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Experiences of Stigma, Posttraumatic Stress Disorder, and other Mental Health Problems among Paramedics in South Africa: A Qualitative Study

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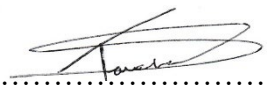
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A research project submitted in partial fulfilment of the requirements for the degree of Master of Arts by Coursework and Research Report in the field of Psychology in the Faculty of Humanities, University of Witwatersrand, Johannesburg.

Declaration

I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where states otherwise by reference or acknowledgment, the work presented is entirely my own.



…… 14 March 2023 ……

Student Signature **Date**

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Ethical Clearance Number

Abstract

Understanding the experiences of South African paramedics is a necessary, yet under-researched area of mental health research. According to recent research, paramedics are at a higher risk of mental health issues in comparison to general norms (Awais et al., 2021). The following study of the lived experiences of South African paramedics made use of a qualitative, exploratory research design which aimed at capturing emergency medical personnel's experiences of stigma relating to mental health help-seeking behaviours. The Mental Illness Stigma Framework (MISF) and the Effort-Reward Imbalance (ERI) model formed the theoretical framework of the study through which the results were analysed and discussed. The study made use of purposive and snowball sampling techniques to obtain a cohort of seven paramedics (n=7), registered as Advanced Life Support (ALS) category. Participants were required to be over the age of 18 years old, and currently operational within the paramedical profession in order to meet the inclusion criteria. Interviews were utilised to collect data from participants using a semi-structured interview schedule. Braun and Clarke's (2006) Thematic Analysis was used to code and analyse transcriptions of the interviews. Analysis of the results indicated three major themes which emerged from the data: 1) Paramedical Sub-culture and Discourse; 2) Paramedic Perceptions of Mental Health and Stigma; and 3) Recommended Intervention Strategies. The study found that mental health stigma, and confidentiality concerns to be the most frequently reported obstacles to help-seeking. The paramedic organisational culture was found to be an influential factor in the proliferation of mental health stigma and stereotypical belief systems. Furthermore, recommendations for future mental health interventions included: education and awareness, support from management, addressing confidentiality concerns, and increasing accessibility to mental health care.

Key Words: Help-Seeking Behaviours, Mental Health Stigma, Paramedic, PTSD, South Africa, Trauma.

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List of Abbreviations

AIDS – Acquired Immune Deficiency Syndrome

ALS – Advanced Life Support

ASD – Acute Stress Disorder

BDI – Beck's Depression Inventory

CBT – Cognitive Behavioural Therapy

COVID-19 – Coronavirus disease of 2019

DSM – Diagnostic and Statistical Manual of Mental Disorders

DSM-III - Diagnostic and Statistical Manual of Mental Disorders, Third Edition

DSM 5-TR - Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision

EMS – Emergency Medical Service

HIV – Human Immunodeficiency Virus

PCL – Posttraumatic stress disorder Check List

PSP - Public Service Personnel

PTSD – Posttraumatic Stress Disorder

SAPS – South African Police Service

TB – Tuberculosis

UK – United Kingdom

USA – United States of America

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Chapter One: Introduction and Overview of Study

1.1 Study Background

Research has shown that paramedics are at significantly higher risk of depression, posttraumatic stress disorder (PTSD), anxiety, burnout, sleep disorders, and suicide/suicidal ideation in comparison with the public (Awais et al., 2021). Exposure to highly traumatic events and situations is commonplace in the field of prehospital care. The average paramedic is expected to experience significantly higher rates of trauma in comparison to individuals within the general population (Auth et al., 2022; Crabbe et al., 2004). This statistic is even higher in a country such as South Africa, which experiences some of the highest rates of violence globally (Head, 2020). South African paramedics not only experience the everyday trauma that naturally comes with the job such as dealing with injury, death, and grief; this profession also endures acts of violence which are oftentimes committed against them while on scene (Crabbe et al., 2004). In addition to experiencing highly traumatic incidents, paramedics are one of the most overworked specialisations in the health profession and have been documented in a recent study, conducted in Israel, to have the highest rates of occupational stress in comparison with other healthcare professionals (Couarraze et al., 2021). Long shifts, lack of adequate sleep or disturbed sleep, increased workload, low degrees of support from those in positions of authority, conflict with colleagues under high-stress situations, unhealthy eating and drinking habits, and high rates of substance use and abuse, all contribute to the disproportionately high rates of mental health problems, professional burnout, and suicide among this profession in comparison with the general public (Auth et al., 2022; Bentley et al., 2013; Garbern et al., 2016; Ward et al., 2005). These difficult aspects of the profession are compounded by the implicit impression that paramedics should conduct themselves in a somewhat emotionally detached manner in their profession, or in other words to “get on with the job” – to disallow any form of emotional connection to the cases

they attend to (Lawn et el., 2020). Thus, one of the factors explored in this study is that of the 'macho culture' which becomes apparent in the reviewing of literature around this topic, seemingly contributing to the overall proliferation of mental health and help-seeking stigma that are conducive to the high rates of psychological distress in this profession (Auth et al., 2022; Lawn et al., 2020).

Numerous studies have documented the rates of depression, anxiety, PTSD, and other mental health disorders among this profession; however, a vast majority of these studies have been conducted in developed countries such as the United States, Canada, Australia, and the United Kingdom (Auth et al., 2022; Crowe et al., 2015; Khan et al., 2020; Ward et al., 2005). It could be argued that a country such as South Africa, with its own unique challenges, provides a vastly different backdrop for the study into what causes and contributes to the high rates of mental health issues documented among this profession. A country in which factors such as electricity blackouts, or "loadshedding", are commonplace; alongside a lack of resources, deteriorating infrastructure, severely high rates of inequality, high rates of poverty, a lack of education among the general population, and one of the highest rates of unemployment in the world (World Population Review, 2022); arguably contributes to the fabric of what makes South Africa a particularly challenging and dangerous place for a paramedic to work. Adding to an already taxing workload, the issues experienced in South Africa reinforce the psychological impacts of this profession.

Furthermore, psychological trauma is inherently multifaceted which manifests differently among individuals based on their past experiences, predisposed conditions or traits, level of social support, and developmental level (Iversen et al., 2008). The complexities of different kinds of trauma and the intricately unique ways of experiencing and coping with trauma underline the need for a qualitative analysis of individual, subjective experiences which may provide important insights for future research. Understanding subjective experiences of trauma among this

population, as well as barriers to treatment of past traumatic experiences, could provide empirical data which serves as the basis for new psychological interventions for this profession.

1.2 Problem Statement

The primary problem at hand can be broken down into two main factors. Firstly, there is the issue of the disproportionately high rates of psychological distress, mental health morbidities, substance abuse, and suicide in the paramedical sphere (Awais et al., 2021; Khan et al., 2020; Lawn et al., 2020; Vigil et al, 2019). High rates of mental health issues contribute to a decreased level of occupational performance and heightened risk for psychological dysfunction – posing a financial risk and burden on healthcare institutions, but more importantly affecting the psychological wellbeing of the individual, causing possible strain and debilitation in all areas of functioning including personal and social functioning (Awais et al., 2021). The consequences of these strained aspects of functioning may include decreased personal safety, decreased patient care and safety, or domestic/personal crises (Lawn et al., 2020). The implications of the traumatic effects of occupying the paramedical role are vast.

Secondly, the high rates of mental health issues persist *despite* help and assistance for such issues being available to those in the profession. Many, if not most, healthcare institutions make use of mental healthcare systems and resources which are made freely available to staff (Ward et al., 2006). However, based on the projected figures of mental health distress among this population, it could be argued that such resources are not fully utilised by staff – which raises the question: why are these services underutilised by paramedical employees? A thorough investigation into the specific area of mental health stigma among this population could assist in providing greater clarity on this issue.

1.3 Rationale

The vast number of paramedics afflicted with a mental health issue and the high rate of suicide among this profession warrants careful and considerate research into the aspects perpetuating these high rates of mental health concerns (Lawn et al., 2020).

As noted in the previous introduction section, a vast majority of research studies conducted around this topic have been produced in countries which have the time and resources available to investigate the psychological effects of trauma and mental health stigma on paramedical employees – namely, developed countries. As South Africa struggles with a plethora of economic and social issues, oftentimes the role of mental health might be overlooked. Research into the topic of mental health stigma as a barrier to psychological care and assistance is sorely needed, globally, but particularly in developing countries (Lawn et al., 2020; Ward et al., 2005). The dire need for rigorous, qualitative research which takes into account the unique experiences, opinions, and thoughts of the paramedic operating in an already physiologically and psychologically demanding profession, at the forefront of the socially and financially troubled backdrop of South Africa, becomes imperative to understanding the full picture. Therefore, this research takes the role of attempting to fill in some of the gaps in the immense amount of research which already exists. The study attempts to yield in-depth insights that might allow for substantial and effective interventions to be employed throughout the paramedical profession. This, in turn, may add to the body of knowledge on ameliorating the damaging psychological impact of the arduous work of operating as a paramedic in South Africa.

1.4 Aims and Research Questions

1.4.1 Primary Aim

The primary aim of this research is to explore the narratives of paramedics working in South Africa as a means to further academic and scholarly understanding of paramedics' lived experiences of trauma and stigma around mental health help-seeking.

1.4.2 Secondary Objectives

The secondary objective of this study focused on understanding the factors in perpetuating mental health stigma in the field of paramedicine, as well as the extent to which stigma around mental health hinders paramedics from seeking and receiving mental health assistance and affects their occupational and social functioning.

An additional secondary objective of the study considered what the results can reveal about paramedics' knowledge and understanding around mental health issues and stigma; and how this could guide future research studies and intervention programmes.

1.5 Research Questions

The following research questions informed this research study:

- Is mental health stigma prevalent among professionals working within the emergency medical health field?
- What are South African paramedics' experiences of stigma around mental health help-seeking behaviours?
- What are paramedics' lived experiences of mental health disorders, among themselves or colleagues?
- What mental health interventions are currently available to paramedics? Are these interventions used and are they trusted among this population?

- How does mental health stigma hinder paramedics from seeking mental health assistance?

1.6 Key Terms

- Psychological Trauma

The concept of psychological trauma is one which has been largely studied and debated across academic fields such as anthropology, sociology, psychiatry, philosophy, and other humanitarian sciences. Although academics and scholars have long debated the specifics aspects of what constitutes a traumatic event and how symptoms of such should manifest. However, there is a consensus on certain facets of trauma are commonly accepted across professional fields and studies. Herman (1992, p. 33) notes this widely accepted understanding of psychological trauma:

> Traumatic events generally involve threats to life or bodily integrity, or a close personal encounter with violence and death. They confront human beings with the extremities of helplessness and terror, and evoke the responses of catastrophe.

This definition of trauma highlights the extent to which paramedics experience serial exposure to traumatic incidents as most cases involve direct treatment of individuals experiencing a traumatic event. Although the subjective nature of trauma could be argued, a counter-argument for the traumatic nature of paramedical work could also be made (Carlson & Dalenberg, 2000). An experience could be considered traumatic if it includes serious bodily harm or threat to self and/or others, violence, death of any nature (natural, accidental, homicidal, and suicidal), and those which involve children or other vulnerable populations (APA, 2013: Boals, 2018; Carlson & Dalenberg, 2000).

- Mental Health Stigma

The psychological schema of mental health stigma manifests as self-stigma, public stigma, and institutional stigma (Subu et al., 2021). Self-stigma occurs when an individual adopts negative beliefs and opinions of themselves based on a mental health issue which they are afflicted with. For example, an individual may feel that he/she is useless or incompetent due to their struggle

with depression (Subu et al., 2021). Self-stigma is often associated with individual beliefs about what other people might believe about individuals afflicted with a mental health issue, which is subsequently internalised (Subu et al., 2021). Public stigma refers to public or societal beliefs and opinions of people suffering with mental health issues. Historically, those afflicted with mental health disorders have been socially perceived in a negative light, believed to be dangerous, incompetent, and burdensome to the larger society (Pescosolido et al., 2008) which has largely contributed to the way in which mental illness is perceived today. Although tremendous strides have been made in challenging mental health stigma, a pervasive attitude toward those suffering with mental illness is still prevalent and enduring (Crowe et al., 2015).

1.7 Research Design Summary

This study follows a phenomenological, exploratory research design which is founded on mental health stigma, and occupational stress frameworks. This research design was applied in order to fully understand the role of stigma and occupational stress on the lives of paramedics. The frameworks utilised assist in providing a frame of reference for how these phenomena occur within social groups, and how the cycle of each is perpetuated through social interactions and structural limitations.

Individual interviews were conducted through an online video conferencing platform (Zoom) with seven paramedics from various organisations in South Africa using purposive and snowball sampling. Informed consent was obtained through three consent forms for: 1) participation in the study, 2) audio recording of the interview, and 3) visual recording of the study. Interviews were conducted over video conferencing in order to observe COVID-19 protocol and limit unnecessary contact. Two preliminary studies were conducted as pre-test studies in order to test the clarity and understanding of the interview guide, as well as to add any additional necessary questions, while removing questions which may be unnecessary and/or irrelevant. The six-phase

thematic analysis developed by Braun and Clarke (2006) was used to analyse subsequent data collected through the interviews.

1.8 Chapter Outline

In conclusion of the summary of the study's research design, the succeeding chapters are structured as follows: Chapter one laid out a contextual foundation for the study, as well as providing background information regarding the purpose and the aim of the study. The chapter focussed on summarising the need for experiential insight and subjective context with regard to the nuances of the research questions. With the aim of demonstrating the significance of exploring subjective experiences from those within the paramedical field, chapter one has highlighted the research gaps and thus justified the need to generate further insights.

Chapter two outlines a detailed review of existing literature which forms our current understanding of the subject, and provides further context to the study. This chapter focusses on providing a geographical, historical, and occupational context which interlink and set the foundation for a holistic understanding of the difficulties which paramedics face. The socio-political climate of South Africa is discussed, as well as the many difficulties faced by the nation decades after the end of the oppressive regime and what this means for those operating in the emergency medical field. A brief discussion of the impact of the COVID-19 pandemic is also laid out in this chapter. This chapter provides the reader with a thorough understanding of the socio-political and psychological concepts which delineate the paramedical environment. Furthermore, included in this chapter is the theoretical framework which outlines the understanding of this study's research questions and theoretical foundation through which the subsequent data is analysed and understood. The Mental Illness Stigma Framework, as well as the Effort-Reward Imbalance model are discussed in detail in this chapter with figures to provide a visual explanation of these concepts. Chapter three discusses the research methodology chosen to conduct this study,

which includes a detailing of the methodological paradigm, data collection procedure, sampling methods, research instruments, data analysis methods, and the ethical considerations and limitations of the study. This section further details the justification for the chosen methods in the research design. Chapter three includes the detailing of the data analysis process which followed the six-phase thematic analysis of Braun and Clarke (2006).

Chapter four provides a detailed discussion of the results of the analysis. Each of the three themes uncovered through the analysis phase are discussed in their relation to the data extracts provided by participants during the interviews.

Chapter five concludes the discussion of the research and includes recommendations for future research and intervention strategies.

Chapter Two: Literature Review

2.1 Introduction

The following literature review provides an overview of pertinent findings and concepts discussed in previous research relating to paramedic stress and trauma, occupational sub-cultures within the profession, mental health perceptions within the profession, and mental illness stigma. The chapter considers the findings of previous research and how they may inform our understanding of this study's subsequent analysis. The chapter starts out by providing a socio-political and geographic background which provides foundational context for this professional environment; this section considers the physical and psychological dangers of the profession, as well as the social environment of South Africa. A review of the effects of trauma is then laid out in order understand the various ways in which trauma may be experienced among paramedical staff. Psychological defense mechanisms are examined thereafter, as well as their use within the paramedic profession. A social and professional history of machoism, or "macho culture" is then discussed, and the effects of such discourse on the profession's current sub-culture. Furthermore, a brief discussion of the effects of the COVID-19 pandemic on frontline healthcare workers is, and what could be learned from this experience. Finally, the chapter outlines the theoretical framework from which this research seeks to understand the overall analysis and findings; including the review of the Mental Illness Stigma Framework model (MISF) (Fox et al., 2018), and the Effort-Reward Imbalance model (ERI) (Gilbert-Ouimet et al., 2011).

2.2 The South African Paramedic

South Africa is characterised as a society with major institutional and governmental inadequacies and socio-economic challenges in the aftermath of a political history rooted in marginalisation and peripheralisation of racial groups, and intentional socio-economic exclusion and inequality (Breetzke, 2012). This section serves to provide a vital background and contextualisation from which to understand the perspectives of paramedics. In order to understand the full spectrum of challenges which paramedics face, it is vital to acknowledge and contextualise the socio-political and geographical context in which the South African paramedic role is embedded. The role of a paramedic has been found to be physically and psychologically demanding in some of the most developed countries in the world (Petrie et al., 2022), thus the additional stressors and hindrances experienced by South African paramedics amplify an already physically and emotionally demanding role. The immense importance of understanding the paramedical role through the intersecting contextual factors which have constant influence over day-to-day duties assists in providing a deeper understanding of the challenges faced by paramedics, as well as the heightened risks of daily trauma influenced by the country's challenges and shortcomings (Finn & Kobayashi, 2020; Maphumulo & Bhengu, 2019). A brief histography of the nation's socio-political environment is thus presented.

One of the most nationally detrimental aftereffects of the apartheid white supremacist, racially segregated, oppressive regime is the major economic and opportunity divide between historically oppressed and non-oppressed populations in South Africa (Finn & Kobayashi, 2020). These factors have a devastating impact on all progress of the general population and country as a whole, with effects which extend beyond the boundaries of economy and class divide, however, previously marginalised identities are among the most affected by the socio-economic impact left in the wake of the apartheid regime; women, Black South Africans, youth, and previously

educationally and economically disadvantaged groups are those which face disproportionately higher rates of poverty and a lack of opportunities (Nwosu & Oyenubi, 2021). The effects of the segregationist, oppressive legacy of apartheid is still evident when considering the many large informal settlements across the nation, which suffer from inadequate housing, nutrition, education, sanitation, and basic service delivery; leading to an increase in major health and nutrition issues, crime rates, and poor education rates – factors which contribute to the challenges faced in the workload of individuals operating in the service of the public, such as first responders (police, social workers, and EMS personnel) (Finn & Kobayashi, 2020; Maphumulo & Bhengu, 2019).

Despite attempts from government departments to address and rectify the major burden of inequality across varying intersections of populations across the nation, South Africa's impoverished public sector (including, but not limited to: education, health, and justice) is severely under-resourced and burdened by overpopulation, pervasive diseases such as HIV, AIDS and TB, heightened levels of violence and crime, high occurrences of rape and sexual assault, and lack of staff and equipment in public services (Maphumulo & Bhengu, 2019).

Public healthcare in South Africa faces severe challenges (Maphumulo & Bhengu, 2019). According to the South African Department of Statistics' Statistical Release mid-year report for 2021, an estimated 8.2 million South Africans are living with HIV, with an estimated prevalence rate of 13.7% (Statssa, 2021). Furthermore, 89 000 cases of traumatic brain injury are reported each year, with the three most prevalent causes being: motor vehicle accidents and/or vehicle-pedestrian accidents at a rate of 50%, cases of falls (25%), and violence (20%) (National Institute for Occupational Health South Africa, 2018).

Crime and violence are exceptionally high in South Africa, with high rates of unemployment, overpopulation, and inadequacies in basic needs being met providing the foundations for such incidences (Bruce & Gould, 2009). The effects of high rates of crime and

violence extend across various professional fields and socio-economic classes; however, crime rates disproportionately affect low-income communities (Felix, 2019).

High levels of crime within South Africa are frequently attributed to poverty, economic disparity, social and economic exclusion, and consistent delays in public service delivery (Felix, 2019). Other factors influencing crime rates have been identified, such as high social stress during childhood due to uncertainty in the meeting of basic needs and/or lack of adequate guardianship and supervision (Davis, 2015). In line with these findings, the Centre for the Study of Violence and Reconciliation conducted research on the specific nature of crime across the nation in 2008. Research findings indicated the following factors which were found to contribute to high levels of crime and violence: 1) Societal normalisation of violence; 2) High rates of alcohol consumption and abuse, evident in the fact that incidents including murder, physical/sexual assault and rape frequently occur in/outside of taverns, nightclubs, and shebeens; additionally, 27% of fatal road accidents are linked to drinking and driving; 3) Violent subcultures in the form of informal groups and gangs where, often, in order to prove worthiness of membership, individuals must display a willingness to resort to extreme violence; and 4) Youth vulnerability due to inadequate guardianship, uncertain living conditions, lack of education and socialisation, and deprivation of basic necessities (Glaser, 2008). In addition to these factors, it is important to note that police services in South Africa are often overburdened and under-resourced, and often lack basic equipment (Wiese et al., 2003). Furthermore, institutional and governmental corruption aid in the production and recidivism of crime in South Africa. The South African Police Service (SAPS) was found to be the most corrupt organisation in the nation; known for accepting bribes from individuals involved in illicit and felonious underground activity (Manyathela, 2019), thus enabling the continuation of lawbreaking in the country, and perpetuating the cycle of violence.

> The underlying determinants of violence, many of which are a legacy of the apartheid past, are intertwined with the disintegration of the social fabric. Income inequality and poverty, high unemployment, rapid social change, corruption and poor rule of law, gender inequalities and family breakdown have contributed to this climate of violence.
>
> (Norman et al., 2007).

It could be argued that South Africa's unfortunate relationship with crime and violence is a self-perpetuating cycle. As crime increases, so too does the deterioration of the social fabric of the nation which ultimately produces younger generations primed for a future of illicit activity (Glaser, 2008; Norman et al., 2007).

With this said, it is important to consider the research population of this study: South African paramedics, which is a profession already associated with high stress, an elevated level of responsibility, heightened risk to personal safety, and extreme psychological demand (Lawn et al., 2020). Operating within an economically and socially deprived country such as South Africa heightens the difficulties faced when occupying this professional role (Norman et al., 2007). The South African paramedic is expected to carry out their role, facing the typical difficulties of a paramedic, while simultaneously hurdling over the challenges and barriers of the dilapidated social fabric of the country.

One of the major risks of operating as a paramedic in South Africa is the risk to personal safety. While paramedics risk their health in the treatment of individuals with communicable diseases they too place their own lives at risk in the often-violent surroundings (Mohamed, 2022). Crime committed against on-duty paramedics is an increasingly common occurrence in South Africa. According to an article published by the *Daily Maverick*, a South African newspaper, paramedics attending to a mother in labour were held up at gunpoint and robbed of their personal items by three armed men (Mitchley, 2022). Another recent attack on EMS personnel in the province of Gauteng resulted in the attempted sexual assault of a female paramedic in 2022

(Mohamed, 2022), and stoning of an ambulance in the Eldorado Park area (Mohamed, 2022). Attacks on paramedics are a frequent occurrence in the Western Cape province of South Africa. The spokesperson of the Western Cape Department of Health, Dr Keith Cloete, notes that paramedical staff are often victims of verbal abuse, and damage and theft of personal property (Jeranji, 2022). Van der Heever additionally noted that between July 2021 to February 2022, 138 safety-related incidents occurred, including violent and threatening behaviour among communities toward paramedical staff, community unrest, armed robberies, gang violence, and hijacking (Jeranji, 2022). Sibongiseni Delihlazo, spokesperson for the Denosa trade union refers to personnel and resource budget cuts as a primary factor influencing the safety risk to paramedical staff and their patients (Jeranji, 2022). Delihlazo further states that those working in healthcare may decide against operating under such dangerous circumstances which further deprives certain communities of EMS services. Chairman of the South African Medical Association, Dr Akhtar Hussain, expressed concern over the safety and security of healthcare institutions, noting that "In some areas, security is non-existent. Hospitals, clinics, emergency medical services, including patients, are even not safe" (Jeranji, 2022, n.p). Dr. Hussain further explained that three clinics were forced to close permanently due to the high rates of extreme violence, hijackings, robbery, and intimidation (Jeranji, 2022). Van der Heever points out an important fact relating to the attacks on paramedics:

> Our crews go out every day into the unknown, wanting to save lives and provide healthcare to those in need. If our staff are attacked or exposed to trauma, this undoubtedly leads to their mental wellbeing also suffering.
>
> (Jeranji, 2022).

Van der Heever further explains that this requires staff to take time off from work in order to psychologically heal, which in turn leads to one less emergency practitioner to provide necessary care to those in need (Jeranji, 2022).

These are only a few of the many examples of the life-threatening situations South African paramedics are at risk of experiencing while attending to a patient. A reported 288 attacks on ambulance personnel were carried out in 2016 (Geach, 2019); dropping to 22 attacks in 2019 (Geach, 2019; Mohamed, 2022), increasing in 2020 to approximately 68 attacks (Hlati, 2021), and over 60 attacks in 2021 (Hlati, 2021). Police escorts are frequently required for paramedics attending to a call in some areas in South Africa, due to the high rate of crime committed against ambulance personnel in these areas (Mohamed, 2022), and in some cases, paramedics have begun wearing bullet-proof vests (Jeranji, 2022).

Attacks on paramedics subsequently cause further derailing of service delivery in South African communities, as paramedics are becoming more and more reliant on police escorts in some of the more dangerous areas of the country. The already overburdened, understaffed, and poorly equipped policing service further delays paramedic response time due to having to wait for an escort by police (Mohamed, 2022).

In addition to the shortcomings of South Africa's health and justice systems, the severe deterioration of the country's infrastructure renders the work of a paramedic additionally burdened by obstructions and insufficiencies (Wall, 2021). Dilapidated roadways damaged by potholes cause a major hindrance and danger to ambulances often travelling in areas where such infrastructural neglect is most common. Scheduled suspension of electricity is a common occurrence across the nation, leaving communities powerless for several hours at a time; this results in paramedics operating in areas with insufficient street lighting exacerbating the risk to personal safety, and causing unnecessary barriers to those providing care on the roads (Wall, 2021). Neglected infrastructure across the country continues to stifle the provision of public service delivery (Wall, 2021).

2.3 The Effect of Trauma

The way traumatic experiences affect the human psyche is a well-researched and documented topic within the field of psychology (Bisson, 2009). Common responses to trauma include psychological shock, denial, inter-personal relationship difficulties, flashbacks, nightmares, uncontrollable or unpredictable emotions, sleep disturbances, cognitive alterations, as well as physical symptoms including chronic headaches, nausea, muscle tension, and increased heart rate (APA, 2013). While Acute Stress Disorder (ASD) and PTSD are recognised disorders associated with trauma and thus discussed at length in this section, subclinical variations of trauma are important to consider as they often remain undetected and undiagnosed for long periods of time, and therefore are important in our consideration of the way in which trauma may affect paramedical populations (Bisson, 2009).

2.3.1 Understanding Acute Stress Disorder and Posttraumatic Stress Disorder

Responses to traumatic experiences are moderated by a number of intersecting factors, which combine to form varying degrees of resilience or vulnerability (Martin-Soelch & Schnyder, 2019). Personality traits, developmental history, familial upbringing, level of social support, neurobiological functioning, and sociocultural factors influence the degree of psychological and physiological damage caused by a traumatic incident and synthesise a unique and subjective experience of trauma for each person (Martin-Soelch & Schnyder, 2019). Additionally, various forms of trauma including singular or "one-time" trauma, multiple traumas, and prolonged or repetitive traumatic incidents; affect individuals differently (Bisson, 2009; Martin-Soelch & Schnyder, 2019). Literature on psychological trauma offers three types of trauma: acute, chronic, and complex trauma. Acute trauma typically occurs after a singular traumatic incident which is severe enough to elicit damage to one's sense of personal safety and security (APA, 2013). The damaging event can trigger the onset of typical trauma responses and changes in mood and

cognition which can have long-lasting effects. Symptoms of acute trauma can range from slight feelings of discontent to more severe cognitive and behavioural changes such as depression, high anxiety, and ASD. As defined by the DSM-V-TR (2022), ASD can occur within one month of the traumatic incident and may include symptoms that parallel that of PTSD. Bryant et al. (2011) noted that the most crucial distinction between ASD and PTSD is that of the onset and duration – while the onset of ASD may begin to manifest from two days to four weeks, symptoms of PTSD are defined as occurring after four weeks. The duration of ASD is typically around one month or less under certain circumstances (APA, 2022). ASD was first defined in order to provide a predictive measure in order to identify individuals who may be at risk of developing PTSD after a traumatic event. However, in their review Bryant et al. (2011) found ASD to be an inadequate predictor of PTSD and noted that ASD is limited in such a way that it may describe acute stress reactions, although such reactions may not necessarily act as precursors of PTSD. Furthermore, the authors explain that currently available evidence suggests the emphasis on dissociative responses may prove to be restrictive as it does not reflect the heterogeneity of early PTSD symptoms (Bryant et al., 2011).

Symptoms of trauma and PTSD have been classified since the publishing of the DSM-III in 1980. Disordered cognition and associated behavioural symptoms, such as intrusive thoughts and emotions, mental flashbacks, nightmares associated with trauma, hyperarousal and heightened startle response, and avoidance of thoughts, memories, and reminders of the traumatic event are all commonly documented symptoms experienced in the aftermath of trauma (APA, 2022). The current version of the DSM classifies PTSD into four clusters: 1) Avoidance – of stimuli, environments, and reminders associated with the traumatic event. Such stimuli may trigger physiological responses such as increased heartrate, palpitations, accelerated breathing and panic attacks; as well as psychological responses such as intense fear, flashbacks, heightened emotional

response, negative thoughts, and feelings of re-experiencing the traumatic incident (APA, 2022); 2) Re-experiencing – symptoms in this cluster may occur as the result of a physical or psychological trigger. For example, an individual who experienced a violent assault may be triggered by the sight of a firearm if one was used in the assault. Re-experiencing may also occur in the absence of a clear or noticeable trigger, an intrusive thought may arise which causes a traumatised individual to experience the abovementioned symptoms such as panic attacks, flashbacks, and feelings of impending dread. In the re-experiencing cluster of symptoms, individuals may note feeling as though the traumatic event were re-occurring and this may feel absolutely real to those that experience it; understandably, these experiences can be debilitating for those suffering from them (APA, 2022); 3) Hyperarousal – this symptom cluster denotes the heightened emotions, behaviours, and attention of traumatised individuals which may manifest in heightened vigilance of one's surroundings, heightened anxiety, and increased startle response (particularly auditory startle response) (APA, 2022); 4) Negative alterations in cognition and mood – feelings of irritability, the inability to concentrate on tasks, emotional outbursts, sleep disturbances, appetite changes, and withdrawing socially are all common PTSD symptoms which fall under this cluster (APA, 2022). Symptoms of PTSD can range from mild to completely debilitating – causing a complete loss of functioning in one or more areas of life, including occupational, social, and emotional functioning (Martin-Soelch & Schnyder, 2019). These responses to trauma may damage an individual's sense of safety and self-efficacy; as well as damaging the affected person's ability to regulate emotions, cope with the daily challenges of life, and navigate social experiences (Martin-Soelch & Schnyder, 2019). A high comorbidity has been found between PTSD and substance use disorders. Frequently, those afflicted with PTSD following a traumatic incident may use negative coping mechanisms such as using or abusing alcohol, nicotine, and/or psychoactive substances, to restrict or escape flashbacks, intrusive thoughts, and other dissociative experiences (María-Ríos & Morrow, 2020). The self-medication

hypothesis is one which is most suited to explain the correlation between PTSD and substance use disorders, illustrating the desire of such patients to self-medicate in order to lessen the extent of their PTSD symptoms due to the numbing effect of such substances, both legal and illegal (María-Ríos & Morrow, 2020). Mills et al. (2006) reported that amidst those with PTSD, alcohol use disorder was found to be the most common form of substance abuse with 24.1% presenting with alcohol dependency. The study further found that alcohol dependency decreased physical and mental health and created greater difficulty in recovery. According to McCauley et al. (2012), 46.4% of individuals diagnosed with PTSD also met the diagnostic criteria for a substance use disorder, and 22.3% met the criteria for substance dependence. PTSD and substance use disorder comorbidity occurs across diverse populations in a variety of unique settings (McCauley et al., 2012), and makes the clinical course of treatment more complex (Mills et al., 2006). Increased suicidality, physical health complications, decreased social functioning, and increased probability for violence are all issues related to the comorbidity of PTSD and substance use disorders or substance dependency (McCauley et al., 2012). Furthermore, these symptoms, or variations of these symptoms, hinder personal progression and hamper an individual's ability to move forward and heal from the event (McCauley et al., 2012). Individuals may feel as though they are permanently damaged due to the long-lasting effects of the trauma, leading to despair, reduced self-esteem, depression, increased paranoia, and suicidality (Martin-Soelch & Schnyder, 2019; McCauley et al., 2012). Tarrier and Gregg (2004) found that 56.4% of the sample reported suicidality, including 38.3% reported suicidal ideation, 8.5% reported having suicide plans, and 9.6% reported that they had made a suicide attempt in the past. Individuals who arrive at the point of suicidality may question their identity, meaning and purpose in life, believing that their situation will not improve (Tarrier & Gregg, 2004). For these reasons, and due to the potential severity of these symptoms, psychotherapy is advised for individuals displaying any level of PTSD.

2.3.2 Subclinical Variations of Responses to Trauma

Psychological trauma is often associated with the subsequent syndrome PTSD. Although a large number of people may develop PTSD, many do present with subclinical variations of the symptoms which may not present as severe enough to receive attention from the afflicted individual (Korte et al., 2016). While some individuals may display certain diagnostic criteria symptomatic of PTSD, others may exhibit responses of resilience and/or minimal symptoms of PTSD, as well as subthreshold trauma-related symptoms (Korte et al., 2016). Consequences of trauma often manifest in insidious and subtle ways, while such consequences may also manifest in apparent symptoms noticeable by others (Protocol, 2014). Where subclinical manifestations of trauma are present, psychological attention is warranted, as such symptoms may progress into more severe forms, or may contribute to lowered resilience or vulnerability in future events of a traumatic nature (Korte et al., 2016). This understanding of trauma is important to consider in the discussion of the effects of trauma on paramedics, as many sub-clinical symptoms may go unnoticed by those affected and thus reports of trauma responses may be lower than what occurs in reality.

2.3.3 PTSD in the Paramedical Population

The physically and psychologically demanding job of paramedics produces frequent and repeated experiences of trauma, either indirectly in which the paramedic witnesses the trauma of others in the form of motor vehicle accidents, abuse, accidental injury, homicide, and suicide; or through direct experiences which may involve assaults on paramedics, or working in environments which produce a risk to the personal safety of the paramedic (Petrie et al., 2022). The rapid shifting from one case to another restricts the paramedic's ability to process and integrate the emotional responses of a traumatic case, thus increasing their cognitive load and decreasing their resilience for the next case (Petrie et al., 2022). According to Alden (2008), emergency healthcare personnel

are trained and expected to encounter and manage emergencies of a medical nature including death and severe injury by virtue of the nature of the profession. For this reason, paramedics are required to increase their levels of emotional preparedness, as well as perceived control over the cases which they manage, which increases the risk and/or vulnerability for PTSD (Alden, 2008). Numerous studies have undertaken the task of documenting the rates of PTSD and other related mental health disorders among paramedics. Bennett et al. (2004) conducted a study on the prevalence of PTSD and other mental health issues among UK paramedics. The results indicated out of 617 respondents, 22% presented with Posttraumatic Diagnostic Scale (PDS) scores indicative of diagnostic levels of PTSD. Additionally, the results specified a noticeably higher prevalence in male respondents (23%) than in female respondents (15%). An alarmingly high prevalence rate of PTSD was found in an Iranian study population of paramedics, with 94% of respondents meeting the criteria (Iranmanesh et al., 2013). Interestingly, the study further found that hospital-based health care workers had higher mean scores for the Mississippi Scale for Combat-Related Posttraumatic Stress Disorder (M-PTSD) than paramedical personnel. This was attributed, by the study authors, to the education levels of the respective groups and the two-year specialty training which paramedical personnel are required to complete. This attribution provides evidence that training and specialty preparedness has an effect on decreasing the risk for PTSD as paramedical staff are trained and specially educated in emergency medicine whereas the hospital-based staff did not receive the same emergency medical training.

2.3.4 Treatment for PTSD and Other Trauma-Related Mental Health Issues

Psychotherapy has been used to treat not only those afflicted with mental illness, but those who have experienced some form of psychological trauma (Schnyder et al., 2015). The notion of "talking therapy" is supported in the work of Fred Alford, making use of Donald Winnicott's conceptualisations of object relations; asserting that psychological trauma damages the "inner

other" and can be repaired through conversations with others, including those which occur in the therapeutic environment (Alford, 2013). In the same vein, Diana Fosha refers to attachment theory in her argument that social relations, such as those of a therapeutic nature, assist in recovery from trauma (Fosha, 2002). Fosha believed that the attachment dynamic which occurs in the therapeutic relationship enables the sense of emotional safety, as well as co-regulation which acts as a secure attachment, proliferating the traumatised client's process of therapeutic recovery (Fosha, 2002). Psychotherapy thus plays a vital function in the healing of the traumatised, creating a safe environment for the processing of emotions, thoughts, and behaviours which arise as symptoms of the experienced trauma (Zoellner et al., 2003). Viable treatment methods for PTSD include the use of various forms of Cognitive Behavioural Therapy (CBT) such as systematic desensitisation therapy, which have been found useful in decreasing difficult symptoms of PTSD often linked to reminders of the event (Zoellner et al., 2003).

2.4 Psychological Defense Mechanisms

Originating in psychoanalytic theory, psychological defense mechanisms are described as an unconscious function of the psyche which acts as a protective factor against traumatic and/or anxiety-causing emotions elicited by traumatic incidents and the subsequent distress that accompanies them (Cramer, 2015). Bowins (2004) proposes two distinct forms of psychological defense mechanisms, namely dissociative and cognitive distortions. While often viewed as pathological, milder manifestations are found to be common and form overlapping spectrums of functioning (Bowins, 2004). Mild manifestations may present as highly functional variants which do not cause excessive distress or dysfunction within an individual's life. Dissociative defense mechanisms provide an opportunity for the individual to detach from reality and excessively disturbing cognitive and emotional states through the distortion of lived reality (Bowins, 2004). Most common and classical defense mechanisms fall within the cognitive distortion spectrum,

stemming from psychoanalytic literature and research (Bowins, 2004). Some examples of common psychological defense mechanisms include: 1) Repression, which refers to the mental act of barring difficult emotions and memories linked to the traumatic event and burying them deep within the subconscious; 2) Denial, whereby an individual disconnects thoughts and emotions about a certain trauma and refutes any evidence of reality. This is similar to repression, however, denial comprises the unwillingness to believe that an event has occurred or that the attached difficult emotions are real, whereas repression accepts the reality of the situation, however, chooses to ignore the associated emotions and thoughts; 3) Projection, is an action where the affected individual perceives their own emotional and cognitive difficulties in another individual; 4) Reaction formation involves an individual dealing with uncomfortable emotions through behaviour which is contradictory to emotions which are uncomfortable or debilitating (APA, 2013; Sadock et al., 2015).

Healthy or unhealthy psychological defense mechanisms may be employed by individuals experiencing a range of psychological dysfunction following a traumatic event, from mild psychological discomfort to severe, debilitating symptoms (Bowins, 2004; Sadock et al., 2015). Healthy mechanisms include seeking help; whether that be professional psychological care or that of a friend or family member; altruistic methods of coping; making use of appropriate humour; and anticipation which refers to the commitment of one's efforts to identifying and solving problems before they occur (Di Giuseppe & Perry, 2021).

While the primary role of psychological defense mechanisms is the protection of the human psyche, unhealthy modes of coping may arise depending on the frequency and conditions in which they are used (Bowins, 2004; Cramer, 2015). Unhealthy defense mechanisms may include avoidance of dealing with the trauma and its aftereffects; denial of the extent of damage from the event; repression of emotions and thoughts related to the event; and sublimation of

internal emotions manifested in outward and misplaced expressions of anger and aggression (Sadock et al., 2015). Insalubrious coping mechanisms subsequently lead to furtherment of symptomatic responses and the additional worsening of psychological and physiological reactions to triggers and stress (Bowins, 2004). Under certain circumstances, defense mechanisms carry the possibility of preventing an individual from appropriately processing and assimilating the traumatic experience into the psyche in a healthy manner (Bowins, 2004). Avoidance of stimuli associated with the event, found in both the symptomology of PTSD as well as one of the most commonly occurring methods of psychological defense, may serve as a deterrent for help-seeking behaviours; as the individual wishes to avoid that which reminds them of the event, they too avoid discussion of the event which may bring back the uncomfortable or unbearable emotions that were felt during the event (Sadock et al., 2015).

2.5 Mental Health Stigma

2.5.1 Defining Mental Health Stigma

Understanding the roots of stigma and its development throughout history provides important context to the current definitions and conceptualisations of stigma which are applicable to this research. Mental health stigma is the product of social construction and social delineation of what is considered “normal” or “abnormal”, that which is accepted and that which is considered unacceptable (Corrigan, 2018). The most prominent definition of stigma was established Erving Goffman in the 1960’s. Goffman (1963) described stigma as “an attribute that is deeply discrediting” (p. 3), and that which marks an individual causing prejudice and discrimination. The term was first used to describe the branding of individual identities for the purpose of identifying certain traits of characteristics. Once an individual had been identified with a stigmatising characteristic, they were perceived as inferior, damaged, dangerous, and less-than others. The individual carrying the stigmatised identity is thus perceived by others as occupying a “spoiled

identity" (Goffman, 1963, p. 3; Krakauer et al., 2020). Individuals experiencing mental health stigma have noted feelings of worthlessness, lack of social support and understanding, labelling, prejudicial behaviour from others, discrimination in both occupational and social areas, diminished self-esteem, and lowered availability of financial opportunities (Corrigan, 2018; Crisp et al., 2000; Goffman, 1963). Many individuals experiencing stigmatisation describe its effects as worse than the actual condition itself, adding to the already complex challenges presented in the disorder and often hampering treatment progression (Goffman, 1963). Moreover, public mental health stigma and self-stigma have been reported as having an inverse association with help-seeking behaviours (Krakauer et al., 2020). Those affected by stigma may avoid seeking treatment for mental health difficulties related to the traumatic realities they have experienced due to the negative connotations associated with being identified as having a mental health disorder, and the way this may impact one's career trajectory and social status (Krakauer et al., 2020).

Lack of specific understanding of the workings of mental health disorders, and general lack of understanding or misunderstanding of certain traits associated with mental health disorders encourages the propagation of negative perceptions of such conditions (Corrigan, 2018). As the academic world produces knowledge on topics such as mental health, social knowledge and acceptance should theoretically be further proliferated (Krakauer et al., 2020), thus making education a vital function of the de-stigmatisation of mental health disorders (Corrigan, 2018; Krakauer et al., 2020).

2.5.2 Stigmatisation in Paramedical Culture

Specific traits, characteristics and beliefs are often ingrained in various professional cultures. Mental health stigma is a common phenomenon, occurring in numerous cultures and belief systems (Goffman, 1963; Corrigan, 2018). The paramedical organisational culture is one that is based in the firm foundation of mental strength and psychological durability.

An examination of mental health stigma conducted by Crowe et al. (2015) in the United States reported various categories of stigma which were prevalent among the paramedical population, including fear of discrimination and disbelief, loss of social and occupational status, and subsequent shame. The findings of this study further reported that loss of status presented as a primary concern among the sample. According to the authors, this suggests that mental health stigma may present different challenges for those within the profession in comparison with the general public due to the hierarchal status nature of the profession, and the requirements for physical and psychological resilience (Crowe et al., 2015). In a somewhat supporting report of these findings, a systematic analysis of stigma and barriers to mental health care by Haugen et al. (2017) found that 33.1 % of first responders reported experiencing stigma in some form. Results of this systematic review indicated that the most frequently reported form of stigma included fear regarding breaches of confidentiality, as well as subsequent negative impacts on career trajectory. This supports the findings of Crowe et al. (2015). Furthermore, among the fourteen articles analysed, five measured barriers to mental health care of which the most frequently reported categories included concerns regarding scheduling, and lack of knowledge regarding how to access such health care (Haugen et al., 2017).

An examination of mental health knowledge, stigma, and help-seeking behaviours among Public Safety Personnel (PSP) was carried out by Krakauer et al. (2020) and may provide some insights and explanations as to what extent stigma and help-seeking behaviours are prevalent in paramedical staff. While the study found interesting differences among the various categories of PSP, an important finding of the study includes the reporting of mental health knowledge, stigma, and degree of help-seeking behaviours of paramedics. The study found that paramedical staff reported high levels of mental health knowledge with low rates of stigma. However, they also reported the lowest level of intent to seek mental health care in the event a mental health issue

arises, in comparison with other PSP categories (police, firefighters, and correctional officers). Although the counterintuitive nature of these findings might theoretically suggest that due to paramedics' high level of mental health knowledge coupled with low degrees of outward stigma could intuitively conclude that such a group may be more inclined towards help-seeking behaviours, this is not the case. The authors of the study propose a possible explanation for this occurrence and suggest that other variables such as high levels of self-stigma or inward stigma, which was not measured, may influence this finding significantly. Furthermore, they suggest that due to paramedics frequently attending to patients of mental health emergencies, perceptions of paramedics may not apply professional experiential mental health knowledge acquired on mental health-related calls to their own subjective experiences of such health difficulties. An example presented by the authors refers to the repeated experiences with mental health calls which may reduce the confidence in paramedics of the intrinsic value associated with mental health care, as well as highlighting the possible limitations and barriers of such care (Krakauer et al., 2020).

An Australasian survey-based study conducted by Mackinnon et al. (2020) which explored the risks of psychological distress and mental health stigma in paramedics, reported that a total of 51% of paramedical participants disagreed with the statement "there is no stigma from paramedic colleagues about paramedics seeking out mental health services" while 54% disagreed with the statement "there is no stigma from managerial staff in my organisation about paramedics seeking out mental health services", with 24% and 20% respectively agreeing with the two statements (Mackinnon et al., 2020, p. 4). Agreement/disagreement with these statements were not affected by whether or not the participants had received mental health counselling and/or therapy. Furthermore, 43% of participants agreed that those with poorer levels of mental health should not participate in the paramedical profession. Upon the opportunity to elaborate on their answers regarding receiving mental health care whilst holding membership to the profession, participants

primarily referenced fears of judgment by occupational peers. Statements such as “it looks like a sign of weakness to many paramedics” as well as “I felt very isolated by management” or “management view it negatively” and “it can impact promotion” were provided in support of this (Mackinnon et al., 2020, p. 4).

Such examples support a conclusion which accounts for the rife social, structural, occupational, managerial, and peer-based stigma which affects those within the paramedical sphere (Krakauer et al., 2020; Mackinnon et al., 2020). Although some literature does exist which explored this phenomena, not enough research has been conducted to fully understand the nuances which perpetuate the cycle of stigma within the profession.

2.6 Machismo Culture

Historical, social, and cultural stereotypes of paramedics depict a profession laden in heroism, bravery, dedication, physical and psychological resilience, and durability (Furness et al., 2021). It is vital to consider this cultural stereotype of paramedical professionalism in order to understand why and how mental health stigma is exacerbated within the profession.

Machoism, from Spanish and Portuguese origins of the term, refers to that which is culturally and historically accepted as “manly”, self-reliant, valiant, and with a substantial sense of masculine pride (Furness et al., 2021). Aggression, dominance, and protection of those of perceived weakness (i.e. women and children) are values which underpin this particular cultural ideology (Furness et al., 2021). The pressures of the cultural ideal of how masculinity should be portrayed provides an exacerbation on overall psychological distress by focusing on the expectation to act with the interest of others prioritised over the interests of oneself (Miller, 2021).

2.6.1 Machoism in Paramedical Sub-Culture

The exploration of macho subculture in this chapter serves to provide foundational concepts underpinning the overall ethos of those within the paramedical profession. Like other public service professions such as police officials and fire fighters, a militant subculture still dominates the paramedical profession in modern times, with a focus on heroism and bravery (Furness et al., 2021). The industry is dominated by beliefs that in order to perform at the expected standards of a paramedic, one ought to be willing to sacrifice their own life while in service to others, and rely on logic and reasoning while setting aside emotions (Furness et al., 2021). The emergency medical profession is one which has been historically dominated by male personnel, with a vast majority of men arriving at this profession through military service which boasts it's highly masculine doctrine of unwavering discipline, toughness or physical strength, emotional numbness or disconnect, and willingness to risk one's own life to save another (Brown, 2007). While the transferring of occupational trajectory from military servant to paramedical team member may be an understandable career development due to the likeness of the two (strategic, fast-paced, adrenaline-filled, methodical, and action-orientated); the militant values which are also transferred between professions may contribute to the ways in which physical and mental health is perceived (Furness et al., 2021). A pivotal principle of those serving in the military is that of psychological resilience, even in the face of extreme trauma, pressure, and adversity. The ability to maintain mental and physiological strength and composure is vital to the ability to perform up to the standard of the militant authority (Furness et al., 2021; Miller, 2021). While little accessible research is provided to give further insight into machoistic subculture within the paramedical profession, it is an important aspect of the profession that must be taken into account when considering the origins of the rife stigma at play within the profession. An unwavering subconscious belief of emotional-detachment, masculinity, and bravery continues to persist even in modern operations of paramedicine. Although the profession may no longer be considered

exclusively male dominated as an increased number of women enter the profession, the masculine cultural undertones continue to structure the profession (Furness et al., 2021; Auth et al., 2022). A vital question should be considered in the discussion of machoism in paramedical operations, how do the principles of such a subculture define the way in which meaning is attached to the traumatic events that paramedics face on a daily basis? Additionally, the way in which emotions related to trauma are processed and assimilated within the human psyche as being moderated through the lens of machoism is a vital point to consider in the discussion of paramedics, their psychological trauma and its subsequent effects, psychological defense mechanisms, and mental health stigma (Auth et al., 2022).

2.7 The Impact of COVID-19

The novel Coronavirus (COVID-19) has impacted society on a global scale, affecting almost all professions and ways of life. The disruption and consequences of COVID-19 affected all individuals and occupations in unique ways. One of the most prominent and in-demand professions during the peak of the COVID-19 outbreak was that of the emergency healthcare worker (Couarraze et al., 2021; Roberts et al., 2021). Paramedics were, and still remain, on the frontlines of the pandemic, they are first in line to treat critical patients, and travel outside of the sanitised hospital environment into the homes of patients, finding themselves within close contact with those affected with the novel virus and thus heightening their risk of contracting the illness (Couarraze et al., 2021). The high risk of COVID-19 infection poses not only a health and safety risk, but a psychological risk as well. The constant concern of transmission and infection takes a major toll on the mental health of these professionals (Roberts et al., 2021).

The global pandemic highlighted the challenges faced by paramedics through a rise in academic and public interest in the experiences of frontline healthcare workers. Several studies have shown increased reports of burnout, stress, anxiety, and depression (Huang et al., 2022; Petrie

et al., 2022; Roberts, 2021). Awais et al. (2021) noted that frontline workers such as paramedical staff have experienced more mental health distress and professional burnout due to the impact of the pandemic than any other profession. Alqahtani et al (2021) found that heightened mental health issues among paramedics may be connected to the lack of social support received by those within the profession as family and friends may distance themselves in order to mitigate the risk of infection, thus highlighting the importance of social support.

Studies revealed high reports of depression, anxiety, burnout, insomnia, and numerous physical health issues in their exploration of paramedics' experiences during the pandemic. The results of such findings highlight the degree to which paramedics experience daily trauma and challenges. The study of frontline healthcare workers during the pandemic also shed light on the dependency of society on individuals within such professions. With that in mind, it becomes clear that paramedics require and deserve the service and care which they provide to the public, and in order to do so it is vital that the mental health challenges of paramedics, and subsequent stigma, are explored with the intent to improve current interventions.

2.8 Theoretical Framework

Understanding paramedics' experiences of mental health stigma involves applying a theoretical framework through which to understand the phenomena. To understand the lived experiences of paramedical staff, a thorough understanding of the concepts of psychological trauma and mental health stigma must first be reflected. The following section explored the central concepts which form the theoretical framework through which the data were analysed and understood.

2.8.1 Psychological Trauma

Although the specificities of trauma are still widely debated topics today, a consensus exists upon a wider definition of trauma and that which is deemed 'traumatic' (Suleiman, 2008). An event is generally regarded as traumatic if the event involves in/direct "exposure to actual or threatened

death, serious injury, or sexual violence" (American Psychiatric Association [APA], 2003, p. 271); and elicits responses of horror, intense fear, and helplessness (Carlson & Dalenberg, 2000). Moreover, the DSM-5-TR notes that "experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders…)" is one of the ways in which traumatic experiences may occur (APA, 2022, p. 271). As the population of this study included those who may not experience traumatic events directly, but rather through the witnessing of the aftereffects of traumatic events through the treatment of their patients, this delineation is important in our understanding of how indirect experiences of trauma are able to pose a risk to this research population.

As the risk of psychological trauma (as well as physical) is present in a variety of contexts for a paramedic, understanding the full spectrum of mental health stigma among paramedics involves understanding the key concept of psychological trauma and how experiencing secondary trauma may influence paramedics' overall mental health. A brief discussion of vicarious trauma, compassion fatigue, and secondary trauma is thus presented below.

Terms of importance under this core concept are those of *secondary trauma*, *vicarious trauma*, and *compassion fatigue*. Secondary trauma refers to the subsequent response of an individual who has been exposed to another's suffering (Carlson & Dalenberg, 2000). Symptoms of secondary trauma parallel those of PTSD, including avoidance, hyperarousal, and depressive symptoms (Carlson & Dalenberg, 2000; Figley, 1995). Personality traits that have been regarded as risk factors for secondary trauma include unrealistic self-expectations, traumatic history, and pessimism (Mento et al., 2020). Figley (1995) described secondary trauma as a continuing preoccupation with the pain and suffering endured by others. Vicarious trauma is an expansion on the concept of secondary trauma as its boundaries encompass not only the symptomatic transfer between patient and paramedic, but the inclusion of a lasting alteration of one's ways of perceiving

the world around them (Mento et al., 2020). Vicarious trauma has been described as resulting from an empathic relationship in which an emotional transfer occurs between a professional and their patient (Mento et al., 2020). While compassion fatigue and secondary trauma share some similarities such as emotional and empathic psychological alterations, a distinction can be made between the two as compassion fatigue generally arises particularly from direct patient-care exposure, whereas secondary trauma arises from traumatic incidents experienced by another individual (Newell & MacNeil, 2010). More specifically, compassion fatigue is characterised as the emotional and physical exhaustion experienced after prolonged exposure to patient care and the witnessing of suffering of others (Newell & MacNeil, 2010).

While compassion fatigue, vicarious trauma, and secondary trauma may arise within those working with individuals who have experienced a traumatic event, varying degrees of occupational stress may proliferate negative reactions to such working conditions. Occupational stress is one of the primary factors influencing professional burnout (Singh et al., 2020). Various models of occupational stress have been developed in order to explain the mechanisms of occupational stress, which forms a foundation for understanding of this phenomena. The Effort-Reward Imbalance model is one which is most suited to explain the occupational stress of paramedics, this is discussed below.

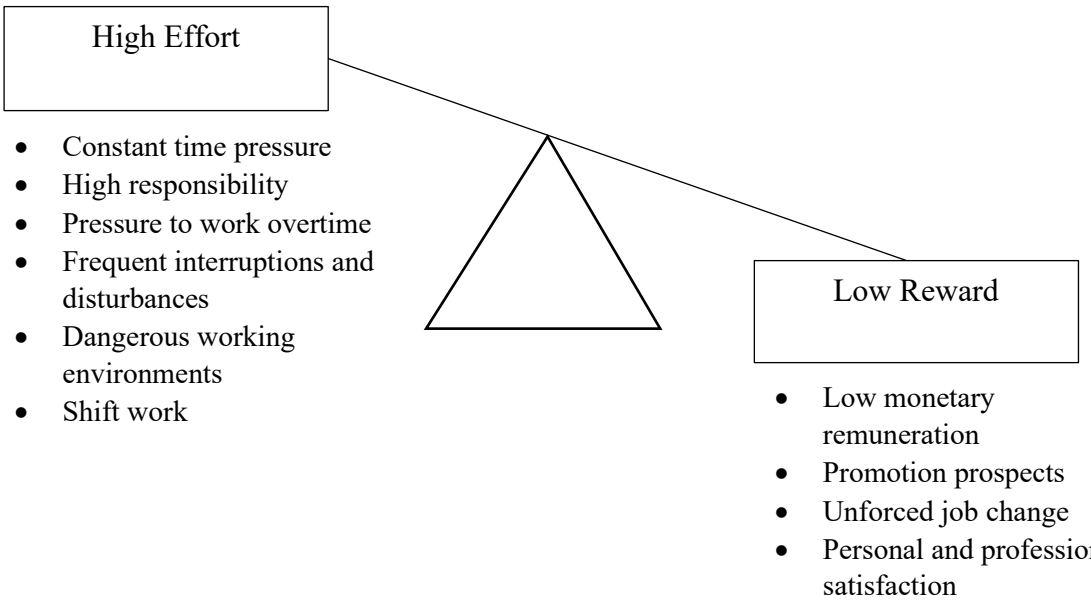
2.8.2.1 Occupational stress and trauma.

Occupational stress and trauma have had a rise in academic interest since the 1980's, with the importance of employee mental and physical health becoming increasingly vital to the operation of a professional system as a whole (Gilbert-Ouimet et al., 2011). Various models of occupational stress have been developed in order to explore the aetiology of occupational stress and burnout, and intervention strategies which may assist in prevention of these negative professional effects. This research will consider the Effort-Reward Imbalance (ERI) model which explores the effects

of a profession which involves high cost and low reward. Adapted from Gilbert-Ouimet et al (2011), Figure 1 describes the manner in which high professional effort such as high responsibility, shift work, dangerous working environments, and pressure to work overtime causes an imbalance when paired with low professional rewards such as low pay, promotion prospects, and personal and/or professional satisfaction. While the paramedical profession may provide a sense of altruism and meaningfulness, this may be diminished through burnout caused by long working hours, a high degree of responsibility and skill needed to perform at required professional levels, witnessing of extreme trauma and death, working in dangerous environments, and risks to mental and physical health.

Figure 1

Effort-Reward Imbalance Model (Gilbert-Ouimet et al., 2011).



Understanding the role of effort and reward imbalances within this profession in the production of negative mental health outcomes is vital when considering the paramedical profession which

consists of high levels of exertion and low degrees of reward. Ultimately, paramedics provide life-saving skills and services while simultaneously experiencing harsh working environments and operational standards, and thus the development of negative mental health outcomes.

2.8.3 Mental Health Stigma

Pescosolido et al. (2008) describes stigma as a mark which defines and separates individuals from each other; grounded in socially constructed ideologies which provide the foundation for negative beliefs and attitudes towards those who deviate from what is socially accepted as "normal". Those afflicted with mental illness are often viewed as weak, "lesser than", incompetent, and dangerous (Pescosolido et al., 2008). Negative beliefs around mentally ill individuals manifests as 'stereotyping', which may include negative generalisations of such individuals. For example, the stereotypical belief that all individuals afflicted with a mental health disorder are unpredictable and dangerous. Such negative beliefs are endorsed through prejudicial and discriminatory actions and behaviours, such as the avoidance and/or exclusion of those who are mentally ill (Stangl et al., 2019).

Goffman (1963) and Pescosolido et al. (2008) argue that mental health stigma is defined through social interaction and construction. The essence of stigma relies on the unspoken rules which dictate which behaviours are considered as acceptable, normal, and expected. Subsequently, this lays the foundation for what is considered "different", and that which is "abnormal", solidifying ingrained schemas which dictate how one should perceive and respond to those within a stigmatised group. Goffman (1963) succinctly describes the concept of stigma in his work, *Stigma: Notes on the Management of Spoiled Identity*. Here, Goffman describes the psychological dynamics fuelling the production and proliferation of discriminatory attitudes towards members of stigmatised groups:

> By definition, of course, we believe the person with a stigma is not quite human. On this assumption we exercise varieties of discrimination, through which we effectively, if often

> unthinkingly, reduce his life chances. We construct a stigma-theory, an ideology to explain his inferiority and account for the danger he represents, sometimes rationalising an animosity based on other differences, such as those of social class.
> (Goffman, 1963, p. 5)

Goffman (1963) implies that stigma-theory is formed at the societal and subsequently the individual level, in order to justify the beliefs that those with mental health afflictions should be perceived and treated as incompetent, burdensome, and dangerous.

Despite efforts made in conceptualising the phenomenon of stigma, little is currently known regarding the foundations of stigmatising attitudes, thus research exploring the sources of such attitudes is vital in providing a holistic understanding of the concept (Pescosolido et al., 2008).

Despite the progression of societal understanding of mental health disorders, as well as increased efficacy in treatment methods; fear and avoidance of those within stigmatised groups is still pervasive and evident in research (Crisp et al., 2000; Subu et al., 2021). The prevalent negative experiences of prejudice, discrimination, and rejection continue to degrade the lived experiences of individuals afflicted with mental health issues, as well as family members and carers of these individuals. The underlying societal perception of such disorders stifles and aggravates the lack of adequate care and consideration that is vital to the treatment of vulnerable and stigmatised individuals (Stangl et al., 2019). Service provision, funding for research, and provision of adequate and accessible treatment structures are, for the most part, lacking; thus affecting quality of life as well as progression towards recovery for those suffering from psychological complications. Furthermore, research on the topic describes mental health stigma as a well-documented hindrance to help-seeking behaviours, enforcing individual ideas of lack of self-worth, fear of social and occupational rejection, and anxiety around seeking mental health care (Subu et al., 2021; Stangl et al., 2019). Individual adherence and engagement in treatment is affected through the fears and

anxieties of social discrimination, thus reducing the opportunity for effective and life-changing treatment methods (Stangl et al., 2019).

Social stigma can be identified in various health categories, such as obesity, leprosy, diseases of the skin, and HIV. Intersecting stigmatised identities may exacerbate the degree to which an individual is discriminated against or viewed negatively. For example, individuals afflicted with mental disorders that are members of other stigmatised groups (those who identify as homosexual, minority groups etc.) may find that the degree in which they are treated or perceived negatively by others is amplified (Crisp et al., 2000; Pescosolido et al., 2008). Social inequalities are fuelled through stigma through perpetual social discourse which narrates the way in which one may respond to those who present even slight neurodiversity (Stangl et al., 2019). Health outcomes of all affected individuals are aggressively influenced through social discourse and subsequent social stigma. Effectively, the affected persons fall at the mercy of a society which dictates how and why individuals with mental illness should be perceived, responded to, and treated in health care terms.

Stangl et al. (2019) reject the idea of existing stigma-based theoretical frameworks which operate via a narrow, siloed approach to understanding stigma through looking at the concept in isolation, with lack of consideration for the intersecting factors which aggravate a singular type of stigma. Furthermore, a much more explicit theoretical framework is proposed by the authors, which this research study attempts to apply through the consideration of intersecting discriminations which influence the overall lived experiences of the study's participant population. The study attempts to understand not only the individual pathways to mental health stigma, but the social and structural enforcers of stigma through the investigation of structural and organisational schemas, and imbedded social factors which increase the discrimination of the stigmatised.

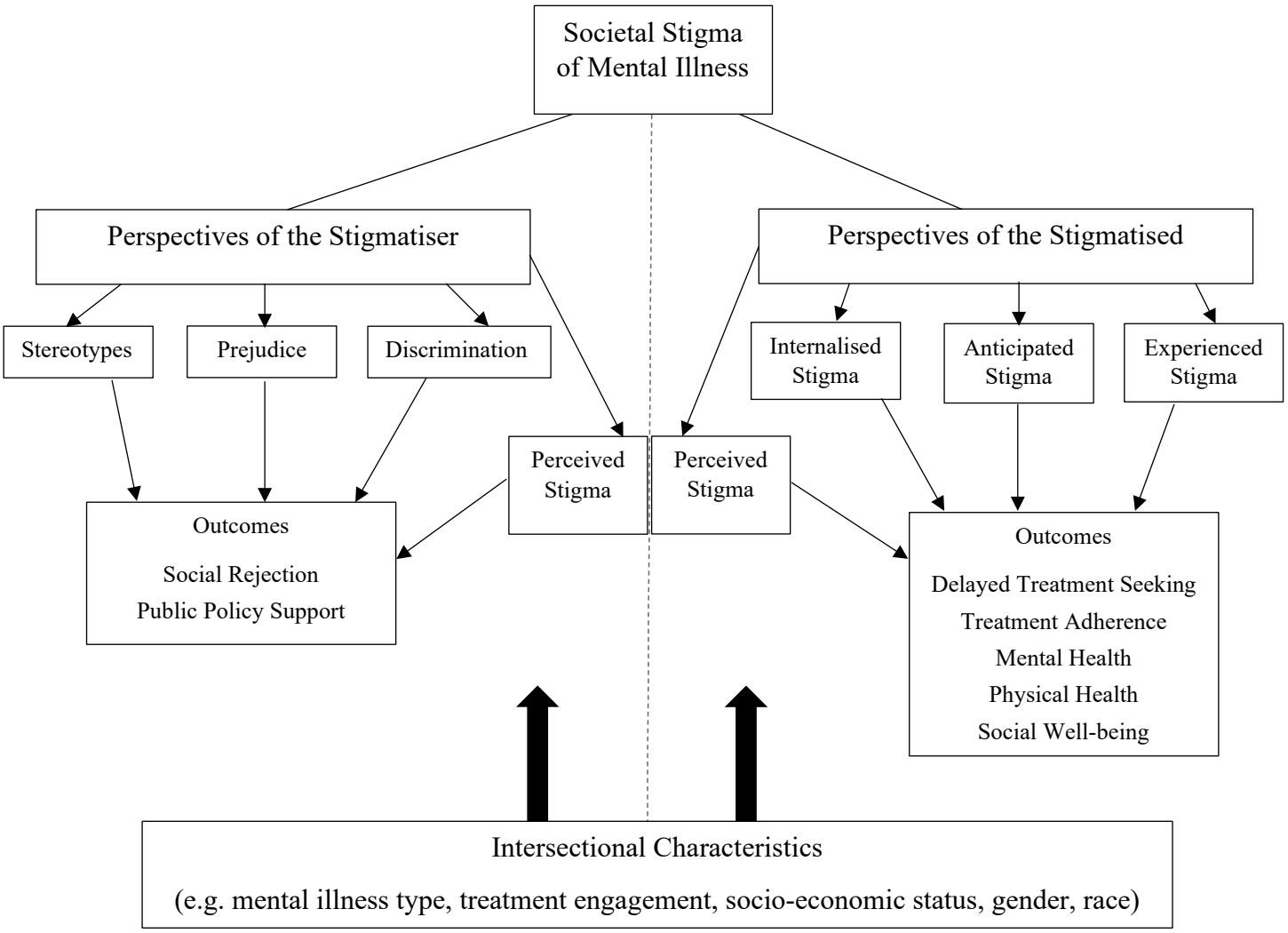
2.8.3.1 Mental Illness Stigma Framework.

This research will draw upon the MISF as a method of understanding the social distribution and perpetuation of mental health stigma. The model was developed and informed by several prominent theories relating to mental illness stigma including the definition of stigma, and social-cognitive theory of public and self-stigma by Link and Phelan (2001), as well as labelling theory (Link, 1987). Figure 2, adapted from Fox et al (2018) describes the manner in which mental health stigma is socially circulated and perpetuated. This model takes into account the role that self-stigma plays in the perception and experience of stigma. The model depicts the perceptions of the stigmatiser as encompassing three main categories: stereotyping, prejudice, and discrimination. While the stigmatised experience the aforementioned forms of stigma, they too experience forms of self-stigma such as the internalised negative beliefs of society such as the notion that those suffering with mental illness are lesser than those not suffering with a mental health challenge; as well as anticipated stigma in which the individual expects discriminatory behaviour from others in a certain situation (Fox et al., 2018).

This model provides an important foundation for understanding the responses of this study's participant cohort in regard to mental health stigma. In order to fully conceptualise the stigmatisation of paramedics, it is vital to consider the ways in which stigma operates externally, as well as internally in order to produce negative psychological effects.

Figure 2

Mental Illness Stigma Framework (Fox et al., 2018).



The above theoretical framework suggests that indirect experiences of trauma are sufficient to cause long-term mental health difficulties, which is exacerbated through chronic exposure to the suffering of others. Stigma around mental health disorders and their respective treatments discourages affected individuals from seeking the health care which is necessary for recovery. Furthermore, the primary framework models described in the above theoretical framework,

including the MISF and ERI provide a backdrop for the overall understanding of mental health issues and stigma within the paramedical profession.

Chapter Three: Research Methodology

3.1 Introduction

Numerous considerations and decisions were made in the deliberation of the theoretical framework, paradigm, and data handling methodology of this study. The following section will introduce and discuss the various chosen methods used in this research study. This section will further explore how the chosen methodology has shaped and informed the particulars of data collection and analysis. Strengths and limitations of each design component have been laid out to justify the decision made to utilise such methods.

3.2 Methodological Paradigm

A phenomenological research design is one which aims to explore and learn from the subjective lived experiences of human beings (Guenther, 2019). This approach seeks to define the essence of a particular phenomenon through the exploration of personal experiences of those who have lived through such a phenomenon. Critical to this approach is the description of *what* the experience entails, as well as *how* it is experienced (Neubauer et al., 2019). With the research questions of this study considered, a phenomenological approach was found to be the best suited paradigm to apply. More specifically, the research subject at hand calls for a purer form of understanding of the subjective experiences of paramedics about mental health stigma, thus a transcendental approach to phenomenology has been applied in the reading, analysis, and understanding of collected data. Edmund Husserl, credited by most historians for defining the phenomenological approach in the 20th century, described transcendental phenomenological research as that which attempts to exclude researcher subjectivity and interpretation from the data analysis. The goal of such an approach is to achieve a *transcendental subjectivity* state which requires a constant assessment of the impact of researcher preconceptions and bias to nullify such partialities and eliminate their influence on the understanding and reporting of the results

(Neubauer et al., 2019). This constant assessment is a vital aspect of this research study, as the goal for research lies not with interpretation of the participants' responses, but in the direct reporting of their lived experiences of the respondents regarding the research questions at hand.

3.3 Data Collection Procedure

3.3.1 Participants and Sampling

The participants of this study consisted of seven South African paramedics registered in the Advanced Life Support (ALS) category. A requirement of inclusion in the sample was that each of the participants had over three years' experience in the field and were currently operational in their line of work. Several potential participants were excluded from the study with the use of two screening measures: the Beck's Depression Inventory, and the PTSD Checklist. Those who scored above the "Mild mood disturbance" range (scoring between 11-16), and those who scored above the "Moderate to Moderately High severity of PTSD" (scoring between 30-44) were excluded from the study. The decision to exclude participants scoring above the selected ranges was due to their possible vulnerability and the risk which the study may pose to such individuals through the exacerbation of any present mental health difficulties resulting from discussion of past traumatic experiences. In keeping with the core ethical research principle of not causing harm, this protocol was followed strictly. Individuals who scored higher than the set cut-off scores were provided the opportunity for referral to a mental health counsellor, one individual requested to be referred while the remaining excluded participants declined the offer. The demographics of the final participant sample included: One female participant, and six male participants; all of whom were over the age of 21 years, and were currently operational in the ALS registration of paramedicine. All of the participants of the study had been working in the field for a sufficient amount of time (over five years).

A purposive sampling technique was used to obtain the respondents of this study in order to reach participants who fell within a certain criterion whereby respondents are chosen based on specific characteristics or membership to a specific group (Campbell et al., 2020). Purposive sampling was utilised as the primary mode of obtaining participants in this research study due to the nature of the research aims and objectives. This sampling technique provided a better matching of the sample with the purposes of the study (Campbell et al., 2020). Thereafter, a snowball sampling method was utilised in order to obtain the remaining participants needed to the sample target. Snowball sampling is used in order to obtain further research respondents by using current participant's social and occupational networks. This process was followed in order to obtain respondents who fit a very particular research criterion, thus developing sampling momentum which emerges a chain of participant respondents (Parker et al., 2019). A major advantage of snowball sampling is the convenience characteristic, and ability to obtain 'hard to reach' research respondents (Parker et al., 2019). Due to the stigmatised nature of this research, respondents were not readily accessible and thus a snowball sampling method was necessitated in order to reach the sample target. A limitation of this particular form of convenience sampling, and one which has been present in this study, is that of selection bias; whereby the risk of sampling distortion emerges early on in the research process. Due to the remaining respondents stemming from the 'seed' participants obtained through purposive sampling (referral process), the risk of homogenous population groups arising is present; for example, a population sample which is exclusively female (Parker et al., 2019).

3.3.2 Data Collection Technique

Before data collection was able to proceed, permission from the relevant authorities was obtained. A research proposal was submitted to the Human Research Medical Ethics Committee at the University of Witwatersrand and approval was obtained. Thereafter, formal permission was

sought and obtained from the relevant gatekeepers of the healthcare institutions from which our participants were sourced (Appendix B -Permission Request to conduct Research with Staff). After formal permission was obtained from institutional authorities (Appendix C – Approval from three healthcare organisations, redacted to protect the identity of approved organisations), a Participant Information Sheet (Appendix D) including details of the proposed research study was referred to paramedics employed at the stipulated institutions through approved appointed chief paramedical authorities. Formal, written consent was obtained from paramedics who expressed a desire to participate in the study (Appendix E). Thereafter, screening measures were utilised to exclude those above the stipulated clinical threshold for exclusion. Interviews conducted via the online platform Zoom was used to collect data from selected paramedics. Each interview consisted of an approximately one-hour long video conferencing call, which was recorded with permission of the participant through the consent forms (Appendix E).

3.3.3 Research Instruments

In order to collect data for this study, a semi-structured interview guide (Appendix H) was drawn up by the researcher in order to provide a structural basis for the interviews. This interview guide was submitted to and approved by the University of Witwatersrand Medical Ethics Committee during the proposal phase of the research process. A total of seventeen questions, and six additional probing questions were laid out in the interview guide. An interview guide is used for the purposes of providing clarity and structure to the interview process through the framing of research objectives in the form of anticipated questions which are developed in order to obtain the required insights and experiences (Johnson & Rowlands, 2012). Due to the potentially sensitive and traumatic nature of the research questions, a detailed distress protocol was drawn up and approved by the Ethics Committee, which described the process which would be followed in the event that a participant became distressed due to recalling traumatic events. Fortunately, the

distress protocol was not utilised as each participant completed the interview without any form of mental distress occurring.

3.3.4 Strengths and Limitations of Data Collection Methodology

Individual interviews of participants were the chosen method of data collection for a number of reasons. First, due to the qualitative nature of the study, detailed opinions, thoughts, and experiences were sought in the pursuit of the research questions. The limited nature of questionnaires was found to be unsuitable for the search for rich, detailed responses to the various interview questions, thus "in-person" (virtual) interviews were used in order to provide the participants the ability to express themselves at length (Johnson & Rowlands, 2012). Second, the semi-anonymous nature of a one-on-one interview was favoured over the use of a focus group/s due to the stigmatised nature of the research topic. During an interview, the participant may be identifiable to the researcher, however confidentiality is ensured outside of the interview process through the use of pseudonyms in transcription and result reporting. Furthermore, the use of interviews was chosen in favour over other methods of qualitative data collection such as questionnaires and focus groups due to the sensitive and stigmatised nature of the research topic. Due to the surrounding stigma of the topic of mental health issues, particularly in the paramedical profession, anonymity became a key concern of the study and thus focus groups were eliminated as a possible method of data collection as participants may have experienced reluctance to fully express their experiences and feelings around the topic in a group of other paramedics (Johnson & Rowlands, 2012).

In order to adhere to COVID-19 social distancing protocols, with particular consideration of the research participants operating as frontline health care workers, the use of online video conferencing platforms became a necessary tool to limit the risk of infection to the participants and the researcher. However, while making use of virtual meeting spaces proved necessary in the

current pandemic, this was not without challenges. Non-verbal expressions and cues were, at times, difficult to read and assess and thus the natural flow of conversation was stifled. Furthermore, some connectivity and network issues were experienced during the course of some of the interviews, and while such issues were not a regular occurrence during this process, a delay in normal conversational flow was experienced.

3.4 Data Analysis

3.4.1 Data Analysis Methods

Data analysis was centred on Braun and Clarke's (2006) approach to *thematic analysis*. The method of thematic analysis involves six main phases:

Phase one: *Familiarising oneself with the data*. The first phase of Thematic Analysis requires the researcher to familiarise themselves with the data set (Braun & Clarke, 2006). This was achieved through the transcription of interviews, as well as careful and repeated studying of each transcript. Audio recordings of the online interviews were carefully transcribed directly following the interview process. During the analysis of the data for this research, this phase was introduced through the systematic transcribing of recorded audio data obtained through the interview process. In the process of transcription, annotations were made for possible codes to be introduced in the secondary stage of the process. Transcriptions were read through, after completion, at least twice; and additional notes for coding were documented for future reference.

Phase two: *Generating initial codes*. The second phase of Thematic Analysis includes the initial coding process wherein raw data are analysed once again while codes are allocated to various concepts within the data (Braun & Clarke, 2006). Initial codes were generated through the careful analysis of the interview transcripts while noting any important, recurring sentiments which are of prominent value. This study made use of ATLAS TI Qualitative Analytical software

in order to efficiently extract initial codes from the participant transcripts. Transcriptions were uploaded to the analysis program and analysed through the use of tools provided by the software.

Phase three: *Searching for themes*. The following phase of analysis includes the exploration of generated codes as they relate to thematic categories. During this phase of the analysis codes were collated into potential themes and data relevant to each theme is collected (Braun & Clarke, 2006). Recurring themes were collected through an interpretive analysis of the collated codes retrieved from the interview transcripts. Data extracts which proved pertinent to the research questions were identified and collated/sorted with regard to the overarching themes present. Relationships between codes and sub-themes were examined and noted for reporting. A bottom-up approach was used to arrive at the final themes of the data by using smaller codes to arrive at broader sub-themes, and even broader primary themes.

Phase four: *Reviewing themes*. The fourth phase of Braun and Clarke's Thematic Analysis includes the review and refinement of initial themes. This phase was conducted through the careful analysis and consideration of the themes produced from the data. Combination, separation or elimination of sub-themes and main themes was considered during this segment, resulting in the finalisation of final themes. Final themes were checked in their relation to coded extracts, and a 'thematic map' was drawn in conclusion of this phase.

Phase five: *Defining themes*. Themes were 'defined and refined' during this phase of analysis. Enhancement of the identified themes was conducted through the identification of final theme names and definitions which capture the core elements of each theme. The analysis continues with further refinement of themes in relation to the specificities of each theme, and the broader narrative of the data set through clear and concise definitions for each theme. Definitions of themes were derived through the exploration of data within collated codes and their accompanying data narrative. Identifying elements of interest was a vital function of this phase of

analysis thus the chosen theme titles do not serve to paraphrase the content of data, but rather identify the core concept of that particular categorisation of data extracts. Sub-themes were investigated as themes within the primary themes, so as to provide a categorical structure within the broader primary themes. Additionally, sub-themes provided hierarchal structure which demonstrate the degree of meaning of the data within the primary theme (Braun & Clarke, 2006).

Phase six: *Reporting of the findings*. In the final stage of Thematic Analysis, select data extracts were used to expand on and provide support for themes that were unearthed during the previous five steps. This section strived to provide a thorough understanding of analysis to the reader with the use of data extracts and quotes from participants (Braun & Clarke, 2006). A report of the findings was generated based on the final themes which were defined in phase five. A comprehensive reporting of the findings can be located in chapter four of this document.

3.4.2 Strengths and Limitations of Data Analysis Methods

Braun and Clarke's (2006) thematic analysis was the chosen qualitative analysis methodology due to its highly flexible nature, and ability to provide rich, detailed, and complex data with which to work (Nowell et al., 2017). Braun and Clarke (2006) and Nowell et al. (2017) consider thematic analysis a useful tool in the examination of various perspectives as it carefully highlights similarities and differences in perception of respondents. Furthermore, this particular analysis method lays out a clear and structured process to follow in the analysis of data, decreasing the levels of research bias and assisting in the production of clear, concise, and organised final reporting of the data (Nowell et al., 2017; Riger & Sigurvinsdottir, 2016). However, it should be distinguished that the chosen analytical methodology of this study was limited by the lack of research and theoretical insight around this mode of analysis, in comparison with grounded theory and ethnography, for example. Furthermore, although flexibility in the methodological framework is considered a strength, in some cases it may prove to be a limitation. Consistency and coherence

may be affected due to the high levels of flexibility of this analysis method (Nowell et al., 2017; Riger & Sigurvinsdottir, 2016).

3.4.3 Trustworthiness

In order to ensure rigour in qualitative research, four key elements should be considered: Credibility, transferability, dependability, and confirmability (Korstjens & Moser, 2018). According to Nowell et al. (2017), a study can be defined as credible through the use of coresearchers and/or supervisors overseeing the research process. In the case of this study, two supervisors assisted through guidance, review, and editing through the entirety of the research process. Furthermore, the supervisors of this research study utilised their own expertise and experience in the field of trauma to "address the 'fit' between respondents' views and the researcher's representation of them" (Nowell et al., 2017, p.4). In addition to credibility enhancement through supervision, credibility was further enhanced through prolonged engagement with the data and consistent documentation of each step during the research process, including the detailed summarising of details of overlapping themes that are consistent with one another, and which determined the key findings of the research (Stahl & King, 2020). A documented log of the research process was kept and assisted with enhancing credibility.

Transferability in qualitative research refers to the study's degree of generalisability (Korstjens & Moser, 2018). Nowell et al. (2017) describes the researcher's responsibility in this regard as the provision of detailed descriptors of various themes and reflections in order to present results in such a way that "that those who seek to transfer the findings to their own site can judge transferability" (Nowell et al., 2017, p.3). The detailed descriptors informing the results section of the study sought to improve the study's level of generalisability to ensure the appropriate level of application to the understanding of future studies.

Dependability in research is reflected through ensuring that the research process follows a logical and clearly documented format (Nowell et al., 2017). Documentation of the process included recording of each step in the process, which entailed keeping records of interview processes, coding tables, theme analysis diagrams, as well as the recording of a reflexivity journal. This paper has attempted to clearly state the methodological dimensions surrounding the process of the research inquiry. Dependability was further amplified, again, through the use of two experienced supervisors through auditing and editing of each step of the research process. Finally, the element of confirmability in research is one which is concerned with establishing the interpretations of the results produced by the researcher (Nowell et al., 2017).

Confirmability was demonstrated through the exploration of the process through which the final results were reached, and how these results were derived directly from the raw, collected data. Furthermore, confirmability was enhanced through the documentation and recording of the various steps in this research process. A reflexive journal which documented the subjective experiences of the researcher further promoted and enhanced the confirmability of the study. Guba and Lincoln (1989) noted that confirmability can be established through achieving the forementioned credibility, transferability, and dependability. In order to maintain clarity and transparency, this paper has provided justifications for theoretical, methodological, and analytical decisions made throughout the process of this study.

3.5 Ethical Considerations

3.5.1 Anonymity and Confidentiality

The guarantee of anonymity and confidentiality are crucial elements in research, particularly when exploring sensitive or stigmatised topics, as this study has done (Hoft, 2021). The elements of anonymity and confidentiality allow participants to express opinions and experiences which they

may have been reluctant to share had their identity been shared (Hoft, 2021). For these reasons, this study prioritised the element of anonymity and identity protection. Although anonymity could not be obtained absolutely, due to the nature of the interview process and the participant's identity being known by the interviewer, anonymity outside of the interview process was ensured through the use of pseudonyms which appeared as a randomized code. All identifying information, including elements of experiences shared during the interview, have been redacted to protect the identity of the participant. Confidentiality was ensured using password-protected data drives to store raw and processed data. Data were analysed using encrypted software on a device which is only accessed by the researcher, as well as the research supervisors. All data collected was not shared with any other persons, other than the reporting of findings collated in this document and with the research supervisors in order to enhance ethical compliance.

3.5.2 Risks and Mitigations

The risk of retraumatisation is present when discussing previous experiences of trauma (Carlson & Dalenberg, 2000), and due to the nature of this study, this risk is present in our study. The mitigation of the risk of retraumatisation was a high priority of this research study, which developed a five-step risk mitigation procedure.

1. The questions of the research study were developed to feel as least intrusive as possible, with a focus on mental health stigma rather than the details of particular traumatic experiences.

2. The Beck's Depression Inventory (BDI-II) and the PCL-C (PTSD Check List-Civilians) were each used to eliminate participants from the study who presented with depression and PTSD. Cut off for depression - 11-16 (Mild Mood Disturbance); cut off for PTSD - 30-44 (Moderate to Moderately High Severity of PTSD) (Beck et al., 1961; USDV, 2003).

3. Participants were provided with a copy of the interview guide detailing the extent of the questions which were to be asked during the interview. Participants were then asked to conduct a self-assessment as to whether the questions may be too intrusive or sensitive in nature, and whether they believed they would be able to emotionally cope with the content of the interview.
4. The risks of the study, including the risk of retraumatisation, was discussed with each participant, and a formal participant information sheet was provided to each potential participant beforehand.
5. A detailed distress protocol (Appendix I) was developed as a measure in the event that a participant experienced emotional distress during, or after the interview.
6. Counselling was made available to all participants of the study.

3.6 Research Limitations

Limitations and shortcomings are common in any research process and thus careful consideration of such shortfalls should be employed in order to provide clarity and transparency. Theofanidis and Fountouki (2018) note that it is vital that the researcher recognise such limitations through the careful analysis of each step of the research process. Several limitations were experienced throughout the course of the research process, primarily the less than desired number of participants, as well as the undesired degree of demographic diversity. Time was a factor contributing to the undesired number of participants, as ethical clearance as well as permission from institutional authorities was obtained later than anticipated which led to a constraint on the amount of time available to source participants and thus the study was limited in the number of individuals who participated in our research. While the study aimed for approximately 15-20 research participants, only seven were could be sourced in the given timeframe, totalling an overall data collection time of 10.5 hours. Even using a snowball sampling method, great difficulty was

found in reaching and obtaining participants from the organisations from which permission was obtained. Although a limited number of research participants were sourced, a fair degree of data saturation was reached through the detailed responses provided by the participants.

Cultural, racial, and gender diversity is a key aspect in the quest for thorough and applicable research inquiry. To obtain varying perspectives and experiences of those within diverse populations such as South Africa, it is vital to include the experiences and opinions of a culturally, racially and gender-balanced assortment of participants (Lyons et al., 2013). A lack of cultural and racial diversity was also found to be a major constraint of the study. Due to the difficulty in obtaining research participants, and thus the need to utilise a snowball sampling method, the desired level of diversity was unable to be achieved. As mentioned earlier in this chapter, utilising a purposive-snowball sampling method poses the risk of a homogenous population sample. Through the sampling process, as well as the stringent and restrictive screening measures utilised, difficulty in obtaining a racially and gender diverse population was found to be a major limitation of this study. While the study proposed a population sample which could account for various culturally, racially, and gender-diverse experiences of mental health stigma amongst South African paramedics, the study obtained a sample which, unexpectedly, did not meet the desired degree of diversity as the sample was comprised of six white, male paramedics and one white female paramedic. An important recommendation for future studies of a similar nature, is the use of alternative sampling methods which may allow the procurement of diverse populations for participation in the study.

3.7 Researcher Reflexivity

Positional Reflexivity

Researcher reflexivity is a vital aspect of rigour in qualitative research as the researcher, with their experiences and positional context, has an effect on the way in which the research is carried out, as well as the way in which the results are interpreted (Jamieson et al., 2022).

In order to provide further rigour in research, it is important that I considered my own positionality and the way in which this may influence the research process (Barrett et al., 2020). I acknowledge that my positionality as a white, female, cis-gendered, middle class, university student provides a specific lens through which to approach this research study. I considered how my positionality has shaped my perception of the world, the paramedical field, trauma, and mental health stigma, and how this may inform my understanding of the research topic.

Since many of the participants of this study were older, more experienced paramedical professionals, who are primarily male, I considered that the social dynamic of the researcher/participant encounter may be affected by this. As discussed in the literature review, the paramedical field is still one which is dominated by machoism hegemonic discourses. I did consider how my role as a female may influence the way in which older male participants may perceive me as the researcher, as well as the research itself. My lack of experience working within the medical field is also a factor which I considered a limitation to an open and transparent conversation with my participants. However, during the data collection phase, most participants displayed a willingness to open up about their experiences despite a difference in age range and professional experience. It appeared that participants were willing to share their experiences despite our various social differences.

During the data collection phase, it was important that I separated my training as a trauma counsellor with my training as a psychological researcher. While showing empathy for the participants' experiences of occupational stress and trauma may encourage a safe space for participants to share their experiences, it was important to do this in a controlled manner in order to prevent the research interview from becoming a counselling session. Additionally, in order to prevent bias in the interview process, I made use of other resources to formulate the interview guide by using questions similar to that of other studies with the same area of focus which allowed me to include questions of a more objective nature.

Furthermore, it is important to note that I had previously worked closely with paramedics and had witnessed many struggling with mental health issues such as depression, anxiety, substance use, and suicidal thoughts. These experiences would have inadvertently shaped the manner in which I came to understand the participant responses. My interest in the research topic arose from my work alongside paramedics and witnessing the high intensity of their work. During my time as a trauma counsellor within the paramedical profession I had witnessed the loss of two paramedics due to suicide, and many others who had clear struggles of their own. I had also witnessed the reluctance of many paramedics to receive adequate mental health care outside of the debriefing sessions they engaged in. Due to my own experiences with mental health stigma in the paramedical field, it was important to remain consistently aware of my interpretations of the results and consider whether they have been influenced through personal bias. Practising bias awareness involved listening carefully to the participant responses and checking with participants whether I had understood them correctly. During the analysis phase, it was important that I carefully read through the raw data in order to provide an impartial and balanced discussion of the results. The intention of the study was to provide a clear narrative of the difficulties within the

profession and highlight the need for improved mental health education and awareness in order to ameliorate the negative psychological effects of the profession.

3.8 Conclusion

The methods chosen in this research were selected with careful consideration and specific intent. Qualitative research methods were chosen in order to explore the experiences of paramedics, the data provided through a quantitative research design may have been too restrictive in providing detailed accounts of paramedics experiences of mental health stigma. The qualitative design chosen provided the ability for participants to express their opinions and beliefs around the topic. Interviews provided rich, extensive data which may have been lacking if questionnaires were used as the method of data collection. The chosen thematic analysis method provided the ability to understand the common themes and sub-themes of the data as a whole and provided the ability to understand similarities and differences among the various participant interviews. Ethical considerations, particularly that of informed consent and respect for persons, were a vital part of the integrity of the study. Protecting the anonymity and confidentiality of the research participant was crucial due to the sensitive nature of the research topic, as well as allowing the participants to share their experiences freely without fear of repercussion or stigma.

The following chapter will explore the findings of the study in relation to the research aims and objectives. Themes and sub-themes uncovered in the analysis are discussed in detail with consideration of the literature review and theoretical framework which underpins the foundation of the study.

Chapter Four: Findings and Discussion

4.1 Introduction

This research study's objective was to explore the lived experiences of South African paramedics, relating to mental health illness and stigma. The primary objective of the study was to explore the narratives of paramedics and unearth common themes between the experiences of several paramedics. Additionally, providing insights into the current status of mental health care and ways in which to improve current interventions formed part of the study's objectives. This chapter serves not only to report on the several narratives of the participants, but to also provide an interpretive component where various key concepts are extrapolated from the participants' lived experiences and narratives.

Data were collected from seven South African paramedics and the subsequent analysis is presented in this chapter. Chapter four begins with a brief discussion of the sample demographic information in order to provide a thorough contextual understanding of the following narratives discussed. A comprehensive reporting of the research findings is then presented in this chapter. Each primary theme and sub-themes are discussed with data extracts used to provide narrative evidence from the participants. Three primary themes were uncovered in the analysis process, including: Paramedical culture and discourse, paramedic perceptions of mental health & stigma, and recommended intervention strategies. Additionally, sub-themes are discussed and provide a more detailed and thorough understanding of the primary themes.

Chapter five will reflect on what recommendations could be gleaned from the study's data extracts and the analysis of these extracts. Several recommendations are discussed, including strategies for intervention, critiques of current interventions and resources, and recommendations for future studies.

4.2 Sample Demographics

The participant sample of this research study was comprised of seven South African paramedics. The age of the participant cohort ranged from 35-60 years. Most participants were male, with one female participant and six male participants. All of the seven participants were white individuals. Three participants were trained within the Critical Care Assistant qualification, two had qualified with a National Diploma in Emergency Medical Care and all were qualified as Advanced Life Support (ALS) practitioners. All participants were working in the private sector, however three had previously worked for public organisations in the paramedic field, and most participants had over 10 years' experience in the paramedic profession.

4.3 Overview of Major Themes and Sub-Themes

Three major themes and sub-themes were generated through the analysis process. The first theme extrapolated from the data was 'paramedical sub-culture and discourse', which considered the psychosocial environment of the profession. Sub-themes such as 'professional satisfaction', 'a sub-culture of emotional detachment', and 'status and reputation' were used to explore the context and culture of paramedics. The second theme, 'paramedic perceptions of mental health & stigma', explored the beliefs, opinions, and attitudes of paramedics with regard to mental health and stigma. Sub-themes uncovered in this theme include 'a profession based in trauma and occupational stress', 'coping with trauma', and 'perceptions and stigma of mental illness and treatment'. Finally, theme three, 'recommended intervention strategies', considered participants' critiques of current mental health interventions, as well as their suggestions for improvement. This theme included two sub-themes: 'critiques of current methods', and 'improvement of current interventions'.

4.4 Presentation of Findings

The following section focused on the exploration of the thematic findings while considering how they relate back to the study's research questions. This detailed analysis focuses on the perceptions of the study's participants and thus references specific data extracts in order to justify and support the conclusive remarks of the analysis. 'Paramedical sub-culture and discourse' is the first theme that is discussed, with the intent to provide social and occupational context and background to the overall lived experiences of paramedics. Culture and sub-culture exist within various professions, this study's first theme considers the sub-culture that exists within the paramedic profession and how this may influence the way trauma is experienced within members of the sub-culture. The second theme, 'paramedic perceptions of mental health and stigma' focuses on the primary objectives of the study by looking at paramedics' perceptions with regard to mental illness, treatment, and stigma. This theme explored the history of mental health stigma in the profession, as well at the status of stigma in the profession's current psychological climate. The third and final theme explored participants' critiques on currently available mental health support structures, as well as recommended improvements suggested by each of the participants.

4.4.1 Theme One: Paramedical Sub-Culture and Discourse

In order to fully conceptualise the state of mental health perceptions among paramedical staff, this study considered the social culture which impacts the underlying discourse which perpetuates and accumulates negative beliefs around mental health and treatment. Understanding the context which forms the backdrop of paramedics' lived experience is a crucial element in considering the destigmatisation of mental health and treatment. This theme looked at components of the paramedical sub-culture and discourse which guides the perceptions and behaviours of its members. These sub-themes include: 1) Professional satisfaction, which encompasses the positive aspects of the profession which not only draw individuals to the paramedic profession, but also

serve as motivation to stay within the profession despite its downfalls. 2) A culture of emotional detachment – aspects relating to machoism and male-dominated discourse are discussed in this sub-theme. Emotional detachment is common among paramedic staff, and the various reasons for this proliferation is discussed in further detail. 3) Status and reputation are discussed in the third sub-theme in paramedic culture. Participant narratives explored the importance of status and hierarchy within the paramedic sub-culture. Fear of loss of status and/or demotion in relation to mental health difficulties, and perceived "weakness" was a common thread which was expressed by several participants.

It is vital that one understands the belief systems ingrained in the paramedic sub-culture, which not only encourage but drive stigma and self-stigma among this population. Creating mental health strategies and interventions for this particular population involves a thorough understanding of the discourse which paramedics operate within. The first theme sought to provide a foundation for understanding the following themes, which is demonstrated and interpreted from participant experiences.

4.4.1.1 Professional Satisfaction.

Paramedics operate within an occupation-specific, socially constructed, set of schemas which construct the attributes under which paramedics are expected to operate. In reference to the data extracts, the profession appears to attract individuals who endorse similar core values and principles, such as altruism, stoicism, and heroism. A common thread connecting several of the research participants was the degree to which altruism was a major factor in profession-derived satisfaction related to the profession. Several participants expressed their professional fulfilment and sense of purpose as stemming from the ability to provide care and utilise life-saving skills to save lives. This was expressed by participant one, who expressed the best part of their job:

> "*The best part of being a paramedic is that moment that I get my patient. And that moment could be a smile. It could be a moment when I hold their hand. It could be a moment of reassurance. It could be a moment where I actually give them medication and help them. It could be a pain-free moment. It could be a moment to the mother of a child where I just say, 'your child is going to be okay'. Whatever that moment, however it presents, that is what I live for.*"
>
> - Participant 1

This extract explored the moments of positivity experienced in the paramedic profession. This is a common theme expressed by several participants which speaks to the positive emotions attached to helping others in their most dire moments. Participant one expressed that they "live for" the moments where their skill and ability provide the desired life-saving results, one could consider this as a method of providing purpose and meaning in their lives. This poignant extract resonates with the existential search for a meaningful and purpose-filled life is a desire which can be considered common across most human beings (Steger & Dik, 2009), and thus one might understand the magnitude of fulfilment which is derived through saving lives. Each patient that is presented to a paramedic presents the possibility of helping the patient as well as his or her family. Additionally, from this narrative, one might consider that the human aspects of the profession are the ones which provide a deeper sense of meaning and purpose. A smile, holding a patient's hand, informing a mother that her child will be alright – human-focussed aspects of the profession which are important in profession-derived satisfaction for participant one. Helping others is a mostly universal human characteristic, and one which provides meaning and purpose in life. Many professions do not have the capacity for instant fulfilment and professional satisfaction – emotions attached to life saving provides constant motivation to persist through professional difficulties and reason to persevere.

Encountering a situation in which they can provide hope and reassurance is a sentiment which is expressed often in the narratives of several participants, such as in the following data extract from participant three:

> "*The best part is you're making a difference in somebody's life that you don't know from a bar of soap. That is the best part. In EMS, it's to walk into an unknown person's house and you make a difference in their lives. It's sometimes just holding somebody's hand and telling them they're going to be alright or helping the little ones."*
>
> - Participant 3

This data extract offered a poignant contrast to consider when exploring the paramedic experience. While there is a heightened degree of intimacy involved in paramedics' relationships with their patients in a critical situation, the subjects of this relationship are essentially unknown to one another. The paramedic plays a critical role in their patient's life due to the nature of the situation in which the patients often find themselves vulnerable, powerless, and desperate.

Furthermore, participant three's narrative paralleled that of participant one as they discussed the ability to make a difference in a stranger's life as their point of professional satisfaction. Additionally, this narrative in also similar to participant one's extract, in that it emphasised the human experience that forms part of their clinical duties, such as holding the hand of a patient and providing reassurance. A similar notion was discussed by participant five, who further explored the fulfilment associated with helping others as a profession:

> "*Seeing work had a change in their medical condition. Whether it's a reduction in their pain from a traumatic incident or they start to feel better because of the medication that we've given, or just that they were able to get help and take them to a facility for help*."
>
> - Participant 5

Participant five expressed the positivity that comes from being able to provide a specialised skillset in order to make a difference in the health outcome of the patient. Being able to alleviate pain and suffering through providing the correct type of care or medication, or even being able to get the patient to a facility which could help them, is one of the most rewarding aspects of the profession. This extract further explored the desire to be needed and the power dynamic present in the paramedic-patient relationship. A paramedic holds the ability to alleviate pain, provide reassurance, and utilise their skills to prevent further injury or loss of life. In this way, paramedics exercise a unique form of power and control over the situation, themselves, and the patient. For some, this aspect of the profession could be one of the many reasons to pursue this career.

Most participants agreed on the most rewarding aspect of their profession – specifically, being able to provide hope and care to individuals in their most dire moments and being able to make a difference in a stranger's life. The following sub-theme will explore further beliefs and behaviours commonly found within the paramedical sub-culture which contribute to the overall perceptions of mental health and stigma. The primary aspect in focus is 'emotional detachment' which is both a common trait among paramedic personnel, as well as the result of desensitisation and coping mechanisms.

4.4.1.2. A Culture of Emotional Detachment.

The underlying or unspoken rules which guide members of a certain profession in behaviour, emotion, and thoughts; are those which construct the reality of such subjects (Saha & Kumar, 2018). While shared altruism and other positive attributes are those which connect many paramedics, various underlying socially constructed schemas have a profound effect on the way in which paramedics perceive themselves and others. The paramedic sub-culture is one which prioritises dedication, physical and psychological resilience, a hard work ethic, bravery, heroism, and the willingness to risk one's own life for the protection of the public they serve (Furness,

Hanson, & Spier, 2021). The idea of being "bullet proof", resilient to physical and psychological trauma, and emotionally detached from operational duties is one which can be found across numerous emergency medicine institutions, cultures, and societies. The idea of being "bullet proof" among the paramedical profession is illustrated in the narrative of participant two who described the following:

> "*You know, the old school 'we're the old firefighters, we're too tough to break, we're bullet proof.*"
>
> - Participant 2

The idea of being "bullet proof" speaks to the unrealistic expectation that paramedics should respond to cases with impenetrable emotional resilience. Participant six made use of the same term to describe the belief systems of paramedics:

> "*There's quite a strong belief in the EMS that, you know, we are bullet proof*"
>
> - Participant 6

Paramedics operate under a socially constructed ideology of ultra-resilience, a heightened capacity for dealing with trauma, and the ability to continue to operate with stoicism through even the highest degree of trauma (Crabbe et al., 2004). The immense pressure of performing a life-saving task coupled with the internalised perception that a paramedic should not be affected by their work was evident within paramedic sub-culture discourse. This concept is one which forms the foundation for understanding the psychological dynamics which drive paramedical culture and discourse. The analysis of the data in this study found that the idea of paramedics perceiving themselves as "bullet proof" ties in with attributes such as "getting on with the job", military/macho cultural idiosyncrasies, and containing emotions on duty. The idea of putting aside emotions and getting on with the job is one expressed by the participants. Presented below are

data extracts which suggest that “getting on with the job” is a vital concept within the paramedical culture.

> “*We’re too strong, and we bite the bullet, and we work our way through it*.”
>
> - Participant 4

Participant five expressed how paramedics are expected to behave after experiencing a traumatic incident, as well as the perceptions from colleagues and managers:

> “*In terms of our colleagues, it's, well, you know, they've got to find a way to deal with it but not let it become a problem. It's kind of “brush it off to the side, you’ve got work to do, carry on*.”
>
> - Participant 5

Here, participant five explained that paramedics are expected to “find a way to deal with it” and “brush it off to the side” while moving on to the next case or workload. Finding a way to deal with it, without affecting job performance, appeared as a common thread among participants who were asked about how paramedics with mental health difficulties are perceived within the profession. The notion of setting aside emotional experiences and getting on with the job is one which appears to tie in with the machoism cultural belief systems which dictate that masculine identities and male-dominated professions should rely on the ability to compartmentalise personal feelings around their operations, and forge on with bravery, and downplay the effects of their witnessed trauma (Linceviciute et al., 2022). To quote the above description of participant five, “brush it off to the side, you’ve got work to do, carry on”. This particular type of thinking sets the stage for later mental health stigma and discrimination of those experiencing psychological difficulties related to exposure to traumatic cases. The belief that to occupy membership in the profession, one should be able to set their emotions aside and “carry on”, perpetuates the self-driven belief

that mental health difficulties are a sign of weakness and incompetence. This further allows the discrimination of others with similar issues. The historically male-dominated paramedical profession, in which many members have transferred through to the profession from other male-dominated professions such as military and firefighting, which also elaborate the need for emergency professionals to be resilient, brave, honourable, and admirable – traits which are perceived to be possessed by those with an unwavering denial of traumatic effects and emotions (Linceviciute et al., 2022). The implicit understanding that each paramedic should be willing to put others before themselves while emotionally detaching themselves from their reality in order to protect and serve the lives of the public, is a concept which was explored by participant seven in the following extract:

> "*We don't know how to care for ourselves. We're not taught to do that. And somehow inherently, if you look at the people that have lasted longer in this profession than others, it's those, in my observation, that maybe just are able to shut out everybody else and everything else more than others. But we don't realize the damage we're doing to ourselves. In hindsight, the saddest thing of the profession is probably how we are killing ourselves to save others.*"
>
> - Participant 7

This extract, a painful reality depicted by participant seven, explored the contradiction of seeking to be a hero and help others, while simultaneously becoming a victim of trauma. Unrealistic expectations are perpetuated through popular discourse, and stigma. Additionally, participant seven described the ability to detach from reality and emotional experiences relating to cases as an ability which increases longevity within the profession. The above quote explored the harsh reality in which paramedics are taught the life-saving skills to help others, while their own psycho-educational needs are neglected. Participant seven also explained that many paramedics, often

unknowingly, sacrifice their own mental health in order to be the strength and skill required by patients. While the ability to detach from one's emotions may prove to be a useful trait in the paramedic profession, it undoubtedly has serious long-term mental health consequences. Participant seven expressed a poignant and impactful reality; "we are killing ourselves to save others".

Participant seven explored his use of compartmentalisation in the below extract:

> "*I've always tended to compartmentalize; I've always tended to ignore emotions and just go into robotic mode and just get through the crisis. Maybe because that's what the job's demanded of me but that's the person I became. So, me getting in touch with my emotions has been a traumatic journey on its own*."
>
> - Participant 7

This data extract emphasised participant seven's difficulty in expressing and connecting with his own emotions due to the continual compartmentalisation and avoidance of his emotions. Participant seven further mentioned that his feelings around detachment from emotions may be linked to the demands intertwined with the profession. Although it may be reasonable to conclude that paramedics will naturally employ a degree of psychological self-protection in the form of emotional attachment and avoidance, it is also important to consider that this ideology may be emphasised and further encouraged, beyond natural self-preservation levels, by systems that wish to lessen the number of paramedics dealing with mental health issues and ensuring a continuation of the notion of impenetrable work force. Paramedics operate within a discourse which does not permit the expression of emotion, or rather, the discouragement of emotional expression as this may be perceived as a sign of weakness and incompetence, further illustrating the concern of emotional detachment and the minimisation of distress. Moreover, participant seven further

discussed the difficulty he experienced with getting in touch with his emotions. While this may be a consequence of the discourse around paramedics and emotional detachment, difficulties in emotional expression may also be linked to the defences most commonly used by paramedics in order to shut out and prevent the reexperiencing of trauma. In a study conducted by Grevin (1996) denial and repression were found to be significantly high in paramedics in comparison with normative samples, and regression and reaction formation scores significantly lower.

An important aspect to take into consideration is the personality traits of individuals drawn into the profession. As paramedic work is known to be a physically and emotionally demanding profession, it requires a particular type of person, with specific personality traits. Mitchell (1983), well-known for his extensive work in the emergency response field and founder of the Critical Incident Stress Debriefing model, suggested that paramedics have a distinct "rescue personality" which is characterised by high levels of dedication, perseverance, and perfectionism. Some individuals who decide to become paramedics may already be emotionally detached to some degree, and the need to withdraw from emotions relating to cases may encourage an individual to choose a career in emergency medicine. For example, the paramedic profession includes a powerful role in being a rescuer or a hero, these professional attributes may appeal more to individuals who have higher degrees of narcissistic traits where empathy is not a priority and control is part of the job. Grevin (1996) found paramedics, and paramedic students, scored significantly lower on empathy, and suggested that paramedics may have a predisposition to personality traits which do not prioritise empathy. In a persistently stressful work environment, low empathy, high resilience to stress, and the need for control may serve as functionally adaptive coping mechanisms (Grevin, 1996). It is worth noting that the saviour culture within the paramedic industry may serve as a defense against the difficult realities which paramedics face. Patients who require the skills of a paramedic are often in critical condition, and the odds in certain situations

are weighted against the responding paramedics. There are likely to be more cases of loss, pain, and death and thus an impossible expectation is often placed on the paramedic. Certain traits may serve in shielding paramedics from sustaining acute levels of secondary or vicarious trauma.

An example of lower degrees of empathy was shown in the way some paramedics make use of 'dark humour' in order to further detach emotionally from their difficult cases. Participant five and participant six showed the two differing schools of thought within the paramedic sub-culture with relation to dark humour:

> *"I can say there are individuals that use dark. Definitely, at my base, I also work on the helicopter service and there are certain individuals there that.. dark humour definitely is a way they deal with situations. Um,.. not all of us refer to dark humour but there are definitely individuals who do. It is quite prevalent within my circles. It's not like.. I can say there's an even split between this group and that group, but it is it is noticeable"*

- Participant 5

This participant explored the use of dark humour within the profession, explaining that while not all paramedics refer to dark humour, there are individuals who do make use of this form of release which is apparent to others. The differentiation, between those in the profession who do refer to dark humour as opposed to those who do not, may come down to the degree of empathy, compassion, and coping mechanisms within the individual. Dark humour is referred to as a mechanism of coping whereby individual makes light of certain taboo subjects which are difficult or painful to discuss Daubney (2019).

> *"I think one of the things that we learned very early on, and it's going to come out wrong ... was to sort of ... how can I say it ... make laughter of it. Not joke at the person but make jokes afterwards and crack a couple jokes or whatever else. Like to give you an example,*

let's say you go to an accident and the guy's leg is amputated, afterwards they'd say, 'yeah he shouldn't to go to court because he doesn't have a leg to stand on'. So, you know ... it's wrong but it does help, and I think what it does is it entices talking about the incident."

- Participant 6

Participant six provided a different perspective through his explanation of his use of dark humour within the profession. This quote explored dark humour through the direct experience of participant six, who explained that dark humour is utilised to entice conversation. Dark humour is also considered to be a coping mechanism used to express unconscious or conscious emotions that are difficult to express directly, it is an outlet mechanism which allows emotional release without the risk of being stigmatised (Daubney, 2019). Participant five and six disagreed on whether dark humour is helpful or harmful:

"I think it's bad from my side, but we never do it in front of the patients or people, we only do it afterwards ... If a guy gets laughter out of it at least he's getting rid of some emotion and then he goes home and cries, obviously we won't know about that. I think getting out of some emotion is good, whether it be happiness, sadness, whatever else. So, I do think the dark humour helps. I don't think it's a long-term fix ... um, it's like a patch job to get someone talking and then hopefully it'll take off from there".

- Participant 6

While the above narrative of participant six stated that he believed that it is a negative reaction from his perception, he asserted that any emotional release is positive. Although he realised it is a short-term fix, he made a point to express that it is an entry point to further intervention. Dark humour may serve its purpose as a means for emotional release, as well as an opening for further discussion, it may also perpetuate stigma as paramedics internalise such rhetoric about patients,

and may self-stigmatise due to these internalised belief systems. According to Figure 1., "Perceived Stigma" forms part of a shared ideology between the stigmatised and the stigmatiser. Paramedics engaging in the use of dark humour may experience some relief, however they may be internalising negative attitudes to those in need of assistance. Participant five further expressed his opinion of dark humour and emphasised the lack of sensitivity that it shows:

> *"My opinion is that it's actually harmful. Yes, we, in a way, we're trying to find a way to deal with a traumatic event, but we become insensitive to the fact that there was family as well and not ... they might not be around, but it's still not showing sensitivity to other individuals or the patient themselves. Um, if it comes from a specific situation, in general, I think it's just this desensitized, um, way of being social and it really doesn't hold up, it doesn't sit well, from my perspective, as well as individuals who don't engage in that kind of conversation".*

- Participant 5

Some behaviours which may be considered methods of coping for some, may add additional hindrances to help-seeking within the profession. Being detached from one's emotions, as well as encompassing a certain degree of insensitivity, may further exacerbate self-directed stigma and stigma of others. Another deterrent for help-seeking is presented in the following sub-theme.

4.4.1.3. Status and Reputation.

In connection with the above sub-themes lies an ingrained cultural belief of maintaining reputation and status within the profession. The paramedical hierarchy is one which relies heavily on the maintenance of status quo ideologies to prevent loss of status and reputation within the profession. Several participants argued the existence of the ingrained belief systems which emphasised the perceived risk to one's reputation and fear of losing status:

> "*Everybody in the EMS is so competitive and everybody is so scared that their reputation is going to be run down because they're attacked as to being perceived as weak. So, that might be an idea is getting into the companies and actually recommending mental health days and removing that stigmatism*."
>
> - Participant 1

Participant one highlighted the competitive nature of paramedics and their fear of appearing as though they are unable to cope with the trauma and challenges in the profession. The extract associated the fear of status and reputation loss with stigma as the internalised stigma belief systems, which dictate that those who experience emotional responses to traumatic cases are weak, incompetent, and are unable to perform their duties at the sufficient standard. Various intersecting factors intertwine and culminate in the totality of stigma within the paramedic profession (Fox et al., 2018). Fear of loss of status and reputation appeared to be one of the primary concerns of participants who expressed fear of prejudice and discrimination. Concerns of loss of status may prevent paramedics from seeking mental health treatment for fear that breach of confidentiality may result in them appearing incompetent and unsuited for the profession. Furthermore, this participant suggested that mandated "mental status review" for all paramedics within a given timeframe may be beneficial if recommended by the organisation itself. He further elaborated that this may be a successful way in dealing with the destigmatisation of mental health concerns among paramedics. The suggestion of a regular "mental status review" may assist paramedics in becoming more comfortable with counselling and therapy, while simultaneously removing the stigma of being singled out for choosing to received mental health care. However, it is important to consider that mental health care is most effective when an individual makes the conscious decision to receive help, rather than being mandated to it (Hachtel et al., 2019). While this suggestion may provide an opportunity for individuals who were considering receiving mental health care but were concerned about others' perceptions of them, it may also prove to be

damaging to individuals who do not wish to receive mental health counselling but rather are obligated to do so. While mandated therapy might raise numerous concerns among some, the idea that all paramedics attend a mental status review in order to remove the destigmatising "choice" of attending professional mental health care is interesting to consider. Although it may not be possible to enforce such an intervention, the concept may provide insights into how stigma operates within this profession. Participant four succinctly described the fear of loss of status and perceived reputation risk linked to accessing mental health care in the following data excerpt:

> "*I'd like to think that, number one, that you're not going to lose your license. That's something that the guys are scared of ... pretty, pretty frightened of. And they think that they'll be put on medication. And then they'll be booked ... not on sick leave ... they'll be boarded. That they can't cope and then they'll lose their license. So that's one thing. The other thing is if they will be ... their colleagues won't look down upon them. So that'll help them also get help*."
>
> - Participant 4

The above extract provided by participant four, speaks to a tremendous amount of fear within the paramedic profession. There is a fear in some paramedics, of professional repercussions if found to not be coping adequately, and a fear of not being able to continue their work. Such paramedics may perceive their jobs, and subsequently their livelihoods, as being threatened by their ability or inability to cope with the day-to-day trauma that they experience. Additionally, their self-perceived strength is also threatened by their manner and degree of coping, whereby any acknowledgment of mental health difficulties may degrade their self-perception of emotional strength and resilience. The following narrative of participant six who explored what would encourage and facilitate paramedics seeking mental health care:

> "*So, you mustn't feel like you're a bad person because you're asking for help now. You should be ... at any time you can be asking for help, and you wouldn't be frowned upon by your colleagues or frowned upon by a manager or anything like that*."
>
> - Participant 6

There is a clear theme presented in the above participant narratives which suggests that a large part of paramedical culture is structured around reputation and status which almost acts as a particular source of capital within the profession. The fear of being looked down upon by managers and peers appeared throughout the narratives of the participants. A reasonable assumption can be made that paramedics deciding not to seek mental health care when it is needed is due, in part, to the belief that they would be perceived differently than they were before seeking treatment, and that they would be considered inferior and incompetent in their professional role.

4.4.2 Theme Two: Paramedic Perceptions of Mental Health and Stigma

The second primary theme unearthed in the analysis of data evolved through focus on the research objectives. While theme one provided important context and background into the socially constructed schemas which impact paramedics' thoughts and behaviours, the following theme explored the social climate within the paramedic profession with regards to perceptions around mental illness and treatment, and specifically, the perceptions of mental difficulties among paramedics. This theme fulfilled the research objectives which sought to understand the extent of mental health stigma within the paramedical profession, as well as the overt and covert factors which perpetuate the degree of stigma present within the participants' narratives. As the participant narratives are discussed, the Mental Illness Stigma Framework (Fox et al., 2018) is considered throughout. In attempting to understand these experiences, the MISF provides a foundation from which to conceptualise how stigma is promoted and proliferated within the profession. It is also vital to consider the important role of intersectional characteristics, including

socio-economic status, age, race, gender, and mental illness type, in furthering the production or reduction of stigma. For example, male participants may experience higher degrees of mental illness stigma due to the machoistic cultural belief that men should operate with higher emotional resilience than women.

4.4.2.1. A Profession Based in Trauma and Occupational Stress.

Trauma and high stress form a large part of the day-to-day duties of a paramedic. In order to fully conceptualise the mental health perceptions of paramedics, the degree and type of trauma which paramedics face in their day-to-day lived experiences should first be considered. As some may expect, the most frequent response with regard to the worst part of being a paramedic, was death and specifically the death of children.

"*The worst part is death. Death of children. I hate it*."

- Participant 1

"*We had two MVAs on the road - lost four children in two accidents, and that kicked a hell of a chain off in me, that was … it wasn't nice. That actually became the reason why I became ALS, because I wanted to do something for the kids that I couldn't do anything for. That was ... they were basically dying in front of me, and I couldn't do anything*."

- Participant 2

"Yes, in a sense, it does affect me. And in my experiences, obviously when it comes to the little ones, to kids, the defenceless, still can't fend for themselves - they either get injured in motor vehicle accidents or get murdered by the parents, and in the elderly. So, when it comes to kiddies especially. It affects me, especially when it comes to the little ones."

- Participant 3

The witnessing of death and serious injury are two of the primary criteria described in the DSM-TR diagnostic criteria for PTSD: Criterion A – "Exposure to actual or threatened death, serious injury, or sexual violence" (APA, 2022). It could be argued that paramedics are exposed to all three types of factors that contribute to traumatic stress on a regular basis, and with a higher degree of intensity in comparison with the type and frequency of trauma experienced by the public. The high frequency and intensity of trauma experienced by paramedics places them in a vulnerable profession which may be at higher risk of developing mental health difficulties (Grevin, 1996). In addition to mental health disorders, paramedics experience significantly higher rates of suicide compared to the general public due to increased levels of acute, chronic stress and trauma (Vigil et al., 2019). Additionally, high rates of depression, anxiety, and substance use and abuse increase the risk of suicide (Vigil et al., 2019). Two participants described their experiences with losing a colleague to suicide:

> "*We've had in the last two, three months, we've probably had four or five suicides within EMS.*"

- Participant 1

  "Unfortunately, I've lost quite a few in my career, due to suicide."
- Participant 3

While the above participants did not elaborate on the colleagues they had lost to suicide, it may be considered that the suicide of a peer may certainly contribute to the overall psychological trauma experienced in this profession. These extracts are interesting in that the participants did not elaborate on their experiences of colleague suicide which may be attributed to the difficulty in expressing the emotional impact of such situations. The elements of denial and repression, as found by Grevin (1996) to be popular coping mechanisms within the profession, may present themselves as a means to cope with the emotional trauma of losing a colleague in such a manner.

Paramedics face a number of traumas which they may feel are difficult to discuss or elaborate on and this may have serious consequences for their mental health (Sadock et al., 2015).

In addition to the witnessing of death, serious injury, and illness; the paramedic profession experiences a number of other factors which contribute to overall occupational-stress and trauma. Participant one explored the sleep-related difficulties experienced as a direct cause of the nature of paramedicine:

> "*I would put it down to starting off the hours we work. In some instances, staff are expected to work really, really long, excessive hours. There are no regulations on the hours that you're allowed to work. If they get behind cars, they are expected to respond to patients after being on duty for hours with very interrupted sleep breaks. So, you sleep for 20 minutes, you wake up, you might sleep for an hour, and you wake up. There's no natural 6 hours of sleep and healing even in that … Energy drinks are so freely available, and they are really, really used a lot by the profession, because you are expected to perform. And I'll give you an example, I fly for a service where if you're a pilot, you can be on duty for X amount of hours. If you go on a call into Africa and you fly for more than 8 hours, they have to swap pilots over, but the paramedics don't swap – the paramedics are expected to go on. So, there's no governing how long a medical person can work for before they need to go and have healthy sleep.*"
>
> - Participant 1

If we consider the detrimental effects on the body and mind caused by a lack of adequate sleep, it can be concluded that the strain of shift work and disrupted sleep patterns may add to the overall psychological effects of paramedical work. Referring back to the Effort-Reward Imbalance model of occupational stress, it can be noted that the difficulties of shift work and disrupted sleep patterns may contribute to a high effort workload which is not offset by high professional rewards.

Paramedics are expected to sacrifice much of their time and energy in their profession, without the promise of high rewards such as higher remuneration, or promotion prospects. The imbalance of effort and reward within this profession, as well as the witnessing of extreme trauma culminates in the development and progression of unhealthy coping mechanisms (Gilbert-Ouimet et al., 2011). Poor sleep habits were common among paramedics due to the rotational shift work, and disrupted sleep cycles which accompanied the demands of the profession. Disrupted sleep patterns have been extensively researched and have proven negative effects on mood and cognition (Simon et al., 2020). In addition, lack of sleep has been linked to decreased cognitive functioning, and emotional regulation (Simon et al., 2020). An Australian study conducted by Khan et al. (2020) measured the relationship between shift work and mental health disorders among paramedics. The study found that the population sample of 136 paramedics had higher prevalence of shift-work sleep disorders, insomnia symptoms, and narcolepsy in comparison with the general population. In addition, inadequate levels of sleep were more prevalent among paramedics in comparison with the general population. Furthermore, the study concluded higher levels of depression, anxiety, and PTSD disorders and generally poorer health and wellbeing compared to the general population. Khan et al. (2020) suggest that shift work disrupts the natural sleep cycle which subsequently results in sleep deprivation and increased risk for mental health concerns.

In conjunction with substance use and abuse, unhealthy sleep habits, and eating habits, the overall lifestyle of many paramedics may have damaging effects on their physical and mental health and wellness (Sadock et al., 2015). Harrington et al. (2010) conducted an analysis of the relationship between four protective lifestyle habits and overall mental health and wellness. Results of the study indicated that participants who engaged in the four protective lifestyle habits were less likely to experience mental health issues in comparison with those who did not meet the required four protective lifestyle behaviours. Furthermore, Velten et al. (2014) discovered that

higher unhealthy lifestyle scores were positively correlated with increased levels of poor mental health disorders such as depression and anxiety. Thus, paramedics' unhealthy lifestyle habits, and use of substances may contribute to the high levels of mental health concerns within this group.

4.4.2.2. Coping with Trauma.

When considering paramedical culture and discourse, it may be useful to first consider the pressure placed on paramedics from the very start of their careers, and what coping mechanisms are frequently used. Participant four described the immense pressure placed on new graduates who entered the field of paramedicine and turned to illicitly using their own medications in order to cope:

> "*There's so much stress on the students to get through first, second, third, and fourth year and qualify. And then get a job. And as soon as they become paramedics, they get a job as a manager, and they're still trying to figure out how to be a paramedic, so they don't cope with that sort of stuff and then they fall apart. And then they end up crying. And it's something that we see, unfortunately quite often, is that they get into their own drug bags, um, or they just become unmanageable, you know, they become angry and angry at everything*."
>
> - Participant 4

The above data extract conveyed the overall unhealthy coping mechanisms used to deal with both occupational and social stress among paramedics. It is also worth noting the inadequate measures used by organisations to monitor and control access to medication and substance abuse. The above data extract unpacks the methods used by paramedics, particularly paramedics new to the field, in order to cope with the immense pressure and responsibility that the job entails.

Substance abuse is a method of coping which is commonly found in the profession (Abhishek & Balamurugan, 2023). Substance abuse and trauma have been closely linked in various studies. Trauma may produce debilitating symptoms in victims and witnesses which are often difficult to live with. Substance use allows a degree of escapism for an individual suffering with symptoms of trauma (Hichisson & Corkery, 2020). Paramedic one discussed the use of both legal and illicit substances in the profession:

> "*I think the next line I would key would be abuse – abuse of substances. The amount of smoking, the amount of coffees and Red Bulls and then that's the legal stuff, and then move towards the more illegal stuff that alcohol, the drugs. It's there, it's happening. That obviously doesn't lead to a healthy lifestyle. Then on top of it, half the EMS is so overweight that they are physically unhealthy which doesn't help*."
>
> - Participant 1

While substance use and abuse may alleviate common symptoms of trauma, this maladaptive coping technique often prevents the individual from processing the trauma and rather repressing the trauma through escapism and distraction (Warren-James et al., 2022). Paramedics who make use of alcohol and other drugs, including drugs which they have direct access to, may often do so as a way of escaping the harsh realities which they face, as well as the subsequent symptoms such as intrusive thoughts, flashbacks, nightmares, anxiety, and depression (Sadock et al., 2015). The paramedic profession encompasses many unrealistic expectations and more opportunity for critical failure than other professions – a small mistake within the profession may make the difference between survival and death (Lucas et al., 2019). As mental health stigma within the profession is high, and paramedics share an internalised fear of rejection and discrimination if they were to admit to their own suffering, some paramedics may see no other way to cope. Dealing with failure, including the death of patients, bearing witness to gruesome pain and injury, and

believing that you are supposed to be able to handle the emotional results of this and carry on, are the main factors which push paramedics to numb their emotions and ultimately repress them (Abhishek & Balamurugan, 2023). In some cases, the use of substances becomes the primary source for symptom alleviation whereby individuals struggle to cope without their chosen substance (Hichisson & Corkery, 2020). Addiction to substances and use of substances while on shift may occur in individuals who are unable to find healthier methods of coping, which ultimately poses an immense risk to the life of the paramedic, as well as their colleagues and patients. The highly skilled nature of the profession requires paramedics to perform their duties while clear minded, and thus the use and abuse of substances is a counterproductive and maladaptive method of coping (Abhishek & Balamurugan, 2023).

Additionally, many participants expressed that discussing their difficult cases, whether it be with a colleague or family and/or friends, was the most effective way of dealing with trauma:

> "*So, the first thing I learned to do from my trauma counsellor is to talk. So I do a lot of talking, especially if there's been a traumatic case, I'll go to my colleagues – I've got specific colleagues I feel comfortable talking to, and I talk. I speak to my boyfriend, and believe it or not, my mom is very, very good – although she's not in medicine. So, for me, talking has been the best*."

- Participant 1

With the notion of "talking through trauma" deemed an effective method of coping with the daily trauma experienced by paramedics, an assumption could be made about the value of talking therapy with regard to assisting paramedics in the improvement of their mental health, particularly after a traumatic case. As participant one is a woman, she may find it easier to open up and discuss her emotions (River & Flood, 2021). It is also important to take note of the informal manner in

which this form of coping occurs. When discussing current methods of coping as well as recommendations for future interventions, participants highlighted the benefit of informal support.

> *"We've become a part of one another's support structures, informal support structures. So she'll bounce stuff off of me I can bounce stuff off of her. But there's no judgment. But we do keep one another honest, and we do hold one another accountable."*
>
> - Participant 7

Participant seven highlighted the importance of having informal support. The ability to hold one another accountable to each other's mental health and is an important function in mental health and wellness. Debriefing could be considered a specific form of informal support. Debriefing with colleagues after a serious call is one of the primary methods of clinical checking and, at times, psychological examination of crew. Participants described their experiences with debriefing sessions following a traumatic case, and mostly found them to be helpful in the reduction of self-questioning or self-doubt. The setting is described as semi-informal, with an emphasis on the decisions made during the treatment of the patient(s), the overall outcome of the patient(s), and what could be done in the future to improve treatment. Participant three detailed the purpose and process of debriefing after a serious case in the following extract:

> "*Sometimes it's on the scene, so, so now and again it's quite a small group. So it's the two pilots and the two paramedics. And then we'll run through 'alright, we got activated …' so we start from the beginning 'til the time we had to now declare the patient dead. And then we'll, we'll discuss 'right we were on time, we had all the necessary equipment, we used protocols', when we resuscitated, in this case, the child - we did everything to our best knowledge, everything to our best care. We've got ... because we do advanced life support, advanced cardiac life support and there's algorithms that you follow, and we*

ensure between the two paramedics that we have followed each and every step, even during resus, we say 'listen, are we following this right? Yes, we are doing this right, doing that right; everything they tried'. So we recall the whole call and discuss it and ensure that in ... so there's no turning around to ourselves and blaming say 'Oh, but we could have done this, or we could have done this', so we get it out there in the open, right there and then before we leave. If the scene doesn't permit you to do a debriefing then that will happen once back at base."

- Participant 3

It is notable that debriefing is conducted not only for the purposes of clinical improvement, but also as a precursive measure to combat feelings of self-blame and guilt associated with loss of a life. The concept relies on the member-checking process, whereby actions and decisions made by the crew are validated by each member of the team, and emphasised as a professional, calculated, and joint decision made by all. A psychologically focussed debriefing session, moderated with the objective perception of an outside mental health professional, may further decrease feelings of self-blame and guilt, and increase levels of resilience and emotional processing within paramedical crews (Burns, 2016). It is important to consider the needs of each individual within a crew debriefing session, and while a session is best conducted with as many individuals present at the scene as possible. Burns (2016) explained that mandatory engagement in such may increase negative attitudes around the case and may potentially undermine the experience for others who find the process helpful.

While informal support is vital to the promotion of mental health, formal treatment has also shown success in some participants. Participant seven expressed his success with being exposed to a specific emotion-focussed therapeutic modality, namely Dialectical Behavioural Therapy (DBT):

> "*Getting introduced to DBT that's probably the biggest difference in my life. Um ... just sessions of sitting and understanding, you know, discussing emotions, discussing perceptions, and getting to the realization that, you know, I wasn't loopy, I wasn't the only person on the planet feeling this way because of this. Other people had gone through different experiences but felt the same*."
>
> - Participant 7

Various forms of talking therapy have been used to assist in the treatment of numerous psychological disorders, such as: depression, anxiety, and PTSD (Sadock et al., 2015). Thus, participants emphasised the benefits of talking as a means of coping is an important aspect to reflect when considering possible intervention strategies.

While talking may be a primary source of coping for paramedics, further emphasis is placed on the degree of understanding of paramedic-related traumas within the person or confidante. Some participants stressed the need for a counsellor or mental health care provider to understand the role of a paramedic, as well as the nature of their experiences:

> "*We used something called an 'employee assistance programme' where you could phone and speak to a person and that person would counsel and work with you. But it was done by a person who had no understanding of what happens pre-hospitally, so she was employed into the position as a counsellor, and I know counsellors are generic, but she'd never actually been on the road. Never been at a car accident or never been at someone who just died. So, it was difficult to talk ... I don't want my counsellor to be traumatised by death, in order to counsel me. But I do feel that they need to have some understanding of what we do*."
>
> - Participant 1

Participant one explored the difficulty she faced in having to discuss the trauma within the profession with a counsellor who did not have a full understanding of the paramedic field. There was a strong need to have a counsellor or therapist who was familiar with the day-to-day traumas which paramedics face. This may be due to paramedics not wanting to affect others outside of the profession with their own trauma (Wheatear &Erasmus, 2017).

> "*I know it's not always possible, is to have the mental health person … to come and work with us on the road. So, when we do get that bad call, you can see how we react to it, how we act.*"

- Participant 3

> *"I think, just listening to friends and colleagues in the past, you know, they wouldn't go see a professional person because 'what do they know about the job that I do?'"*

- Participant 4

The above extracts explored how it might be important for mental health practitioners to witness how paramedics respond to certain situation and will therefore be better equipped to treat them. Paramedics may find it difficult to open up to people who are not a member of the profession and therefore having specific knowledge about the pre-hospital care environment appeared to be important to these participants. This too could be an important point of consideration when reflecting on possible mental health care strategies for paramedics. Mental health services tailored to the unique professional role of paramedics and the occupational environment they work in may be perceived as more beneficial. Additionally, this may also reflect the degree of stigma related to mental health care and professionals as the need to be understood within the context of their professional duties appeared to be of high importance to many paramedics (Fox et al., 2018).

4.4.2.3. Perceptions and Stigma of Mental Illness and Treatment.

In order to fulfil the research objectives, structuring of the interview guide was based around obtaining participants perceptions of mental health, paramedics afflicted with mental health difficulties, and their perceptions of other paramedics' ideas around these topics. Participants were asked about perceptions of psychiatric patients, and mental difficulties among colleagues, within the paramedical culture:

> *"PTSD and depression have always been kind of frowned upon, brushed aside, we don't want anything to do with it because you have this perspective that makes you a weak person, you can't handle the trauma"*
>
> - Participant 5

Participant five spoke to the historically negative perception of depression which influences the belief that those afflicted are weaker, and unable to dope with trauma. This statement supports the idea that mental illness is frowned upon within the paramedic community, and this could pose as a major deterrent for help-seeking.

> "*So the patient's ... um, probably not seen in a good light amongst the EMS, but I mean, they treat them quiet professionally.*"
>
> - Participant 4
>
> "*If it's with patients, it's kind of, 'they're a mental case there's nothing that can be done, or they don't want to seek the help and that's why the situation ... it's almost blaming the patient for their condition and without realising that there's a whole lot more behind it*."
>
> - Participant 5

Psychiatric patients are also not viewed in a positive light within the profession. In the above extracts, participants four and five both explored the beliefs around patients with mental illness. While patients might be treated "quite professionally", it is important to consider the overarching effect this may have on paramedics' perceptions of mental illness as a whole. Additionally, this data extract is interesting as it mentions a degree of blame which is assigned to the patient suffering from mental distress – "they don't want to seek the help and that's why the situation". Blaming the patient for their mental distress may occur in paramedics with lower degrees of empathy and emotional detachment and may also represent a form of projection in some cases (Vigil et al., 2019).

> "*If we're talking about patients we go "oh hell we've got a fight on our hands again". That's the normal psych patient, doesn't want to go into hospital; or they are completely off their rocker and you have to maintain them and you look at the psych patients like "oh jeez, we're going to fight", and it is violent. You need the cops and the whole thing like that."*
>
> - Participant 2

Participant two paints a picture of contempt for psychiatric patients, among paramedical staff. The psychiatric patient is described as often violent, against being admitted to hospital, and an inevitable "fight". It is important to consider, however, that psychiatric cases attended by paramedics are often the result of patients with severe mental illness, or in a state of serious mental distress. Paramedics are unlikely to be exposed to individuals with mental health symptoms on the lower end of the intensity spectrum, and thus are only exposed to the most severe cases including psychosis, delirium, suicidality, etc. It could be expected that exposure to only severe forms of mental illness my inflict bias towards paramedics' perception of mental illness (Vigil et al., 2019). Referring back to the Mental Illness Stigma Framework (Fox et al., 2018), the

stereotyping of mentally ill individuals produces outcomes such as social discrimination and rejection within the paramedical profession, which furthers self-stigma and stigma of others. Furthermore, participant two further described the frustration experienced by paramedics in working alongside a paramedic suffering from some form of mental health issue. A fear of triggering the individual is noted by the participant, which may understandably cause added stress to duties. It is worth mentioning that the participant did not explore feelings of empathy regarding those suffering from a psychological difficulty, which may be attributed to some degree of compassionate desensitisation (Sadock et al., 2015). This experience of prejudice further promotes outcomes such as social rejection and discrimination of the stigmatised individual.

> "*As the years went on, and obviously studies and research and all of that, you start realizing that there are really people out there that can't deal with, with stresses in life, and with trauma in life. And that's why they are like they are. And, you know, your treatment regime towards your patients became so much more proficient and so much more caring, put it that way; than just 'oh this is just another crazy person'. You actually started listening and sitting down and trying to ... look if they weren't suicidal ... if they just needed somebody to talk to - you helped*."

- Participant 3

This extract described how perception of mental illness has changed as time has passed and further research has been conducted and awareness increased. The participant expanded on this and described the improvement in care for psychiatric patients due to improved understanding of psychological disorders. Increasing awareness around mental health illnesses and treatment has potential to improve not only the care provided to psychiatric patients, but to patients of all ailments. Equipping paramedics with basic mental health knowledge, skills, and tools, may increase overall feelings of empathy for all patients (McCann et al., 2018). The above data extract

highlighted the importance of information and knowledge transfer which encourages tolerance, understanding, and compassion.

Furthermore, participants' perceptions of paramedical colleagues afflicted with mental health difficulties showed mixed reviews:

> "*We try and refer them or at least you try and refer them for help. You don't treat them any differently because at the end of the day we still have to do a job. So we try and speak management, from my side, I try to recommend them to management*."
>
> - Participant 4
>
> *"As crew and staff, yes, it's a difficult one to answer. You've got a person with a psych issue, what's going to happen today? What's going to kick them off today? What's going to happen that they go into a freak and burst out crying? And do you need to manage this person now because they can't see patients?"*
>
> - Participant 2

While participant four expressed dealing with colleagues suffering from mental health difficulties with respect and assistance where possible. In contrast, participant two suggested a degree of frustration, indifference, and the perception of the afflicted individual as a nuisance and hindrance in operational duties. From these statements, the perception of stigma, as illustrated by Fox et al. (2018), is perpetuated through stereotyping, prejudice, and discrimination. Overall, it appeared that paramedics with mental illness are stereotyped and discriminated against. In the extract below, participant five explained that paramedics who have been affected by traumatic cases are expected to "find a way to deal with it".

> "*In terms of our colleagues, it's, well, you know, they've got to find a way to deal with it but not let it become a problem. It's kind of "brush it off to the side, you've got work to do,*

carry on' … Just historically within the emergency services, so that includes the police service and its various divisions, the fire service and then the pre–hospital emergency medicine service, um, PTSD and depression has always been kind of frowned upon, brushed aside, we don't want anything to do with it because if you have this perspective that makes you a weak person, you can't handle the trauma."

- Participant 5

Referring back to the Mental Illness Stigma Framework (Fox et al., 2018), the above data extract speaks to the perspectives of the stigmatiser, as well as the perspectives of the stigmatised. This data extract explored the various stereotypes, prejudices, and discrimination produced by the stigmatisers, and the effects experienced by the stigmatised paramedics with regard to internalised stigma, anticipated stigma, and experienced stigma (Fox et al., 2018). The perspectives and behaviours of the stigmatisers lead to the internalised beliefs of the stigmatised, as well as the stigmatisers. Once the belief that one is weak if he or she experiences a mental health problem, the individual experiencing such mental health difficulties can internalise this belief, and the individual/s perpetuating this belief also internalise it themselves. This leads to a proliferation of negative beliefs and stigma within the institution which leads to outcomes such as social rejection, and delayed treatment seeking (Fox et al., 2018).

Stigma around the *treatment* of mental health issues is a separate obstacle to stigma around mental illness. Some participants were unable to see the value of discussing occupational difficulties with a mental health professional:

"*You're going to go and tell somebody, a complete stranger ... and I think it was maybe it's just that you could be put in boxes. You look at them and think, 'you're probably just going to sit there, take a whole lot of notes, charge a lot of money at the end of it. And you*

don't walk out any wiser, or you don't feel different. So why should you do it? So it was never explored from my side."

- Participant 4

Reflected within this narrative is the attitude of distrust in currently available mental health support, which is further explored in theme three. The participant explored their hesitance to share their experiences with a stranger in the belief that it wouldn't be able to make a difference. Depending in the degree of frequency of this belief among the paramedical population, further research and education may find it useful to address feelings of reluctance and distrust towards mental health treatments (Holmes et al., 2020).

Considering the above excerpts, one may conclude that stigma around mental illness and treatment, particularly when a professional member is afflicted, still maintains its impact. While improvements have been made in education and awareness within this profession, a general disdain for mental health issues still appears to be present within this population. Mental health stigma continues to act as a primary hindrance to help-seeking among this profession and thus addressing this issue as a primary objective in the quest for improved mental health among paramedics remains exceptionally crucial. Current methods of destigmatisation may benefit from the recommendations and suggestions from paramedics within the field.

4.4.3 Theme Three: Recommended Intervention Strategies

The third and final emergent theme extracted from this data is that which surrounds the participants' recommendations and guidance relating to the destigmatisation of mental health illness and treatment. Participants provided critiques of current intervention systems which are perceived by most as unable to meet the necessary standards in order to effectively assist this

population. Discussion of this theme begins with participants critiques of available support and will conclude with recommendations for future mental health care regimes.

4.4.3.1. Critiques of Current Methods.

Currently available mental health interventions were predominantly described as 'ineffective' by several participants. Various factors influenced participants' perceptions of available strategies including concerns around confidentiality, experiences of confidentiality breaches, fear of punitive measures, distrust of interventions in place, a lack of support from management, accessibility shortfalls, and the frequent use of religious-based counselling. The most frequent critique of available support regarded confidentiality concerns and conflicts of interest in the counselling environment.

> "*So in my previous employment, this one particular trauma counsellor was also involved in cases. So, for example, if you had a disciplinary case, and during the disciplinary you need an assessment, that counsellor would be the one who assessed you. So not only are you talking to the counsellor about your personal stuff, but now you're being assessed for possible disciplinaries. That counsellor was just ... the staff did not go to her, the staff didn't enjoy going to her because she just had no idea of pre-hospital medicine. You know, you would say to her 'I see death' and she would say 'I'm so sorry', and then she'll just move on to the next question and there was no productive insight into what you were bringing to her.*"
>
> - Participant 1

The above extract not only described confidentiality anxiety in cases where mental health professionals possess dual roles which may encourage or involve potential breach of confidentiality and subsequent repercussions. Lamont-Mills et al. (2018) emphasised the

importance of maintaining confidentiality in a therapeutic setting in order to build trust and rapport. Participant one further expressed the crucial requirement for mental health professionals working with paramedics: The need to understand paramedic-specific trauma and dynamics. In addition, this extract highlights the need to provide effective, result-driven mental health care which provides education, insight, and evidence-based treatment plans. As many paramedics have been described as perfectionists who are also action-orientated (Mitchell, 1983) it is reasonable to conclude that they would seek out mental health care which works toward a specific goal and which has a target to achieve.

Participant four provided further support for mental health care which is based on more than simply "getting it off their chest":

> "*The counsellor we don't ... the feedback that we get from generally the staff is that they're not very helpful, they just sit and they listen and then at the end of their 15 minutes they just send you on your way.*"
>
> - Participant four

The cathartic benefits of simply talking through difficult cases may not be enough for paramedics who are action-orientated and desire tangible results. Participant four expanded on the importance of counselling and/or therapy which is meaningful, productive, and goal orientated.

As discussed previously, confidentiality breaches are a concern in the paramedic profession for a number of reasons. When considering recommendations for future improvements to current methods, it is important to conserve a high standard of confidentiality with the mental healthcare providers. Participant five expressed the profound fear of confidentiality breach, and the extent to which these impacted paramedics seeking mental health care:

> "*When we're talking about the history of EMS and how small we are; that to say one thing here, someone else in another city will hear, and as much as confidentiality is literally thrown in our face because we have to be confidential about our patients, about our patients conditions, their details, family, life, all that … there's this general fear that if we go and say something in confidence to a social worker and it's going to go back to our manager, and our manager is going to tell all the other managers "so-and-so's going through mental depression, should they be on the road?" or whatever, and it kind of fuels a fear of seeking help. I think there's fear that what they share will be distributed even though they were told it was in confidence, I think that's one of the biggest fears of people actually going in dealing with these and seeking the help. It's that it will somehow get out.*"
>
> - Participant 5

As confidentiality is a vital function of psychological counselling and therapy, perceptions around distrust of the current systems in place is an understandable deterrent for help-seeking (Lamont-Mills et al., 2018). Paramedics that have experienced, or witnessed, the breach of confidentiality in the therapeutic setting, and particularly if the affected individual faced repercussions for that which was divulged in the therapeutic setting, may naturally feel betrayed and may develop an impenetrable degree of distrust and aversion to mental health care (Lamont-Mills et al., 2018). The freedom which accompanies uncompromised expression of thought, emotion, and imagination is built on the respect for client's agency and privacy (Carasevici, 2015). Furthermore, the therapeutic relationship which is built on trust and reliance motivates the client to follow the suggestions and indications prescribed by the mental health professional (Carasevici, 2015; Lamont-Mills et al., 2018). In order to establish a healthy rapport and working relationship with the client, it is the professional's responsibility to ensure the maintenance of trust. It will be

important for future interventions to consider the important role of confidentiality in therapy and counselling, and ensure its improvement.

In addition to the abovementioned accounts, participant one expressed her critique of counselling from a religious basis which may:

> "*My other challenge was that many of the counsellors to my previous position are religious ... from a religious perspective, and sometimes, you know, I'm not saying that I'm not religious and I don't have beliefs, but there's sometimes where I want to understand why I am hurting so bad about someone dying and I don't need to hear 'it is God's will*'."

- Participant 1

Religious counselling may be useful to members who identify with a particular religion, however, due to religious diversity within paramedic crews, the appropriateness and applicability of the content surrounding the session may not be accessible to every member of the crew. Intervention strategies aimed at assisting paramedics may be more effective when they operate with an inclusivity agenda, with the focus on holistic care catered to all cultures and belief systems.

4.4.3.2. Improvement of Current Interventions.

With the shortfalls of currently available mental health interventions in mind, it is important to consider the specific requirements for appropriate and effective care for those within the paramedical profession. In discussion with participants around mental health and wellbeing, several emphasised the need for support from management; improved quality of care through stringent confidentiality virtues; increased mental health promotion, education and awareness; enhanced accessibility to care; and further research. Participant four critiqued the degree of support by management and expressed the reactive nature of managerial responses to employee trauma:

> "*I don't think managers know how to create that safe space. So, because they've always done it that way and therefore we must carry on perpetuating the problems that we've created probably. They don't do that. And the ones that do it, as I say, it's reactive. So after a major incident does happen, those 20 staff members will quickly get sent to somebody for a debriefing session and training on how to recognize stress within yourself. And then we get on with life and it's never repeated.*"
>
> - Participant 4

Here, the limited nature of existing interventions and the need for continuous support and follow-up with regard to traumatic cases, was highlighted. Additionally, it appears as if current interventions are more reactive and crisis-orientated rather than preventative, thus future interventions and research could consider the use of preventative measures against acute trauma responses, and stigma.

While debriefing may provide an initial, preliminary support function, it is unable to treat symptoms of trauma at the individual level (Burns, 2016). Management is able to ensure that symptoms of trauma and mental health difficulties are identified timeously, through education of staff, continuous follow-up, and through the creation of a safe space which encourages help-seeking. Managerial support may also include personal "check-ins" with staff after a particularly difficult case. An example was provided by participant three:

> "*I had a phone call from one of my management from head office who phoned, "Are you okay? Can we talk? What can I do?". For me... that counted a million points. When previously on the road, you would finish a call like that and then the next one is waiting for you. They just... you were a number.*"
>
> - Participant 3

-

Interestingly, support from management in the form of "sharing experiences" appeared in the below extract, in which participant six explored the positionality of managers as having an impact on the way in which discussions around negative experiences are perceived. While occupying a leadership positionality, managers have the ability to make use of their own experiences to normalise mental health difficulties and subsequent help-seeking within the profession.

> "*Especially, I think, if it comes from a leadership point of view, or a peer point of view, someone you look up to type thing, if that person is not shy to talk about whatever happened to him, and don't tell me that in thirty years of working in EMS you've never had a bad call or bad experience; not necessarily patient related, but, you know, you can't say you had smooth sailing with thirty years in, no ways.*"
>
> - Participant 6

In addition to support from management, participants expressed the need for furtherment of education and awareness of mental health difficulties within the profession, which may be achieved through further research and employee health promotion. In order to destigmatise mental health difficulties within the profession. Several participants felt that increasing paramedics' understanding of mental health, not only in psychiatric patients but within themselves, would have a great impact on the way in which mental health difficulties are perceived within the profession. The findings of Henderson et al. (2014) support the notion that increased education and awareness of mental health can contribute to the decrease of related stigma.

> "*Amongst paramedics, it will probably just be that constant, just awareness, creating awareness amongst each other.*"
>
> - Participant 4

> "*It's about learning skills and making things work. So if we're teaching the clinical skills and diagnostics, we could just as easily be teaching them skills of recognizing the problem within themselves and coping mechanisms and skills to deal with it, and in recognizing when I need to reach out for extra assistance. You are taught to recognize a clinical condition with a patient where you need to reach out to your medical director for a consultation or advice. So why can't we teach them when to or how to recognize an issue within themselves, where they need to reach out to a professional psychologist or psychiatrist or counsellor for help?*"
>
> - Participant 7

Education and awareness arose as the primary recommendation from participants with regard to destigmatising mental health and promoting paramedic wellness. Participant seven raised the question around why mental health isn't a larger component of paramedical studies and continued professional development. It is reasonable to assume that an improved understanding on behalf of paramedics with regard to mental health, may disprove stereotypes and negative beliefs around those suffering with mental health difficulties. Additionally, providing paramedics with the tools to recognise and address psychiatric concerns within themselves further reduces the degree of self-stigma experienced on the individual level. Education around paramedic-specific health and wellness may have the most beneficial effects if it is implemented at the student level. In the data extract below, participant one commented on the amount of mental health training is provided in the "mental health and wellness" training module:

> *"That module accounts for 70 notational hours out of 1200 notational hours. So, emphasis is not placed on personal paramedical mental health. So, in that module in the 70 hours, majority will be spent on teaching you about the mental health patient, grief, dying, the process of how to tell someone that someone has died, and a very small component is on*

> *the stress of the paramedic … I think it would start off with education, and so, when you enter the system and you sit down as a new student, that ... look maybe more emphasis could be on it, and so that we are now going to be breeding a new breed of person coming in as opposed to trying to get this message across to people already qualified. It's more challenging because they are set in their ways, they have lived this. Improve the component within the education. Also having people like you doing research like what you're doing, that I really pray gets into the emergency medical environment, that has a positive outcome"*
>
> - Participant 1

Finally, accessibility of care was raised by some participants as a hindrance to preventative and treatment-based interventions. While the notion of 'accessibility to care; does refer to the availability and ease which one is able to identify and self-allocate treatment options, 'accessibility; also refers to the manner in which the care being provided is presented at the individual level, drawing on the example above regarding the lack of inclusivity in religious-based counselling. Paramedic-specific mental health interventions should consider the particular occupational culture in which paramedic trauma occurs, fears and negative beliefs within the profession with regard to mental health support, and the varying identities which occupy the paramedical space.

As mental health strategies are in place in many, if not most, emergency healthcare institutions; future strategies might focus on the improvement of such structures. When considering future mental health strategies for paramedics, addressing major concerns such as confidentiality breach and conflicts of interest in the therapeutic setting are vital. Furthermore, improvement of accessibility to care, as well as promotion and encouragement on the managerial level may drastically improve the infrequent use of currently available mental health resources.

As a starting point, those with the intention to improve the state of mental health care within this position might begin with the destigmatisation of mental health difficulties through promotion of education and awareness. Mental health stigma remains one of the most prohibitive factors in paramedics seeking help, and thus a primary focus on destigmatisation is crucial in fostering wellbeing in this profession.

4.4 Conclusion

Paramedics experience a wide range of trauma, including dealing with death and serious injury on a daily basis. While trauma is an expected element of the profession, the effects of the intensity and frequency with which trauma occurs in the paramedics' lived experiences of doing their jobs cannot be denied. One of the primary obstacles which prevented paramedics from seeking mental health care was the degree of public and self-stigma. Paramedical discourse which delineates paramedics that suffer psychological distress as weak, inferior, and incompetent for duty is one of the major hindrances to paramedics seeking and acquiring help. The overall paramedical culture and discourse enforces the degree of mental health stigma which is still prevalent in paramedical culture. Destigmatising mental illness and treatment is a vital first-step in the process of implementing effective intervention strategies. In order to destigmatise mental illness and treatment, interventions should prioritise addressing the ingrained beliefs within the social discourse of paramedicine, garnering support from managerial identities, increasing mental health education and awareness, and conducting further research to bolster current methods of intervention. The next chapter concludes the discussion of the study and further suggests important areas for research and intervention.

Chapter Five: Conclusion

5.1 Introduction

This chapter will include a synopsis of the study, recommendations for both intervention and future research, and concluding insights and remarks. Furthermore, the research aims and objectives are discussed in relation to the findings of the study. Recommendations provided are developed on the basis of the findings of the study, as well as from critiques of current methods and suggestions for future interventions from participants.

5.2 Synopsis of Findings

This research sought to explore the experiences and perceptions of seven South African paramedics with regard to mental health difficulties and stigma. The study made use of a qualitative, phenomenological research approach in order to collect and analyse data relating to the study's research objectives.

Results of the analysis included three primary themes which encompassed the key concepts relating to responses provided by the participants:

Paramedical Culture and Discourse – This major theme provides context for the subsequent themes to follow. Within many professional circles exists a unique and specific culture which many professionals inherently abide by (McCann, 2022). The paramedical culture is one that is largely derived through military culture carried across the two professions (McCann, 2022). This theme focuses on the type of culture within the paramedical profession and how this impacts the way in which paramedics operate occupationally, socially, behaviourally, and cognitively. The underlying discourse which serves to influence the way in which paramedics should feel, think, and behave is an important foundation in the understanding of the overall context in which mental health stigma operates in paramedical society. This theme encompasses ideologies within

paramedical culture relating to military and macho culture, expected work ethic and its consequences, socially constructed beliefs such as “getting on with the job”. This theme also explored the various positive attributes that participants connect with the profession such as altruism and occupational passion. This study found that paramedics found purpose and satisfaction in caring for people, and this aspect was found to be common among six of the seven participants. Furthermore, the study found that the beliefs and discourse which permeate the profession lead to the continuation of negative perceptions of mental illness, and stigma.

Paramedic Perceptions of Mental Health & Stigma - The second theme derived from the collected data and subsequent generated codes is one which surrounds paramedical ideologies, beliefs, opinions, and behaviours relating to mental health and stigma. While literature may concur that a heightened degree of mental health stigma does exist within the paramedic profession (Crowe et al., 2015), this theme explored the idea through the narratives of this study’s participants. Key concepts explored in this theme are that of mental health issues within the profession, current mental health awareness and treatment strategies available to paramedics, and general observations, perceptions, and behaviours regarding overall mental health and related stigma.

Recommended Intervention Strategies – The third and final theme derived from the research data was that which involved participants ideas around ways to destigmatise mental health difficulties and treatment within the paramedical profession. Recommendations provided by the participants explore current methods of mental health education and awareness, as well as the downfalls of these interventions, and strategies to improve such structures are provided. Important concepts under this theme which were considered include the critiques of mental health strategies currently in place, improvements on the employee level, as well as improvement of managerial positions within the profession.

5.3 Findings and Research Objectives

This study attempted to provide an account of paramedics' experiences with mental health disorders, social stigma, and help-seeking behaviours. All participants reported having either direct or in-direct experiences (witnessing family, friends, colleagues experiences) of mental health disorders. Several participants recalled their experiences of depression, anxiety, PTSD, suicide of colleagues, and substance abuse within the profession. Most participants were aware of the underlying social stigma against mental health issues within the profession. Overall, the fear of appearing incompetent and weak, and being demoted was a major concern of paramedics, according to the participants. The fear of external discrimination and prejudice, as well as of status and reputation loss, continues to fuel the self-stigma of paramedics. Some participants reported seeking counselling and therapy and commented that it was a beneficial experience and would recommend that other paramedics seek mental health care.

The secondary objectives of the study attempted to provide an understanding of the various factors which contribute to the proliferation of mental health stigma in the profession. The study found that overall mental health issues are still stigmatised within the profession, however this issue was reported by some participants to have improved over the last decade as research and knowledge increases. According to the findings of the study, mental health stigma is perpetuated through a lack of education and awareness, the discourse around mental health within the profession, and a lack of trust in current resources. Many of the ingrained beliefs within the sub-culture appear to stem from a lack of understanding of mental health difficulties, and an overall negative perception of mentally ill individuals as the result of discourse passed down in the field, and exposure to psychiatric patients. Furthermore, the findings highlighted the need for more comprehensive mental health training and an improvement of current resources.

Finally, the study explored what the findings could reveal about paramedics' perception and understanding of mental illness and stigma, and how this may be of importance to improvement of mental health resources, and later research. According to the participants' narratives, an underlying negative perception of mental illness and treatment is still present within the industry. While some participants had completed mental health training and education through their studies, the depth of this training appeared to be less than sufficient in preparing paramedics with their own mental health.

5.4 Recommendations

In line with this study's research objectives, recommendations based on the findings of the study are provided. Suggestions for both future interventions and further research is discussed, including recommendations for education, training, and improvement of current mental health resources.

5.4.1 Recommendations for interventions

According to participants, mental health resources are often offered as part of an employee wellness plan. Current mental health interventions which are available to paramedics through a workplace programme were reported by participants to be easily accessible, however various other concerns were raised, such as confidentiality breach, and types of counselling/therapy used.

Based on the results of our data analysis, the following recommendations could be made for future research and intervention: 1) Addressing the issue of mental health stigma through mental health promotion in the form of education and awareness. Mental health stigma could be addressed through targeting the perspectives of both the stigmatiser and the stigmatised (Fox et al., 2018). 2) Increased accessibility to mental health care which excludes conflicts of interest and prioritises confidentiality. 3) Promotion of mental health interventions and resources currently available and encouragement of staff utilisation. 4) Garnering support from managers and

implementing a safe working environment where staff feel comfortable to seek help. 5) Implement preventative interventions such as increased mental health training at the student level, continued development of mental health knowledge, and regular mental health check-ups.

Furthermore, this study recommends a review of current mental health intervention strategies and consideration of the inclusion of some or all of the above suggestions. This study recommends the implementation of a holistic approach, focusing on preventative and reactive measures for coping with trauma. Preventative measures should focus on eliminating stigma, increasing mental health knowledge, and promoting the mental health of paramedics through the use of specialised training in mental health, increased managerial support, and a review and improvement of current approaches.

5.4.2 Recommendations for future research

In accordance with the above findings, this study recommends future research be conducted in order to further understand the unique experiences in the paramedic profession. Research involving similar topics may consider the following suggestions: 1) Conducting research which focuses on effective mental health treatment plans and strategies which takes into account paramedic-specific mental health difficulties. 2) Future research could consider making use of different sampling methods in order to achieve a more diverse sample cohort, which may provide insight which is more representative of the South African paramedic population.

5.5 Strengths and Limitations of the Study

The strengths of this study included the rich data which emerged from the use of qualitative methods, namely interviews, as opposed to another form of data collection such as questionnaires and surveys. This allowed for the research objectives to be examined in depth and detail, and allowed the subjective experiences of the participants to further our understanding of PTSD and

stigma within the profession. Furthermore, the study was strengthened through the assistance of two supervisors with experience in the field of Emergency Medicine.

This research study experienced several limitations throughout the sampling and data collection phases. The sample cohort was limited in two ways. Firstly, the sample did not reach the desired number of participants. Initially, this research aimed for approximately fifteen participants, whereby only seven were obtained. This affected the degree of representation, however the small sample size provided the opportunity a more in-depth analysis of each interview. As the study was sensitive in nature as well as the ethical concerns of sampling, obtaining the desired amount of participants proved challenging. Secondly, as the sample was limited in size, this research did not reach the desired degree of diversity and representation as the sample cohort consisted predominantly of white, middle-aged males.

5.6 Concluding Remarks

The analysis revealed the predominant discourse within the field informs many paramedics' thoughts and behaviours around mental health and help-seeking. The social structure of the paramedical field provides a preferable environment for the perpetuation of negative perceptions of mental illness and help-seeking. This is supported by the Mental Illness Stigma Framework's (MISF) (Fox et al., 2018) Coping mechanisms used by members of this profession are often maladaptive and reactive rather than preventative (Kirby et al., 2011). This study found that some paramedics make use of coping mechanisms which serve as a temporary aid to the negative emotions they experience. The paramedic culture encourages the use of unhealthy methods of coping through the stigmatisation of mental health treatments. Furthermore, this study revealed paramedics' perceptions of mental health, in both patients and colleagues, were oftentimes negative. The negative perception of mental illness contributes to self-stigma and ultimately becomes a deterrent for help-seeking. In order to assist paramedics in the future, more research

focusing on methods to eliminate mental health stigma and promotion and improvement of current strategies may assist the improvement of paramedics' mental health.

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Appendix A – Ethical Clearance Certificate

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG	HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

Office of the Deputy Vice-Chancellor (Research and Innovation)

TO: Ms SA Touche Du Poujol
School of Human and Community Development
Department of Psychology
University

E-mail: sarah.touchedupoujol@gmail.com

CC: Supervisor: Dr F Masson
<Francine.Masson@wits.ac.za>
and <HREC-Medical Research Office@wits.ac.za>

FROM: Mr Iain Burns
Human Research Ethics Committee (Medical)
Tel: 011 717 1252

E-mail: Iain.Burns@wits.ac.za

DATE: 2022/01/20

REF: R14/49

PROTOCOL NO: **M210920** (This is your ethics application reference number. Please quote it in all enquiries, oral or written, relating to this study.)

PROJECT TITLE: *Experiences of stigma around help-seeking behaviours for PTSD and other mental health problems amongst paramedics in South Africa: a qualitative study*

Please find attached the Clearance Certificate for the above project. I hope it goes well and that an article in a recognized publication comes out of it. This will reflect well on your professional standing and contribute to Government funding of the University.

MSWorks2000/Iain0007/Clearscan.wps

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

R49 Ms SA Touche Du Poujol

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
CLEARANCE CERTIFICATE NO. M210920

NAME: **(Principal Investigator)**	Ms SA Touche Du Poujol
DEPARTMENT:	School of Human and Community Development Department of Psychology University
PROJECT TITLE:	*Experiences of stigma around help-seeking behaviours for PTSD and other mental health problems amongst paramedics in South Africa: a qualitative study*
DATE CONSIDERED:	2021/10/01
DECISION:	Approved unconditionally
CONDITIONS:	
NOTE:	If contact information regarding student study participants is required, please contact the Registrar's office - <Nicoleen.Potgieter@wits.ac.za>
SUPERVISOR:	Dr F Masson
APPROVED BY:	CB Penny Dr CB Penny, Chairperson, HREC (Medical)
DATE OF APPROVAL:	2022/01/20

This Clearance Certificate is valid for 5 years from the date of approval. An extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office secretariat on the 3rd floor, Phillip Tobias Building, Parktown, University of the Witwatersrand, Johannesburg.

I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated from the research protocol as approved, I/we undertake to submit details to the Committee. **I agree to submit a yearly progress report**. When a funder requires annual re-certification, the application date will be one year after the date when the study was initially reviewed. In this case, the study was initially reviewed in **September** and therefore reports and re-certification will be due in the month of **September** each year. Unreported changes to the study may invalidate the clearance given by the HREC (Medical).

Signature of Principal Investigator _____ Date _____

Appendix B – Request to Organisations

Sarah Touche Du Poujol

Master's Student

University of Witwatersrand

1 Jan Smuts Ave, Braamfontein, Johannesburg, 2000

+27 68 530 1005

RE: Permission to conduct research with staff.

To Whom it may Concern,

This letter serves to provide information regarding our research study, and to formally request permission to conduct research with your staff members. Please read this document carefully and do not hesitate to direct any questions to the contact details listed below.

Outline of the research study:

This research study seeks to explore the experiences of South African paramedics with regards to stigma; PTSD and other mental health disorders; and help-seeking behaviours. This particular topic is important to study as previous studies have indicated high rates of psychological health concerns such as PTSD, depression, and anxiety in the paramedic population. It is for this reason that our study has chosen to conduct an exploration on the experiences and perceptions of paramedics in this regard. Understanding the stigma associated with mental health help-seeking behaviours will help to inform more effective mental health interventions for South African paramedics in the future.

Individual interviews will be used to collect the data, which will be conducted via Zoom due to the current COVID-19 pandemic regulations.

Nature of Employee Participation:

In accordance with the policy of the Department of Psychology at the University of Witwatersrand all participation in this research study is voluntary, and the participant has the right to withdraw at any time, without prejudice, should they object to the nature of the research. Participants are encouraged to ask questions and will receive an explanation at any point in the process.

Confidentiality and Anonymity:

Participation in this research study will remain strictly confidential. We will not make use of any information which may identify the participant or the institution for which they work, including information provided during the interview which may identify the participant or theirorganisation. The names of the health institutions that the participants work for or with will beredacted from the research study. All raw and analysed data will be stored in a password-secure device that is only accessible bythe researcher.

Possible Risks and Mitigating Factors:

As with many research studies, there are potential risks involved with conducting this research. The risk of retraumatisation is present when discussing topics around trauma and PTSD, however, we have taken every possible precaution to prevent and manage this risk.

a) Retraumatisation – This occurs when an individual discusses a past traumatic event which could trigger emotional distress. Should this occur, our distress protocol ensures that the session will cease immediately, and following a debriefing session, you will have the option of a confidential referral to a counsellor at no cost to you.

b) Identification – Although we will not divulge any of your identifying information including your name, organisation of work, location etc. the stories you tell could identify you in some way, please keep this in mind when sharing certain aspects that might identify you.

In order to lower the abovementioned risks, the following precautions have been developed:

- A copy of the interview guide, which encompasses a list of general questions and themes we will be discussing during the interview, will be attached to the participant information sheet. Participants will be asked to read through these carefully, and make note if the questions feel intrusive or highly sensitive. Participants will be asked not to participate if they believe the interview guide to be too sensitive.

- Our research study has constructed a stringent distress protocol in the event that a participant experiences emotional distress, and free counselling has been arranged with Adelaide Mangena (+27 82 841 4638) for any participant who may require it. Counselling for participants outside the Gauteng area will be conducted virtually.

We believe it is important to undertake this study in order to understand how we can better understand the experiences of South African paramedics, and use these understandings to inform improved prevention, intervention, and treatment programmes.

Thank you for taking the time to read through this document and for your consideration onthis research study. Please feel free to contact me should you have any questions regardingthe research. We look forward to your feedback.

This study has been approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg ("Committee"). A principal function of this Committee is to safeguard the rights and dignity of all human subjects who agree to participate in a research project and the integrity of the research.
If you have any concern over the way the study is being conducted, please contact the Chairperson of this Committee who is Dr Clement Penny, who may be contacted on telephone number 011 717 2301, or by e-mail on Clement.Penny@wits.ac.za. The telephone numbers for the Committee secretariat are 011 717 2700/1234 and the e-mail addresses are Zanele.Ndlovu@wits.ac.za and Rhulani.Mukansi@wits.ac.za

Kind Regards,

Sarah Touche Du Poujol
+27 68 530 1005
Sarah.touchedupoujol@gmail.com

Supervisor: Dr. Francine Masson
011 717 4450
Francine.masson@wits.ac.za

Appendix C – Organisation Approval Letters

13 April 2022

Ms Sarah Touche Du Poujol: Student 2492421
CC: Dr F Masson: Supervisor

Dear Sarah

Re – Request for approval for [redacted] paramedics participation in research

Topic: Experiences of stigma around help-seeking behaviours for PTSD and other mental health problems amongst paramedics in South Africa: a qualitative study

Your request for our paramedics to participate in your research has served on the Clinical Governance and Quality Committee Meeting and has been approved.

It is our viewpoint that complete transparency is key here if we have any desire to improve our prehospital environment.

Communication to our paramedics may be done via myself at [redacted].

We wish you all the
best! Kind Regards,

[redacted]

24 January 2022

Ms S. Touche Du
Poujol Master's
Student Department
of Psychology
University of the Witwatersrand

Dear Ms Touche Du Poujol,

PERMISSION TO CONDUCT RESEARCH WITH STAFF

1. Your letter of even date refers.
2. The management teams of both [redacted] and [redacted] have deliberated and are happy to advise that we consent to your request to conduct research with our staff members.
3. The research will be undertaken in strict compliance with the approvals and guidelines provided by the University and treated with the utmost dignity and confidentiality.
4. Medical crew members will subscribe to the proposed research on a totally voluntary basis and at no time under any form of expectation or pressure.
5. Please feel free to liaise with our Chief Clinical Officer, [redacted] for any further assistance.

We wish you every success with this study and trust it will add value to this organization as well as the [redacted] industry at large.

Sincerely,

[redacted]
Executive Chairman

[redacted]

RESEARCH OPERATIONS COMMITTEE FINAL APPROVAL OF RESEARCH

Approval number: UNIV-2022-0016

Ms S Touche Du Poujol

Email: sarah.touchedupoujol@gmail.com

Dear Ms Touche Du Poujol

RE: EXPERIENCES OF STIGMA, AROUND HELP-SEEKING BEHAVIOURS FOR PTSD AND OTHER MENTAL HEALTH PROBLEMS AMONGST PARAMEDICS IN SOUTH AFRICA: A QUALITATIVE STUDY

The above-mentioned research was reviewed by the Research Operations Committee's delegated members and it is with pleasure that we inform you that your application to conduct this research at Private Emergency Services, has been approve<;!, subject to the following:

i) Research may now commence with this FINAL APPROVAL from the Committee.

ii) All information regarding the Company will be treated as legally privileged and confidential.

iii) The Company's name wiU not be mentioned without written consent from the Committee.

iv) All legal requirements with regards to participants' rights and confidentiality will be complied with.

v) All data extracted may only be used in an anonymised, aggregated format and for the purposes of this specific study as specified in the proposal. The data may under no circumstances be used for any other purpose whatsoever.

vi) The Company must be furnished with a STATUS REPORT on the progress of the study at least annually on 30th September irrespective of the date of approval from the Committee as well as a FINAL REPORT with reference to intention to publish and probable journals for publication, on completion of the study.

vii) A copy of the research report will be provided to the Committee once it is finally approved by the relevant primary party or tertiary institution, or once complete or if discontinued for any reason whatsoever prior to the expected completion date..

viii) The Company has the right to implement any recommendations from the research.

ix) The Company reserves the right to withdraw the approval for research at any time during the process, should the research prove to be detrimental to the subjects/ Company or should the researcher not comply with the conditions of approval.

x) APPROVAL IS VALID FOR A PERIOD OF 36 MONTHS FROM DATE OF THIS LETTER OR COMPLETION OR DISCONTINUATION OF THE STUDY, WHICHEVER IS THE FIRST.

We wish you success in your research.

[redacted]

Full member: Research Operations Committee & Medical Practitioner evaluating research applications as per Management and Governance Policy

[redacted]

Chairperson: Research Operations Committee

This letter has been anonymised to ensure confidentiality in the research report. The original letter is available with author of research

Appendix D – Participant Information Sheet

Sarah Touche Du Poujol
Master's Student University of Witwatersrand
1 Jan Smuts Ave, Braamfontein, Johannesburg, 2000
+27 68 530 1005

RE: Participation in Research Study

You are invited to participate in a research study conducted by Sarah Touche Du Poujol supervised by Dr. Francine Masson.

The title and focus for this research study:

Experiences of Stigma, PTSD, and other mental health problems among Paramedics in South Africa: A Qualitative study

The purpose of this study is to understand the mental health distress that comes with working as a paramedic, and the field-wide stigma around help-seeking behaviours. We seek to explore your experiences, opinions, and beliefs around this issue so that we may come to a clearer understanding of how this stigma could be challenged. This will entail an interview conducted over Zoom which will take approximately 1 hour, allowing for some time to go over. Mobile/all-network data vouchers, to the value of R50.00, will be provided to cover data costs. With your permission, the interview will be recorded and transcribed for later analysis.

Important information to know before you decide whether to consent:

Your participation in the research study is anonymous, however, anonymity cannot be 100% guaranteed due to the nature of the interview process and your identity being known by the researcher. Protection of your identity and anonymity outside of the interview process will be ensured through the use of coded pseudonyms; and information which is believed to have the ability to identify you may be redacted from the final report.

The interview process will remain completely confidential, which means that only you and the researcher interviewing you will be aware of your participation in this study. All information including raw and processed data will be stored on an encrypted storage device which is only accessible to the researcher and will be erased after 2 years if the study is published, or 6 years if the study is unpublished.

Possible Risks and Mitigating Factors:

As with many research studies, there are potential risks involved with conducting this research. The risk of retraumatisation is present when discussing topics around trauma and PTSD, however, we have taken every possible precaution to prevent and manage this risk.

a) Retraumatisation – This occurs when an individual discusses a past traumatic event which could trigger emotional distress. Should this occur, our distress protocol ensures that the session will cease immediately, and following a debriefing session, you will have the option of a confidential referral to a counsellor at no cost to you.
b) Identification – Although we will not divulge any of your identifying information including your name, organisation of work, location etc. the stories you tell could identify you in some way, please keep this in mind when sharing certain aspects that might identify you.

In order to lower the abovementioned risks, the following precautions have been developed:

- Attached to this document is a copy of our interview guide which encompasses a list of general questions and themes we will be discussing. We ask that you please read through these carefully. If you feel that the questions and topics are too sensitive and might cause distress please do not participate in this study, and if possible, inform us so that we are able to reconsider our questions.
- Our research study has constructed a stringent distress protocol in the event that you experience emotional distress, and free counselling has been arranged with Adelaide Mangena (+27 82 841 4638) for any participant who may require it. Counselling for participants outside the Gauteng area will be conducted virtually.

Payment

There is neither cost nor payment involved in participation, with the exception of the R50.00 data voucher to cover interview data costs.

Study results

A summary of the study results will be available on request at no cost.

Enquiries
If you have any questions regarding this research study please do not hesitate to contact:

Principal Investigator: Sarah Touche Du Poujol
sarah.touchedupoujol@gmail.com
Tel Number: 068 530 1005

Supervisor: Dr Francine Masson
Francine.Masson@wits.ac.za
Tel Number: +27 68 530 1005 / 011 717 4450

This study has been approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg ("Committee"). A principal function of this Committee is to safeguard the rights and dignity of all human subjects who agree to participate in a research project and the integrity of the research.
If you have any concern over the way the study is being conducted, please contact the Chairperson of this Committee who is Dr Clement Penny, who may be contacted on telephone number 011 717 2301, or by e-mail on Clement.Penny@wits.ac.za. The telephone numbers for the Committee secretariat are 011 717 2700/1234 and the e-mail addresses are Zanele.Ndlovu@wits.ac.za and Rhulani.Mukansi@wits.ac.za

Thank you for taking the time to read through this document in its entirety.

If you wish to participate in this research study, please fill out the attached consent form and return it to sarah.touchedupoujol@gmail.com

January 2021

Appendix E – Participant Consent Form



PARTICIPANT CONSENT SHEET

Study Title: Experiences of Stigma, PTSD, and other mental health problems among Paramedics in South Africa: A Qualitative study

1. I have been given a Participant Information Sheet which explains the nature and processes involved in this study, which is attached hereto;
2. I was given time to read it, or had it read to me, in the language I best understand;
3. I was given time to ask any questions I wanted to and found any answers given to me to be reasonable and satisfactory;
4. I believe I fully understand why the study is being conducted and what the intended outcomes will be;
5. I understand that there will be no immediate benefit to me, should I agree to participate, nor will I receive any payment; conversely, participation will not cost me anything but my time;
6. I understand that, even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons; if that happened, any data collected about me for the purposes of the study would immediately be destroyed, unless I give consent for it to be retained
7. I have been given a range of contact details, listed below. If I require further information or become concerned about any aspect of this study I am free to speak to any of these contacts.

Contact details:

Sarah Touche Du Poujol, Principal Investigator, telephone no. 068 530 1005, or by e-mail at sarah.touchedupoujol@gmail.com,

Dr. Francine Masson, Supervisor, on telephone no. 011 717 4480, or by e-mail at francine.masson@wits.ac.za

Professor CB Penny, Chairperson of the Human Research Ethics Committee (Medical) at the University of Witwatersrand, on telephone no. 011 717 2301, or by e-mail at Clement.Penny@wits.ac.za.
Ms. Z Ndlovu or Mr Rhulani Mkansi, Committee Secretariat, telephone nos.: 011 717 2700 or 1234, or by e-mail at: Zanele.Ndlovu@wits.ac.za or Rhulani.Mkansi@wits.ac.za

Date: _____
Place: _____
Signature or mark _____

Witnessed by:

Name of Witness: _____
Signature: _____
Date: _____



CONSENT FORM FOR AUDIO RECORDING OF STUDY PARTICIPATION

Study Title: Study Title: Experiences of Stigma, PTSD, and other mental health problems among Paramedics in South Africa: A Qualitative study

I hereby consent to audio recording of the interview.

.

I understand that:

- The recording will be stored in a secure location (a locked cupboard or password protected computer) with restricted access to the researcher and the research supervisor.
- The recording will be transcribed and any information that could identify me will be removed,
- The recordings will be erased within either (a) two (2) years of the publication of the research findings, or (b) six (6) years, if no publications arise from this research
- Anyone wishing to access this information in the future will first have to obtain the approval of the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg
- Direct quotes from my interview, without any information that could identify me, may be cited in the research report or other write-ups of research.

Name of Participant: _____
Date: _____
Place: _____
Signature or mark _____

Witnessed by:

Name of Witness: _____
Signature: _____
Date: _____

CONSENT FORM FOR VISUAL RECORDING OF STUDY PARTICIPATION

Study Title: Study Title: Experiences of Stigma, PTSD, and other mental health problems among Paramedics in South Africa: A Qualitative study

I hereby consent to visual recording of the interview.

.

I understand that:

- The recording will be stored in a secure location (a locked cupboard or password protected computer) with restricted access to the researcher and the research supervisor.
- The recording will be transcribed and any information that could identify me will be removed
- My face and voice will not be identifiable in any visual recording
- The recordings will normally be erased within either (a) two (2) years of the publication of the research findings, or (b) six (6) years, if no publications arise from this research, or:
- The film, with all identifying information directly linked to me removed, will be stored permanently and may be used for future research
- Anyone wishing to access this information in the future will first have to obtain the approval of the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg
- Direct quotes from my interview, without any information that could identify me, may be cited in the research report or other write-ups of research.

Name of Participant: _____
Date: _____
Place: _____
Signature or mark _____

Witnessed by:

Name of Witness: _____
Signature: _____
Date: _____

Appendix F – Beck's Depression Inventory

Beck's Depression Inventory

This depression inventory can be self-scored. The scoring scale is at the end of the questionnaire.

1.	0	I do not feel sad
	1	I feel sad
	2	I am sad all the time and I can't snap out of it
	3	I am so sad and unhappy that I can't stand it
2.	0	I am not particularly discouraged about the future
	1	I feel discouraged about the future
	2	I feel I have nothing to look forward to
	3	I feel the future is hopeless and that things cannot improve
3.	0	I do not feel like a failure
	1	I feel I have failed more than the average person
	2	As I look back on my life, all I can see is a lot of failures
	3	I feel I am a complete failure as a person
4.	0	I get as much satisfaction out of things as I used to
	1	I don't enjoy things the way I used to
	2	I don't get real satisfaction out of anything anymore
	3	I am dissatisfied or bored with everything
5.	0	I don't feel particularly guilty
	1	I feel guilty a good part of the time
	2	I feel quite guilty most of the time
	3	I feel guilty all of the time
6.	0	I don't feel I am being punished
	1	I feel I may be punished
	2	I expect to be punished
	3	I feel I am being punished
7.	0	I don't feel disappointed in myself
	1	I am disappointed in myself
	2	I am disgusted with myself
	3	I hate myself
8.	0	I don't feel I am any worse than anybody else
	1	I am critical of myself for my weaknesses or mistakes
	2	I blame myself all the time for my faults
	3	I blame myself for everything bad that happens

9.	0	I don't have any thoughts of killing myself
	1	I have thoughts of killing myself, but I would not carry them out
	2	I would like to kill myself
	3	I would kill myself if I had the chance
10.	0	I don't cry any more than usual
	1	I cry more now than I used to
	2	I cry all the time now
	3	I used to be able to cry, but now I can't cry even though I want to
11.	0	I am no more irritated by things than I ever was
	1	I am slightly more irritated now than usual
	2	I am quite annoyed or irritated a good deal of the time
	3	I feel irritated all the time
12.	0	I have not lost interest in other people
	1	I am less interested in other people than I used to be
	2	I have lost most of my interest in other people
	3	I have lost all of my interest in other people
13.	0	I make decisions about as well as I ever could
	1	I put off making decisions more than I used to
	2	I have greater difficulty in making decisions more than I used to
	3	I can't make decisions at all anymore
14.	0	I don't feel that I look any worse than I used to
	1	I am worried that I am looking old or unattractive
	2	I feel there are permanent changes in my appearance that make me look unattractive
	3	I believe that I look ugly
15.	0	I can work about as well as before
	1	It takes an extra effort to get started at doing something
	2	I have to push myself very hard to do anything
	3	I can't do any work at all
16.	0	I can sleep as well as usual
	1	I don't sleep as well as I used to
	2	I wake up 1-2 hours earlier than usual and find it hard to get back to sleep
	3	I wake up several hours earlier than I used to and cannot get back to sleep.
17.	0	I don't get more tired than usual
	1	I get tired more easily than I used to

	2	I get tired from doing almost anything
	3	I am too tired to do anything
18.	0	My appetite is no worse than usual
	1	My appetite is not as good as it used to be
	2	My appetite is much worse now
	3	I have no appetite at all anymore
19.	0	I haven't lost much weight, if any, lately
	1	I have lost more than five pounds
	2	I have lost more than ten pounds
	3	I have lost more than fifteen pounds
20.	0	I am no more worried about my health than usual
	1	I am worried about physical problems like aches, pains, upset stomach, or constipation
	2	I am very worried about physical problems and it's hard to think of much else
	3	I am so worried about my physical problems that I cannot think of anything else
21.	0	I have not noticed any recent change in my interest in sex
	1	I am less interested in sex than I used to be
	2	I have almost no interest in sex
	3	I have lost interest in sex completely

Appendix G – PTSD Checklist

PTSD CheckList – Civilian Version (PCL-C)

Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Pleaseread each one carefully, pick the answer that indicates how much you have been bothered by that problem *in the last month*.

No.	Response	Not at all (1)	A little bit (2)	Moderately (3)	Quite a bit (4)	Extremely (5)
1.	Repeated, disturbing *memories, thoughts, or images* of a stressful experience from the past?					
2.	Repeated, disturbing *dreams* of a stressful experience from the past?					
3.	Suddenly *acting* or *feeling* as if a stressful experience *were happening* again (as if you were reliving it)?					
4.	Feeling *very upset* when *something reminded* you of a stressful experience from the past?					
5.	Having *physical reactions* (e.g., heart pounding, trouble breathing, or sweating) when *something reminded* you of a stressful experience from the past?					
6.	Avoid *thinking about* or *talking about* a stressful experience from the past or avoid *having feelings* related to it?					
7.	Avoid *activities* or *situations* because they *remind you* of a stressful experience from the past?					
8.	Trouble *remembering important parts* of a stressful experience from the past?					
9.	Loss of *interest in things that you used to enjoy?*					
10.	Feeling *distant* or *cut* off from other people?					
11.	Feeling *emotionally numb* or being unable to have loving feelings for those close to you?					
12.	Feeling as if your *future* will somehow be *cut short*?					
13.	Trouble *falling* or *staying asleep*?					
14.	Feeling *irritable* or having *angry outbursts*?					
15.	Having *difficulty concentrating*?					
16.	Being *"super alert"* or watchful on guard?					
17.	Feeling *jumpy* or easily startled?					

PCL-M for DSM-IV (11/1/94) Weathers, Litz, Huska, & Keane National Center for PTSD-Behavioral Science Div.

Appendix H – Interview Guide

Interview Guide

Introductory Questions

1. Do you understand your rights as a research participant with regards to confidentiality, anonymity, withdrawing from the study? As well as the limits to confidentiality? Do you understand the risks and benefits of the study? Do you have any questions before we begin?
2. How many years have you been a paramedic?
3. What jobs, if any, did you have prior to becoming a paramedic?
4. What interested you most in becoming a paramedic?
5. What are your main daily responsibilities/duties?
6. What is the best/worst part of your profession?

Research Questions

7. This may be a difficult question to answer, please feel free to answer in as much or as little detail that feels comfortable to you; what is your personal experience of PTSD and/or other mental health issues in your field? Either relating to yourself or a co-worker?
8. How do you personally deal with a difficult or traumatic case?
    i. Do you find this method/s to be effective? Is there another method that you have wanted to try or have been recommended?
9. Do you feel that your workplace environment makes it easy or difficult to discuss difficult emotions relating to cases? Or symptoms of mental distress?
    i. Do you have any particular examples of this?

10. What interventions or resources are available to you as part of a workplace program, that you are aware of, to help staff deal with difficult cases?
    i. Are these interventions/resources helpful? Are they easily accessible? Are they trusted by employees?
11. How are people with mental illness (be that PTSD, depression etc) perceived within your professional sphere?

Do you have any questions you would like to ask? Or comments that you would like to make?

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12. What do you believe to be some of the factors in perpetuating mental health and help-seeking behaviours among your profession?
    i. How prevalent are these factors in the profession?
13. What, in your opinion, could be done to challenge to stigmatised view of mental distress in your profession?
    i. What are your suggestions for de-stigmatising paramedics with PTSD and other mental health issues?
    ii. What could be done to normalise paramedics seeking counselling or therapy?
14. Is there anything we may have missed that you would like to include as part of your experience as a paramedic?
15. How do you feel about having participated in this study? What is your hope for the application of the results?

16. It is important for myself as the researcher to consider how my positionality as a young, female university student will influence my study. Do you feel that this positionality may have influenced the way in which you have responded to the questions today?
17. Do you have any questions about the study, the interview, results, or any other part of the process?

    (Pucci, 2016).

Appendix I – Distress Protocol

Distress Protocol

During the interview session, should the participant experience any emotional distress as indicated by themselves or indicated by behavioural cues such as crying, incoherency in speech, indications of flashbacks etc., the following steps will be taken:

1. The interview session will immediately cease, and the participant will be informed that their data will not be used should they request this.
2. Support will be offered to the participant in the form of anxiety-reducing techniques such as deep breathing.
3. The participant's mental status will be assessed, and a determination will be made on whether the participant is experiencing acute stress or retraumatisation. This will inform the immediacy/urgency of the psychological care to be sought.
4. Referral options will be discussed with the participant and an appropriate referral plan will be drawn up based on the participant's mental state and psychological needs.
5. A strictly confidential referral letter will be sent to the head psychologist/doctor at an appropriate institution based on the province in which the participant lives.
6. Follow-up will be made with the participant one week after referral to ensure that they have been contacted by the institution, or if they require additional help.

Participants will be urged to contact the researcher, or their supervisor should they experience any delayed responses after the interview has ended. In this case, the above steps will be followed, and the participant will be referred for counselling/therapy at an appropriate institution in their province. Alternatively, participants will be given a copy of a 'Mental Health Support' contact list for their area which contains the contact information of various psychologists.

The following institutions will be used for referral of participants for free mental health services:

Johannesburg:

Emthonjeni Community Centre Counselling Services
University of Witwatersrand
1 Jan Smuts Ave, Braamfontein, Johannesburg, 2000
011 717 9140

Durban and Cape Town:

Emthonjeni Community Centre Online Counselling Services
To be Conducted Online.