursue the medical career. Nonetheless, the responsibilities of a caring profession can have emotional costs on employees. Compassion fatigue among emergency personnel is a matter of extreme significance as it is known as the cost of caring. Response time is one of the crucial performance indicators for emergency workforces, a feature which is not easy to achieve with limited resources and considering the SA's crime rate as revealed by the study findings. This increases stress levels and frustration among emergency personnel. Emergency work exposes employees to daily suffering and disturbance and compassion fatigue can happen when constant experience of trauma takes its toll which could result to sluggishness and feelings of hopelessness.

7.3.4.1 Feeling hopeless

Emergency personnel are regularly the first to arrive on the scene to face demanding distressing and hazardous conditions. They also reach out to catastrophe survivors to offer psychological and physical assistance. Even though the responsibilities are crucial to the public, they are emotionally taxing to emergency personnel. Eventually, the experiences of critical incidents will give rise to feeling of hopelessness as shown in the quote below: such gruesome death is normally most disturbing and can result in long lasting reminiscences that harmfully affect the health and wellness of emergency personnel.

> *R5, "Two trucks collided on Dendron road, five people lost their lives, three were burned beyond recognition. I was the first to arrive on the scene, I had to do the job alone I felt so hopeless'.*

The same sentiment was share*d* by M4, who reported that

> *"The most depressive situation is to witness victims burned in the car and there's nothing you can do about the situation''.*

Fatalities due to motor vehicles and pedestrians' accidents and seeing burned bodies are horrifying. Most participants described motor vehicle and pedestrian accidents as tremendously traumatising, particularly when human body parts are scattered all over the tar road. Picking dismantled different body parts adds to the trauma and the feeling of despair experienced by emergency personnel. Regrettably, due to the inimitable nature of their job, emergency employees are regularly confronted with the shock of such fates. The study findings are consistent with Sansone and Sansone (2011) conclusions, that one of the most extensive, taxing events were those in which emergency personnel experienced feelings of powerlessness and not have control of the circumstances. The feeling of not doing enough for the victims results in emergency workers feeling helpless and hopeless.

7.3.4.2 Perceived lack of appreciation

All human beings have the need of recognition or appreciation, emergency personnel are no exception. In the emergency setting, the study findings show that lack of rewards in

the form of low salaries. In general, most participants in this study felt like they were ill-treated by the employer and discontent with salaries and lack of appreciation were the sentiments expressed by most participants. The following extracts bear witness to it the above statement:

> R13, *"In our field we get so much demoralised by our employer as well we are sometimes get segregated as a unit our efforts and the services rendered are not appreciated".*
>
> R5, shared the same sentiment *"I feel like the government is using me for its benefit".*

Perceived lack of appreciation, job dissatisfaction, lack of positive feedback from the employer and lack of coping resources are contributory factors for employees feeling like not coming to work the following day. Lack of benefits and lack of a positive organisational culture were contributory factors for employees to be absent from work or abuse of sick leave days. "*M1 reported that, most employees submit sick leave due to occupational stress and little support from the department''.* However, frequent utilisation of sick leave by employees might be highly costly to emergency organisations. When emergency personnel are not satisfied with the level of appreciation and recognition they receive from the employer, there is high possibility for them not reporting to work or frequently use their sick leave. Remarkably, in such circumstances, engagement and the accessibility to job and personal resources contributes to job fulfilment, reduce absenteeism and minimise frequent use of sick leave might be an effective and motivational response to work.

7.4 PHYSICAL STRESS

Intensive exposure to critical incidents may result in poor physical health. From the study findings, environmental aspects such as high job stresses, shift work limited opportunities for debriefing and lack of appreciation were evidently had negative impact on the physical health of emergency personnel that are as substantial as, if not more than, the nature of emergency work. Constant, ineffective resistance to work-related stress ultimately leads to the breakdown of psychological and physical defences. Chronic stress might cause damage to an employee's physical health and emotional state, exhaustion and high blood

pressure are some of the physical complications. Poor concentration and tenseness are also physical symptoms of work-related stress.

7.4.1 Exhaustion

Emergency work is very demanding which could result to employees being physically worn-out. The effects of exhaustion develop slowly over time and can be simply identified by decrease in things that stimulate the drive in a personnel's work and individual life. The energy and passion are deadly stripped off and fatigue take over. Exhaustion is very common among emergency employees owing to the inherent nature of emergency work. Factors such as shift work and staff shortage increase the risk of exhaustion which might can lead to, poor concertation and efficiency, and high risk of fatalities in the workplace. Participants in this study were suffering from high levels of physical exhaustion which may have been contributed by high occupational demands and unsupportive work environment. Exhaustion does not just cause employees to feel more drained; it also increases the rate of ambulance road accidents as revealed by previous research and the current study. Increased vulnerability to exhaustion also increases the risk of accidents as emergency personnel does not have enough time to recover after critical incidents. The following interview excerpts bear testament to this:

> R4: *"'Due to staff shortage, I am sometimes requested to manage the station and respond to calls it very stressful and exhausting because I am always on the road.*
> *R8: "We do not have time to recover, for example during December holidays, we usually receive calls to respond to another accident scene while you are still attending other patients. We just need to be always ready for that''.*

Emergency personnel are working under pressure without staff compliment, job demands may become stressors in circumstances that necessitate great effort to withstand a projected performance level, which appears probable for South African workforces. Studies demonstrates that job demands which comprised of work overload and poor physical work settings were recognised as major causes of emotional stress, w It was proven that job demands were more remarkable predictors of fatigue than a lack of job resources.The study participants reported that they are working under pressure owing to

staff shortage and that employer seem not to be concerned about the influence of the workload on their physical health and welfare. It has been acknowledged that for the previous years, emergency work settings focused on what the emergency personnel should do to save lives. The current findings add weight to Adams et al.'s (2015) assertion that the physical and mental health of emergency personnel were not given necessary consideration from the emergency organisations.

7.4.1.1 Poor concentration

Emergency work regularly requires driving at fast speeds, which contribute to physical hazard and making this a risky profession. Data collected in this study confirm that South African emergency personnel are destructively influenced by critical incidents which resulted in poor concertation and increases the risks of road accidents. The current study discovered that this is not an unusual situation as there were ambulance accidents where emergency personnel had to attend to colleagues which added more trauma on their part. The high level of stress experienced by emergency personnel might not only result to road accidents on the road but to medical slip-ups on the scene while assisting victims of trauma. This was evident from the following quote:

R12, "*We do not even have debriefing services, it is just a call after call. Sometimes we make mistakes because our minds are affected".*
R2 further said, " *It was on Sunday when I responded to call where my colleagues were involved in an accident, it was the third ambulance traffic accident in the past six months".*

The study findings accords with Chiu et al. (2018) who established that globally, ambulance traffic accidents (ATAs) are the main source of work-related mortalities among emergency personnel because of work-related stress. The report produced by Gauteng DoH (2012) revealed that in 2008, 111 ATAs resulted in 16 deaths in Gauteng Province. During 2009, the number of accidents declined to 88. The report put more emphasis to the findings of the study that emergency personnel are overburdened and this decreases the concertation level of emergency personnel which increases the risks of accidents. The study also revealed that emergency workers have lost colleagues in the line of duty.

7.4.1.2 Reduced job performance

Burnout owing to work-related stress might affect job fulfilment. Subsequently, it will affect an employee's work performance which is the behavioural symptoms of occupational stress. Participants in this study have shown high levels of job dissatisfaction. Staff turnover also reduces productivity in a way that the previous employee takes with him the skills and familiarity of the organisation that may not be recollected while the position is vacant and even if the new recruit is learning her duties or position. In this study, it was established that the since 2010, the researched organisation never recruited new employees while some personnel resigned or deceased. Sadly, such situation add more pressure to the emergency personnel as they have to do more with less workforce which might affect their performance and lead to poor service delivery. The study findings revealed that employees are demoralised and the felt the need to quit the job at any time. This is consistent with Bakker and Demerouti (2014) assertion that workplace stress might lead to less productivity and reduced job satisfaction. Stressed and demoralised employees cannot function effectively at work which might also have a negative impact to the whole organisation as it adds more burden on other employees who are then subjected to increased risk of compassion fatigue and possibility for medical errors.

7.5 FACTORS PROMOTING STRESS AMONG EMS PERSONNEL IN CAPRICORN DISTRICT

Socio-cultural and economic factors in a workplace have become an ever-increasing crucial point in the emergency field. Turnover and shortage of staff often put more pressure on remaining employees when job demands and time at work increase. The study findings revealed that emergency personnel often struggle with work-life balance. Stress is not necessarily detrimental, although it is generally discussed in a negative context. Ordinary employees might use high job demands responsibilities as a challenge to increase the quantity and productions excellence within the productions. Stress is harmful when it is associated with job demands, limitations to job resources and without support from the organisation. Besides, the diverse range of psychological complications experienced by emergency workers are not explicitly related to critical incidents. The additional sources of organisational stress manifest in a physical, mental and social or

behavioural signs. Influences such as organisational related stressor and unfavourable working conditions have been shown to affect the wellbeing of employees which might lead to ongoing feelings of discouragement and demoralised, guilt, withdrawal, and frustration. The contributory factors of socio-cultural and economic stress revealed by the current study are the following:

7.5.1 Work environment

The occurrence rates for stress are higher than in other professional groups. Therefore, it is important to consider whether their working environment plays a role in contributing to the stress levels they tolerate. In an emergency organisation, stress is associated with an excess of extensive workloads and compromised resources, which link up to create undesirable physical and emotional changes, making employees vulnerable to pathology. The current study has established that organisational policies, administration, salary, collegial support and organisational culture are of significance in a workplace as they can either positively or negatively affect personnel. This is in line with Scerra's (2011) viewpoint on strengths perspective, that it is an ecological perspective that recognises the significance of individuals' surroundings and the numerous situations that impact their lives. The study findings resonates with Subramaney (2010) and Blix et al. (2013) deductions that regardless of intensive training and years of experience, stressors emanating from several aspects in the workplace can produce excessive weight and adverse reactions for first responders such as emergency employees, trauma specialists, SAPS officials, and firefighters. Strength-based perspective purports that the environment, resources and social support are regarded as sources of strengths in assisting employees to deal with the after-math of critical incidents. In this study, it was shown that the excessive workload and unsupportive work environment leads to a substantial decrease in life and work fulfilment.

7.5.1.1 Lack of organisational support

The daily workload of emergency workers is branded by both emotional and organisational challenges. Generally, in emergency field stress become huge problem where employees have no support system within the organisation through which they can share their experiences and receive assistance**.** The undue workloads, lack of resources such as human resources, ambulances and patient care transport depressingly influence

their work experience, creating a strenuous and exasperating working environment. Organisational support and job resources of emergency officials can be beneficial considering how the work setting influence the health and wellness of emergency personnel, more especially their level of stress and production.

The wellbeing of personnel includes the support needed from the organisation, top management, as well as the emergency personnel themselves supporting one another on daily basis. All participants reported that they receive no support from the organisation. The study findings are consistent with Mac Ritchie and Leibowitz (2010) assertion that although, for the past 40 years the job-related stress experienced by emergency personnel have dominated trauma literature, there has been little consideration paid to the organisational support that is provided to the workforce. This is revealed by the following quotes:

> R1 *"Since I started working in 2009 I have never received any counselling services from the employer".*
>
> R1 further said, *"The department fails to attend us immediately after critical incidents".*

The findings corroborate Minnie *et al.* (2015) findings who reported that emergency personnel in the South African setting receive a lesser amount of support from the management to assist them in managing the psychological impact of distressing events they are experiencing on daily basis. Besides the distressing events that the emergency personnel experiences on a daily basis, the organisational culture and lack of job resources has a vast negative effect on their mental, physical and social wellbeing. Emergency personnel receive no support from the organisation to manage the aftermath of critical incidents. Moreover, the absence of motivators in the workplace further contribute to burnout and findings to employees feeling neglected and unfulfilled at the work. Nevertheless, having appropriate personal resources and the skill to utilise such resources might well prepare the emergency personnel to deal with dreadful episodes or critical incidents. Lack of organisational support demoralise employees, increase work errors and decrease productivity owing to psychological fatigue. Implementation of

preventive and support programmes at the workplace can possibly alleviate the adverse effects of distress. Deeply, the study participants felt like forgotten helpers. However, the researcher supports Pulla's (2012) strengths-based practice perspective that the right and power of the individual to heal depends on the assistance of the environment and the need of an association with the optimism that life might be better.

However, the findings of this study has also demonstrated that irrespective of the influence that the work environment has on emergency workers levels of stress and engagement, resilient workers remained committed and engaged to perform their duties. This was evident from the following quote:

R13, *"I have to be mentally strong or feel normal. I deal with small needles inserting those into small veins I do not want to make mistakes. The patients rely on my strength if I am not mentally prepared it might cost a human life, my focus is to save life''.*

The findings of this study support D'Emiljo (2015) assertion that the results of engagement comprise improved employee effort, productivity and reduced intents to quit the job. Even though emergency personnel may find the inherent reward of emergency work to be fulfilling, organisational issues such as high job demands and reduced level job satisfaction might contribute to frustration and exhaustion which result to poor work engagement and compassion fatigue

7.5.1.2 Inadequate job resources

Emergency employees who lack adequate working resources to perform their duties are at greater risk for emotional exhaustion. Disturbingly, emergency workers are often confronted with organisational stressors such as shortage of equipment and transport which in turn affect their morale and are at higher risk for burnout.

Data specify that job resources occur at several levels at a workplace, that is: (1) organisational (salary, promotions and job security (2) at work role level (partaking in decision-making and role clarification), (3) relational (managerial and mutual support and team work) and (4) at job level (job meaning, job performance feedback, job distinctiveness) (Asiwe, Hill & Jorgensen, 2015; Betlehem et al., 2014; Kleim & Westphal,

2011). Insufficient or shortage of job resources has an undesirable effect on job performance and the provision of quality patient care services might be compromised. This study provided evidence that work-related stress is associated with high demands and lack of support which has an adverse effect on biopsychosocial wellbeing of employees. As noted earlier, the organisation's responses to employees' needs are of significance to a healthy work environment. Almost all participants felt strongly about the lack of resources such as shortage of equipment and ambulances in the organisation and the undesirably influence on their job. The most frustrating captured responses from the participants are revealed in the following extracts:

> R4, *"I remember the incidence where one of my colleagues was involved in an accident. it was a very frustrating moment for me. I had to use my own vehicle to go to the scene as there was no support vehicle available at that moment".*

> R10, shared the same sentiment, *"We do not have suction machines or aspirators at our stations and there are complications when responding to incidents involving victims who require such'. When you come across such disturbing incidents, you do get not help from the department; you just have to counsel yourself''.*

Lack of organisational support and unfavourable work environment discourage employees, reduce productivity and increase emotional fatigue. Job stresses and inadequate job resources were shown to be associated with workplace stress in the emergency field. Job demands and lack of job resources are momentous analysts of stress and fatigue. Subsequently, such emotions result into feelings of distress and frustrations and could cause negative attitude to work. Therefore, job resources are not only essential to deal with job weights, but also are critical to reduce the stress level of emergency personnel. Job demands might not only have hostile responses for employees. Bakker and Demerouti (2014) and Xanthopoulou, Bakker and Fischbach (2013) found that they might have constructive influence on personnel, specifically when job resources are readily available easily accessible. South African literature has demonstrated an emphasis on this point (De Beer et al., 2013; Macauley, 2015). The

substantial obligation and expectation to save lives with limited resources were also found as a main contributor of stress, adding to the negative influence on the emergency personnel physical, psychological and social wellbeing.

7.5.1.3 Human and financial resources

Financial limitations including staffing are the realities of most emergency establishments experience including the researched organisation. Emergency personnel are working under pressure without staff compliment and job stresses may become stressors in circumstances that necessitate great effort to withstand a projected performance level, which appears probable for South African workforces. The current study demonstrated that job demands which comprised of work overload and poor physical work settings were recognised as major causes of emotional stress This is consistent with the findings of Bakker and Demerouti (2014) and Xanthopoulou et al. (2013) who established that job demands a lack of job resources were more remarkable predictors of emotional fatigue. All participants felt strongly about the lack of resources such as shortage of equipment and ambulances in the organisation and the undesirably influence on their job.

This is supported by the following extracts:

> M2, *"Employees are not satisfied with their salaries; the job demands do not match the remuneration. The department should provide human resources to lessen the burden''.*
>
> R8: *"We do not have time to recover, for example, during December holidays, you can receive a call to respond to another accident scene while you are still attending other patients; you just need to be always ready for that''.*

Holiday periods are peak or busiest times for emergency personnel as more people are on the roads. Family members are visiting one another; habitually more alcohol is consumed during family events which increases the risk of road accidents and family violence. Therefore, the number of self-destruction and suicides during this period is also high. The study findings add weight to Sansone and Sansone's (2011) assertion that emergency work demands and confines the emergency personnel chances to be involved

in a life outside of their work with friends and families, and it further obscures their world as they miss out family gatherings owing to work obligations which increases their level of stress. However, Minnie et al. (2015) and Collopy et al. (2012) note that an individual provided with sufficient job and personal resources is a motivated and productive employee. Therefore, it can be noted that providing employees with adequate job resources leads to more fruitful and dedicated workforces and improved work performance. Hence, it would be of value to implement recruitment and retention strategies to attract and develop employees.

7.5.1.4 Lack of involvement in decision-making

As discussed previously in chapter 5, emergency organisations should empower personnel to identify solutions and should also be challenged to make worthwhile contributions by being involved in setting organisational goals, mission and visions and support those goals. This research established that besides the distressing events that the emergency personnel experiences on daily basis, the organisational culture and lack of autonomy and involvement in decision-making process has a vast undesirable consequence on their mental, physical and social wellbeing. The findings are supported by Bakker and Demerouti (2014); Hauff, Richter and Tressin (2015) who note that stimulus effects such as achievement, appreciation, type of work, accountability and growth have been proven to boost staff morale and the absence of those result to personnel feeling unsatisfied at the workplace. The unfulfilled feelings are revealed by the following quotes:

> M1, *"Decision are only made at a senior level; we are not involved in decision that affect our work it is not fair to us".*
>
> M7, *"We are not even consulted when they purchase ambulances or cars; some types of vehicles are not suitable for the roads we are using ".*

Decision-making and its implementation is therefore very key to the wealth of any organisation. Employees are the fuel that runs the engine of the organisation and their non-involvement in the decision-making process can creates tensions between management and staff. Non- involvement in decision making process in the workplace was also found to further contribute to burnout and lead to employees feeling neglected

and unfulfilled at the workplace. However, Collins (2008) and Kirby *et al.* (2011) established having autonomy over one's surroundings also improves resilience which is also associated with improved mental health and wellness. It was also established from the research that when employees see themselves as not being part of the decision-making process, they become dissatisfied and uninterested which is likely to unpleasantly affect organisational performance. It is critical that employees' views are sought on matters that affect their work and lives, they should also be empowered to take decisions through which they will have a sense of self-confidence and a feeling of belonging that will make enable them to give their best in the workplace. Motivated employees will disburse more enthusiasm and surpass minimum requirements at work as illustrated by M1: *"A happy employee is a productive employee".* Although only one participant referred to the need for labour union involvement, it is noteworthy to report it as emergency personnel feel that the department does not comprehend the influence of trauma on their mental and psychological health. The following quote clearly highlight this fact:

> M1, *"It will be better if we can have a labour union to represent EMS personnel, that will be our voice as the department does not listen to us".*

The above sentiment resonates with Adams et al.'s (2015) assertion that, for the previous years, it has been acknowledged emergency work settings focused on what the emergency personnel should do to save lives, but their mental health was not given necessary consideration from the emergency organisations.

7.5.2 Lack of education and training

Proper teaching and training are of significance in any occupation. Any method of instruction would help individuals cope with the physical and psychological job stresses. The questions which plagued the researcher in this study were as follows: Does emergency care teaching and training comprehensively furnish the trainees with skills to deal with any workplace related trauma they may encounter or does it simply offer basic training and provide trainees with procedural and life skills that might or might not be beneficial in the first responder's profession in managing critical incidents? The study findings revealed that lack of training on how to manage critical incidents which increases their vulnerability to PTSD. The findings resonate with Minnie et al. (2015) who

established that lack of training was found to be one of the influences that composite the encounters of South African emergency personnel.

7.5.2.1 Poor emotional intelligence

Cultivating learners' emotional intelligence is critically significant. Training emergency personnel necessitates more than preparing novices with the practical skills to get the work done. The participants described that they had to acquire skills on their own while in the profession. The study findings add more weight to Minnie et al.'s (2015) findings who discovered that 82 percent of emergency workers who participated in the study indicated that they never received sufficient training to manage circumstances that demand emotional intelligence such as handling death of children and suicide cases. The lack of training might give rise to emergency personnel behaving in a way that could be misinterpreted as arrogant or insensitive by colleagues and supervisors.
This line of thought is supported by the following quotes:

> M3, *"I sometimes face challenges in dealing with cases such as absenteeism and staff who are angry and burnout".*
> *M2, it is sometimes difficult for me to deal with male subordinates who are always display arrogant behaviour at the workplace, though I do understand that there might be going through a lot of work-related and personal stress.*

Emergency personnel often work in extremely volatile and emotionally challenging conditions which necessitate a high level of emotional intelligence from personnel. Employees with poor emotional intelligence are more likely face more challenges at work and emotionally preparing emergency personnel for such challenges enhance positive coping. Poor emotional intelligence could lead to frustration, helplessness, fatigue and mostly sudden hostile behaviour. Managers might also fail to deal with subordinates who display such conducts. Nel, Jonker and Rabie (2013); Wloszczak-Szubzda Jarosz and Goniewicz (2013) deduce that individuals who are emotionally intelligent are more probable to display better proficiencies in demanding professions such as emergency medical services. Emotional intelligence can be enhanced through proper life skills training.

7.5.2.2 Lack of supervisory skills

Supervisors play a critical role in assisting troubled workforces to seek help, as they are channels to assistance. Supervisors and managers perform the function of formal referrals to organisational intervention programmes. Supervisors assist in identifying and referring troubled employees to an EAP**.** The study findings established that most managers lack supervisory skills and no supervisory training was conducted to assist flourish in their positions or role. It is suggested that such training should be conducted annually (Kurzman & Akabas, 2010). Supervisors who are not clear about the manner of assessing employees may encounter challenges when referring these employees to an appropriate intervention programme as shown in the following expressions:

> M5, *"Emergency workers become rude and arrogant due to work-related stress and I do not know how to deal with such individuals. There is a need for awareness and educational sessions on how to manage occupational stress".*
>
> M6, *"We have never been trained as supervisors on how to deal with troubled employees. The department just give us this responsibility without proper training. There should be opportunities for professional development for station managers''.*

Definitely, it was revealed that procedural based education possibly cannot totally prepare an individual with all the necessary skills desired in the profession. Lack of supervisory training further contribute to the work-related problems that are faced by station managers. The study findings resonate with Holmes, Jones, Brightwell and Cohen's (2017) postulation that the capability to manage one's emotions as well as that of others is critical in the workplace. Hence, it is critical for managers to possess skills for handling their own emotional state as well as that of subordinates. The instruction of emergency personnel should gradually pay more consideration to psychologically preparing novices and managers for the mental health problems associated with the occupation. This is because this study revealed that emergency profession has greater psychological stresses and the highest risk of burnout and compassion fatigue than other occupations.

7.6 COPING STRATEGIES EMPLOYED BY EMS PERSONNEL

Trauma theory underpins coping literature. One of the crucial aspects of trauma theory is the identification and use of character strengths. The desired outcome of strength-based practice is resilience. In response to distressing events, people make choices to deal with their experiences or minimise the weight of traumatic life circumstances. The decisions or coping methods on how to manage traumatic experience are often functional or dysfunctional. Functional coping methods result in constructive outcome and individuals become hardy in the face of adversity while dysfunctional coping methods are often temporary solution and has a number consequences on the physical, mental and social wellbeing such as depression and suicide (Delany et al., 2015; Heffer & Willoughby, 2017; APA, 2013). Within the emergency context, employees use both functional and dysfunctional coping strategies. Coping approaches such as substance abuse and emotional detachment are employed as an effort to deal with overwhelming mental distress that seem like it is unbearable to handle which often leave the victims feeling helpless, hopeless or with a deep sense of withdrawal. Functional coping strategies methods that could shield the influence of occupational stress consist of sharing of experiences, social support, exercise, and resilience.

7.6.1 Functional coping strategies

People are unique; they respond and utilise coping approaches differently to deal with adverse events. Managing trauma depends on various sources of support which include emotional and behavioural responses to trauma. Normally, having supportive social systems at the workplace or social context such as a having a supportive spouse may contribute to positive coping and in selecting helpful coping strategies. In this study, the coping approaches employed by the participants to manage the after math of critical incidents included the following:

- Collegial support;
- Family support;
- Mental toughness; and
- Physical exercise (hobbies and sports).

The main coping strategy defined by all participants was sharing of experiences with co-workers.

7.6.1.1 Collegial support

In this study, collegial support emerged as key source of support; a robust sense of teamwork was the utmost determining factor in prevention of burnout. Participants reported that an excessive part of peer support takes place during parade or shift. From these findings, it can be concluded that constructive association can be regarded as a determinant of emotional wellbeing. Although family support was valued, in this study collegial support and managers remained superior. Participants specified peer debriefing about traumatic incidents emerged as a central method of dealing with stress. These findings resonate with Zerubavel and Wright's (2012) idea about the importance of the wounded healer. The latter denotes to an individual experience of trauma or illness, lessons learnt and what can be shared with other people going through similar situation. This is evident and shown from the following interview extract:

> R8, *"Most of the calls that we respond to are very disturbing, talking about the incidents with colleagues makes a lot of difference. We just counsel ourselves as colleagues and talk about what happened on the scene and move on. I don't normally share my work experiences with my family members".*
>
> *R1, Due to patient confidentiality I only share with colleagues, it allows us to express our feelings".*

These findings are in line with Rubin, Malkinson and Witztum (2012) who contend that there are three factors that affect resilience: factors internal to individual, environmental factors and a product of the interaction between the person and the environment. Casual talks among employees experiencing similar causes of trauma can be regarded as a functional coping approach since it permits them to express their feelings and relate what transpired from the accident's scene. Informal debriefing or casual talks often happen during shifts. Resilience processes is not so much within individuals, but within systems of social associations with co-workers, family and groups. Collegial support was found to

be helpful in hospital emergency department. It boosts resilience and reduce compassion fatigue (Barbee et al., 2016). From Barbee's (2016) findings, the researcher construe that it is critical in the emergency field to have positive relations, be able to detect and be concerned about their emotional wellbeing of fellow colleagues. Furthermore, absence of healthy relationships and collegial support at the workplace harmfully influence the health and welfare of emergency personnel and might influence their choices of coping style. This opinion is supported by Tremblay and Messervey (2011) who note that teamwork and a sense of wellbeing in spite of hardship are personal resources which can shield the adverse effects of job stresses on employee fatigue in an emergency environment.

7.6.1.2 Family support

On the topic of support, it is worth remarking that an additional source of support which has demonstrated to be of vital significance in shielding emergency personnel from emotional distress is casual support from family and associates. Family support is a fundamental element in human existence, relationships with spouse, friends and family members might positively or negative influence how individuals behave and respond to stressful situations. Having a supportive partner contribute in alleviating the stress level experienced by the emergency personnel while having a nagging partner might worsen the symptoms of stress. Few participants reported that their families and friends provided support but highlighted the significance of collegial support. R5 mentioned that she usually shares the experiences of traumatic incidents with her husband.

It was supported by R9, who reported that *"The experience of gruesome calls are emotionally overwhelming, I normally share my work experiences with my wife who is a pharmacist".*

This is consistent with Briere and Scott's (2013) findings that support from family members have shown to meaningfully reduce depressive signs subsequent shocking incidents. This was specifically feasible for spouses who were also working in the therapeutic or medical field as they were considered to have background knowledge or understanding about emergency services. Owing to regular exposure to critical incidents, emergency personnel often necessitate a greater level of care, support and understanding in order to maintain a healthy lifestyle so they can better serve the general

community. It is significant for emergency personnel and their significant others to fully comprehend negative influence of the profession. Having a strong family support structure might assist to shield emergency employees from the adverse effects of occupational stress. However, several participants found that discussing traumatic incidents was not permitted owing to patient confidentiality. Furthermore, they felt that nature of incidents will subject their family members into secondary trauma. They perceived family as strangers and unqualified to understand what emergency work necessitates. In contrast, they turned to their co-workers for support. This was revealed by the following quote:

R4, *“Due to patient confidentiality and the gruesome nature of incidents I hardly share my work experiences with family members, professionally; it is not allowed”.*

The sentiment is supported by Regehr and Bober’s (2005) findings that the influence of emergency work-related tress on emergency personnel might also be experienced by the significant others. In this regard, the findings propose that sharing their work-related with their spouse or family members might and does have unfavourable effects on the employees, friends and their spouses.

7.6.1.3 Physical exercise (hobbies and sports)

Non-professional related activities including physical exercise, yoga, dance, meditation, writing and reading are helpful in developing physical and psychological wellness. In this study, participants reported workouts such as playing soccer, listening to music, jogging or running a resourceful coping method to manage stress. Such activities were revealed to have a constructive comprehensive result on the levels of stress experienced by emergency personnel. The benefits of physical exercise in managing trauma were highlighted by the following excerpts:

R14*, “We have emergency personnel soccer team at the hospital that’s how relieve stress and be able to face tomorrow”. R1 “I exercise to relieve work stress”.*

R12, “I run every morning from 4h3am to 6h30, this is how I deal with stress”.

R13, “I listen to music after a stressful day”.

This is in accord with Zimmerman (2012) who note that that employees who engage in physical exercise are less probable to call in sick, less likely to suffer heart ailment and more likely to enjoy reporting to work. The study findings contradicts those of Jenkins (2002) who argues that physical exercise is an unhelpful coping strategy which ends up being a boring energy workout. The study findings are consistent with the view of Smith and Burkle (2018) who postulate that physical exercise at the workplace also increases work fulfilment; it is another aspect that can upsurge employee self-confidence and decrease occupational stress.

The researcher was an employee at the hospital where the emergency services section is within the organisation. On few occasions she observed emergency personnel during their lunch hour playing indigenous games; they appeared calm and very joyful. Hence, it is critical to have such kind of working environment which may support and offer the emergency personnel an opportunity to socialise and relieve their tension. Such activities aid to enhance positive coping and improve the health and wellbeing of the workforces. This may also improve their mental health, increase productivity and equip them to adopt functional ways to manage the demands of the occupation.

However, emergency personnel highlighted impediments they encounter such as lack of formal exercise facilities and not finding time owing to shift work schedule. Unsupportive organisational culture or work environment also plays a negative role for contributing to the high stress levels experience by emergency personnel. The researcher concurs with Dobson et al. (2013) who note that emergency personnel are further traumatised by the working environment. If formal fitness or physical exercise activities was easily accessible by emergency personnel, it would lead to healthier workforces whereby it will eventually benefit the whole organisation.

7.6.1.4 Religious coping or spirituality

Critical incidents and spirituality have always been linked together in trauma studies as they interrelate and influence each other. Spirituality and religion are regarded as a source of resilience and is acknowledged as an important part of life by most individuals. Religious and spiritual practices have been found to improve positivity and hope among emergency personnel (Park, 2010). In this study, prayer was reported by the participants

as a coping strategy that they found useful during the years of service and they will recommend it to newly recruits in the emergency field. Prayer and positive spiritual thoughts were related to better adaptations in distressing situations. Pastoral services are essential to assist emergency personnel in managing the aftermath of critical incidents. This is evident from the following quotes:

> M5, *"When I am stressed, I just pray so I can be able to keep going and focus on my work. I will recommend that newly recruit should pray and ask God for strength to cope with the experience of critical incidents".*
>
> M3, shared the same sentiment *"Pastors should be allowed at our workstations to offer prayer sessions to emergency personnel. The situations that we are dealing with are very traumatising and we sometimes find It difficult to deal with".*

Generally, people often run to religion and spirituality to cope with stressful circumstances they use prayer to cope with catastrophes and disease outbreaks. The significance is evident in the current situation where the country is facing Covid-19 epidemic, house of worship are regarding as a place of refuge and pastors play a substantial role in peoples' lives in assisting to deal with the trauma of losing their loved ones. Religiosity is related to coping and resilience-building edifices such as problem-solving skills, positivity and efficacy. Religious and spiritual beliefs can offer meaning and purpose in time of crises and they can be foundations of strengths that people resort to in times of hardship. Spirituality in emergency workers was regarded as a useful coping strategy and came to positively affect their health and wellbeing. A spiritual connection depends on a basis of trust in the superior sovereignty. Therefore, this recounts well with meaning making and it gives a basis of positivity, complete purpose and meaning for the environment in which an individual is residing or working. This is consistent with Gilliland's et al. (2010) findings that spirituality was a common coping strategy and a substantial influence in managing workplace stress and strongly linked with employee wellbeing and resilience. Nonetheless, Torres et al. (2016) and Potter et al. (2011) contend that some individuals might be exposed to dreadful episodes without experiencing extensive interruptions in their daily functions. This is supported by the study findings which revealed that certain individuals are resilient in the face of adversity.

7.6.1.5 Mental toughness

Mental toughness is an individual distinctive feature that is related to coping and the capability to deal with pressure and trauma. Mental toughness benefits people to return to their optimal functioning by bouncing back from adverse stressful events. An individual's capability to adapt to life after a distressing event can be considered a fundamental aspect or prerequisite in a high stressful environment like emergency services. Mental toughness skills are an asset to have in all areas of life Resilience to disturbing events experience is often a feature of life in the emergency field. In this study, mental toughness was associated with the number of years in service as an emergency worker. The following interview extracts bear evidence to this:

R5, *"Since I started working an emergency officer, I am a much stronger person than before".*

This was supported by R13, *"I have never been distressed, when you deal with critical incidents on daily basis you end up being used to it and be able to function normally and continue perform your duties".*

The participants in the above assertions are clear regarding the positive influence of mental toughness, the years of experience working in the emergency services and its benefit in managing the aftermath of critical incidents. This resonates with Lin (2010) and Santos et al.'s (2016) views that resilient employees who are mentally tough may find their work more appealing than those individuals who lack this means. This is consistent with Louw (2014); Jeve, Oppenheimer and Konje, (2015); Zhu, Liu, Guo, Zhao and Lou (2015) who that resilience or bounciness is a substantial analyst of engagement, as individuals who are mentally tough are capable to successfully adjust their circumstances, which enable them with fundamental inspiration and vigour to chase and achieve their purposes. Therefore, they are able to participate in their work responsibilities. The findings of the study highlight that constant experience of critical incidents might lead to a better ability to manage the aftermath of trauma, which is in contrast with Phoenix Australia's (2013) assertion that the risk of PTSD upsurges with cumulative trauma and the rates of disorder is likely to be higher among long-term emergency personnel than the novice or new staffs. This study revealed that not all individuals exposed to critical

incidents display high level of anxiety and stress. The study findings support strength perspectives which purport that individuals typically exhibit strengths when confronted with hardship. Pienaar (2012); Rubin, Malkinson and Witztum (2012) argue that personal resilience can be reinforced and improved by developing a diversity of functioning approaches that lessen susceptibility and predisposition to stress. Therefore, enhancing resilience through training and job preparation may improve the health and coping strategies for emergency personnel.

7.6.2 Dysfunctional coping strategies

Not all coping strategies are credible to reduce stress. Dysfunctional coping strategy refers to an approach that is less helpful and is regularly a short-term solution, the possibility where an individual will impose self-harm is very high. In most cases, dysfunctional coping approaches are employed as an effort to deal with mental or physical health suffering that appears devastating or unbearable to manage, leaving the victims with either a deep sense of avoidance or feeling helpless. The dysfunctional coping approaches employed by the participants were the following:

7.6.2.1 Emotional detachment

Emergency personnel often detach themselves emotionally from the patients or victims of critical incidents. In such cases, they just focus on performing their duties and display no emotions. This reaction is often associated with traumatic stress. Witnessing viciousness and death regularly, one become impassive and hardened towards suffering. This study established that participants employed emotional detachment or disengagement as a method to manage workplace stress. This is in accord with Papazoglou and Andersen (2014) who found that occupational stress leads to compassion fatigue where employees in health professions seem not to be concerned about the pain the victims or patients may be going through. Therefore, the researcher construes that emotional detachment and compassion fatigue coexist with feelings of frustrations and apprehension because emergency personnel are conscious that they no longer give of themselves or take care of patients as they had before. This can be shown when they begin to treat patients as objects. Additionally, failure to express feelings can

be misinterpreted by emergency workers as “being a stronger person” as revealed by R5 in the section above.

The following extracts highlights this line of thinking:

R13, *“I have to be mentally strong or feel normal when I am dealing with critical incidence. I deal with small needles inserting those into small veins; I do not want to make mistakes. Patients rely on my strength. If I am not mentally prepared, it might cost me my job and loss of life; my focus is to save lives so I do not attach my feelings to patients”.*

R12, “I do not take calls personally, I get over it very quickly you should never get emotionally attached *.”*

When emergency personnel detach themselves emotionally when assisting patients, it is a sign of compassion fatigue which in turn undesirably influences their wellbeing. This result into emergency personnel dealing with victims of trauma strictly “by the book” rather than getting emotionally involved and they can also become pessimistic towards co-workers and the organisation. Nonetheless, mild forms of detachment permit a person to cope with the current distress.

7.6.2.2 Use of alcohol

Substance abuse is a critical concern in a workplace. Overindulgence of these substances may result in further individual, health and social-economic problems within the organisation. Earlier research established that drugs and alcohol are addictive and detrimental to an individual’s health if overused and it can negatively affect the whole organisation (Park et al., 2019; Mashigo, 2010; Feldman et al., 2011). As mentioned earlier, substance abuse is of a major concern as it is often considered as a short-term coping technique by some South African emergency workers. In this study, participants were hesitant to talk about the use of drugs and alcohol. Only three mentioned the use of alcohol after dealing with the critical incidents or after a stressful day at work. Drinking alcohol occasionally was seen as way of temporarily managing stress as revealed by the following excerpt:

R3, “*After a horrendous incident, I drink red one before I sleep to relieve stress*”.

R4, “I sometimes drink alcohol after a disturbing incident”.

Participants also highlighted witnessing co-workers using drugs to deal with the aftermath of critical incidents. *R13, “I have never used drugs or alcohol to deal with stress, but others do”.*

The use of drugs as a coping technique was prevalent in the emergency occupation. Remarkably, an association between work relates stress to the use of substance found among the EMS personnel. Some of the emergency personnel use drugs and alcohol in an effort to suppress adverse effects of critical incidents. Basically, the using drugs or alcohol as coping strategies may be futile for preserving the physical, psychological and social wellbeing of emergency personnel.

7.7 ACCESSIBILITY OF EAP SERVICES

Workers are the most important asset of any organisation and it is significant to safeguard their health and wellbeing. High job demands are however inevitable in the emergency field. EAP services are explicitly intended to provide personnel with functional and emotional support that they require for normal life. It assists workers to be able to cope with personal or work-related stress or any other issues that may arise in their lives as a way of attaining the benefits related with a healthier labour force. Appropriate workplace intervention programme can reduce depression and increase resilience and emotional wellbeing in emergency personnel. Surprisingly, despite the fact that there is an EAP programme in the organisation being studied, all participants in this study reported that that they were not aware of the workplace intervention programme which could be readily available and easily accessible or dedicated to EMS unit within in the DoH in Limpopo Province except for the psychologist appointed in some hospitals. However, this study established that EAP services were unknown by the participants which could be the result of the following factors:

7.7.1 Lack of policy implementation

In South Africa, public organisations are confronted with countless hitches regarding the application policy directives as stated in their policy documents. Government institutions have excellent written policies which might have been acknowledged as being significant

in a workplace. The study findings revealed that there is lack of policy directives regarding the implementation of EAP programme within the DoH. Middleton (2014) identified contributory that have been linked to difficulties faced by public institutions such as non-compliance of public policy and lack understanding and expertise. In such cases, there will be a failure in a full implementation strategy of a particular policy. Regardless of the fact that an EAP professional was appointed by the DoH in 2019, participants of this study reported that since the EAP practitioner left in 2010, the programme was no longer active which left employees without any formal counselling services and they had to deal with the work-related stress on their own. This was shown by the following extracts:

> M1, *"Since 2010 there have been no new recruits or replacement for deceased staff and those who resigned in the department; we are working under pressure".*
> *M3, " I am not aware of EAP policies and services that are readily available and easily accessible for emergency personnel''.*

The current situation contributes to the daily pressures faced by emergency personnel in Capricorn District. It is significant for government institutions to consider resource management and management strategy when adopting policies within their organisations for sustainability and continuity of services. Furthermore, it is also vital that personnel familiarise themselves with the organisation's EAP policies and to fully comprehend what the programme can and cannot offer. This is in line with Employee Assistance Professional Association (EAPA) standards and guidelines (2011) which emphasise that it is fundamental for employees to understand an EAP policy and consistency of its implementation throughout the organisation. Therefore, knowing where to turn to when need arise is of paramount in demanding occupations such as emergency care services.

7.7.2 Lack of interest in the health and welfare of employees

The humanistic aspect of work environment is determined by the overall desire to support personnel and to lessen the destructive effects of the work setting. A well-defined written policy might exist within the institution to assure consistent and effective delivery. However, lack of interest in the health and welfare was reported as a contributory factor for emergency institution not implementing work intervention programme. Lack of

organisational support and unfavourable work environment discourage employees, reduce productivity and increase emotional fatigue. This was shown to be linked with occupational stress in the emergency field. Participants of this study reported that they feel that the employer does not care about their health and wellbeing. They emphasised that they feel being used by the employer. This is revealed by the following quotes:

R2, *"I am now on chronic treatment for psychological problems. I have been servicing Capricorn area for 17 years but when I requested for a transfer to work closer to my family or home. The Department did not respond. It really paralysed me; I feel the government is using me".*

R8, " The employer is not concern about our feelings as emergency officers as there are no attempts to offer Counseling services.

Besides the distressing events that the emergency personnel experience daily, the organisational culture and lack of support have a vast undesirable consequence on their physical, mental and social wellbeing. Emergency personnel receive no support from the organisation to manage the aftermath of critical incidents. Absence of motivators in the workplace further contributes to burnout and findings to employees feeling neglected and unfulfilled at the work. The study findings Minnie et al. (2015) who reported that emergency personnel in the South African setting receive a smaller amount of support from the management to assist them in managing the psychological impact of distressing events they are experiencing on a daily basis. This resonates with Kirby et al. (2011) who postulate that lack of support and harmful job environments might demoralise the employees and decrease productivity owing to psychological fatigue while the implementation of preventive and support programmes can possibly alleviate the adverse effects of distress. However, having appropriate support and personal resources might well prepare the emergency personnel to deal with dreadful episodes or critical incidents.

7.7.3 Lack of managerial competence

Policies and procedures are essential to formalise any programme or structures within the organisation and they should provide the required direction for employees to ensure practical activities. Managers play a critical role in any organisation, assisting troubled

employees to seek help, as they are channels to assistance. Supervisors perform the function of formal referrals to organisational intervention programmes. Managers and supervisors assist in identifying and referring troubled employees to an EAP. Incompetent managers who are also not clear about the policy application within the organisation will have an adverse influence of the success of the EAP. Incompetent managers will be unable to support the implementation of the work intervention programme within the organisation. This evident from the following excerpts:

M4, "I have never trained on EAP referral processes and procedures".

M7, "We are sometimes unable to provide support to subordinates because we never received proper training".

To support personnel meaningfully with suitable coping approaches, managers need to be in a better position to introduce or modify EAPs that all workers find it beneficial. Managers should be able to identify and control psychosocial risks associated with job demands in the work setting. They should also support and enable collegial relations at work to assist employees better cope with trauma.

7.7.4 Employees' awareness of the EAP

As previously mentioned, the study participants revealed that they were not aware of the EAP services provided within the organisation. This might be the result of contributory factors such as lack of or poor marketing strategies employed, lack of familiarity about the programme and inaccessibly of the programme. A crucial aspect noted for an effective operation procedure for the EAP comprises clear description of the role and availability of the EAP. This viewpoint is in line with Csiernik (2011) who suggests that including EAP information in the organisational resource policies and constant communications to the workforces might increase EAP awareness and programme utilisation.

7.7.4.1 Employees' unfamiliarity with an EAP

Employees' familiarity about the EAP suggests having detailed information and understanding about the programme and its services. The study participants reported that they never utilised EAP services. This is because they were not familiar with the EAP services. The following quotes bear evidence:

R1 “I never heard of any psychological assistance that is available to EMS personnel”

R14, “I have never used any counselling services since I started working. I just deal with it on my own and continue with my normal duties and forget about the traumatic incidents”.

On the other hand, when employees are familiar with programme services, they are more likely to utilise it. Therefore, emergency should be made aware of about the location of the EAP programme, the services rendered and how to access the services. This sentiment is supported by Attridge’s (2012) assertion that constant marketing of the promotion of the EAP services within the work setting is significant because some employees may not be aware of its existence as some service users may come as referrals given by other co-workers or supervisors. This indicates that all employees within the organisation should be conscientised about the availability of the services and its benefits. Regardless of the regular marketing and communication about the EAP, factors such as concerns about confidentiality, stigma, location, and contact details of EAP practitioner can inhibit EAP use. It will be convenient for employees to have the contact details of the of the EAP practitioner. This results in many workforces who could access and possibly benefit from utilising the EAP services.

7.7.4.2 Inaccessibility of EAP services

Ease access to the EAP is integral to programme utilisation. Employees face many impediments when they consider looking for assistance in managing the aftermath of critical incidents and dealing with their personal challenges. The study findings revealed that the EAP services were inaccessible by the emergency personnel. Currently, the EAP services are centralised at the provincial office to service all public servants employed by the DoH in the Limpopo Province which pose as a challenge to make the services to be inaccessible by employees who are at peripheral areas. Even though EAP services are available free of charge and the personnel do not have to pay to utilise EAP services, the employer may incur high financial expense in providing resources such as transport for employees and time lost when employees have to travel long distance to access the services. This might affect the organisation in terms of outputs. In this study, the EAP location emerged as barrier for emergency personnel to access the services. It is essential for personnel to have access to the EAP services convenient and confidential

way. To enhance utilisation opportunities, the organisation should consider the possibility providing off-site counselling services in addition to in-house services for easy access. M3, shared the same sentiment as he felt that *“EAP services to be readily available and easily accessible by employees at all times’’.* To improve accessibility, careful consideration should be made on how best to locate the EAP.

7.7.4.3 Poor marketing

Marketing entails promoting existing EAP programme services within the organisation with the intention to enhance employees’ awareness. Constant marketing should occur between the executive management of the organisation and to staff members. The study findings revealed that poor marketing was one of the contributory factors which influenced employee that EAP services in the studied organisation was poorly marketed. However, the EAP professional credentials also have an influence on the programme to ensure programme effectiveness. The proficiency, accessibility and visibility of EAP professional can influence the usage and success of the programme. In this case the EAP professional should possess a broad knowledge of skills in terms of marketing and superior personal skills such as problem-solving and communication. This viewpoint resonates with Csiernik’s (2011) assertion that constant marketing of the EAP programme at all levels within the organisations will increase employees’ familiarity, awareness, comfort about the programme.

R2,“My understanding is that EMS originated from USA where they market and also have debriefing services for their employees, we need to have such services at our station to alleviate the impact of stress”.
R3, “The department should appoint dedicated social workers for emergency personnel, and they should conduct monthly visits to EMS stations within the district.

This will also enhance accessibility and its success. This assertion is in accordance with Mogorosi’s (2019) view point that marketing should occur through diverse staff training methods such as information brochures, novel staff orientation, workshop and training sessions with managers, employee associations and labour representatives. Information about the EAP services can be provided through other sections within the department

such as human resources and occupational health and safety which are in regular communication with personnel to the increase programme to knowledge and to enhance the chances of programme utilisation. It is critical to develop continuous and ground-breaking marketing strategies to improve staff awareness and to ensure that all personnel are familiar about the EAP services provided within the organisation.

7.8 SOCIAL SUPPORT FROM SUPERVISORS

Humans are social beings; people spend most of their times at work than with their partner or significant others. As a result, social support is a fundamental aspect influencing an individual's health and wellbeing. Interventions aimed at job stresses, job satisfaction and social support should be upheld at the workplaces. This study revealed social support from supervisors as the necessary tools to deal with work-related stress. In this regard, social support may be viewed as resources offered by supervisors to others as coping aid. Therefore, supervisors should be always accessible to provide support to their supervisees and possible arrange constant team meetings and provide sufficient feedback associated with to job performance or address employees' behaviour and attitudes as a result of job stress. Generally, most participants reported being socially supported by their co-workers but also with their supervisors at workplace. The types of social support reported by the study participants will be discussed next:

7.8.1 Casual talks

Casual talks seem to be most outstanding resource that was employed by supervisors and their subordinates and seems to be more beneficial to those who use it. Participants relied on more casual talks as compared to other coping methods and resources. Basically, one of the significant needs of an employee is to have a healthy professional relationship with others in the workplace including the immediate supervisor. A supportive function is one of the supervisor's roles in the workplace. More importantly, a good rapport between the manager and the subordinate at work can be preserved as long-term coping resource to support employees to manage the aftermath of critical incidents and also improve their attitudes and wellbeing, and it may also assist them get adequate resources to satisfy other needs at the workplace.

The following interview excerpts bear testament:

M6, “I sometimes sit down with my subordinates listen to their frustrations and provide support”.

M7, “I usually call my colleagues just to check on them after attending to a horrible incident even when they are on leave”.

The study findings revealed that emergency personnel tended to share their emotions and frustrations especially regarding critical incidents situations with their supervisors and they reported it to be beneficial. In this regard, participants used causal talks as a platform to ventilate their disturbing emotions. High quality relations also make it possible for employees to gain more social support and social resources from managers to achieve tasks and deal with adverse effects of trauma. The study findings are consistent with (Adriaenssens et al. (2015) and Lorinc’s (2016) assertion that owing to the significant role that supervisors play in the emergency services work setting, it is critical that a robust team spirit is sought. This will also aid in building teamwork and enhance team spirit among emergency personnel to improve employee functional coping with stress. In addition, an open-minded attitude towards an individual or group differences at work is critical.

7.8.2 Lay counselling or emotional support

First responders like all people need emotional support. Emotional support for them from the organisation is however completely in accessible. Managers have the responsibility to detect the early indications and warnings of maladaptive coping among their supervisees and formally refer for professional counselling. However, owing to the inaccessibility of workplace intervention programme, supervisors play the role of a lay counsellor by giving emotional support to emergency personnel. This was revealed by the following quotes:

R2, “I always discuss my work-related stress with my supervisor”.

M6, “I normally offer emotional support to my staff, I do refer when they need psychological intervention”.

This could lead to additional stress as supervisors had to deal with their emotional stress which is not attended to. The study discovered that there is a lack of emotional intelligence from the study participants who are occupying managerial positions. This will add to their frustrations as supervisors would not know or find it difficult to manage the emotions of other co-workers. Supervisors to need to be furnished with the proper skills to build mental toughness or bounciness for their subordinates. This sentiment is supported by Clark et al. (2014) and Tzoneva (2012) who highlight that mentoring programmes should be introduced at the workplace as this will enable managers to provide attentive and emotional support to emergency supervisees. This will assist in lessening tension, boost morale, better ability to manage difficult circumstances and improve production at a workplace as participant acknowledged that the support they received from their supervisors in a form of empathy, comfort and motivation was indeed helpful in managing the aftermath of critical incidents.

7.8.3 Informational support

Employment relations is crucial in the emergency field. The participants revealed that managers do not only give feedback about the supervisee's job performance; they also provide encouragement, information on how to manage job demands and provide opportunities for sharing and receive feedback in a supportive environment. The study findings revealed that the additional type of social support offered by supervisors was in a form of providing information which may assist the employee in problem-solving and giving them advice on life skills. This supported by the following quotes:

R1 reported , "'I do really benefit when I share my life experience with my supervisor as he is always available to assist".

M3,"I sometimes give my colleague guidance on work and personal related issues".

This will also assist employees to manage challenging situations in future. This can be seen as an opportunity to transfer knowledge and skills among emergency personnel. This study is in contrast with Shirom et al. (2011) who observed that supervisor's social support was revealed to have no influence on health and wellbeing. However, Thompson and Prottas (2005) have established a positive relationship between supervisors' social support and wellbeing adding value to the current study findings.

7.8.4 Informal referral

Managers are under duty to notify employees of the therapeutic services accessible through workplace intervention programme. Since the study findings revealed that participants were not aware of any counselling services available at the workplace, supervisors were relying on informal referral as a way of supporting supervisees. Informal referral also contains a point when a supervisor informally encourages a staff member to seek professional assistance, which posed as challenge and a financial strain as some emergency personnel had to pay for the services they received. The following quote bear evidence:

> M6 reported *"I have observed or identified a troubled employee, I usually encourage sub-ordinates to consult a psychologist, but the challenge is that they have to pay for the services".*
>
> *M2, "Most of the time I refer my colleagues to Social workers at Lebowakgomo hospital for counselling services".*

The work stress experienced by emergency personnel might be exaggerated by the fact that they are further frustrated by the organisation and the financial strain they had to endure to cover for their medical expenses. The organisation's obligation should be to nurture socially caring work settings which necessitates launching systems and real-world solutions, which will empower workers to effectively deal with workplace trauma and jointly work as a team. Enhancing team spirit is key in the emergency field as the study findings revealed that emergency personnel rely on collegial and supervisors' support to deal with daily stress.

7.9 SUMMARY

This chapter presented and discussed the themes that emerged from the interview transcripts obtained from the participants of the study. A blend of theory-led and inductive thematic analysis was employed in this study. The analysis involved attentively listening and reading through each interview record and noting any pieces of data or items of interest which appeared to be appropriate to this study. After organising and labelling data, pertinent descriptive data were linked to each theme. A few related excerpts were carefully chosen for explanatory and reporting purposes. The data presented by the

participants supported former studies regarding the realities of emergency work, the influence it has on personnel and the coping approaches they used to deal with the daily experiences of critical incidents. The findings of this study are significant to lead future research path concerning what emergency organisations should do to support and assist employees in this field. The next chapter provides a summary of key research findings, conclusions and recommendations.

CHAPTER EIGHT

SUMMARY OF THE MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

8.1 INTRODUCTION

This chapter presents the summary of key findings, specifically appraising if the findings demonstrate the achievement of the research objectives. In this chapter, conclusions and recommendations are constructed from the empirical data gathered from the study participants. It was deemed necessary that this chapter recommend changes or administrative strategies that emergency organisations and policy-makers may implement regarding the operationalisation of the work-based intervention programme to improve the health and wellness of emergency personnel in Capricorn District. The suggested strategies based on the findings detailed in Chapter 7 may assist administrators, managers, occupational social workers or psychologists, and human resource personnel to recognise problem areas and strengths within the emergency field.

8.2 RE-STATEMENT OF THE AIM AND OBJECTIVES OF THE STUDY

8.2.1 Aim of the study

The study sought to explore and describe lived experiences of Emergency Medical Personnel in the South African DoH towards and propose user-led model. The aim of the study was effectively realised.

8.2.2 Research Objectives

The following objectives directed the study.

- **Objective 1:** To profile work-related stress and the lived experiences of EMS personnel in Capricorn District.

This objective was achieved as highlighted in theme 1-5 which summarily revealed that emergency personnel are going through emotional and physical stress which lead to burnout, compassion fatigue and PTSD. The responses to critical incidents were also

captured as revealed by the participants which consist of re-experiencing trauma, hyper-arousal, emotional numbness, guilt, and shame. Emergency personnel revealed that they are more traumatised by suicide, MVA, vicious crimes, and incidents involving colleagues and children. Emergency workers seem to be aware about the emotional impact of work-related stress, Generally, emergency work comes with serious risks such as travelling at fast speed when responding to calls and it is hard for individuals attending MVA scenes involving co-workers while in line of duty. Their lived experiences were also captured. The unremitting nature of ordeal had devastating effect. Participants also mentioned that they do not have time for recovery from dealing with trauma. The study findings also revealed aspects which contribute to stress among emergency personnel such as unsupportive work environment and lack of proper education and training which included, lack of organisational support, Inadequate job resources lack of involvement in decision-making, poor emotional intelligence and lack of supervisory skills.

- **Objective 2:** To identify and appraise coping strategies employed by EMS personnel.

In this study, coping strategies emerged as a theme and the methods employed by emergency personnel to deal with the aftermath of critical incidents have been identified. This study established that functional and dysfunctional coping strategies were being used by emergency personnel.

Functional coping methods and support structures which were found helpful included collegial support, family support, resilience and physical exercise (sports and hobbies). The dysfunctional coping strategies that were revealed comprised of detachment and the use of alcohol.

- **Objective 3:** To establish how accessible and user-friendly EAP services are to EMS personnel.

  This objective was accomplished. The study findings revealed that EAP services were not accessible. All participants in this study revealed that there is no EAP within the DoH. The participants indicated that since 2010, the Department never employed any EAP practitioner. One participant indicated that she is consulting her private psychiatrist while the rest rely on collegial and family support. Another participant

reported that he is referring subordinates to social workers at Lebowakgomo Hospital or private psychologist when need arise. It was evident from the study findings that emergency personnel were not familiar with the EAP services rendered within their organisation. As a result, the following themes and sub-themes emerged under these objectives which comprise of lack of policy directives, lack of interest in the health and welfare of employees lack of managerial incompetence in implementing the EAP programme, lack of employees familiarity with an EAP, inaccessibility of EAP services and poor marketing of EAP services. There is an intense need for employing various marketing strategies that will familiarise emergency personnel about the services which will assist them to manage the experiences of occupational stress.

- **Objective 4:** To determine the nature of social support (colleagues and supervisors) EMS personnel receive.

This objective was realised. Collegial and supervisors support emerged as a major coping strategy among emergency personnel. It was discovered that most participants were in favour of sharing or talk about their distressing experiences with co-workers and supervisors as compared to sharing with family members. Collegial and supervisors support were found to be useful coping strategies. Casual talks, lay counselling or emotional support, informational support and informal referral were found as key role performed by supervisors. Supervisors had to play a therapeutic role as they were also not aware of the available EAP services and sometimes informally refer troubled employees to social workers for assistance.

- **Objective 5:** To develop a user- led model for EMS personnel.

This objective will be successfully accomplished in Chapter 9 of the study. It is critical to have a user-led model guided by the study findings as revealed from the thematic analysis of the data. The user-led model will assist administrators and managers to create a highly caring organisational culture.

8.3 SUMMARY OF MAJOR FINDINGS

Key study findings are presented as follows:

8.3.1 Work-related stress

8.3.1.1 Emotional and physical stress

Globally, emergency work was underlined as being predominantly challenging (Herbert, 2013). The unique role of emergency personnel and workplace stress were evident from the study findings. The study discovered that the participants frequently deal with distressing events in their profession. Participants alluded that they are often confronted with different distressing events such as suicide, vicious crime, seeing burned bodies, death of children, co-workers and gruesome deaths owing to MVA's Incidents involving children and colleagues were voiced by participants as most disturbing, hurtful and leave an emotional mark in their lives. The result of repeated exposure to disturbing episodes and emotional stressors are hidden risks in emergency field. This seems to be an extensive contributor to their job pressure which leads to compassion fatigue and exhaustion. Employees reported feeling hopeless which could result in loss of job satisfaction and employees frequently utilising their sick days as a result of stress.

Trauma is comprehended in terms of persons reaction within their context and the meaning they attach to the incident will influence the initial response and method to deal with the situation. Emergency employees are extremely vulnerable to the adverse effects of work pressure. The inimitable biopsychosocial challenging features of emergency work were frequently emphasised in this study and the high risk for emergency personnel developing PTSD. Trauma response to critical incidents varies from individuals, and each person is influenced by stress in a unique way. In this study the reactions to trauma to trauma included: *guilt and shame* were revealed by participants who reported deaths of patients despite of all the efforts done to save them. The current study also revealed that the experience and the influence of distressing episodes among emergency personnel was very high; it was reflected by their personal responses. Most participants were presenting *re-experiencing trauma* symptoms. One participant exclusively alluded that he is still traumatised by the incident he responded to in 2019. Subsequently, it is worth stating that the shared indication confirms the detrimental effect of emergency work on

the emotional wellbeing of personnel. Lack of organisation support and coping resources immensely leads to this experience. It was also revealed that one emergency personnel were booked off-sick due to depression.

Trauma response to traumatic events differs from individuals. Each person is affected by trauma in a unique way. This process does not only necessitate learning how to handle trauma but also allowing a person to reflect and make sense of their life experience. In this study, it was evident that some participants displayed trauma reactions responses such as *hyper-arousal* and *emotional numbness and avoidance*. Hyper arousal signs such as high alertness, being easily annoyed and furious were stated by participants. The study participants tried to escape the feelings, thoughts of critical incidents by emotionally disengaging themselves from the victims and focus on doing their job. The emergency personnel response to critical incidents were pronounced as personally distressing and the feelings experienced were overwhelming. Hence, there was a need for assistance in managing the aftermath of critical incidents.

8.3.2 Lived experiences

8.3.2.1 Helplessness

The study revealed that the strenuous events were those in which the participants experienced emotions of helplessness and had no control of the situations. The feelings arise even if they have done everything in their power to save the patient's life. Regardless of adverse consequences of emergency work, job commitment and the responsibility to save lives was evident was the primary focus of the participants. However, the passion and pressure to save lives including public expectations were associated with the emotional stressors experienced by emergency personnel. In this study, the massive pressure from public expectations on emergency personnel was clearly captured.

8.3.2.2 Unsupportive work environment

Despite the fact emergency work was considered to entail of several stressors, the participants maintained that these originate from organisational failure, such as lack of management support and job resources rather than the job itself. In this study, it was evident that enduring organisational related stressors were also realised to adversely

influence the health and wellness of emergency workforces. Numeral aspects have been emphasised which affect mental health and trauma response. In their responses they reported frustration, helplessness and fatigue mostly from lack of organisational support, ever cumulative job demands and insufficient communication between the employees and the executive management. Lack of educational programmes on how to manage the aftermath of critical incidents, inadequate, or no recovery period. EMS managers were not competent on how manage troubled employees at the workplace. Lack of physical resources for job accomplishment such as medical equipment, ambulances and personnel have been highlighted as a major source of organisational stress in earlier studies as in the current study. In this study, absence of organisational and personal resources might contribute to the stress experienced by emergency workers. Hence, emergency personnel need to be furnished with the tools and skills essential for adequate individual resources, through education and continuous support. Managers were also not involved in decision-making process such as buying of equipment and ambulances which added to their frustrations as end users. Recognising the basis of the stress and knowing when and where to seek assistance might circumvent more complications. Hence, a proactive organisational approach would be necessary to avert dysfunctional pressure from happening. This study discovered that job resources such as organisational and support, human and financial resources) are fundamental and might have the utmost positive outcome on work engagement when stressors are excessive. The participants felt that they were being neglected or mistreated as first responders and not taken seriously enough by the department which increases their frustration. The undue workloads lack of resources such as human resources, ambulances and patient care transport depressingly influences their work experience, creating a strenuous and exasperating working environment. The study also established that emergency personnel felt like they are unnoticed within the organisation. Lack of job incentives such promotions and dissatisfaction with salary packages were revealed as organisational factors which contribute to stress experienced by emergency personnel. In spite of this, participants agreed that organisational support and job resources of emergency officials can be beneficial considering how their work environment impact their health and wellness, more especially their level of stress and production.

8.3.3 Coping in the emergency field

The study revealed that that coping strategies and workplace enabling factors were not enough to prevent and manage occupational stress. However, camaraderie and collegial support were considered important and adopted as a coping strategy employed by emergency personnel. The emergency personnel highlighted the importance of sharing the experiences of adverse events with co-workers. In this context, colleagues support one another and benefit from others' experiences of others which enable them to better manage trauma. Support from spouse was also revealed as functional coping methods in the current study. Physical exercise and religious coping strategies were reported by participants as coping mechanisms. Physical exercise has been shown to improve mood and reduce exhaustion. However, lack of organised exercise programmes or limitations to access exercise activities were conversed as a main problem. This has an undesirable effect on psychological, social and physical wellbeing of emergency personnel. Most participants proposed possible ways to deal with these confines such as provision of organised exercise at each station and employment of new staff to reduce the burden of work and improve their ability to manage stress.

Nonetheless, there were few participants who acclimatise well regardless of the traumatic work environments. Continuous exposure to adverse events may lead to a better way of managing stress. The participants appeared to be tough while assisting the victims. This study also revealed the use of dysfunctional coping in the emergency field such as disengagement and the use alcohol. Disengagement or detachment is an indication of compassion fatigue which has an adverse effects on the health and wellbeing of emergency personnel. The participants divulged witnessing co-workers using drugs to deal with workplace stress The use of drugs and alcohol has an unfavourable effect employees and the organisation as a whole.

8.3.4 Inaccessibility of EAP services

All emergency personnel were not aware of any formal or workplace interventions offered within the organisation, in spite of an overall acknowledgement of the significance of such interventions. This study established that the EAP services were inaccessible and emergency personnel were unfamiliar about the services provided within their own

organisations. This could be result of poor marketing strategies, lack of managerial competence or lack of interest in the welfare of employees. There are also participants who expressed their discontent over a number of areas about the organisation. The emergency personnel had ideas on how the DoH can assist them deal with stress. The assistance needed and support being discussed could come from numeral sources including, readily available counselling services, easy access of fitness or sports activities which would in turn lead to healthier personnel and benefit the overall organisation. The plentiful effects of the distressing characteristics of emergency work were discussed at length in this study which necessitate the researched organisation to take into consideration the emergency personnel' needs and dissatisfactions and respond aptly by integrating support services as proposed by the emergency personnel. This will enable emergency workers not to miss out on the essential professional support they may require. Emergency workers strongly reported the need for readily available workplace intervention programmes such as debriefing services and EAP at the station level to mitigate the effects of workplace trauma.

8.3.5 Social support from supervisors

This study established that social support from supervisors was beneficial in dealing with the aftermath of critical incidents. The participants acknowledged the role played by supervisors such as casual talks, encouragement, lay counselling or emotional support and informal referral for further assistance. The other type of social support provided by supervisors was in a form of information giving which might be beneficial in the management of critical incidents, assist emergency personnel with problem-solving skills. This will also enable workers to constructively deal with difficult circumstances in future. Furthermore, the study also revealed that there is a lack of emotional intelligence from supervisors as they clearly expressed their frustrations or difficulties in managing the emotions of their subordinates.

8.4 CONCLUSIONS

The study conclusions are presented as follows:

8.4.1 Objective 1: To profile work related stress and the lived experiences of EMS personnel in Capricorn district.

- The study concludes that emergency work is very challenging and emotionally stressful. Emergency staff are traumatised by critical incidents involving children and colleagues which further contribute to emotional and physical stress experienced by emergency personnel.
- Organisational stressors such as under-staffing, lack of job and personal resources, discontent with salary packages were associated with high levels of stress exhibited by emergency personnel.
- Additionally, work overload was shown to have a substantial association with the level of stress experienced by emergency personnel.
- Lack of managerial and organisational support results in frustration and fatigue among emergency personnel. Therefore, administrators and managers should ensure that adequate job resources are made available and workplace intervention programmes are provided and easily accessible to emergency workers.

8.4.2 Objective 2: To Identify and appraise coping strategies employed by EMS personnel.

- The current strategies employed by emergency employees are not sufficient to stop stress.
- Lack of formal training on how to deal with frequent exposure to traumatic incidents has a direct negative impact on how emergency cope with stress.
- Besides the inherent characteristics of emergency work emergency personnel are further traumatised by unsupportive work environment.
- Lack of formal coping strategies contribute to the high level of stress experienced by emergency personnel.

8.4.3 Objective 3: To establish how accessible and user-friendly EAP services are to EMS personnel.

- The study concludes that the EAP services were not accessibly and user-friendly. Emergency personnel were not aware of the availability of the intervention programme and the services offered within the organisation.
- The ineffectiveness of workplace intervention programme also contributes to the influence of stress on the biopsychosocial wellbeing of emergency employees.

8.4.4 Objective 4: To determine the nature of social support (colleagues and supervisors) EMS personnel receive.

- Social support provided by supervisor was found beneficial in assisting emergency personnel to manage work-related stress.
- Managers played a substantial role in supporting subordinates manage the aftermath of the critical incidents. However, managers also struggle to manage emotions of their supervisees.

8.4.5 Objective 5: To develop a user- led model for EMS personnel.

- Development of a user-led model in mitigating work-related stress based on the lived experiences of EMS person will be discussed in the next chapter.

8.5 LIMITATIONS OF THE STUDY

The specific influences on the conclusions and limitations of the study to be acknowledged include the following:

The study was confined to Capricorn District in Limpopo Province. Therefore, the conclusions cannot be generalised to a larger population or other provinces. Owing to the sensitivity of the research topic, getting study participants was not easy. Furthermore, emergency personnel were reluctant to participate in the study. Data collection process was a challenge owing to network problems and considering the emergency unpredicted calls. There were disruptions during telephone interview sessions as some emergency personnel had to respond to urgent calls.

8.6 RECOMMENDATIONS

The suggested intervention approaches have considered interventions at a personal, collegial, managerial, and institutional levels. The following recommendations are made based on the conclusions of the study:

- EAP policies should form part of information package given to new recruits during induction or orientation programme and emergency personnel should be informed about different methods of utilising the programme.
- Various marketing strategies should be adopted to familiarise employees with EAP services available to them.
- The DoH should consider decentralisation of EAP services to improve accessibility and utilisation and EAP practitioner should be placed at the district level to offer proactive services on a monthly basis not only to be reactive when there is a serious case.
- EAP supervisory training should be conducted on a quarterly basis. Managers who are familiar and understands the functions and benefits of the EAP are more likely to refer their colleagues and supervisees.
- EMS managers should be involved in decision-making process more especially when it involves purchasing of work equipment.
- The DoH should create an organisational culture of support by ensuring the availability, accessibility and promoting the use of support or EAP services to deal with the aftermath of critical incidents.
- Supervisors or station managers should be trained to early detect signs of ill-coping or troubled employees among their subordinates.
- Also, once they are able to identify such employees, they should be furnished with the necessary skills and tools to assist in building mental toughness or resilience.
- A wide-ranging of workplace healthy habits should be promoted to avoid dysfunctional coping such as team building exercises, time for mental and physical exercise and encouraging spiritual sessions.
- Social support should be maintained at the workplace. Managers should be accessible and be always available to their supervisees. They should organise

regular team building meetings and provide constructive feedback regarding their performance, behaviour and attitudes.

- Generally, training and development of employees can improve personal resources such as resilience. Personal resources can be enhanced to improve job engagement and production. Giving employees the necessary tools to cope adequately with work-related stress is of significance.
- Collegial support, team-work and developing mental toughness is key and tremendously necessary in the emergency field and regular post-trauma defusing and debriefing sessions should be readily available for both individuals and teams to offer prompt and focused support to emergency personnel when need arise.

8.7 FUTURE RESEARCH

In this study, it was shown that the emergency personnel lacked education and training on how to manage the aftermath of critical incidents. Therefore, it might be thought-provoking for future research to explore the perceptions of newly appointed personnel or retirees in the emergency field about relevance or appropriateness of their professional training or curriculum in promoting resilience.

CHAPTER NINE

A PROPOSED USER-LED INTERVENTION MODEL FOR EMERGENCY PERSONNEL

9.1 INTRODUCTION

The study findings demonstrated that the traumatic nature of emergency work can have adverse effects on the physical, psychological and social wellbeing of emergency personnel. Even though there is an in-house EAP model within the DoH, the EAP services were found not be accessible or user-friendly. In this regard, the administration of the DoH should consider creating a supportive organisational culture by adopting an intervention model which will be driven or led by end-users to mitigate the aftermath of critical incidents. This chapter presents a user-led model for emergency personnel in Capricorn District. For this study, the terms user-run and user-led will be used interchangeably. The notion of a user-led model originated in 1970s for mental healthcare users. It involved to be inclusive of other health care fields such as disability and HIV/AIDS (Grey & O'Hagan, 2015). Scientific evidence supporting the usefulness of user-led service models is gradually expanding (Australian Healthcare Associates 2013; Croft & İsvan 2013; Bologna & Pulice, 2011). The model developed in this study presents strategies in which the DoH responds to the needs and challenges faced by emergency personnel and it may serve as a guiding instrument that can support emergency organisations in implementation of appropriate workplace intervention programmes. The development of ground-breaking user-led model and strategies necessitates rigorous processes to ensure effective execution of the support services in the emergency industry, particularly, in the Limpopo DoH. The model will also allow EAP practitioners; social workers and psychologist dedicated to EAP unit to make use of strength-based perspective and resilience theories to manage the adverse effects of trauma experienced by emergency personnel. The model may further necessitate the organisation to conduct programme assessment to determine the efficiency and adequacy of the services provided.

9.2 THE SIGNIFICANCE OF A USER-LED MODEL

Ross and Deverell (2010) note that a model's aims are to develop an individual's knowledge and understanding, to familiarise public members about problem-solving methods through skills development, encourage teamwork and involvement by ensuring that interventions are kept user-friendly. The concept that service users or people with lived experiences can partake and provide valuable services to others has been based on the following foundations proposed by Ross and Deverell (2010).

- Users are experts about their own problems and illness and needed services; they may have various but similarly significant viewpoints and approaches about their challenges and care.
- User participation may lead social inclusion in the workplace and it can be beneficial in itself.

9.2.1 Models of service user involvement

There are different models of user involvement that can be employed by organisations such as (1) user-controlled: where services are initiated and led by service users; (2) delegated power which includes a peer support group on an intensive care unit and (3) partnership: where service users and non-service collaborate to develop, plan and execute an intervention (Scully, 2011). Despite the claims made about the attractiveness and the benefits of service users' involvement, it remains a challenge to adopt user-run services in government institutions.

The types of user- involvement model that were found pertinent to this study are the following:

9.2.1.1 Access

The key aspect of this model is that users should have access to support services provided within the organisation such as EAP services. Disturbingly, the study findings revealed that the EAP services were not accessible and participants were not aware of the professionals appointed by the DoH and the services being offered. The study also found that the EAP services are located at the DoH provincial office. This had a great influence on work-related stress experienced by emergency personnel who were scattered across the province. Consequently, adopting a user-led model at a district level is of great benefit for better access of support services.

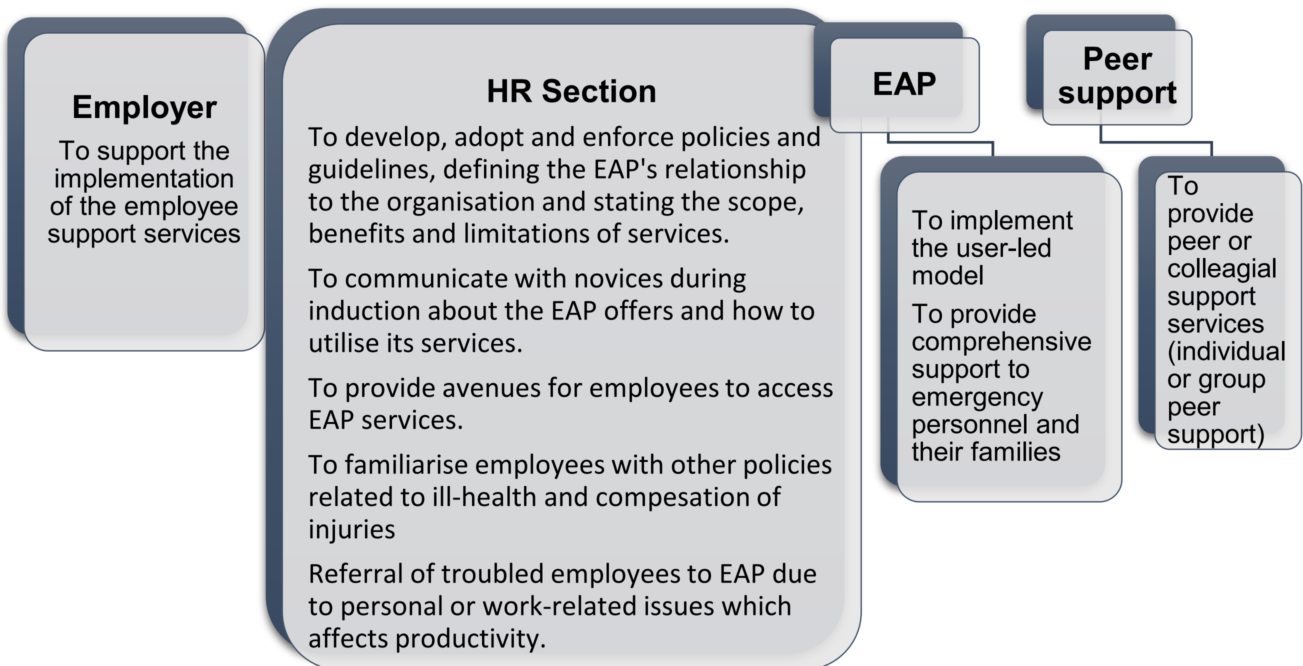
9.2.1.2 Participation

This model allows service users to plan, control and evaluate services based on their identified needs which do not preclude non-consumers or professionals from being involved. Nelson and Lomotey (2006) and Croft and İsvan (2013) established that employees in user-led services have a stable psychological health, improved social support and good quality of life. It is significant for emergency personnel to be part of the intervention development as they have been offering informal support to each other so the lived experiences will be the key ingredient for coming up with the best strategies. The study participants highlighted strategies that will assist in reducing the effects of work-related stress. The strategies were proposed and presented as recommendations in Chapter 8.

9.4. PROPOSED EAP INTERVENTION MODEL

Following a brief synopsis of findings in Chapter 8, this study proposes an inclusive model of care for emergency employees which will also humanise emergency organisations by taking into account a state of comprehensive biopsychosocial wellbeing of personnel. The fundamental aspect of the model is for the EAP section to provide early intervention and psycho-social support to emergency personnel following exposure critical incidents. The model is intended for emergency labour force to be assisted with both their job-related and personal issues. The success of the model relies on collaboration among the organisation's administration, professional counsellors and service users. There should be a readiness of the employer to listen and attend to service user's opinions. The model recognises that managers have an obligation to ensure that they are proactive in managing their own psychological wellbeing and those of their co-workers. The researcher proposes that the levels of support should include the employer, human resource section and peer support.

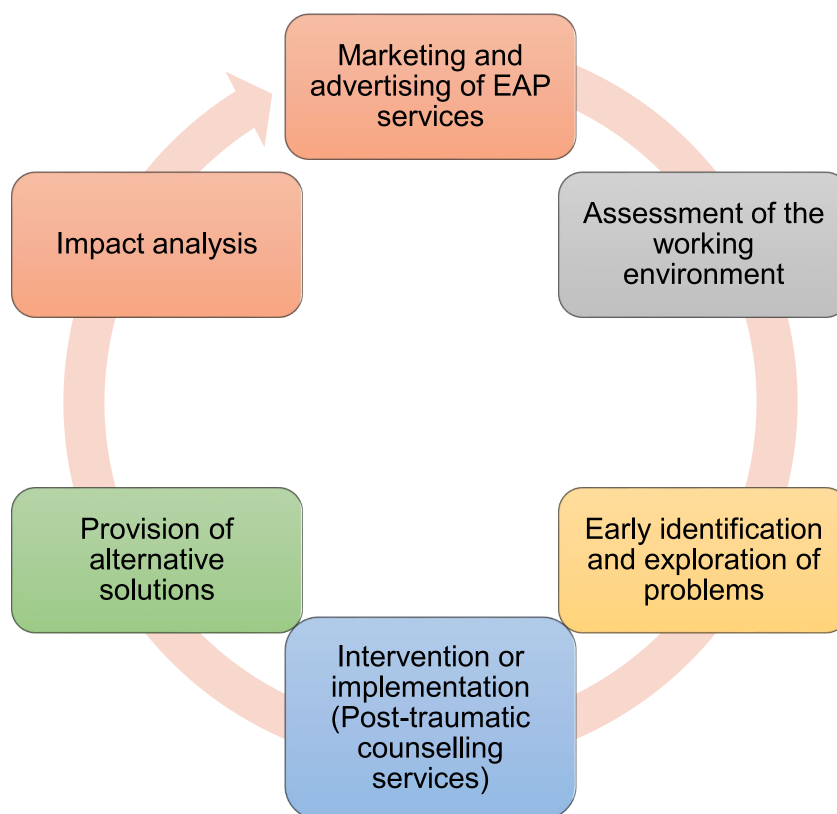
FIGURE 9.1 Proposed continuum levels of care



Discussion

The researcher is of the view that the proposed EAP model relies on the above mentioned suggested continuum levels of care for it to be effective and efficient. The employer has social responsibility to introduce and support the use of EAPs to ensure the improvement of mental health and welfare of the personnel. The success of EAP depends on collaboration of internal stakeholders such as HR section, which has the accountability to ensure that all employees within the organisation are familiar about the EAP policies and its benefits. The study established the importance and benefits of peer or collegial support among emergency personnel. Therefore, formalising peer support programmes will be of great benefit in assisting emergency personnel manage the aftermath of critical incidents.

FIGURE 9.2: Proposed intervention model for EAP services



The proposed user-led model comprises of 6 steps namely;

- Marketing and advertising of EAP services;
- Assessment of working environment;
- Early identification and exploration of problems;
- Intervention or implementation (post-traumatic counselling services);
- Provision of alternative solutions; and
- Impact analysis.

9.4.1. Step1: Marketing and advertising of EAP services

To ensure accessibility and effectiveness, it is significant for workplace intervention programmes to be regularly marketed at all levels within the organisation. Ramokolo (2004) notes that the goal of marketing is to maintain the visibility of the programme and its existence as a significant contributor to organisation's output, effectiveness, work-life, and personnel' health and wellness.

Marketing is a critical element of an EAP. It plays a crucial role in introducing the services and acceptance within the organisation. Marketing promotes ownership and enhance utilisation of the services.

9.4.1.1 Communication or marketing strategies

The success of an EAP relies on the marketing strategies about the programme services. The research findings established that EAP was poorly marketed. The model provides a clear information or guidelines to the organisation, adopters and participants about the initiatives which should be undertaken to improve communication within the department. The organisation should consider adopting various innovative methods of disseminating information and utilise various communication channels. The communication strategies for workplace intervention should be linked with other institutional initiatives undertaken to increase awareness, familiarity about the services rendered and involvement of all stakeholders. To improve marketing of the programme, a range of marketing strategies are proposed which are paper and electronic format. This consists of flyers, prints, bulletins, and circulars. These materials should be designed to provide employees with information or topics about the EAP programme, mental health issues and critical incidents management. Marketing of EAP services should also aim at reducing stigma about the utilising of EAP services.

9.4.1.2 Reducing barriers to support

Reducing impediments to support should be the focus for EAP. The EAP staff should utilise various initiatives such person-centred approaches to enable a shift about in the cultural attitudes of seeking and accessing support within an in-house EAP model. Some employees might not be comfortable utilisation in-house counselling services due owing to social and personal perceptions of seeking assistance, stigma and misunderstandings or uncertainties about the EAP. Emergency personnel should be afforded an opportunity to raise their apprehensions about the impediments in utilising the programmes and come with suggestions. The DoH should ensure that the EAP services are provided by highly skilled registered professionals such as social workers and psychologists with extensive background knowledge of emergency services. Additionally, the DoH should endure the

provision of an environment where personnel will access services without concerns about confidentiality and stigma.

9.4.2 Step 2: Assessment of the working environment

The work environment or organisational culture has an influence on the health and wellness of employees. The EAP professional should analyse concerns from the employees and relevant stakeholders on organisational factors which promote stress among emergency personnel. The study revealed that lack of support and lack of training contribute to the work-related stress experienced by emergency personnel. Horizontal transfers should also be allowed for employees to work closer from home. It is critical to act on the aspects affecting current concerns and focus on transformation and reallocation of resources. Therefore, it is essential to consider the intervention structure and whether the current intervention system (EAP) needs modification. The intervention should aim on early prevention and to improve the psycho-social and spiritual wellbeing of emergency personnel. Emergency personnel should be involved on the planning process of intervention strategies.

9.4.2. Step 3: Early identification and exploration of problems

Early identification of troubled employees signs or maladaptive coping is core technology of an EAP. The researcher suggests that in spite of providing responsive psychological services after a traumatic incident, supervisors or station managers should trained to be able to timely identify troubled employees or look for signs such as poor performance, absenteeism, anger, unpunctuality, aggression and poor interpersonal relationships with co-workers. This will ensure that emergency personnel receive support before problems can escalate to disciplinary matters or medical litigation. The EAP staff should also conduct support or consultation visits to all the emergency stations once per quarter or when need arises.

9.4.2.1 Supervisors' training

It is envisaged that this training will equip supervisors to provide supportive, person-centred leadership which was recognised as critical in Chapter 7. This approach supports Beyondblue (2016) who note that supervisors training plays a significant role in fostering a healthy organisational culture and shields against the influence of occupational-related contributory factors of stress. The training course should provide supervisors with the

information on early identification of troubled employees, skills and resources to support personnel who may be at risk of emotional stress. Station managers should also provide support to their subordinates and some form of continuous monitoring. Supervisors should be encouraged and provided with opportunities to attend capacity building workshops available internal or external.

9.4.4 Step 4: Intervention or implementation (counselling or post-traumatic counselling services)

In many occasions after a critical incident, support services and interactions with the individual provides an opportunity for lessening emotional hyper-arousal. The study findings revealed that there are no accessible critical incident management services for emergency personal in Capricorn District. The DoH should have a clear policy and procedures critical incident response and management. The study revealed that emergency personnel feel like forgotten helpers. Therefore, building mental toughness and providing information regarding functional coping and supporting others in relation to personal and work-related matters should be provided to all emergency personnel. It should be noted that people react differently to traumatic events and the emotional impact of a critical incident upon an employee may vary. Therefore, the level of emotional support provided should be dependent upon the needs of the individual and circumstances. The model proposes that the response services should be person-centred, underpinned by strength-based approach and therefore customised to the needs of an individual employee. The model envisioned that the following will be provided and be utilised by emergency personnel in all potential critical incidents.

9.4.4.1 Staff support services

To ensure that there is a comprehensive holistic approach, the DoH needs to develop, implement and enhance health and services for emergency personnel and their immediate families that is consistent with the aim and objectives of the EAP and the policy guidelines to ensure that personnel receive the most appropriate care. The staff support services should be developed through consultation with the emergency personnel and informed on the best practice. What should remain the focus of the EAP staff is to provide proactive and responsive support services which are suitable for the circumstances, and an evaluation process meet employee’s needs or incident. There should be role

clarification between the management, EAP staff, EAP committee and relevant stake holders. This is likely to increase openness and willingness to access support which in turn improve programme utilisation rate. The following approach should be followed.

9.4.4.2 Building resilience

Generally, emergency personnel are resilient individuals and are able to deal with critical incidents through their inherent functional coping approaches. This can be enhanced resilience and psycho-social training in the workplace. The training should be designed to offer employees with an early understanding of functional coping approaches and normalise responses that might occur following possible critical incidents. Post-critical incident psychological interventions should be offered, and it should occur after the first 24- 48 hours. In some occasions where there is an incident affecting several employees within the same station, station visits by EAP staff and a peer officer from a district level might be helpful. Self– referral to the programme should be encouraged as there might be situations where an employee may choose to self-refer to EAP. This will support employee's rights and autonomy to be in control for their own health and wellness.

9.4.4.3 Suicide prevention

Emergency personnel are at high-risk of committing suicide owing to traumatic nature of emergency profession. The study findings established that one emergency officers committed suicide. Protection and prevention services which promote mental toughness, interpersonal relationships, promotion of positive and early help-seeking, to reduce and normalise of psychological wellbeing issues should be introduced. Consideration should be made to support co- workers subsequent a suicide case at the workplace as this the most distressing situation to deal with as revealed by the study findings. The EAP should ensure that there are various and constant communications within the organisation that empower personnel that will and reduce stigma around suicide and increase possibilities for seeking support for all employees. The DoH should support the establishment and implementation of peer support services. Peer support officers should also be appointed and trained to be able to early identify signs or behaviour associated with suicide. Furthermore, station managers should also be trained on suicide identification and approaches for supporting at risk staffs. The EAP should also provide immediate and continuous support to the deceased's family members following a suicide.

9.4.4.4 Non-professional activities (physical exercise)

The study stablished that emergency personnel employed non-professional activities to manage stress. Non-professional related activities including physical exercise, yoga, dance, meditation, writing and reading are helpful in developing physical and psychological wellness. However, the research findings highlighted some impediments in accessing such activities. Hence the following are suggested:

- Opportunities to participate in sports should be crated and supported;
- Establishment of soccer team between emergency station s in the Limpopo province;
- Departmental team building exercises should be conducted on quarterly basis; and
- The department can also invite fitness trainer to be part of the team building exercise.

9.4.5 Step 5: **Peer support/collegial support**

The study findings have proven that peer or collegial support was beneficial in managing the aftermath of critical incidents. The DoH should consider formalising peer support services in the emergency field. This enables an opportunity for emotional support among emergency personnel. The EAP practitioner should be prudently selected and well-trained peer officers to be able to offer defusing post potential critical incidents and offer referral to EAP. Platforms should be provided for employees to meet in groups for sharing purposes. It is envisaged that peer support will aid to mitigate the onset PTSD. Peer support officers should provide continuous wellness monitoring of employees.

9.4.5.1 Supervisors social support

The role of supervisors in proving coaching and advice to the subordinates was evident in this study. Effective supervisors' support has been acknowledged by earlier research including the current study to be significant for welfare and prevention of emotional wound (Beyondblue, 2016; Brunetto et.al., 2013). In terms of critical incident management, this support is best offered within the first 12-24 hours. The model proposes that further support should be provided through the readiness and accessibility of managers to access. This will provide an opportunity to normalise traumatic incident reactions and for the employee to feel appreciated by the organisation. The DoH should consider providing

station managers with work mobile phone to be able to offer support co-workers at any time subsequent all traumatic events that the supervisor is aware of. This process should be in conjunction with the supervisory training.

9.4.6 Step 5: Provision of alternative solutions

Having identified the most flexible adaptable strategies for emergency personnel to deal with critical incidence, there might be specific cases which need further explorations. The most critical issue is to come up individual tailored-made intervention or solution and to decide how to accomplish that. All socio-environmental determining factors need to be considered when coming up with the strategies. At this stage the DoH should consider consultation with emergency personnel as authors of the recommendations presented in chapter 8 to direct them as people with lived experiences on the best strategies which will be beneficial. The person-centred approach should be utilised in assisting the emergency personnel to manage the aftermath of critical incidents. The model proposes the following alternative solutions:

9.4.6.1 Specialised support

The study established that emergency personnel are vulnerable to suffer from mental health issues such as depression. There might be occasions where extra care may be required. This might include a service from a psychiatrist or referral to rehabilitation centres. To fully support emergency personnel, collective treatment approach should be adopted by the EAP and utilised to ensure continuity of care. The EAP can establish a network of external services where employees can access services and provided with quality services.

9.4.6.2 Spiritual counselling

It was established that the study participants relied on prayer to deal with the effects of traumatic events. Spiritual and divine practices have been revealed to improve positivity and hope among emergency personnel. Therefore, the role of chaplains is key in the managing the aftermath of critical incidents. The employees should identify pastors who will be available to provide spiritual counselling to emergency personnel and their families. Emergency personnel should be responsible to seek for such services when they are required. Station managers should also refer co-workers for spiritual counselling in cases

of adversities or natural disasters where emergency personnel are part of the rescue team.

9.4.6 Step 6: Impact analysis

The main principle of the EAP is to improve health and wellbeing of employees. Therefore, this step necessitates the EAP staff with and the EAP committee to conduct impact analysis with the aim of determining whether the service is appropriate and adequate to address the needs of emergency personnel. The organisation should support initiatives with the aim of improving services that are currently being offered by the EAP. The DoH should provide resources such as transport and finances to enable the EAP directorate to conduct surveys and interviews with emergency personnel. Impact analysis is likely to produce information that has value beyond the specific programme assessed, it is critical that the lessons learned, or the findings should be well distributed to the relevant stakeholders within the organisation effectively to all those who are able to use them.

9.5 KEY ADMINISTRATIVE FUNCTIONS

These recommendations will ensure that there is an inclusive approach that is not only reactive to addressing identified challenges but to the proactive provision of preventative and post traumatic counselling services and identifying approaches to build resilience, reduce impediments to access support services and increase production. The study findings demonstrated organisational flaws such as lack of policy implementation, lack of interest in the health and wellbeing of personnel. Meaningful user contribution requires organisations to consider practical aspects of the process such as the financial and organisational or operational changes that needs to happen. The developed model has considered integration of key administration functional areas for successful implementation in the DoH. These include supportive organisation and management, development effective and efficient operational strategies, EAP committee structures, communication strategies and the implementation of EAP services at the district level.

9.5.1 Supportive organisation and management

This administrative operational area delivers strategic direction and distribution of resources. A supportive organisational culture necessitates that services being introduced and implemented initiated should be linked with the vision, strategic objectives

and plans of the organisation. The study revealed that emergency personnel were not involved in decision-making processes. Hence, user participation also needs organisations to analyse their own cultural environment. Service or organisational cultures that encourage user involvement share a number of mutual characteristics which include a genuine commitment to the development of shared objectives and to partnerships between service users. As indicted earlier, one of the objectives that the employer intends to achieve is to provide support and address health and wellness issues the workplace (Sieberhagen, et al., 2011). Managerial functions such as planning, organising, leading and controlling are key to effective implementation and improvement of a user-led service delivery model in the workplace.

9.5.2 Development of effective and efficient operational strategies

The development and execution of effective and efficient operational strategies are fundamental to the development of user-led model as they provide methods and organised administrative principles for successful intervention model that will be beneficial to the service users. This key administrative operational area further encourages reliability regarding management of intervention strategies and initiatives in the workplace. The administration of emergency organisations and EAP unit, as key drivers in the implementation of workplace intervention, should ensure that the adopted strategies are developed and applied for reliable and operative execution of effective and efficient operational strategies and initiatives to address challenges faced by emergency personnel. It is significant for the organisation or the employer to support the operation of wellness programmes.

9.5.2.1 Education and training

Education and training emerged as an imperative theme in this study. There has been highlights within this research about the need for training for emergency personnel. The DoH should support the EAP section to design and implement a broad-spectrum educational package to promote physical, psychological and social wellbeing among emergency personnel. Emergency personnel should be involved in the design of course content through needs assessment or skills development questionnaire. The proposed types of training are as follows:

9.5.2.2 Leadership development

This type of training is intended to develop leadership competence and knowledge required by supervisors and the EAP professional to fully implement the EAP and its policies. The study finding revealed that the EAP is not user-friendly or fully functional. The triumph of the EAP relies on the competence of the EAP professional, administration buy-in and labour union endorsement. The EAP committee members should also be trained on the roles and responsibilities in the programme as the success of the programme relies on their contribution.

9.5.2.3. Resilience and readiness training

The model proposes that all novel emergency personnel should receive psychological health critical incidents management and resilience training. The training is intended to provide information and pyscho-social education. The course content should include but not limited to; occupational stress, resilience, PTG, functional and dysfunctional coping strategies, self- care and methods of EAP utilisation should they need help at any stage in their profession.

9.5.2.4. Workplace wellbeing training on mental health

This training is proposed for all staff members at various levels of the organisation in relation to the EAP services and how to access the services, resilience building and coping approaches to minimise risk of suicide, trauma and psychological problems in the DoH. This type of training should be conducted throughout the working lifespan of employees to ensure continuous support on emotional, physical and social wellbeing and reduce stigma and impediments to seeking help.

9.5.3 EAP committee structures

Despite the inaccessibility of the EAP services, the study evidence indicates that emergency personnel were not involved in decision-making process. Therefore, they perceive a great need for an EAP committee structures which will serve as their voice. Organisational structures are perceived to be playing an imperative role in the real execution of workplace intervention programmes which will be beneficial for the employees. In this regard, committee structures should endorse and encourage collaboration among different sections within the organisation. Therefore, service users who jointly work together in roles of service provision are in a supreme position to close

the gap of poor service delivery and address a range of problems faced by service users on daily basis such as work-related stress including social seclusion, demoralisation and complications in accessing support services. The committee structures should allow the free flow and adopt both top-down and bottom-up communication strategies.

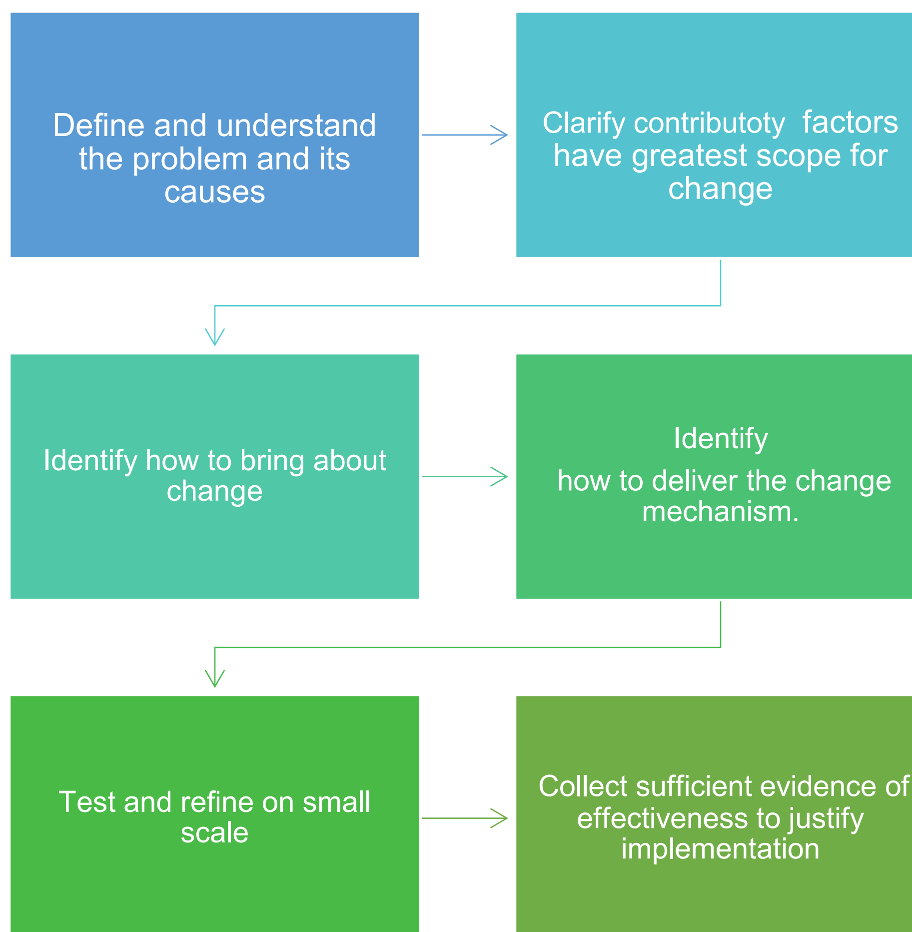
9.5.5 Implementation of EAP services at the district level

The implementation of workplace intervention needs a full component and dedicated management unit that should be accountable for managing, coordinating and facilitating the provision of the support services. The DoH should consider appointing EAP coordinator at the district level to implement support services which will be accessed by all stations or employees at that particular district. A project plan which entails financial implications, clear activities, time frames, and key individuals involved should be developed for the effective implementation and evaluation of the services. The employers should provide essential resources to ensure the successful implementation. Programme evaluation should be conducted in order to appraise whether envisioned outcomes have been accomplished or not. Consequently, monitoring and evaluation function necessitates proficiencies and skills which may be scarce in the public service. In this case, the organisation may consider the possibility of subcontracting this function to get appropriate results. In situations where proposed outcome is not attained, the gaps should be identified and corrective measures taken. Following are the guidelines for model implementation at Capricorn District.

9.6 MODEL IMPLEMENTATION GUIDELINES

Improving the efficacy of workplace interventions depends on improving their design as much as their assessment. The researcher is of the opinion that the model will be piloted in a Capricorn District before it can be fully implemented for the whole DoH in Limpopo Province. The model implementation should be guided by following the steps outlined by Wight, Wimbush, Jepson and Doi,(2016) as presented in the figure 9.3.

FIGURE 9.3: Proposed phases of implementation



Adapted from (Wight, Wimbush, Jepson & Doi, 2016)

9.6.1 Define and understand the problem and its causes

Using the current study evidence, the first step will be to define the problem with emergency personnel and relevant stakeholders within the organisation. Once the problems are identified, the next step is to establish what methods or strategies currently exist within the DoH and why they are deemed inadequate. It is also significant to understand what exaggerates the problem to be able to identify best methods to intervene, including who is currently most/least probable to benefit from an intervention.

9.6.2 Clarify contributory or contextual factors have greatest scope for change

This step requires identification of causal features that shape a problem have the utmost room to be transformed. The study revealed that lack of organisational support and lack of training contribute to the work-related stress experienced by emergency personnel. It is critical to act on the aspects affecting current activities and focus on transformation and

reallocation of resources. Therefore, it is essential to consider the intervention structure and whether the current intervention system (EAP) needs modification. The intervention should aim to improve the psychological, social and spiritual wellbeing on emergency personnel on early prevention.

9.6.3 Identify how to bring about change: the change mechanism

Having identified the most flexible adaptable contributory factors to address, the following step is to decide how to accomplish that transformation. All socio-environmental determining factors need to be considered when coming up with the strategies. At this stage the DoH should consider consultation with emergency personnel as authors of the recommendations presented in chapter 8 to direct them as people with lived experiences on the best strategies which will be beneficial and assist them in managing the aftermath of critical incidents.

9.6.4 Identify how to deliver the change mechanisms

This phase involves relevant stakeholders with the relevant practical knowledge to develop the execution plan. In this regard, the DoH should involve relevant section within such as EAP unit, occupational health and safety, human resource and labour unions in developing the implementation plan of proposed model. The execution plan necessitates identifying related risks, organisational circumstances and resources required for efficacious application. In government institutions resource limitations can totally confine options for model delivery. However, in some cases, transformation or implementation can be done through a very restricted resources and variety of events, for example, psychologist within the department can be invited to facilitate team building activities and conduct workshops which will build resilience. Other stakeholders such as medical aid scheme can be invited to present about health and wellness issues or financial services to talk about financial planning and retirement to employees who are to retire. Time for training and delivery should be allowed.

9.6.5 Test and refine on small scale

Once the intervention strategy has been done, its practicability should be tested, and modifications made. In this regard, the DoH may pilot the presented model in Capricorn district before full execution in the Limpopo province. Testing the model can elucidate

central matters such as programme adequacy and ideal model content such as the type of service required. This will assist in the improvement of the current existing EAP.

9.6.6 Collect sufficient evidence of effectiveness to justify implementation

The last phase is to gather satisfactory evidence of usefulness to warrant investment such a model. What is critical at this phase is some evidence that the programme is performing as envisioned, it is attaining slightly short-term results and it is not having any massive unplanned effects. Considering the recourse restrictions, the most cost-effective method is for DoH to conduct a survey after implementation of the model and compare the results with the current study findings. Possibly, a control group momentously the strengthen of evidence. After a model adoption the researcher proposed the it can be implemented for the whole Limpopo Province.

9.7 PROPOSED QUALITY ASSURANCE OF THE MODEL

Quality assurance should be conducted to ensure programme adequacy that the needs of emergency personnel are met by the EAP services. This can be done through the following methods:

- **Review of usage data**

Data should be reviewed on an annual basis to identify areas that needs modifications of extra resources. Review reports should be presented to the executive management of the DoH.

- **Development and review of Standard Operating Procedures.**

There should be a constant appraisal of the traumatic events response process through partnership and feedback from organisational committees or work groups and employees to continue providing a well-versed approach to the modification of these processes.

- **Review and refinement of education and training programs.**

Review on education and training should continue to ensure that service provided to all levels of the organisation is designed and to meet the current needs of the all staff members within the department.

- **Ongoing research.**

The DoH should support initiatives to enable a greater understanding of specific needs of employees and provide a user-led informed service approach. There should be ongoing research conducted to assist in providing best practice support to emergency employees.

9.8 Conclusion

This chapter responded to the fifth objective of the study, namely; to develop a user-led model for EMS personnel which is likely to enhance partnership between relevant stakeholders in managing the aftermaths critical incidents. The implementation of the model can inform the development of best practice and transform the current support services. The implementation of the user-led model is envisaged to empower and to improve the quality of life to emergency personnel in the DoH in Limpopo Province.

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Appendix A: Request for permission to conduct research

27 Cloth of gold

Phalaborwa

1390

To: The HOD

Department of Health

18 College Street

Polokwane

0699

Dear Sir/Madam

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

My name is Manganyi Patricia Siphiwe. I am PhD Student in Social Work at the University of Limpopo. I would like to conduct a study in exploring the lived experiences of Emergency Medical Personnel in Capricorn district as part of my PhD degree programme. This research will be conducted under the supervision of Dr V. Mabvurira and co-supervised by Prof J.C Makhubele.

The objectives of the research include the following:

I. To profile work related stress and lived experiences of EMS personnel in South Africa.

II. To Identify and appraise coping strategies employed by EMS personnel.

III. To establish how accessible and user-friendly EAP services are to EMS personnel.

IV. To determine the nature of social support (colleagues and supervisors) EMS personnel receive.

V. To develop a user- led model for EMS personnel.

I am hereby seeking your consent/approval to conduct the study at Capricorn district. I have provided you with the copy of my proposal, ethics clearance as well at the consent form and data collection tool to be used in the research process. Upon completion of the study, I undertake to provide the DoH with a full copy

of my full research report. If you require further information, please do not hesitate to contact me on Tel: 015 962 8337; Cell: 074 609 4508; 071 412 3932 Email:jessemanganyi@gmail.com

Thanking you in advance for your consideration in this matter

Yours sincerely

Manganyi P.S (University of Limpopo)

Appendix B: Informed consent form

Researcher's Name: Manganyi Patricia Siphiwe

Contact details: 015 962 8337 / 071 412 3932 /074 609 4508

Dear participant

My name is Manganyi Patricia Siphiwe. I am PhD Student in Social Work at the University of Limpopo, Turfloop Campus. I would like to invite you to participate in a study exploring the lived experience of Emergency Services Personnel at Capricorn district as part of my PhD degree programme. This research is being conducted under the supervision of Prof V. Mabvurira, co-supervised by Prof J.C Makhubele. As part of the study, I am expected to collect data from identified participants and that includes you. Your voluntary and anonymous participation in this study would be greatly valued. The session will take approximately 30-45 minutes. You are kindly requested to provide informed consent for the interview and that you understood the information provided to you.

Thanking you in advance.

Manganyi Patricia Siphiwe

PhD Social Work Candidate

University of Limpopo, Turfloop Campus

Signature:

Date: 5/08/2020

Appendix C: Declaration of consent

1. **Participant's Name: I** ………………………………………………………… hereby voluntarily grant my permission for participation in this study with the following understanding:

2. **Title of the study:** Lived Experiences of Emergency Medical Personnel in Capricorn district: Towards the Development of User-Led Model

3. **Purpose of the study:** The study seeks to explore and describe lived experiences of Emergency Medical Personnel in the South African Department of Health towards the development of a user- led model in mitigating occupational stress.

4. **Procedures:** I will be requested to answer the questions and the interview will be tape-recorded. The interview will take approximately 30 to 45 minutes long.

5. **Risks and Discomforts**: There are no known medical risks or discomfort associated with this study apart from certain question that might be uncomfortable to answer some individuals may experience distress when answering questions pertaining to critical incidents.

6. **Benefits:** I understand that there are no known direct benefits to me for participating in this study and that the research will add to literature in Social Work. However, the results of the study may help the researcher gain a better understanding on the lived experience of EMS Professionals.

7. **Participants rights:** I understand my right to choose whether to participate in this study and that I may withdraw participating in the study at any time.

8. **Confidentiality:** I understand that the information furnished will be handled confidentially and that the results of this study may be published in professional journals or presented at professional conferences, but my identity will not be revealed unless required by the law. I am aware that the collected data will be stored at the Department of Social work according to the University of Limpopo Policy and when necessary may be used for future research.

9. **Acknowledgement:** My recorded voice consent indicates that I understand the above information that read to me and I had an opportunity to ask any questions I may have had. I understand what my participation entails, and I agree to participate in this study until I complete the interview or decide to withdraw. By consenting to this interview, I do not waive any of my legal rights.

Signature of participant : ______________Date : _____________

Appendix D 1: Interview schedule for emergency personnel

A. Introductory/ Demographic details

What is your job title?

How many years in current position?

How many years in this organisation?

Objective 1: To profile work related stress and the lived experiences of ems personnel in Limpopo province.

1.1 What is your routine or duty while on station?

1.2 Please tell me about your experiences with critical incidents.

Follow up questions may include:

Approximately how many critical incidents have you been involved into date?

Please describe the most recent critical incident. (When did this occur, how were you involved, outcome)

1.3 What were your feelings during and after the incident?

1.4 For approximately how long did this incident disturb you?

1.5 In what way your work has affected your life over the period of your employment?

1.6 In general, do you find that you get sufficient time to recover from such personally disturbing incidents before you have to deal with another one?

Objective 2: To Identify and appraise coping strategies employed by EMS personnel.

2.1 Do you find it easy to remain positive and hopeful at work? Is there something that helps you regain hopefulness or optimism?

2.2 Do you ever share your workplace experiences with any of your family members, direct or extended family?

2.3 Do you make use of personal resources outside those at your workplace? If yes, specify the kind of resource preferred as well as give reasons for your preference.

2.4 Which hobbies do you engage in, in order to relieve work related stress?

2.5 Do you ever take any tranquilisers, alcohol, drugs or a combination of the following items after a highly stressful or critical incident?

2.6 List three coping strategies that you have found being effective - starting with the most effective. Please give reasons for your ranking.

2.7 What coping strategies would you recommend to someone just starting out in this field?

Objective 3: To establish how accessible and user-friendly EAP services are to EMS personnel.

3.1 In general terms do you find your employer sufficiently concerned about the emotional impact of personally disturbing incident on its personnel?

3.2 Are you aware of the availability of counselling services at your workplace? If yes, are these easily accessible? Please explain:

3.3 How readily available are the services when needed?

3.4 Do you make use of them? If yes, give frequency and explain the outcomes.

3.5 What is your opinion about the attitude of the Employee Assistance professionals? Please explain your answer.

3.6 In general terms do you believe concerns about confidentiality are a barrier to EMS personnel seeking help/support after personally disturbing incidents?

3.7 If you do not make use of these services, please give reasons

3.8 If you are of the opinion that any changes are required, please suggest recommendations.

Objective 4: To determine the nature of social support (colleagues and supervisors) EMS personnel receive.

4.1 Please specify the kind of work experiences you usually share your work experiences with colleagues and why?

4.2 How helpful have you found them to be? Please explain.

4.3 Would your experience above be similar to as when you share with supervisor? Please explain:

Thank you for participating in this study

Appendix D 2. INTERVIEW GUIDE FOR STATION MANAGERS

1. In your own understanding, how do work related stress affects work and personal life of EMS personnel

2. What is your role in assisting EMS personnel to effectively deal with the experience of daily pressure.

3. What do you think the Department should do to assist EMS personnel to cope with the exposure to critical incidents

4. What are your views on the development of the user-led model in mitigation occupational stress for EMS personnel.

Thank you for participating in this study.

Appendix E: Ethical clearance

University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 3935, Fax: (015) 268 2306, Email: anastasia.ngobe@ul.ac.za

TURFLOOP RESEARCH ETHICS COMMITTEE

ETHICS CLEARANCE CERTIFICATE

MEETING: **10 July 2020**

PROJECT NUMBER: **TREC/136/2020: PG**

PROJECT:

Title:	Lived Experiences of Emergency Medical Personnel in Capricorn district: Towards the Development of User-Led Model
Researcher:	PS Manganyi
Supervisor:	Dr V Mabvurira
Co-Supervisor/s:	Prof JC Makhubele
School:	Social Sciences
Degree:	PhD in Social Work

PROF P MASOKO
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: **REC-0310111-031**

Note:
i) **This Ethics Clearance Certificate will be valid for one (1) year, as from the abovementioned date. Application for annual renewal (or annual review) need to be received by TREC one month before lapse of this period.**
ii) **Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee, together with the Application for Amendment form.**
iii) **PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.**

Finding solutions for Africa

Appendix F: Provincial approval to conduct study

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

Ref : LP2020-08-009
Enquires: : PF Mahlokwane
Tel : 015-293 6028
Email : Kurhula.Hlomane@dhsd.limpopo.gov.za

Patricia Siphiwe Manganyi

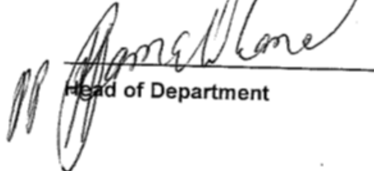
PERMISSION TO CONDUCT RESEARCH IN DEPARTMENTAL FACILITIES

Your Study Topic as indicated below;

Lived Experiences of Emergency Medical Personnel in Capricorn district: Towards the Development of User-Led Model

1. Permission to conduct research study as per your research proposal is hereby Granted.
2. Kindly note the following:
   a. Present this letter of permission to the institution supervisor/s a week before the study is conducted.
   b. In the course of your study, there should be no action that disrupts the routine services, or incur any cost on the Department.
   c. After completion of study, it is mandatory that the findings should be submitted to the Department to serve as a resource.
   d. The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
   e. The approval is only valid for a 1-year period.
   f. If the proposal has been amended, a new approval should be sought from the Department of Health
   g. Kindly note that, the Department can withdraw the approval at any time.

Your cooperation will be highly appreciated

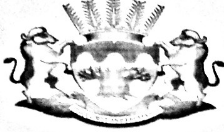


Head of Department 14/09/2020
Date

Private Bag X9302 Polokwane
Fidel Castro Ruz House, 18 College Street. Polokwane 0700. Tel: 015 293 6000/12. Fax: 015 293 6211.
Website: http/www.limpopo.gov.za

The heartland of Southern Africa – Development is about people!

Appendix G: District approval to conduct study



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

EMS CAPRICORN DISTRICT

Enquiries: Masebe CC
Tel: 082 040 5320

TO: STATION MANAGERS

CC: SHIFT LEADERS

BCC: EMS PERSONNEL

FROM: EMS DISTRICT MANAGER: CAPRICORN

SUBJECT: PERMISSION FOR RESEARCHER PATRICIA SIPHIWE MANGANYI TO COLLECT DATA FOR AN ACADEMIC DOCTORAL DEGREE IN CAPRICORN DISTRICT

1. The above bears reference:
2. Patricia Siphiwe Manganyi, a lecturer at University of Venda is conducting a study entitled **"Lived Experiences of Emergency Medical Personnel in Capricorn District: Towards the Development of User-Led Model"** for a PhD in Social Sciences.
3. Her request to conduct the study in the district was approved by the Head of Department.
4. You are therefore requested to assist her in collecting data. Due to COVID19, the method of collecting data will be telephonic interviews with the participants.
5. The researcher will explain all the details regarding the study, and is ethically bound to treat the collected data with confidentiality.
6. Find **attached the researcher's** ethical clearance certificate and approval from Head of Department (Health) to conduct this study.
7. Your assistance will be appreciated.

MR MASEBE CC
EMS DISTRICT MANAGER: CAPRICORN

07/10/20
DATE

PERMISSION FOR RESEARCHER PATRICIA SIPHIWE MANGANYI TO COLLECT DATA FOR AN ACADEMIC DOCTORAL DEGREE IN CAPRICORN DISTRICT

Appendix H:Editing and proofreading certificate

EDITING AND PROOFREADING CERTIFICATE

7542 Galangal Street

Lotus Gardens

Pretoria

0008

20 May 2021

TO WHOM IT MAY CONCERN

This certificate serves to confirm that I have language edited PS Manganyi's thesis entitled, **"Lived Experiences of Emergency Medical Personnel in Capricorn District: Towards the Development of User-Led Model."**

I found the work easy and intriguing to read. Much of my editing basically dealt with obstructionist technical aspects of language, which could have otherwise compromised smooth reading as well as the sense of the information being conveyed. I hope that the work will be found to be of an acceptable standard. I am a member of Professional Editors' Guild.

Hereunder are my contact details:

Jack Chokwe (Mr)

Contact numbers: 072 214 5489

jackchokwe@gmail.com

Professional
EDITORS
Guild

Appendix I: Editing letter

P.O BOX 663
THOLONGWE
0734
03 September 2021

Department of Social Work
University of Limpopo
Private Bag X1106
SOVENGA
0727

Dear Sir/Madam

This serves to confirm that I proof-read and edited a PhD Thesis entitled "Lived Experiences of Emergency Medical Personnel in Capricorn District Towards the Development of User-Led Model" by Manganyi P.S.

I have also suggested few amendments, provided the changes I recommended are effected to the text, the language is of an acceptable standard.

Please don't hesitate to contact me for any enquiry.

Regards

Dr. Hlaviso Motlhaka (PhD, WITS, MA, IUP: USA)

Cell number: 079-721-0620/078-196-4459
Email address: hlavisomhlanga@yahoo.com